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Introduction and Overview

1.1 Why Media Economics?

This book sets out the economic principles and concepts needed to understand media industries and issues. Most of the applications are real-world examples drawn from countries such as the United States, Canada, the United Kingdom, and Australia.

Media industries have customarily been defined in terms of a distinct product distributed in a particular way—books, magazines, television, radio, music, film, and video, for instance.

In the new digital economy, the content provided by many of these formerly distinct industries can be distributed via the Internet and read, viewed, or listened to on a personal computer (PC). E-mail can be read on a TV screen, and telephone messages can be routed over the Internet. With convergence, companies such as AOL-Time Warner in the United States and BCE in Canada are vertically integrated, including text, audio, and video content; an Internet portal; and distribution capability through cable or telephone wires. In this new economy, only a broad definition of what comprises media industries makes sense. Hence our applications will be drawn widely from new media, print, television, radio, film and video, video games, music recording, cable TV, and telecommunications.

These are examples of media issues and applications that will be addressed in this book. How is the Internet affecting the supply of information-based entertainment and cultural goods? Why was owning a commercial television broadcasting license, as Lord

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Thomson of Fleet said, “like having a licence to print your own money” (Oxford Concise Dictionary of Quotations, 1997, p. 332)? Why did knowing that the demand for television advertising is relatively insensitive to changes in the price of advertising spots lead the Peacock Committee to recommend against permitting advertising on the BBC? Why is the benefit of subscribing to a network, such as a telephone network or Internet (e-mail) network, greater the larger the number of subscribers, and what are the implications for corporate strategy? How do economies of scale provide the United States with a competitive advantage in producing television drama and movies? Why are there so many media mergers, such as those between AOL and Time Warner in the United States and BCE’s acquisition of CTV in Canada? How could Paramount claim that a movie bringing in \$250 million at the box office was produced at a loss? Why are media industries inherently risky, and what can producers and distributors do to reduce this risk? How can we determine how competitive a given industry (e.g., the newspaper industry) is? How does the structure of a media industry affect its conduct and performance? Why have governments traditionally asked regulators to set the rates for telephone services? Why have many governments recently retreated from regulating long-distance rates? Why have some governments used competitive bidding to award cable television franchises or allocate electromagnetic spectrum frequencies? What has caused the “crisis” in public broadcasting? Why was it “winner takes all” in the VHS versus Betamax battle of VCR standards? Why are the prices for foreign sales of U.S. television programs so low, and does this constitute unfair competition? Why do publishers of academic journals have different subscription prices for institutions (libraries), students, and other individuals? Why do telephone companies have peak and off-peak prices for long-distance calls? Why have movie projectionists suffered big reductions in wages? Why do superstars, such as top movie directors and actors, authors, and pop stars, earn such vast salaries? Why is broadcasting, but not newspaper publishing, usually regulated and sometimes subsidized? Why is trade in television programs and films so controversial? Is protection of media industries justified?

Why study media economics? Many students in media studies, communications, radio and television, journalism, and film studies are exposed to little or no mainstream economics. Indeed, economists are often viewed with mistrust as mercenary folk who know

the price of everything and the value of nothing, people who favor cost cutting at the expense of cultural development. An appreciation of the economic forces driving industry and firm behavior is, however, invaluable—not only to a general understanding of the media but to the ability to be effective in a media- or communications-related job, whether in the corporate or public sector.

If you are a student in business, economics, or political science, why should you take media economics rather than a more traditional introduction to economics? Maybe you are already pursuing a career in the media or are seriously thinking of doing so. However, the real reason to take media economics is that during the course, you will learn basic economics, and instead of worrying about widgets and whatsits, you will be able immediately to apply your learning in a dynamic and controversial sector of the economy, with interesting hands-on applications of your new skills.

Our emphasis is quite different from that of the usual media economics text, which provides a bare minimum background in economics by way of brief introductions to economic concepts and the industrial organization framework before undertaking chapter-by-chapter studies of the various media industries using that framework. The industrial organization framework has its place (we devote chapter 7 to it), but there are pitfalls in using it. Much of the industry material, such as a size ranking of the leading firms, is descriptive and soon becomes dated. More fundamentally, the traditional industry-specific perspective is increasingly outmoded, as individual industry segment distinctions are becoming almost meaningless in an era of convergence and digitization. In contrast, this text provides a much broader and deeper understanding of key economic concepts. Our approach provides a superior background for analyzing media industries and issues and functioning effectively in a job in a media company.

1.2 What Is Economics?

Economics is the science that studies how the economy allocates scarce resources, with alternative uses, between unlimited competing wants. But what does this really mean?

The *wants* reflect the desires by households or individuals acting as consumers. The wants are satisfied by consumer goods (tangible) and services (intangible). Even though most people in the developed

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world are able to purchase a variety and volume of goods and services undreamed of by our ancestors, very few people are able to consume everything they would like. Wants are a relative concept; there is invariably some neighbor or friend who is able to buy attractive items we would like to be able to afford but cannot.

These unlimited wants can only be provided using resources that are scarce and capable of producing many alternative products. These resources are also called *inputs* or *factors of production*. Resources can be placed in one of three categories: land (all natural resources), labor (all human employment designed to produce goods and services), and capital (all man-made aids to production).

Economics is divided into two main strands, *microeconomics* and *macroeconomics*, and an applied branch known as *managerial economics*.

- Microeconomics is concerned with the behavior of individual economic units, notably the firm and the household, and the role of relative prices in affecting behavior.
- Macroeconomics is concerned with economic aggregates, such as the overall level of employment or unemployment, the average price level, and gross national product (GNP).
- Managerial economics is the application of economic concepts, principles, and tools to managerial decisions.

This text deals primarily with microeconomics and managerial economics, as these are most relevant to media issues.

1.3 Problems to Be Solved by Any Economy

Because of scarcity, any economic system has to solve the *what*, *how*, and *for whom* allocation problems.

- A. *What goods and services are to be produced, and how many of each?* This entails, for example, not only how many television receivers but what mix in terms of, for example, screen size, digital or analogue, flat screen or conventional, stereo or nonstereo, picture-in-picture capability or not, and so on.
- B. *How are the goods and services to be produced?* Which scarce resources are to be used in their production and in what combination? Should a very capital-intensive or labor-intensive method be used? The answer will vary with the product and even within

a product group. The combination of resources appropriate to production of a local television station's newscast may be quite different from that appropriate for a network newscast. How should an animated film or TV program be made? Should it be made using many graphic artists or should it be largely computer generated? In nonanimated films, should scenery and special effects be done on location or created digitally?

- C. *Who is to receive the limited goods and services produced?* How are they to be allocated between consumers? Who is going to own and use the television sets, DVD players, or magazines made? Who is going to have an opportunity to watch the movie in the theater or to own a camera cell phone?

1.4 Solving These Allocation Problems Under Different Economic Systems

Under a *command economy*, such as that in the old Soviet Union, factories are state owned and allocation is made by central planners on the basis of economic forecasts. Planners may issue an edict to state-owned Factory No. 104 to produce 10,000 television receivers per month. Forecasting demand is extremely difficult, especially when economic data tends to be poor and out of date. Perhaps people would like to buy 20,000 or 5,000 television receivers from Factory 104. Perhaps they would indeed like to buy 10,000, but of a different screen size from those being produced. Perhaps they want to buy 10,000 television receivers of the size produced but would prefer to pay more for better quality. Factory 104's responsibility is to produce 10,000 units per month. Typically there is no incentive to provide an appropriate product range or to maintain the quality of output. The command economy has proved inflexible and unable to provide citizens with a rising standard of living.

In a *market economy*, allocation results from decisions made by individual households and firms interacting in the *product market* (where consumer goods and services are bought and sold) and the *factor market* (where inputs are bought and sold). Households have two roles. They are consumers of goods and services, purchasing them in the product market, and suppliers of labor (and, in some cases, investment financing for capital) through the factor market. Similarly, firms supply consumer goods and services to the product market and buy (hire) labor and other inputs in the factor market.

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Money flows from households to firms in the product market and from firms to households in the factor market.

In a market economy, the *what*, *how*, and *for whom* allocation problems identified are solved as follows:

- A. *What goods and services are to be produced, and how many of each?* This is determined by the demand for products at different prices by households (acting as consumers) and willingness of firms to supply products at different prices.
- B. *How are the goods and services to be produced?* The number and combination of inputs depends on the relative prices of inputs and their productivity; that is, how effectively they contribute to making the product.
- C. *Who is to receive the limited goods and services produced?* The allocation is made by rationing according to the willingness of households (which includes ability) to pay the price asked.

Economics, in examining how a market economy works, assumes that households and firms make decisions based on their own self-interest. The objective of households is assumed to be *utility maximization*, utility meaning, in this case, satisfaction. Households allocate their income among consumer goods and services in the manner that maximizes satisfaction, and they choose a line of work that gives the most satisfaction. An important element of the latter will be the level of remuneration, as this will affect the size of the basket of consumer goods and services the household can buy.

The objective of firms is assumed to be profit maximization. Profitability determines what is to be produced, the features of the product, the price at which to sell, the level of output, and the combination of resources to employ.

Households and firms weigh the benefits and costs of alternative choices in terms of utility or profits, respectively. *Incremental analysis* is important, as these choices are often not of the all-or-nothing variety but of how much or to what degree. For example, a household does not typically make a decision whether or not to buy a movie ticket this year but whether to buy 4 or 5 or 6. Similarly, once a company is established in the magazine business, the decision is more typically whether to produce 60,000 or 65,000 copies of next month's issue rather than whether to produce at all. Weighing the benefits and costs of relatively small changes is known as incremental or marginal analysis.

Relative prices play a crucial role in allocation decisions. Firms will find it most attractive to allocate resources to production of goods and services where the product price is relatively high and prices of inputs used in production are relatively low. Households will find low product prices attractive in their role as consumers and will prefer employment in an area where the price for their labor is relatively high. In competitive conditions, these prices themselves will be determined by the interaction of households and firms in the product market and the factor market.

Most economies today are *mixed economies*, with both a *private* and a *public* sector. However, in most of these mixed economies, the private sector, in which privately owned firms produce the goods and services, dominates. The public sector part of the economy is that in which the producing organizations, such as public broadcasting organizations, are publicly owned. In a mixed economy, the government may also assume the role of regulating and subsidizing privately owned firms in selected industries.

A classification somewhat similar to private and public is *market* and *nonmarket*. In the nonmarket sector, production may go ahead even if the revenue, if any, from selling the good or service does not cover the costs of production. An example is children's education. Normally public sector organizations supply the nonmarket sector and private sector organizations supply the market sector. For example, children's education and public broadcasting are usually provided by public organizations operating in the nonmarket sector. However, this is not always the case. Children's television programming produced in the market sector may be supplied to both private and public broadcasting organizations. In countries such as France, Canada, and Australia, some independent producers of feature films and television programs (private sector) rely partially on public funding (nonmarket sector). In other countries, such as the United States and Japan, public funding is insignificant, and film producers operate unambiguously in the market sector.

1.5 Key Concepts

Key concepts include *scarcity*, *choice*, *opportunity cost*, *substitutes*, *specialization*, *trade*, *incentives*, and *economic growth*. We will return to these concepts throughout the book, but we want to introduce them briefly here.

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As we have seen, *scarcity* arises because resources are limited, but wants are unlimited. Hence there is an ongoing need to make a *choice* between desirable alternative goals or wants. There is a cost to every choice made, as satisfying one want means forfeiting another. In economic terminology, this *opportunity cost* is the best alternative foregone. Thus the public subsidy going to produce one more feature film may result in 50 fewer scholarships to university students. Supporting a public broadcasting organization may entail foregoing a tax cut; the opportunity cost here is the foregone utility from consumption of the goods and services households would choose to buy with the increase in their after-tax income. Understanding the opportunity cost concept is crucial to a sensible consideration of media issues. Arguments made often use the following faulty logic: "Public broadcasting is desirable [a list of reasons for considering it desirable is usually provided], therefore we should maintain [or increase] the level of funding." The opportunity cost concept teaches us that being desirable is not enough. *Substitutes* are always available. There are always attractive alternative goods and services that can be produced with given resources.

Both households and nations have found it more efficient to *specialize* rather than attempt to be jacks of all trades. At the household or individual level, specialization increases efficiency because talents and abilities differ. Also specialization promotes learning by doing. For example, tax accountants are very good at filing tax forms not only because they have special training but because of the learning and practice that comes from repeatedly doing this task. At the national level, it is also more efficient for a country to specialize in goods and services in which it has a comparative advantage; that is, in those goods and services that the country can produce at a lower opportunity cost.

Specialization is only possible if accompanied by *trade* that is itself facilitated by money used as a medium of exchange. Without money, barter can be the only form of trade. Specialization and trade is a very controversial topic in communications. The United States is the dominant producer of entertainment or cultural goods such as feature films, and in most countries, indigenous producers find it difficult to compete. We will return to this topic at several points in the text.

Economics assumes that people act in their own self-interest. In a market economy, *incentives* are provided by the price system. A

lack of appropriate incentives was a prime reason for the collapse of communism in the Soviet Union and the Eastern Bloc. In the command economy of the Soviet Union, a common (if bitter) joke between workers that described the relationship between themselves and the state was “We pretend to work, and you pretend to pay us.”

An important objective of any economy is *economic growth*. Growth permits rising standards of living and arises from technological progress and capital accumulation. Technological progress is the development of new and better ways of producing goods and services. Capital accumulation involves the production of capital goods that are then used as inputs to make consumer goods and services. In the short run, there is an opportunity cost because resources that could be used to directly produce consumer goods and services are diverted to production of capital goods. In the long run, however, production of consumer goods and services is more efficient, and growth of output occurs.

Economic growth sometimes uses up exhaustible resources and causes environmental degradation, but these are not inevitable problems. Before the collapse of communism, West Germany enjoyed higher growth rates than East Germany, but it was the East German factories that were the great polluters. It was the East German Trabant that had serious emission problems, not the clean-running Mercedes or BMW vehicles. Growth can create resources to examine and solve environmental problems. Communication improvements, by reducing the need to move goods and people, also reduce environmental problems.

1.6 Economic Methodologies

Economics employs both positive and normative methodologies. It is important to appreciate how the approaches differ because otherwise misunderstandings arise.

Microeconomics employs a *positive economics* methodology that is concerned with explaining and predicting economic phenomena that can be observed. It uses the scientific method. Definitions describe the conditions or circumstances being studied. For example, the type of industry being studied might be defined as one in which there is a single seller or, alternatively, one in which there are very many sellers. Assumptions are made about the motives of economic units. For example, as we have seen, firms are assumed to be

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profit maximizers. A process of logical deduction is used to discover the implications. The process of logical deduction may be made through words, graphical analysis, or mathematical techniques such as calculus. This book will use words supplemented by graphical analysis. The implications derived from the definitions and assumptions made are in the form of explanations and predictions. These explanations and predictions are tested by a process of empirical observation to see whether they are consistent with the facts. Because economics is a social science, controlled laboratory experiments are not usually possible, and the process of testing is thus difficult. Typically, testing involves statistical analysis of data generated over time (time-series data) or across economic units at one point in time (cross-section data). Consideration of such statistical techniques is beyond our scope.

Positive economics makes no value judgments. For example, a positive economic theory based on the assumption of profit maximization does not imply that firms ought to maximize profits. What it does imply is that a theory based on the assumption that firms are profit maximizers provides explanations and predictions more consistent with observed facts than theories based on alternative motivational assumptions. Noneconomists (and most people in media and communications and related fields are noneconomists) often have difficulty with this. For example, a number of years ago, we undertook a study of broadcasting for the Canada government. The completed study was reviewed by several members of the then Department of Communications. One reviewer wrote: "The assumption made [by the authors] that private broadcasters act as profit maximizers is so cynical that it undermines the credibility of the entire study." We remain unrepentant. The actions and behavior of private broadcasting organizations are explained well by a theory based on the assumption they are motivated by profits. Some may wish that private broadcasting organizations' primary motivation were more high minded, for example, promotion of cultural development, but this is another issue. Economists would be eager enough to build a theory based on such an alternative assumption if the predictions of such a theory proved to be more consistent with the facts.

Normative economics considers what should or ought to be and often involves a trade-off and judgment of what is good or bad. An example of a normative statement is: "the government should be more concerned with equity in income distribution than in economic growth." Policy decisions by governments or strategic decisions by

companies (managerial economics) typically entail trade-offs and a judgment of the relative merits of competing goals.

1.7 Decision Making

When proposing a government policy, evaluating an existing policy, or considering a company strategy, six questions should be asked:

1. What is the problem?

This takes into account the questions of why a decision is being considered in the first place. Context should also be considered in answering this question.

2. What are the goals?

Possible broad public policy goals include cultural goals, as well as economic goals such as efficiency, economic justice or fairness (equity), economic growth, and economic stability. A given public policy proposal may have a much narrower objective, however, such as increasing the profitability of domestic broadcasting organizations. If it is a decision of a private company, the broad goal might be profit maximization, but a narrow goal might be increasing audience ratings for the supper-hour newscast.

3. Would the proposed decision option achieve these goals?
4. Would the proposed decision option have adverse side effects?
5. Are there alternative means of achieving these goals?
6. How do the net benefits (total benefits minus total costs) of the proposed decision option compare to those for the alternatives?

Let's use these six questions to examine a government proposal to require theaters to devote at least 20% of screen time to domestic films.

What Is the Problem?

Suppose that domestic films receive about 3% of domestic cinema screen time and that the box office share is even lower (the situation in Canada).

What Are the Goals?

Assume that the government has stated the goals to be promotion of domestic film production, promotion of theatrical viewing of domestic films, and strengthening of national culture.

Would the Proposed Decision Option Achieve These Goals?

Promote domestic film production. Assured access to domestic cinemas could be expected to result in greater film production. However, will the domestic industry be able to supply enough films to meet the quota? Will these films attract an audience and be profitable? The policy would raise the need to define what constitutes a national film—cultural content or the nationality of inputs. Would international coproductions qualify? Would Hollywood films shot on location in the country qualify?

Promote viewing of national films. Making more national films available in cinemas does not ensure that people will watch them. Substitutes are everywhere. A typical person might go to the movies four times a year, and there will still be all the films from the Hollywood studios to choose from. Even if, thanks to the quota, there is no U.S. film showing at a convenient cinema at the particular time that a person feels like viewing, renting a video of a U.S. film is still an option. If exhibitors and distributors are handling national films to satisfy the quota, they are likely to keep marketing and promotion costs to a minimum; to do otherwise would be throwing good money after bad. They are also likely to relegate national films to unpopular times, such as Monday afternoons or evenings. Hence, there is ample reason to be sceptical that a screen-time quota would significantly increase theatrical viewing of domestic films.

Promote national culture. National culture can only be strengthened if more people actually watch national films. From this discussion, we can see that cinematic viewing of domestic films may not increase. Even if cinematic viewing does increase, would these additional viewers have watched the films in any case on television or video? (Films that do not get cinema release are nevertheless often shown on television.) Will the films promote national culture? To what extent will they be generic, imitating Hollywood, rather than culture specific?

Would the Proposed Decision Option Have Adverse Side Effects?

Adverse side effects that will or may occur could include:

1. The direct cost to the cinemas of providing the data with respect to screen time allocation and to the government agency or department responsible for collecting and assessing the data to see if cinemas are conforming to the quota
2. Sacrificing the best of offerings from other countries, as cinemas are going to be reluctant to reallocate screen time from U.S. to national films
3. A reduction in the number of screens because the policy can be expected to reduce the profits of cinemas (exhibitors) and distributors as they are forced to move from their preferred film portfolio

Given preferential access, domestic producers of national films may feel less pressure to produce films that will appeal to audiences.

Are There Alternative Means of Achieving These Goals?

Alternatives would include direct government subsidy of domestic film productions (which Canada already does, to some extent) and various tax relief measures.

How Do the Net Benefits of the Proposed Decision Option Compare to Those for the Alternatives?

Ideally, the benefits and costs would be quantified. Very often, such as would no doubt be the case in this example, this is impossible. Nevertheless, a benefit-cost framework is the appropriate context, and a qualitative weighing of the benefits and costs should be undertaken. This should also be done for the alternatives, such as those identified here. One alternative that should never be forgotten is *doing nothing*—that is, maintaining the status quo.

In assessing policy proposals, one should be wary of statements such as, “Our country needs to have our own cinemas showing our own films.” What is wrong with this statement? The basic problem is the notion of necessity. What disaster will befall us if our cinemas

are not showing our films? Does the statement imply that cinemas should only be showing our own films? Substitutes are always available. Does it change matters if our films are available on television, DVDs, or videocassettes? Is it relevant if other domestically produced cultural products, such as books, are readily available? What would be the cost of a policy ensuring that our own cinemas are showing our own films? As we have seen, resources are scarce, and hence any course of action has an opportunity cost in terms of alternatives forfeited. Would the money that would be required to attain the goal (if indeed it is attainable) be better used on day-care subsidies, health care, or left in the hands of taxpayers?

Statements of the “all or nothing” variety are suspect. An example is, “All roads in the country should be paved.” The problem here is that although it may well make sense (benefits greater than costs) to pave some gravel roads, the benefits of paving some very remote, lightly travelled roads will certainly be less than the cost. Returning to our media example, even if a policy measure that improved cinema access for some of our films passed a benefit-cost assessment, it is inconceivable that this would be the case for all national films. As we have seen, using the incremental approach, economists ask, “For how many units is it worthwhile?” How many miles or kilometers of road should be paved? How many of our films should be guaranteed cinema access?

1.8 Summary

Any balanced examination of the media cannot ignore the contribution and perspective that economics provides. Unlike the traditional media economics text that provides industry-specific examinations of the media, an approach that is increasingly outmoded as convergence blurs distinctions between media, this book stresses a deeper understanding of economic concepts and the tools necessary to analyze media issues and decisions. An understanding of the economic forces driving industry and company behavior is invaluable to you if you wish to be effective in a media or communications-related job, whether in the corporate or public sector.

Economics studies how the economy allocates scarce resources, with alternative uses, between unlimited competing wants. Three allocation problems need to be solved. *What* goods and services are to be produced, and how many of each? *How* are they to be produced;

which scarce resources are to be used, and in what combination? *Who* is to receive the limited goods and services produced?

In a market economy, allocations result from decisions made by individual households and firms interacting in the product market (where consumer goods and services are bought and sold) and the factor market (where inputs are bought and sold). Households and firms are assumed to act in their own self-interest. Households attempt to maximize satisfaction or utility; firms attempt to maximize profits. Relative prices play a crucial role in allocating scarce resources.

Most economies today are mixed economies, but the private sector, where privately owned firms produce goods and services, dominates the public sector, where producing organizations, such as public broadcasting organizations, are publicly owned.

Key economic concepts are scarcity, choice, opportunity cost, substitutes, specialization, trade, incentives, and economic growth.

Economics employs both positive and normative approaches. Positive economics is concerned with explanations and predictions relating to economic phenomena that can be observed. Definitions describe the conditions or circumstances being studied, and assumptions are made about the motives of economic units. Through a process of logical deduction, explanations and predictions are made. These explanations and predictions are tested by a process of empirical observation to see whether they are consistent with the facts. The more consistent they are with the facts, the better the theory. No value or moral judgment is involved.

In contrast, normative economics considers what should or ought to be and often involves a trade-off requiring a value judgment.

When making a decision, whether it involves a government policy or a company strategy, the following questions should be asked. What is the problem? What are the goals? Would the proposed action achieve these goals? Would the proposed actions have adverse side effects? Are there alternative means of achieving these goals? How do the net benefits of the proposed action compare to those for the alternatives?