ECONOMIC APPROACHES TO ORGANIZATIONS

Sixth Edition

Sytse Douma and Hein Schreuder

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Economic Approaches to Organizations

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For password-protected online resources tailored to support the use of this textbook in teaching, including three additional online chapters, please visit **www.pearsoned.co.uk/douma**

ON THE WEBSITE

Preface

This sixth edition marks the Silver Jubilee of a book originally published in 1991. The book has been translated into five languages – Chinese, Danish, Japanese, Korean and Spanish.

It has been gratifying to witness the success of the book, but to us it has been even more satisfying to work on its evolution from one edition to the other. In the fourth edition, we expanded the conceptual framework of our book to include more emphasis on the environmental and institutional context of markets and organizations. In the fifth edition, we split the chapter on economic approaches to strategic management into two separate chapters dealing with business strategy and corporate strategy, respectively, allowing us to address the distinctive strategic tasks at the business and corporate levels of larger, diversified organizations in a more focused approach. In the sixth edition, we have expanded the main text with the following topics:

- Introduction of a seventh, Internet-based coordination mechanism: Digital Platforms. Demonstration of the rapid rise of the use of such platforms, powered by algorithms and network effects.
- Discussion of the corresponding organizational configuration to which Digital Platforms give rise: the Platform Organization. Extensive coverage of such Platform Organizations, like Amazon, Google, Uber, Airbnb, Alibaba Baidu and Facebook.
- A new chapter on Behavioural Economics. When we wrote the first edition back in 1991, behavioural economics was still in its infancy. Since then the field has developed enormously. In the fifth edition, we already introduced several concepts of behavioural economics, such as loss aversion and the endowment effect. In this sixth edition, we devote a whole new chapter to this important new field, which is very relevant for the study of organizations.
- The chapter on Game Theory has been restructured.
- The concluding section on organizations as complex adaptive systems has been expanded to reflect the recent developments in this exciting field.

In addition, all chapters have been reviewed and updated with new developments and examples.

With these expansions, which we deemed necessary, we rethought the basic structure of our book. Since the fourth edition, we had included three 'application chapters' to the book, dealing with: Mergers & Acquisitions, Hybrid Forms, and Corporate Governance. We felt that the book would become too large and unwieldy if we maintained all these chapters. Therefore, we have decided to include part of the material on Hybrid Forms in the present Chapter 9. The full chapter on Hybrid Forms as well as the other 'application chapters' on Mergers & Acquisitions and Corporate Governance are now available in updated versions electronically on www.pearsoned.co.uk/douma.

There has been no lack of theoretical developments and demonstrations of the relevance of economic policies and approaches in recent years. Since the publication year of our fourth edition (2008), the world has experienced a severe financial crisis, triggered by the collapse of Lehman Brothers in the USA. This has led to severe pressures on the banking systems of many countries. The term 'moral hazard' which may have been a rather arcane, technical term in the first edition of our book has become very familiar to those reading newspaper coverage of the bail out of banks and large corporations that were deemed 'too big to fail'. The financial crisis has also exacerbated the plight of companies with unsuccessful strategies to cope with rapid technological change (Kodak) or globalization of markets (Volvo). In particular, the increasing force of the 'digital revolution' has forced many companies to rethink their business models. Another set of companies have thrived in these circumstances (Alibaba, Apple, BMW, Instagram, Snapchat). In this sixth edition, we will examine these changes, particularly from the perspective of the twin needs for 'exploration' and 'exploitation' which companies must satisfy for long-term success. As a result of all these new developments, we have had no difficulty at all in coming up with many new boxes illustrating the applicability of the economic concepts and approaches covered in this book.

This book is intended for students of organization and management – an important area of study for students of business administration, economics, sociology and organizational psychology. There is no shortage of textbooks on organization and/or management, but most do not include even a short introduction to the various economic approaches to organizations that have been developed in recent decades. This book takes a different approach: it has been designed as an introductory text on the analysis of organizations from an economic perspective. The book has been used successfully as a main text on organization and management courses in many universities and business schools with an emphasis on economic aspects of management (such as finance, marketing and accounting). In other settings, the book can be used as a supplementary text in conjunction with a more conventional textbook on organization and/or (strategic) management.

No prior knowledge of economics is assumed. The economic background needed to understand the arguments made in the text is explained in the text itself, mainly in Chapter 2.

Students of economics will also find this book useful. Most textbooks in microeconomics devote little attention to the field of organization and management. This book offers students in economics a view from their own discipline into a related but usually unknown field.

The book starts by comparing markets and organizations. Why do organizations exist at all? Why are not all economic decisions coordinated by the market mechanism? Conversely, why do markets exist at all? Why is not all production carried out by one large firm?

Our answer is that information requirements play a crucial role in understanding why markets and organizations coexist. Markets and organizations offer different solutions to the information problems that are inherent in many situations. Understanding these differences leads to insights where markets are most appropriate and where we should expect organizations to perform better. The different advantages of markets and organizations also explain why we often find that a mix of market and organizational coordination is the optimal solution from an economic point of view.

The book consists of two parts. In Part I, Chapters 1 to 6, we lay the foundations for the economic approaches to organizations that are discussed in Part II. In Chapter 1, we build, step by step, a conceptual framework to explain the fundamental economic approach to organizations. In that framework, information is a concept of vital importance.

Chapters 2 and 3 explain how markets and organizations work. In particular, these chapters explain how decisions are coordinated by various mechanisms, such as the price mechanism, direct supervision, mutual adjustment and standardization. Chapter 4 then focuses on the information requirements of different types of coordinating mechanisms. How players can coordinate their decisions in different information settings is also the central theme of the discussion of game theory in Chapter 5. Our new chapter 6 summarizes the findings of Behavioural Economics which are most relevant for studying organizations. The first six chapters, which form Part I, thus explain the fundamental concepts and methods underlying the economic approaches to organizations.

As the title of this book suggests, there are several different but related economic approaches to organizations. These approaches are discussed and compared in Part II, which consists of Chapters 7 to 13. The approaches are:

- behavioural theory, which sees the firm as a coalition of groups of participants, each with its own interests;
- agency theory, which focuses on delegating decision-making to an agent, while the boss (or principal) can only partly observe the agent's behaviour;
- transaction cost economics, which focuses on the sum of transaction costs and production costs as determinants of organizational forms;
- economic contributions to strategic management from the field of industrial organization and game theory, with applications in the areas of business strategy and corporate strategy;
- evolutionary approaches to organizations, which direct our attention to the development of organizational forms in the context of their interaction with their environments.

Chapter 13 compares and evaluates these different approaches and adds the perspective of organizations as complex adaptive systems.

As indicated, three areas of the application of the theories and approaches discussed in Part II are available on www.pearsoned.co.uk/douma.

- Mergers and Acquisitions applies many concepts such as hidden information (adverse selection), hidden action (moral hazard), the winner's curse and auction theory to the context of the acquisition, divestiture or combination of companies.
- Hybrid Forms deals with íntermediate' organizational forms, such as joint ventures, business groups and franchising. These are sets of organizations where coordination between those organizations takes place by means of the

price mechanism and various other coordination mechanisms simultaneously.

- Corporate governance is discussed as a special case of the framework developed in this book. It covers, amongst other topics, agency problems, the use of incentive contracts, and internal and external monitoring. It also elaborates on different systems of corporate governance and their evolution in various parts of the world.

The field of economic approaches to organizations has been growing substantially since 1991 and this book has been growing as well. The first edition consisted of 185 pages, whereas this sixth edition has increased to nearly 400 pages with an additional 90 pages available electronically. Nevertheless, our ambition has remained the same throughout these years: to present the economic approaches to organizations in a way that we hope is concise, illuminating and appealing. We welcome the feedback of users whether we have achieved that ambition and any comments or suggestions you may have to improve this book further.

An instructor's manual containing answers to end-of-chapter questions, suggestions for further reading for each chapter, additional open questions with answers, multiple choice questions and true/false statements with answers, items for further discussion in the class room, as well as copies of many of the figures found in this edition, is available at no extra cost to lecturers adopting this book as a textbook. An electronic version is available to download at **www.pearsoned.co.uk/douma**.

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Hein Schreuder

Visit the Companion Website at **www.pearsoned.co.uk/douma** to find valuable Lecturer Resources including:

- Complete, downloadable Instructor's Manual.
- Powerpoint slides that can be downloaded.
- Three chapters on applications of *Economic Approaches to Organizations* to the fields of:

  Mergers and Acquisitions
  Hybrid Forms, such as joint ventures, franchising and business groups
  Corporate Governance.

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Part 1

Foundations

1 Markets and organizations

1.1 The economic problem

Imagine a world of abundance – perhaps a tropical island where you are basking in the sun, with lots of food and a tribe of friendly islanders as your companions. Would you have any economic problems on this island? Well, 'No', you may say, 'I can't imagine *any* problem on such an island, let alone an economic problem'.

Many people associate economic problems with money. As money would be either absent or abundant on our imaginary island, they would think there would be no economic problems. An economist, however, would not be content with this reasoning. He/she would enquire further, asking, for example, whether you felt you had enough time to enjoy all the pleasures of your island or if your needs for housing, education, culture, friendship and so on had been met. The point is that an economist would identify an **economic problem** in any situation where needs would not be met as a result of scarcity of resources – 'resources' being quite broadly conceived as meaning all factors that may contribute towards the satisfaction of human needs. So, yes, you may not have an economic problem on your fantasy island, but only if you could truly say that all your needs would be met.

Economic problem

Time to return to the real world, where economic problems abound, whether we apply a narrow definition or the broader one presented above. We do not have enough land to meet all our needs for cultivation as well as ecological preservation. We do not manage to feed the world's population properly. Many raw materials are in limited supply. Talent is always scarce and so is time. Most people, even in rich countries, do not earn enough money to buy everything that they would like to buy. In short, scarcity is a fact of life in the real world. Given this predicament, the economic problem may be rephrased as the problem of how to make the best use of the available resources. Alternatively, in economic jargon, what is the **optimal allocation** of the scarce resources over the alternative uses that can be made of them? Resources that are optimally allocated are said to be used with **efficiency**.

Optimal allocation

Efficiency

This book is concerned with economic approaches to organizations. Now, economics might not be the first discipline you think of when trying to understand organizational phenomena. Indeed, it will be argued later that economics had for a long time hardly any contribution to make to the study of organizations. The approaches that we present in this book have been developed relatively recently, although in some cases their origins are much older. So, you are quite justified in wondering what insights economics has to offer. Our answer is that economic approaches to organizations are fruitful whenever the problem to be studied has

Economic aspect

an **economic aspect** – that is to say, whenever part of the problem deals with the (optimal) allocation of scarce resources.

Note that we have carefully specified that economics deals with parts and aspects of problems. We believe that there are hardly any 'purely economic' problems. Similarly, there are hardly any purely legal, sociological or psychological problems. All these social sciences deal with aspects of real-world phenomena. All illuminate a part of social reality. Whoever believes that economics can explain entirely the 'marriage market' or, for that matter, organizational phenomena is guilty of 'economism' (which, we are informed, is a contraction of economics and colonialism). There is an equal danger of legalism, sociologism or psychologism, too, whenever the explanatory power of one discipline is exaggerated. Having said that, we do believe economics has an important contribution to make to the understanding of organizations. Two points follow from the perspective outlined above.

- Economic approaches to organizations focus specifically on the economic problem of optimal allocation of scarce resources (broadly conceived).
- The economic contribution to our understanding of an organizational problem increases when the economic problem forms a greater part of the organizational problem that we are trying to understand.

In this book, we present the major strands of the current economic approaches to organizations. In addition, we illustrate some of the applications of those approaches to organizational problems. In doing so, we shall avoid technical expositions and, instead, concentrate on the basic concepts involved. Our aim is to provide a conceptual introduction to these approaches. By focusing on the basic concepts, we hope also to present a more coherent picture of organizational economics than has been provided before. In this first chapter, we build, step by step, the basic conceptual framework that we use to explain the fundamental economic approach to organizations. This framework is shown in Figure 1.1. The framework will clarify the crucial role of information and the various ways in which information can be mediated. This central role of information will be elaborated further in Chapter 4, where we argue that this is the glue that binds the various economic approaches to organizations together.

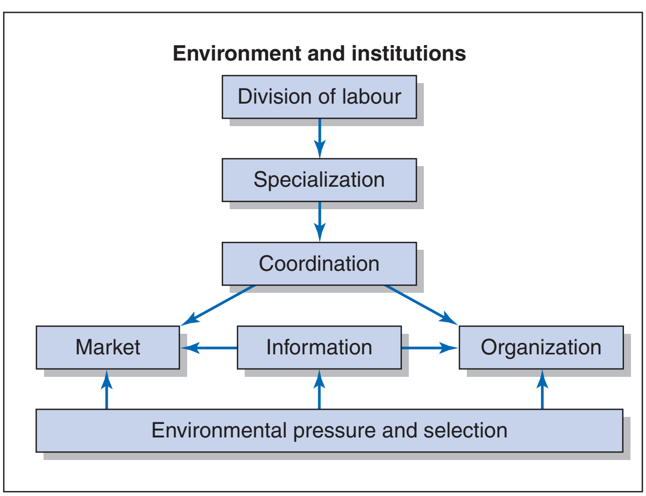


Figure 1.1 The basic concepts

1.2 The division of labour

Adam Smith is usually credited as the founding father of modern economics. In his book *An Inquiry into the Nature and Causes of the Wealth of Nations* (1776), he accords great importance to the division of labour: 'The greatest improvement in the productive powers of labour, and the greater part of the skill, dexterity, and judgment with which it is anywhere directed, or applied, seem to have been the effects of the division of labour'.

His famous example is that of a pin factory. He showed that a tremendous increase in the productivity of the work of pin-makers could be achieved by splitting this work up into distinct tasks and having each worker perform one specific task rather than making entire pins (see Box 1.1).

Division of labour

Division of labour, therefore, refers to the splitting of composite tasks into their component parts and having these performed separately. It is a pervasive phenomenon in modern societies.

Box 1.1 The pin factory

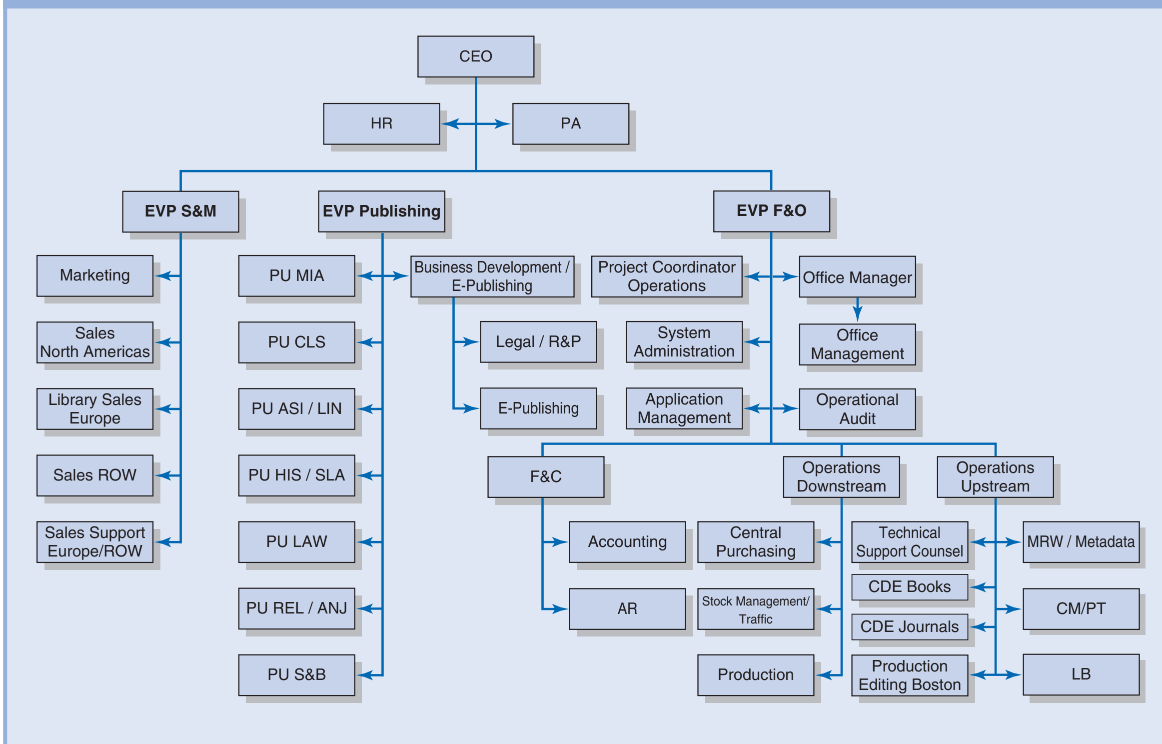
To take an example, therefore, from a very trifling manufacture; but one in which the division of labour has been very often taken notice of, the trade of the pin-maker; a workman not educated to this business (which the division of a labour has rendered a distinct trade), nor acquainted with the use of the machinery employed in it (to the invention of which the same division of labour has probably given occasion), could scarce, perhaps, with his utmost industry, make one pin in a day, and certainly could not make twenty. But in the way in which this business is now carried on, not only the whole work is a peculiar trade, but it is divided into a number of branches, of which the greater part are likewise peculiar trades. One man draws out the wire, another straights it, a third cuts it, a fourth points it, a fifth grinds it at the top for receiving the head; to make the head requires two or three distinct operations; to put it on, is a peculiar business, to whiten the pins is another; it is even a trade by itself to put them into the paper; and the important business of making a pin is, in this manner, divided into about eighteen distinct operations, which, in some manufactories, are all performed by distinct hands, though in others the same man will sometimes perform two or three of them. I have seen a small manufactory of this kind where ten men only were employed, and where some of them consequently performed two or three distinct operations. But though they were very poor, and therefore but indifferently accommodated with the necessary machinery, they could, when they exerted themselves, make among them about twelve pounds of pins in a day. There are in a pound upwards of four thousand pins of a middling size. Those ten persons, therefore, could make among them upwards of forty-eight thousand pins in a day. Each person, therefore, making a tenth part of forty-eight thousand pins, might be considered as making four thousand eight hundred pins in a day. But if they had all wrought separately and independently, and without any of them having been educated to this particular business, they certainly could not each of them have made twenty, perhaps not one pin in a day; that is certainly, not the two hundred and fortieth, perhaps not the four thousand eight hundredth part of what they are at present capable of performing, in consequence of a proper division and combination of their different operations.

Source: Smith (1776)

Our primeval ancestors were much more self-supporting. They built their own houses, grew or hunted their own food, made their own tools, defended themselves from various threats and so on. Since then, gradually, these tasks have come to be divided into separate sectors in society (such as the private and the public sectors), and, within those sectors, further divided into separate entities (such as government agencies, industries and firms). An economic system has developed in which we normally buy these goods or services in exchange for money. Most of us work in organizations where we earn our money. Looking inside those organizations we can see that the division of labour occurs there as well. We usually perform but a small part of an entire organization's task. In order to accomplish its task, the organization itself is split into different parts (such as divisions and departments), levels and functions. As a result, we need organization charts (see Box 1.2) as maps to guide us through the organizational territory. These charts are one reflection of the division of labour within organizations.

It was Adam Smith's contention that the progressive division of labour led to productivity increases that constituted the main source of the increasing 'wealth of nations'. In the next section we shall see what the basis for this contention was. Here we want to conclude by emphasizing that we take the division of labour as a fact of life in our kind of society. No matter what position we occupy, every time we interact with others to obtain goods or services we need, we may be reminded of this fact. This is what forms the starting point for our conceptual framework, which is outlined in Figure 1.1.

Box 1.2 Organization Chart of Brill: a publishing company (May 2011)



1.3 Specialization

Why would an increasing division of labour lead to such great productivity increases and, thus, to a growth in 'the wealth of nations'? Smith (1776) gave the following explanation:

> This great increase in the quantity of work, which, in consequence of the division of labour, the same number of people are capable of performing, is owing to three different circumstances; first, to the increase of dexterity in every particular workman; secondly, to the saving of the time which is commonly lost in passing from one species of work to another; and lastly, to the invention of a great number of machines which facilitate and abridge labour, and enable one man to do the work of many.

Economies of specialization

In our present economic terminology, we say that there are **economies of specialization** to be gained. In the specialized pin factory, the same amount of output can be produced with less labour effort than in the unspecialized factory. Conversely, a greater amount of output can be achieved with the same level of labour input (ten men), as Smith showed. Specialized production is thus more *efficient* than unspecialized production.

Among the reasons for this being true are the ones mentioned in the quotation above. Essentially, when work is split into specific tasks, we may select one that particularly suits our own needs and capabilities. When we specialize in that task, we can devote all our attention to improving our performance of that task. We can learn from more experience and we can use that experience to devise methods and instruments to further improve our execution of the task. For all these reasons, a specialized economic system is usually more efficient than an unspecialized one. Division of labour thus leads to specialization, which allows for efficiency gains (Figure 1.2).

This is a pervasive phenomenon in society. Let us consider some examples. In the family, household work is usually split into different tasks and the members of the family specialize in distinct tasks (whereas others may be shared). They become good at those tasks, but not at others. Some know exactly where to shop for particular goods and get the best value for money. Some know how to operate the household appliances; perhaps others know how to fix them. Some have specialist skills in filling out the tax forms; others perhaps in monitoring the budget. Whatever the particular distribution of tasks, some degree of specialization is present in all families and, in most families, the efficiency of running the household is seriously disturbed when members have to switch to unfamiliar tasks. In that sense, there is a cost to specialization.

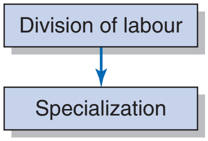


Figure 1.2 Division of labour leads to specialization

Similarly, in sports, specialization leads to higher performance, but comes at a cost. An individual cannot compete, let alone excel, in all sports. Choices have to be made and long, specialized training has to be undertaken. Once specialized, high performance is necessarily restricted to a narrow range of options. Even an admirable sportsman such as Novak Djokovic is restricted to playing professional tennis. Specialization, building on a unique talent, has allowed him to reach the top in playing tennis, but even Djokovic would not be able to compete at the highest level in two sports (for example, in tennis and golf). In team sports such as hockey or soccer, it is usually very unproductive to switch goalkeepers and field players. Good teams make the best use of their members' specializations. Specialized skills are scarce. Good teams allocate those members with these specialized skills in an optimal manner to the tasks to be executed and, thus, are organized efficiently.

In many fields, such as medicine or transportation, it would even be disastrous to switch specialists. However much we favour variety of work, we are not willing to enter hospitals or board aircraft where the specialists take turns doing each other's work.

For the individual, then, specialization has the advantage of allowing higher levels of performance to be reached, but the disadvantage of restricting choice. At the individual level, the limits of specialization are reached when the satisfaction gained from higher performance (and the consequent rewards) is outweighed by the dissatisfaction from too narrow an area of application of one's skills (with the resulting boredom and frustration). As many organizations have learned over time, the gains from further specialization are easily offset by the costs of dissatisfaction when those individual limits are exceeded. The conveyor belt, for instance, enabled great gains in productivity, but only to the extent that the workers accepted the range of activities required of them. If such a range becomes too narrow, the gains are offset and a restructuring of activities (for example, into semi-autonomous workgroups) is called for. Individual limits are thus one boundary to increasing specialization. There are also organizational limits to specialization: high organizational specialization may lead to insufficient collaboration in addressing new challenges, as illustrated in Box 1.3. More fundamentally, increased specialization requires increased coordination, as discussed in the next section.

Box 1.3 The 'Silo Effect' of organizational specialization

A potential drawback of high organizational specialization is known as the 'Silo Effect':

There is no principle more fundamental to the market economy than the division of labour. It is the subject of the very first chapter of the founding text of modern economics, Adam Smith's *The Wealth of Nations.*

And yet, as anyone who has ever worked in a large corporation knows only too well, that principle has its dark side as well. Specialization improves efficiency – but it also leads to tunnel vision and blind spots. Organizing companies into discrete divisions makes responsibilities clearer – but it also leads to bureaucratic rivalry, corporate infighting, and the left hand not knowing what the right hand is doing. In short, the miracle of the division of labour can all too easily degenerate into the nightmare of *The Silo Effect,* the topic of a new book by the FT's US managing editor, Gillian Tett.

The Silo Effect starts from a taxonomy of the disease. Much silo-building is initially deliberate and its immediate effects are often beneficial. The problems start when the silos become taken for granted.

Tett uses Sony as an example. In the 1970s and 1980s, Sony was a watchword for innovation with its Walkman and its Trinitron TV. By the 1990s, however, the company had grown ungovernably large, so its new chief executive Nobuyuki Idei deliberately reorganized the unitary corporation into 10, and then 25, sub-companies.

In the short term, efficiency improved and profits rocketed. Over time, however, the reforms began to backfire. Internal competition killed collaboration and innovation slowed . . . The problem, argues Ms Tett, was Sony's silos. The firm knew it needed to evolve, but its divisions did not work together on a unified strategy or draw on each other's strengths. Instead Sony's staff were concerned with protecting or expanding their own turf by producing their own – incompatible – products. The company's record label, which should have been an asset, was a hindrance: it feared losing revenue and therefore resisted the digital transition . . . ..When the digital age arrived, silo-ridden Sony was comprehensively bested by Apple, with its famously totalitarian ethos and relentless commercial focus.

We return in Chapter 3 to the digital revolution and the new organizational forms it spawned. In Chapter 12 we discuss 'inertia' and in Chapter 13 'competency traps', which are recognizable in the Sony case as well.

Sources: Reviews of Gillian Tett, *The Silo Effect* (2015) in *The Economist* (29 August 2015) and *The Financial Times* (https://next.ft.com/content/ac89e9cc-4a55-11e5-b558-8a9722977189)

1.4 Coordination

In the previous paragraphs we have seen that division of labour and specialization are pervasive phenomena in society. As a result, hardly any people are economically self-reliant, in the sense that they produce all the goods and services they wish to consume. In order to obtain those goods and services, they have to acquire them from other specialized people.

Exchange

In economic terminology we say that **exchange** has to take place. Goods and services are exchanged whenever the right to use them is transferred. Much exchange takes place through markets. In a market, the right to use particular goods and services is bought (and, of course, sold at the same time). When I buy a piece of soap in my local store, I acquire the right to use the soap, whereas the storeowner acquires the right to use the money I have paid for it.

Exchange of goods is usually beneficial to both parties to the exchange. For example, a painter should paint and a cook should cook. They can both specialize when they exchange their products. A nice example is given in Box 1.4.

Exchange, though, is broader than just market exchange. First, the goods involved need not be only goods that are marketable. Economists speak of goods whenever scarce resources are involved. We can indeed also exchange favours as they are very scarce and can be used to get things done. Similarly, we exchange information as soon as the right to use the information has been transferred. Second, the transfer of rights need not be mutual. When I offer you some of my time, I am offering you the right to use a scarce resource. An economist would