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## Introduction

The study of communications and of media has traditionally been dominated by non-economic disciplines. Analysis of dominant representations in the media, for example, provides a means of understanding the societies in which we live and our value systems. But economics is also a valuable subject area for media scholars. Most of the decisions taken by those who run media organizations are, to a greater or lesser extent, influenced by resource and financial issues. So economics, as a discipline, is highly relevant to understanding how media firms and industries operate.

This book provides an introduction to some of the main economic concepts and issues affecting the media. It is designed for readers who are not specialists in economics but who want to acquire the tools needed to unravel some of the more interesting economic features and pressing industrial policy questions surrounding media firms and markets. No prior knowledge of economics is assumed.

The first three chapters explain a number of broad and fundamental concepts relevant to the study of economics as it affects the media. This opening chapter introduces you to firms and markets and examines the distinctive economic characteristics of media. Chapter 2 examines the organization of media industries and how firms are adjusting to the immense changes brought on by digitization and convergence. Chapter 3 focuses on the relationship between the distinctive economic characteristics of media, changing market conditions and the corporate strategies that are commonly deployed by media firms.

These initial chapters are followed by six others, each of which explores dimensions of supplying media that are of special importance to understanding the economics of media, e.g. consumer behaviour and market demand, networks and network effects, content production and risk-spreading strategies, copyright and the role of advertising in two-sided media markets. These six chapters establish

a framework within which, for each theme, two or three of the main economic concepts or questions that are commonly associated with or best exemplified by that topic may be examined more closely. So, the structure of the book enables a series of economic themes and questions relevant to the media to be gradually and progressively opened up and explored. The final chapter of the book examines the increasingly important role media economics can play in informing public policy questions.

After studying this opening chapter, you should be able to:

- identify the kinds of questions that media economics seeks to address;
- explain what a firm is and its motivations;
- describe the different types of competitive market structures which exist;
- understand what is special about the economics of the media;
- identify and explain some of the key economic characteristics of the media.

## WHAT IS MEDIA ECONOMICS ABOUT?

Media economics seeks to combine the study of economics with the study of media. It is concerned with the changing economic forces that direct and constrain the choices of managers, practitioners and other decision-makers across the media. The economic concepts and issues introduced in the course of this book provide a basis for developing your understanding of the way in which media businesses operate and are managed.

Some attempts have been made to formalize a definition of media economics. Economics has been described as ‘the study of how people make choices to cope with scarcity’ (Parkin, Powell and Matthews, 2008: 4). Scarcity is a familiar concept for most, and we are all economists to the extent that we have to decide how to make the best of our limited incomes or resources. According to Robert Picard, media economics ‘is concerned with how media operators meet the informational and entertainment wants and needs of audiences, advertisers and society with available resources’ (1989: 7). It is about applying economic theory ‘to explain the workings of media industries and firms’ (Picard, 2006: 15). Albarran likewise describes media economics as involving the application of economic ideas and principles to study ‘macroeconomic and microeconomic aspects of mass media companies and industries’ (2004: 291).

Media economics, then, is concerned with a range of issues including international trade, business strategy, segmentation, risk-spreading, exploitation of rights, pricing policies, evolution of advertising markets, competition and industrial concentration as they affect the media firms and industries. These themes are explored in the chapters of this book. The predominant focus is ‘microeconomic’ (i.e. to do with specific individual markets or firms), but some of the questions addressed also have a macroeconomic dimension.

## MACROECONOMICS AND MICROECONOMICS

The distinction between macro- and microeconomics is about whether that which is being studied involves either large groups and broad economic aggregates or small well-defined groups and individual firms and sectors. Macroeconomics is concerned with very broad economic aggregates and averages, such as total output, total employment, national income, the general price level and the rate of growth of the economy as a whole. These sorts of aggregates are arrived at by summing up the activities carried out in all individual markets and by summarizing the collective behaviour of all individuals.

One of the most commonly used measures of a nation’s overall level of economic activity is called its gross domestic product (GDP). A country’s GDP represents the sum of the value of all goods and services produced within the economy over a particular period, usually a year. Media goods and services represent a small but growing proportion of total economic activity in developed countries and in the UK, for example, they account for some 3–5 per cent of GDP. Many sectors of the media (e.g. television production, publishing) count as ‘creative’ industries which are regarded as especially important in driving growth in the wider economy (Andari et al., 2007).

In the UK, the long-term trend in GDP since the Second World War has generally been upwards and this, in turn, has facilitated a substantial increase in living standards. Within this overall growth trend, a second feature of movements in GDP has been short-term fluctuations around the trend. Rather than growing at a steady and consistent pace, economies tend to move in a series of irregular up and down ‘business cycles’ which are characterized by five phases: growth, peak, recession, trough and recovery.

The overall performance of the economy has important implications for the business performance and prospects of firms in all sectors, including media. Indeed, the fortunes of most media firms are highly sensitive to the ups and downs of the economy as a whole. As will be

discussed below, many media firms rely on advertising as a primary source of income. Despite recent divergences, analysis of long-term trends in advertising suggest a strong association between the performance of the economy as a whole and levels of advertising activity. Revenues for media firms from direct expenditure by consumers are also clearly dependent on broader economic aggregates such as levels of disposable income and consumer confidence.

In theory, public policies towards the economy (monetary, fiscal etc.), and policies to promote or restrain growth or social welfare may have an affect on the economic environment in which media firms and industries operate. For example, government control over the supply of money and over interest rates provides a means of influencing levels of investment and economic activity in general (Baumol and Blinder, 2011). However, it may be argued that the power of state authorities to exert such influence is waning. ‘Globalization’ means that it is increasingly difficult for open economies to predicate monetary and other economic policies on domestic considerations alone.

Whereas macroeconomics is about forces that affect the economy as a whole, microeconomics is concerned with the analysis of individual markets, products and firms. An economy is a mechanism that determines ‘what, how and for whom goods and services get produced’ (Parkin, Powell and Matthews, 2008: 6). These decisions are taken by three types of economic actors – consumers, firms and governments – and are co-ordinated in what are called ‘markets’. Economics relies on certain assumptions about how these actors make their choices.

Each consumer, for example, is seen as having unlimited wants and limited resources. It is assumed that all consumers seek to maximize their total ‘utility’ or satisfaction. ‘Marginal’ utility represents the change in satisfaction resulting from consuming a little more or a little less of a given product. The law of diminishing marginal utility suggests that the more of a given product that an individual consumes, the less satisfaction they will derive from successive units of the product. The example used by Lipsey and Chrystal to illustrate this principle shows that, everything else being equal, the more films a consumer attends each month, the more satisfaction they get. However, the marginal utility of each additional film per month is less than that of the previous one – i.e. marginal utility declines as quantity consumed rises (1995: 128–9).

## THE FIRM IN ECONOMIC THEORY

In economics, production is an activity that involves conversion of resources or inputs (e.g. raw materials, ideas, knowledge) into outputs

(goods and services). 'Firms' are establishments where production is carried out and industries consist of a number of firms producing a commodity for the same market. The concept of a media firm spans a variety of different types of business organizations; from the online fanzine publisher to the vast television corporation, and from single proprietorship to major transnational stock exchange listed companies. What all media firms have in common is that they are involved somehow in producing, packaging or distributing media content.

All media firms are not, however, commercial organizations. Most countries have a state-owned broadcasting entity which takes the form of a public corporation and which is dedicated to 'public service' television and radio broadcasting. Many public service broadcasters (PSBs) rely on public funding (e.g. grants) but some depend, in part or in whole, on revenues derived from commercial activities such as sale of airtime to advertisers. Even when they compete for revenues from commercial sources, PSBs are usually distinguished from commercial firms by the fact that their primary goal is to provide a universally available public broadcasting service rather than to make profits.

By contrast, it is assumed that a commercial firm's every decision is taken in order to maximize its profits. The assumption that all firms seek to maximize profits is central to the neoclassical theory of the firm. It allows economists to predict the behaviour of firms by studying the effect that each of the choices available to it would have on its profits.

However, there are two commonly cited criticisms of the traditional theory of the firm, and both are relevant to media. The first suggests that it is too crude and simplistic to assume that businesses are motivated purely by pursuit of profits. The case for profit maximization on the part of business owners is thought to be self-evident but, in fact, some are undoubtedly motivated by alternative goals. These range from straightforward philanthropy to the desire for specific benefits associated with owning certain types of businesses. An alternative motivation – especially in the case of media firms – might well be the pursuit of public and political influence.

A second criticism is that the theory assumes that all firms will behave in the same way, irrespective of their size and organizational structure. In reality, a firm's institutional structure may have an important bearing on its priorities. Rupert Murdoch's involvement in the running of News Corporation shows how some media firms are closely managed by their owners. The dominant form of industrial organization these days is the public limited company (or plc) under

which, more typically, the day-to-day running of the firm is carried out not by the owners (or shareholders) but by managers.

When ownership and control of an organization are separate, its managers may decide to pursue goals other than maximising profits and returns to shareholders. This conflict of interest is referred to as a type of 'principal-agent' problem. The managers appointed to run a media firm (agents) may not always act in the manner desired by shareholders (principals) but might, instead, have their own agendas to pursue. When the agent's goal is allowed to predominate then pursuit of profits may be superceded by, for example, a desire to maximize sales revenue or the firm's growth.

There are good grounds for questioning how well the broad assumptions of conventional economic theory apply in practice to the behaviour of media firms. Even so, to the extent that economic actors (firms and households) make their decisions in a 'rational' manner and in pursuit of what are assumed to be their own individual goals (of, respectively, profit and utility maximization), there is clearly an important role for government to play in creating a regulatory environment within which these individual goals are not achieved at the expense of societal welfare (Owers, Carveth and Alexander, 2002: 17). The issue of supplying violent media content provides an example of an economic activity that maximizes the goal attainment of individual economic units (i.e. it contributes to the success and profitability of film and television programme-makers) but, arguably, may detract from overall social welfare (*ibid.*).

A firm's profits are the difference between its revenues and costs. Costs in economic theory refer to all 'opportunity costs', a concept that involves recognizing whatever benefit must be foregone or sacrificed when choosing to use a resource in one particular way rather than another. The opportunity cost of the inputs used to produce something is the value of the goods and services that otherwise could have obtained from those same inputs if they were put to their next-best alternative use (Allen et al., 2005: 326). So, as well as assigning costs to purchased or hired inputs, an 'imputed' cost must also be calculated for and assigned to any factors of production owned by the firm, especially the firm's own capital.

The concept of opportunity cost is important in economics. Our resources can be used in many different ways to produce different outcomes but, essentially, they are finite. All of the land, labour and capital that is available to us will be relatively more efficient in some activities rather than others. Opportunity cost is inevitable and requires firms to make trade-offs. The most productive outcome will be achieved when

every worker, piece of land and item of capital equipment is allocated to the task that suits it best (i.e. the one that results in the most productive outcome).

For example, if we want more new and inventive media-related software apps and fewer computer games, we might switch some of the creative, marketing and administrative personnel and the computing and IT expertise and equipment, etc. involved in producing computer games into publishing apps instead. However, because game inventors may be less good at creating apps than dedicated apps inventors, the quantity of marketable apps produced is likely to increase by a relatively small amount while the quantity of computer games produced falls considerably. Similarly, app inventors can be reassigned to the task of producing online computer games but, because they are not as good at this activity as the people who currently make games, there will be an opportunity cost in terms of lost output. The opportunity cost of switching resources from computer games to app creation (or from apps to games) can be calculated as the number of games that must be given up in order to produce more apps (or vice versa).

In order to maximize profits, firms need to decide which overall rate of output would be most profitable (e.g. whether to produce 100,000 or 200,000 copies of a periodical). To do so, they need to know exactly what costs and revenues might be associated with different levels of output. The so-called 'production function' describes the relationship between input costs and different levels of output. Changes in relative factor prices (of labour, capital equipment, etc.) will cause a replacement of factors that have become relatively more expensive by cheaper ones. For example, the introduction of computing and desktop publishing technologies in the 1980s and 1990s reduced capital equipment costs and allowed a reduction in costly labour inputs associated with production such as typesetting etc., thus enabling a reorganization within print publishing industries. Another example of factor substitution, this time in the audiovisual sector, was the switch towards production of animated movies in response to a period a 'escalating salaries' among movie stars in the early twenty-first century (Hoskins, McFayden and Finn, 2004: 92).

'Marginal product' is the change in total product (or the total amount produced by the firm) that results from adding a little bit more or a little less of a variable input to a fixed input. The law of diminishing returns suggests that if extra quantities of a variable factor (e.g. freelance technicians) are applied to a given quantity of a fixed factor (e.g. plant and equipment), the marginal and average product of the variable factor will eventually decrease. Hoskins, McFayden and Finn

offer the example of a small company that produces DVDs (the ‘output’) using a machine designed to be operated by three people (whose labour represents the ‘input’). Productivity increases as the number of people operating the machine increases from one to three. Thereafter, however, the onset of diminishing returns occurs because, as more personnel are added and the use of production equipment has to be shared, the efficiency and productivity of each machine operator begins to reduce (2004: 87).

However, contrary to what is implied by the law of diminishing returns, many media firms tend to enjoy increasing rather than diminishing marginal returns as their output (or, rather, consumption of it) increases. The explanation for increasing returns to scale in the media industry lies in the nature of the product and how it is consumed. The value of media content lies not in the paper that it is printed on or the ink or videotape that conveys its text or images but in the meanings, messages or stories that it has to offer – its intellectual property. This is an intangible and costs virtually no more to reproduce in large than in small quantities. The cost of producing a television programme or a film is not affected by the number of people who watch it. So, for media firms, the relationship between input costs and different levels of output tends to be skewed positively by the availability of increasing returns to scale.

## COMPETITIVE MARKET STRUCTURES

As discussed above, the production function describes how costs vary at different levels of output. Firms that wish to maximize profits are not only concerned with costs but also need to know what revenues are associated with different levels of output. To a large extent, this depends on what sort of competitive market structure a firm finds itself operating in.

Economic theory offers us a model for analysing the different sorts of structures a market can have and the degree of competition between firms in that market. The competitive market structures within which media operate will have an important bearing on how efficiently media firms organize their resources and business affairs. The main theoretical market structures are perfect and imperfect competition (i.e. monopolistic competition and oligopoly) and monopoly. The distinction between these structures is largely dictated by the number of rival producers or sellers in a given market. This is important because it is an indication of the ‘market power’ that individual firms possess and their ability to control and influence the economic



operations in that market (e.g. to set prices). The less market power that individual firms have, the more competitive the market structure in which they operate.

The structure of a market depends not only on the number of rival sellers that exist but on a variety of other factors, including differences in their product, the number of buyers that are present and barriers to the entry of new competitors. Perfect competition and monopoly are at opposite extremes. In perfect competition, markets are highly competitive and open, and each firm has zero market power. In monopoly, a single firm has absolute control over the market. Most firms tend to operate in some intermediate market structure rather than at the extremes.

Perfect competition exists when there are many sellers of a good or service that is homogeneous (i.e. exactly the same or not differentiated) and no firm(s) dominate(s) the market. In such a situation economic forces operate freely. Each firm is assumed to be a price-taker and the industry is characterized by freedom of entry and exit. So, under perfect competition, no barriers to entry exist – i.e. there are no obstacles (e.g. lack of available spectrum, or high initial capital costs) to prevent new rivals from entering the market if they wish. Monopoly, at the other extreme, involves just one seller, no competition whatsoever and (usually) high entry barriers.

It is very rare to find an example of perfect competition in the real world. Most industries, including the media, sell ‘differentiated’ products, i.e. products that are similar enough to constitute a single group (e.g. books) but are sufficiently different for consumers to distinguish one from another. In other words, they may be close substitutes but are not exact substitutes, as would be the case in perfect competition. Monopolistic competition exists when there are a number of sellers of similar goods or services, but the products are differentiated and each product is available only from the firm that produces it. Firms thus have some control over their prices.

If there are only a few sellers in a market but some competition exists for their products, either homogeneous or differentiated, the market structure is described as oligopoly. How few is ‘a few’? The most usual method of measuring the degree of oligopoly in a market is by applying a ‘concentration ratio’. These measures show the proportion of, say, output or employment or revenue accounted for by the top four or top eight firms in the sector. Another measure of market concentration is the Herfindahl–Hirschman Index (HHI) which measures the percentage market share of all firms in an industry to provide a rough guide as to levels of competition (Fisher, Prentice and

Waschik, 2010: 175–6). In the media sector, concentration levels can be calculated on the basis of audience shares (as defined by ratings or readership figures). According to Lipsey and Chrystal, in an oligopoly ‘each firm has enough market power to prevent it from being a price-taker, but each firm is subject to enough inter-firm rivalry to prevent it from considering the market demand curve as its own’ (2007: 188). So, in an oligopoly situation, firms have a greater degree of control over the market than in a monopolistic competition.

Oligopoly is the most common type of market structure in which media firms operate. Chapter 3 addresses the question of why it is that so many sectors of the media are dominated by a few large firms. In many cases, the answer is to be found in falling costs due to the economies of large-scale production. Economies of scale are prevalent in the media because the industry is characterized by high initial production costs and low marginal reproduction and distribution costs. Economies of scope – economies achieved through multi-product production – are also commonly characteristic of media enterprises. So, there are major advantages of large size for firms that operate in the media industry.

The theory of imperfect competition says that cost advantages associated with size will dictate that an industry be an oligopoly unless some form of market intervention or government regulation prevents the firms from growing to their most efficient size. If no such intervention takes place, existing firms in the industry may create barriers to entry where natural ones do not exist so that the industry will be dominated by a handful of large firms only because they are successful in preventing the entry of new firms. But substantial economies of scale in any industry will, in themselves, act as a natural barrier to entry in that any new firms will usually be smaller than established firms and so will be at a cost disadvantage.

## MARKET STRUCTURE AND BEHAVIOUR

The expectation that the behaviour or conduct of firms may be determined by the market structures within which they operate is formalized in what is called the structure–conduct–performance (SCP) paradigm first propounded by Joe Bain (1951). The SCP paradigm suggests that market structure (i.e. the number of firms, barriers to entry, etc.) will determine how the firms in an industry behave (e.g. their policies on pricing and advertising) and this conduct will, in turn, determine the performance of the industry in question – i.e. its productive efficiency (Moschandreas, 2000: 7). This model implies that the fewer firms in a

market, the greater the likelihood of collusion, anti-competitive strategies and other inefficiencies.

While empirical studies often demonstrate some sort of link between structure and performance, the SCP approach is recognized as having limitations because there is ‘simultaneity in relationships’ between structure, conduct and performance (ibid.; Martin, 2002). Recent theoretical work suggests that firms in monopoly and oligopoly are not always prone to inefficient behaviour and that contextual factors other than competitive market structure will have a bearing on the performance of firms (Tremblay, 2012: 85). Most notably, the theory of market contestability, as developed by US economists William Baumol, John Panzar and Robert D. Willig, suggests that the very fact that a market is potentially open to a new entrant will serve to contain the behaviour of monopolists – i.e. market contestability prevents the exploitation of market power to restrict output and to raise prices (Lipsey and Chrystal, 2007: 198).

Game theoretic approaches, which have become more popular in mainstream economics, place emphasis on how the performance of firms can be determined by their own decisions and their interactions with other market players. Game theory modelling involves building and testing assumptions about how firms will behave in strategic interactions so as to maximize their own self-interest (Allen et al., 2005: 570). The formalities of mathematical game theory have only sparingly being adopted (mostly in relation to modelling programming strategies) as a guiding framework for the analyses of media (Wildman, 2006: 85). However, interdependence between firms is a recognized aspect of oligopoly markets – the prevalent market structure for media. Given that ‘the behaviour of oligopolists can be seen as akin to that of a strategic game’ (Moschandreas, 2000: 169), it is not surprising that many studies of economics of media, while drawing the traditional frameworks of industrial organization, also involve some conjectural analysis in relation to the behaviour and responses of rivals. How media firms behave, in practice, under different market structures and circumstances is a concern for many media economists (Picard, 2006; Wildman, 2006; Wirth and Bloch, 1995) and will be a subject of interest throughout this book.

## WHAT IS SO SPECIAL ABOUT ECONOMICS OF THE MEDIA?

Because media and other ‘cultural’ output have special qualities not shared by other products and services, the application of economic theory

and economic perspectives in the context of media present a variety of challenges. Media output seems to defy the very premise on which the laws of economics are based – scarcity. However much a film, a song or a news story is consumed, it does not get used up.

Economics seeks to promote ‘efficiency’ in the allocation of resources. The notion of economic efficiency is inextricably tied up with objectives, but the objectives of media organizations tend to vary widely. Many media organizations comply with the classical theory of the firm and, like commercial entities in any other industry, are primarily geared towards maximizing profits and satisfying shareholders. A good number, however, appear to be driven by alternative motives. For those who operate in the public service sector, quality of output and other ‘public service’-type objectives form an end in themselves. Some broadcasting firms find themselves between the market and the non-market sector – appearing to fulfil one set of objectives for an industry regulator and another set for shareholders. Because objectives are hazy, the application of any all-embracing model based in conventional economic theory is difficult.

In free-market economies, most decisions concerning resource allocation are made through the price system. The relationship between price and resource allocation in the media is somewhat unusual, particularly in broadcasting where, notwithstanding growth in subscription-based television services, it remains the case that many of the services consumers receive do not involve a direct payment from the viewer. Without price as a direct link between consumers and producers, there is a failure in the usual means of registering consumer preferences with suppliers.

In terms of economics, production methods are said to be inefficient if it would be possible to produce more of at least one commodity – without simultaneously producing less of another – by merely reallocating resources. However, when it comes to the production of media output, this approach begins to look inadequate. For example, it might well be possible for a television company to redistribute its resources so as to produce more hours of programming output or bigger audiences for the same cost as before. But if, at the same time, this were to narrow the diversity of media output, could it be said to be a more efficient use of resources?

These questions about the efficiency of production and allocation belong to the branch of economic theory called welfare economics. Much of the work that has been carried out in the UK in relation to broadcasting economics and associated public policy issues – most notably by Alan Peacock and, more recently, by Gavyn Davies and others – belongs

to this area. Implicit in this approach is the assumption that a social welfare function (i.e. a functional relation showing the maximum welfare that can be generated by alternative resource decisions) can be defined for society as a whole. Within such a conceptual framework, media economics can play a role in showing how to minimize the welfare loss associated with any policy choices surrounding media provision.

## KEY ECONOMIC CHARACTERISTICS OF THE MEDIA

A good way of getting to grips with what is special about media economics is to consider the characteristics of media that distinguish it from other areas of economic activity. One such feature is that media firms often operate in what Picard has called ‘dual product’ markets (1989: 17–19) or what can be understood as ‘two-sided markets’ – two-sided in the sense that media firms simultaneously produce two different commodities which, in turn, can be sold to separate and distinct user groups (Rochet and Tirole, 2003). The two different outputs that media firms generate are, first, content (i.e. television programmes, newspaper copy, magazine articles, etc.) and, second, audiences. The entertainment or news content that listeners, viewers or readers ‘consume’ constitutes one saleable form of output. The audiences that have been attracted by this content constitute a second valuable output, insofar as access to audiences can be packaged, priced and sold to advertisers.

Audiences are the main currency for many media companies, because these provide advertising revenue which, as later chapters will discuss, is a primary source of income for commercial television and radio broadcasters, online media service providers and newspapers and magazine publishers. Even non-profit-seeking media organizations are concerned with audiences. Public service broadcasters, for example, must pay close attention to their ratings and the demographic profile of their audience because the audience utility or satisfaction they can demonstrate is normally central to negotiations surrounding what level of funding, whether public or otherwise, is made available to them.

The other type of media output – i.e. content – exhibits a number of interesting and unusual features, as have been noted by, for example, Blumler and Nossiter (1991) and Collins, Garnham and Locksley (1988: 7–10). Media content is generally classified as a ‘cultural’ good. Feature films, television broadcasts, books and music are not merely commercial products but may also be appreciated for the ways they enrich our cultural environment. Many cultural goods share the quality that their value for consumers is symbolic and tied up with the information or messages they convey, rather than with the material carrier of that information

(i.e. the radio spectrum, the digital file and so on). Messages and meanings are, of course, intangible and, to that extent, do not get used up. So, like other information goods, media content is not 'consumable' in the purest sense of this term (Albarran, 2002: 28; Withers, 2006: 5)

It is sometimes difficult to define what constitutes a unit of media content. This could describe, for example, a story, an article, a television programme, an entire newspaper or a radio channel. One way or another, the essential quality that audiences get value from is meanings, which are not, in themselves, material objects. Because the value of media content is generally to do with attributes that are immaterial, it does not get used up or destroyed in the act of consumption. If one person watches a television broadcast, it doesn't diminish someone else's opportunity of viewing it. Because it is not used up as it is consumed, the same content can be supplied over and over again to additional consumers.

So, television and radio broadcasts exhibit one of the key features of being a 'public good'. Other cultural goods such as works of art also qualify as public goods because the act of consumption by one individual does not reduce its supply to others. Public goods contrast with normal or private goods in that private goods (e.g. a loaf of bread, jar of honey or pint of Guinness) *will* get used up as they are consumed. As soon as one person consumes a loaf of bread, it will no longer be available to anyone else. So, a loaf of bread can only be sold once. But when an idea or a story is sold, the seller still possesses it and can sell it over and over again.

The consumption of private goods uses up scarce resources and therefore needs to be rationed (usually by the market and by prices). Public goods do not comply with this logic. The initial cost involved in creating a public good may be high but then the marginal costs associated with supplying an extra unit of it are next to zero. The marginal cost involved in conveying a television or radio programme service to an extra viewer or listener within one's transmission reach is typically zero, at least for terrestrial broadcasters. Likewise, the marginal cost of providing an online media content service to one additional Internet user is negligible. Although producing a new book, music recording or feature film typically involves a heavy investment of 'sunk costs' (Van Kranenburg and Hogenbirk, 2006: 334), it then costs relatively little and sometimes nothing to reproduce and supply it to extra customers. So, increasing marginal returns will be enjoyed as the audience for any given media product expands.

Conversely, there are relatively few savings available for media firms when audiences contract. In most other industries, producers can vary some of their costs up and down in response to how much of their product is being sold (e.g. they can cut back on purchases of raw

materials if demand slows down). For broadcasters, however, the cost of putting together and transmitting a programme service of given performance characteristics is fixed, irrespective of how many viewers tune in or fail to tune in. The same is true for Web-based media suppliers – lack of uptake will not affect the costs necessitated in producing a site and its content. Similarly, few savings can be made by newspaper and other print media publishers when circulations fail to live up to expectations (albeit that, unlike in broadcasting and electronic publishing, marginal print and distribution costs can be significant).

The presence of risk counts as another distinctive feature of media and other creative industries (Caves, 2000). Creating the initial copy of a television programme or another media product is often very expensive but, at the same time, the media industry is characterized by high levels of uncertainty about demand – which content properties will make a ‘hit’ with popular taste and which will not. The need for strategies to counteract risk, which often exert a significant influence over how media organize themselves and their activities, is another theme that will be explored in the later chapters of this book.

## ECONOMIES OF SCALE

Economies of scale, then, are a highly prevalent feature of the media industry. They will be mentioned and discussed frequently throughout this book, so it is worth clarifying what is meant by the term. Economies of scale are said to exist in any industry where marginal costs are lower than average costs. When the cost of providing an extra unit of a good falls as the scale of output expands, then economies of scale are present. This is summarized by the function coefficient (FC) which measures the average cost (AC) to marginal cost (MC):

$$FC = \frac{AC}{MC}$$

Many industries experience economies of scale, especially those engaged in manufacturing (e.g. of cars) where larger production runs and automated assembly line techniques lead to ever lower average production costs. A variety of reasons may explain why economies of scale are present. For example, sometimes it is because large firms can achieve better (bulk) discounts on required inputs than smaller firms can. Often, economies of scale are to do with the benefits of specialization and division of labour that are possible within large firms.

Economies of scale exist in the media because of the public good attributes of the industry's product. For media firms, marginal costs (MC) refer to the cost of supplying a product or service to one extra consumer. Average costs (AC) are the total costs involved in providing the product or service, divided by its audience – i.e. the total number of users who watch, read, listen to or otherwise consume it. In most sectors of the media, marginal costs tend to be low and, in some cases, they are zero. Marginal costs are virtually always lower than average costs. Consequently, as more viewers tune in or more users visit a content service website or more readers purchase a copy of a magazine, the average costs to the firm of supplying that commodity will be lowered. If average production costs go down as the scale of consumption of the firm's output increases, then economies of scale and higher profits will be enjoyed.

## ECONOMIES OF SCOPE

Economies of scope are also to do with making savings and gaining efficiencies as more of a firm's output is consumed. In this case, however, savings are created by offering variations in the character or scope of the firm's output. Economies of scope – economies achieved through multi-product production – are commonly characteristic of media enterprises and, again, this is to do with the public good nature of media output.

Economies of scope refer to the savings and cost-efficiencies made possible 'by simultaneous production of many products by one firm' (Baumol and Blinder, 2011: 267). Such economies will be present if large-scale multi-product production and distribution enables a firm to supply goods more cheaply than would be the case were each good being supplied separately by individual firms. Economies of scope arise when there are some shared overheads, or other efficiency gains available that make it more cost-effective for two or more related products to be produced and sold jointly, rather than separately. Savings may arise, for example, if specialist inputs gathered for one product can be reused in another.

Economies of scope are common within the media because the nature of media output is such that it is possible for a product created for one market to be reformatted and sold through another. For example, an interview with a politician which is recorded for broadcast within a documentary might also be edited for inclusion within other news programmes, either on television or, indeed, on radio. The same television content can be repackaged into more than one product. And the



reformatting of a product intended for one audience into another ‘new’ product suitable for a different audience creates economies of scope.

Assuming economies of scope are present, the benefits available through a reduction in costs (C) for a multi-product firm producing, say, good A and good B can be described by the following mathematical equation:

$$C(A,B) < C(0,A) + C(B,0)$$

Whenever economies of scope are available to be exploited, diversification will be an economically efficient strategy because ‘the total cost of the diversified firm is low compared with a group of single-product firms producing the same output’ (Moschandreas, 2000: 102). Strategies of diversification are increasingly common among media firms and this reflects the availability of economies of scope which, thanks to digitization, have become even more widespread. Economies of scope and scale are important characteristics of the economics of media and these concepts will be developed and exemplified in later chapters.

## CHANGING TECHNOLOGY

Media industries are heavily reliant on technology and as such are regularly affected by new advances in how media may be produced or distributed. Each major evolutionary step – from the invention of the printing press, to the arrival of broadcasting, to the spread of the Internet – has brought both upheaval and opportunity for market incumbents. Thus, media firms are no strangers to the so-called ‘gales of creative destruction’ discussed further in Chapter 2.

Digitization has unquestionably had a transformative impact on media industries and markets. The spread of digital distribution methods has both increased the volume of media content offerings in circulation and fragmented audiences, thus shifting the emphasis of scarcity within the media supply chain away from content and delivery and towards capturing audience attention. As digital convergence and growth of the Internet have eroded traditional boundaries and reshaped media markets and modes of consumption, the advent of greater competition, the necessity for organizational adjustment and the unraveling of conventional revenue strategies have posed new challenges for media suppliers. At the same time, the transition to digital delivery platforms has brought with it a host of commercial and creative possibilities.

Content producers have also been profoundly affected by recent technological change. Digitization has affected production costs and

facilitated the introduction of automated content management systems which enable more efficient exploitation and management of content assets. But it has also introduced new hazards, including the greater threat of intermediation, i.e. lifting and reassembling of online content, and other 'free rider' problems.

Throughout this book, great emphasis is placed on understanding the economic significance of digital developments. However, it is worth bearing in mind that, despite changing technology and widening market access, many aspects of the economics of content provision – e.g. the public good characteristics of media content and the prevalence of economies of scale and scope – remain unchanged. The business of supplying media is and always has been centred around conveying stories and messages to consumers – enabling a connection between content and audience and generating an economic return from this activity. While the struggle to discover how to make the most of advances in technology is a perpetual challenge in the media, it is evident that the structure of markets and the interactions and behaviours of organizations in this industry are frequently guided by a distinctive and core set of economic fundamentals and principles with which this book aims to familiarize you.