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Value Creation in the Service Economy

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Table of contents

Introduction 9

Chapter 1 – Services in economic thought 11

1.1. Classical approach – productive and non-productive activities (1700-1850) 12
1.2. All activities are productive. Every activity is a service (1850-1930) 15
1.3. The theory of the three sectors. Post-industrial society (1930-1965) 16
1.4. Neo-industrial concepts (1975 – today) 18

Chapter 2 – Services sector in the modern economy 20

2.1. What are services and what are their characteristics? 20
2.2. The increased importance of the services sector in economies 25
2.2.1. The share of services in GDP 25
2.2.2. The share of services in employment 27
2.2.3. Trends in labour productivity 29
2.2.4. Innovations in services 32
2.2.5. The phenomenon of the service economy 36
2.3. Interaction between manufacturing and services. 39

Chapter 3 – Services on international markets 45

3.1. How do the characteristics of services influence international trade? 46
3.2. The impact of technological progress on international trade in services. 50
3.3. The impact of changes in domestic and international economic policy on the international trade in services 53
3.4. Foreign direct investment in services 54

Chapter 4 – Services offshoring 57

4.1. Basic concepts and global trends 57
4.2. Motives for service offshoring 62
4.3. Controversies with the results of offshoring. 64
4.4. Service sectors vulnerable to offshoring 66
4.5. Segments of outsourcing 70

Chapter 5 – New trends in service management 75

5.1. Value based management 75
5.2. Services in the process of value creation. 77
5.3. Consumers as co-creators of value 79

References. 83

Tables

Table 2.1. Illustrative list of services. 22
Table 2.2. Characteristics of services. 23
Table 2.3. Old and new industrial order. 38
Table 2.4. Breakdown of the N95 EUR 546 (+tax) retail price circa 2007. 42
Table 4.1. Global offshore services market size. 60
Table 4.2. Country comparison for IT outsourcing: India vs. China. 62
Table 4.3. Average salaries of computer programmers in USD, 2002. 65
Table 4.4. Occupational categories by the degree of offshorability, USA, 2004. 68
Table 4.5. Selected US occupations regarded as highly likely to go offshore, ranked by the offshorability index from the highest to the lowest, 2004. 69

Figures

Figure 1.1. The results of labour according to Adam Smith. 13
Figure 1.2. Jean-Baptiste Say's division of products.. 14
Figure 2.1. Value added by the kind of economic activity in developed economies, 1970-2011, in % 25
Figure 2.2. Value added shares of the services sector, 1970-2008, in %.. 26
Figure 2.3. Employment by sector in developed economies, 1991-2012, in % of total employment. 27
Figure 2.4. Employment by sector in selected OECD economies, 1995-2010, in % of total employment.. 28
Figure 2.5. Service-related occupations in manufacturing, 2002 and 2012, as a percentage of total employment in manufacturing. 29
Figure 2.6. Growth in real value added per hour worked by main activity, 2001-2012, selected OECD countries. Percentage change at the annual rate. 30
Figure 2.7. Growth in real value added per hour worked by business services, 2001-2012, selected OECD countries. Percentage change at the annual rate. 31
Figure 2.8. Contribution of industry and services to growth in real business sector value added per hour worked, 2001-2012, selected OECD countries. Percentage change at the annual rate. 32
Figure 2.9. Innovative enterprises (as a percentage of all firms, 2010). 33
Figure 2.10. Non-technological innovators (as a percentage of all firms, 2010). 34
Figure 2.11. GDP and value-added growth, 2000–05. 36
Figure 2.12. Services content of manufacturing exports in selected countries with the highest and lowest values of 1995 and 2009, in%. 44
Figure 3.1. Trends in world exports of total merchandise and services. Index 1980=100. .47
Figure 3.2. World exports of merchandise and services, 1980-2013. 47
Figure 3.3. Average annual growth rate of exports of commercial services, 2000-2013, in %.. 50
Figure 3.4. Distribution of FDI stock in services, 1990 and 2011, in %.. 55
Figure 4.1. Outsourcing vs. offshoring.. 59
Figure 4.2. The A.T. Kearney Global Services Location Index™, 2011 (change in rankings, 2009-2011). 61
Figure 4.3. The four broad occupational categories according to Blinder. 68
Figure 4.4. Main segments and activities of the offshore services value chain.. 71
Figure 4.5. From a conventional business structure to a shared service model. 73
Figure 5.1. Model of value-in-exchange. 80

Services are myth-making stuff. The lanterns that have shed light on our economies have left services residing in the dark night of the economy; in a world of myths and legends: a residual world, a "tertium datum", of the intangible and inexpressible. It is a world inhabited by shadows, by priests and servants, by hamburger-flippers and pizza delivery services, by hot-air selling consultants ... and scientists and professors. The world of night is a danger for the world of day, smothering it. Furthermore, the twilight zone is no longer clearly defined; the world of day is increasingly inhabited by creatures of darkness.

Johan Hauknes, 1988

Introduction

The transformation of Western economies over the last few decades has often been characterised as the rise of the service economy. That means that societies went through a transformation from being based mainly on agriculture (for centuries) and industry (in the twentieth century) to having a majority of economic activities located in the service sector (in the twenty-first century). Services now account for approximately three quarters of the economic activity and employment in advanced countries. Their share in economies exceeds more than fifty per cent in most of the developing countries also. This raises some doubts and concerns about the interpretation of such a transition. Opinions vary from strongly positive, praising the movement towards better paid, more fulfilling jobs to clearly negative, indicating the need for making things rather than performing menial, often simple, tasks and providing services for each other. The truth, as usual, is somewhere in between these views. Neither all service jobs are highly rewarding (even if they are more than those of "hamburger-flippers" or other unqualified and unmotivated workers who come into contact with customers) nor the manufacturing economy which is synonymous with economic health and prosperity.

The discussion on the economic role of services dates back to the eighteenth century and is definitely not solved in the existing economic literature until now. Part of the problem stems from the lack of the uniform definition of services and the services sector. Another issue is the distinction between goods and services based on services characteristics and the increasing interrelations between manufacturing and services observed nowadays. These obviously affect the volume of international trade in services and the different ways services enter international markets. Technological progress and changes in economic policy facilitate the services industry's access to foreign markets via different paths: exports, foreign direct investments and offshoring. The transition to a service economy also affects management trends. One of the important features is the central role of services in the process of value creation in modern companies and the perception of consumers as determiners and co-creators of value.

This book consists of five chapters. The first one deals with the historic perspective of services within the economic literature. It introduces, primarily, the classical approach, represented by the writings and observations made by Adam Smith and his followers, and finishes with neo-industrial concepts, which are still in the stage of development to the present day. In chapter 2 the characteristics of services and the development of the service economy are described. The interrelations between manufacturing and services are also highlighted within this chapter. Chapter 3 discusses services available on international markets, i.e. in trade and foreign investments, which are often the only way of non-tradable services being transferred overseas. This chapter is complemented later by an explanation of the offshoring phenomenon in chapter 4. Issues relating to the motives and outcomes of this process, as

well as the sectors vulnerable to them are presented in detail. Finally, chapter 5 deals with the new trends in management with regard to services. The concepts of value based management, service-dominant logic and value creation are also discussed.

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Chapter 1

Services in economic thought

The concept of services in economic thought is interrelated with the understanding of the terms: goods and services. While most people intuitively know the difference between these two terms and can easily decide whether a certain activity concerns goods or services, the economic literature does not provide one, comprehensive and widely accepted definition of services. What is more, the division of economic activities into goods and services is also questioned, together with the term commodity as opposed to services. According to Peter Hill (1977) what is common for both goods and services is that they must be transactable, which means that an interaction (or interexchange) between two economic units is necessary. These transactions may involve goods and services and are called commodity flows (as opposed to flows of money or financial assets and liabilities). Thus the term commodity embraces goods and services – the products of economic activity traded in a market. Following this approach, the term of "goods" in this book is used to describe tangible (physical) products of economic activity, whereas services are understood as intangible results of a production activity that change the conditions of persons or their belongings, or facilitate the exchange of products or financial assets.

What is also common for goods and services is that they are the results of economic activity, which in turn is defined as a set of actions taken by people to meet their diverse needs. In a broad sense, goods and services are the means that can be used directly or indirectly to meet these needs. It is quite common in the literature that the concept of goods refers to tangible (or material or physical) goods, while services are regarded as intangible. But there are still doubts whether intangibility is a determining factor of the division of economic activities into goods and services. This point is discussed in the following subchapters.

The understanding of the terms goods and services has varied in the history of economic thought. The author is particularly interested in the question of the definition, classification and the relationship between goods and services and their role in the creation of value and national wealth. Currently, there is no doubt that the services are one of the means of satisfying human needs and a component of national wealth; however, it has not always been so.

Despite the high and constantly growing role of services in economies, the economic theory of services is, as yet, not fully developed. There are economists and sociologists who have been dealing with the subject since the times of Adam Smith, but their works are strewn in the literature and their analyses often contradict each other. J. C. Delaunay and Jean Gadrey's book on *Services in Economic Thought. Three Centuries of Debate, published* in

1992 gives a thorough overview of the development of economic view on the role of services from the eighteenth century until the present day [Delaunay and Gadrey 1992]. That is why the following chapter is based mainly on this source. A complementary source of information is a paper by Stephen L. Vargo and Fred W. Morgan, *Services in Society and Academic Thought: An Historical Analysis* published in 2005 [Vargo and Morgan 2005]. Only the most influential authors in the historical periods highlighted below were selected for emphasis.

1.1. Classical approach – productive and non-productive activities (1700-1850)

Before the industrial revolution services were not specifically identified nor directly discussed. For mercantilists, services were socially useful activities that create national wealth, but their main interest was in finding out how to increase that wealth. Therefore there is no theory of services in their works. They had taken into consideration foreign trade and maritime transport (which nowadays are classified as services) as useful means of acquiring gold. The intrinsic value of these activities was not important.

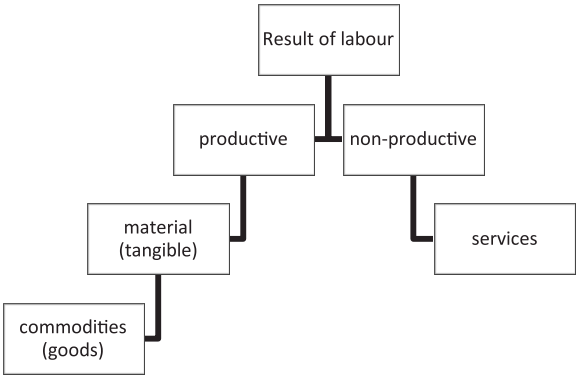
At least since the times of Adam Smith (1723-1790), economists have struggled to be clear about what it is in the nature of the *things* which are exchanged daily on markets that gives rise to exchangeable value[1]. A. Smith, in *An Inquiry into the Nature and Causes of the Wealth of Nations* published in 1776, argued that the exchange value of *objects* is determined by objective conditions of production. He called these objects quite consistently *commodities* (i.e. items exchangeable on the market) and not *goods*. This does not mean that A. Smith did not use from time to time the word *good*, but it usually appears in less theoretical and formal passages. He was not particularly interested in *services* as such. He attempted to describe how wealth is accumulated. Individual wealth was understood by him as the degree to which an individual could satisfy his or her needs. Therefore all activities contribute to wealth. The wealth of individuals relates to final consumption, but the wealth of a nation is discussed wider: in relation to production, savings and the accumulation of capital.

What is more important, since Smith's days, the distinction between goods and services is associated with the concept of productive and unproductive labour. He paid particular attention to labour (and services were regarded as a type of labour). Whether labour is productive or not depends on if value is produced. "Thus the labour of a manufacturer [an industrial worker] adds generally to the value of the materials which he works upon, that of his own maintenance, and of his master's profit. The labour of a menial servant, on the contrary, adds to the value of nothing." [Delaunay and Gadrey 1992, p. 12]. What matters is not the work done, but the profit which it generates. If the labour is employed in the manufacturing industry producing (durable) commodities for exchange, then it creates a certain value. If services (which vanish in the course of their performance) are provided, no value is generated, so this is a non-productive activity that does not increase the wealth of the na-

[1] Look up the term: "goods and commodities" in: *The New Palgrave Dictionary of Economics* http://www.dictionaryofeconomics.com/ [date of access: 10.02.2014].

tion and from this point of view it is a waste (see figure 1-1). The list of unproductive service activities compiled by A. Smith consists of the sovereign, civil servants, the military, as well as the clergy, lawyers, medical personnel, writers, artists, comedians, musicians, singers, opera dancers, other personal services, and, finally, domestic servants [Delaunay and Gadrey 1992, p. 13]. Their work, even though useful and respectful, was not productive in terms of Smith's national wealth standard, because no tangible products are created. However, it does not mean that labour, and by implication services, is necessarily non-valuable. Some services, such as those provided by wholesale and retail merchants, as well as transport and communications services are both useful and productive since they were necessary for the production and trade of commodities.

Figure 1.1. The results of labour according to Adam Smith.



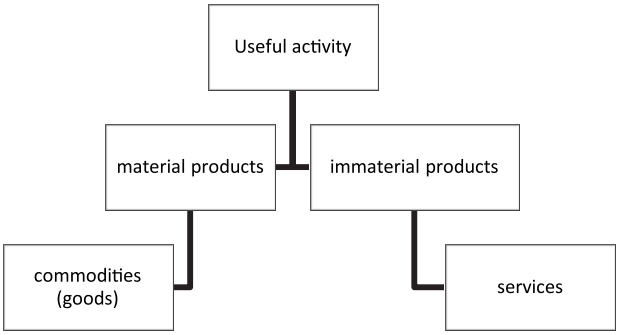
Source: author's own research.

Smith influenced generations of economists and sociologist. For years, services were not really taken into account as an economic phenomenon and were outside the classical theory of economics. What is more, Karl Marx (1818-1883) had largely been influenced by Smith's opinions with relation to services and the division of labour into the productive and unproductive. The Material Product System (MPS) as a method of presenting national accounts in centrally planned economies was based on Marx's *Capital* and *Theories of Surplus Value,* where he narrowed the understanding of national income to the sphere of material production only. The system assumed that the social product is the result of productive labour only. Such labour creates material products and some productive services (transport of merchandise, and maintenance of machinery and equipment). Other services, such as education, health, trade, cultural, insurance, financial and other business services were considered as non-production, immaterial sphere of economic activity. Generally, K. Marx wrote very little about services as such, but the consequences of his approach to value creation are evident in the post-socialist countries until today, where years of underinvestment in the services sector are reflected in the lower level of their development.

Smith's group of non-productive workers (i.e. non generating value) consisted mainly of those employed by the aristocracy and the sovereign. But changes in economic and social conditions in the 19th century made this classification obsolete. The industrial development and emergence of new social classes resulted in the need for a new approach. Most of the 19th century authors refer to services as a group of professions, not as a sector of the economy. For example, Jean-Baptiste Say speaks about administrators of public duties, civil and military engineers, judges and other employees of the State; Jean Charles Simonde de Sismondi lists the administrators, the armed forces, and "everyone concerned with security", from "the Head of State to the common soldier" and entertainment and personal services [Delaunay and Gadrey 1992, p. 16].

As A. Smith made services synonymous with non-productive work, Jean-Baptiste Say (1767-1832) in publishing in 1803 the *Traite d'Economie Politique* contributed to the treatment of services as intangible products. In contrast to his predecessor, he believed that what creates national wealth is utility, not necessarily only material products. Anything that is useful, which satisfies human needs (and not just what can be stored) creates national income. Therefore, services for which people are willing to pay a price are also part of such income. He was the first one to state that services generate immaterial output. He described services as immaterial products, i.e. consumed at the time of provision (figure 1-2). The attitude of J.-B. Say is reflected, inter alia, in the way the national income is calculated in most countries nowadays – the System of National Accounts (SNA), which recognizes the contribution of services to the creation of the national income.

Figure 1.2. Jean-Baptiste Say's division of products.



Source: author's own research.

With a similarity to A. Smith, Jean Charles Simonde de Sismondi (1773-1842) concentrated on explaining whether a particular type of work is productive or not, and not on services as such. In his work, published in 1819 under the title *Nouveaux Principes d'Economie Politique*, J. Ch. Sismondi gives an example of public and personal services and says that they do not produce anything, do not take material form and cannot be accumulated. He explains that personal services cannot be accumulated because they are embodied in peo-

ple, and people are not the object of market transactions. And personal services cannot be "produced" with machines. He does not consider the adjective "non-productive" in any way unfair or derogative [Delaunay and Gadrey 1992, p. 22].

1.2. All activities are productive. Every activity is a service (1850-1930)

While A. Smith divided labour into two separate categories (productive and unproductive), and identified services with the latter, 19th century authors searched for a uniform concept of all activities. As a result, the notion of non-productive labour has almost disappeared from later works. Economic relationships in a capitalistic society were more frequently described as service relationships. The representatives of these trends include such authors as Frédéric Bastiat, Clément Colson, Alfred Marshall and Léon Walras [Delaunay and Gadrey 1992, p. 58].

Frédéric Bastiat (1801-1850) (and also Clément Colson, whose works are not analysed in this subchapter as his opinions are similar to those of Bastiat's) considered Smith's division of labour to productive and non-productive an outdated concept. Actually, he was the one who popularised a simplified view of Smith's theory, paying special attention to the (incorrect) link between the tangibility of products and productivity of labour. According to him all activities are productive. He argues that since A. Smith explained the value on the basis of work done (the essence of the labour theory of value), then he should have had admitted that services which actually consist of solely of work done, create value [Delaunay and Gadrey 1992, p. 59]. His understanding of value is different to that of Smith's, as for him value is the relative evaluation of the two services which are exchanged. For Bastiat, service is the basic concept of economic activity. People are not able to create any material objects – these are given by nature and can only be transformed by people into a state that can provide satisfaction. That is way it is incorrect to think that only those working on materials are doing productive work. Those who are "middlemen" between producers and consumers create value as well. What he says is that, it is not services that derive value from things (objects), but the opposite is true. He believes that the theory of value as it applies to things is just a particular case of the theory of the value of services, because they comprise of all economic activities. In his words: "society is nothing but an exchange of services" [Delaunay and Gadrey 1992, p. 62].

Léon Walras (1834-1910) pioneered the development of the general equilibrium theory, where each activity is believed to contribute to the others. Everything (whether material or not) which has a price (because of their scarcity) constitutes social wealth. He claimed that the exclusion of immaterial "services of capital goods" by most economists precluded the development of a pure theory of economics. He also divided the services of capital goods into consumers' services (with direct utility) and producers' services (with indirect utility only). Productive services are exchanged directly with each other [Vargo and Morgan 2005, p. 45].

Alfred Marshall (1842-1924) found little use for the distinction between unproductive and productive labour. But still used the term productive in order to mean "productive of the means of production, and of durable sources of enjoyment" [Vargo and Morgan 2005, p. 46]. He and other authors who wrote around the end of 19th century understood society as a "society of exchange of services". What matters is not whether particular activities are productive, but how they interrelate.

1.3. The theory of the three sectors. Post-industrial society (1930-1965)

The great depression of the 1930s resulted in the need for the re-evaluation of ideas that had evolved in the previous centuries. Governments became more active over time, involving themselves in more increased market intervention. And as public functions were at that time considered services, an increasing number of jobs were classified as service occupations. The term "tertiary sector" was introduced at that time, implying the existence of a services sector of relatively homogenous activities. The most important works dealing with the notion of the three sectors were written by Allan G. B. Fisher, Colin Clark and Jean Fourastié.

Allan G. B. Fisher (1895-1976) distinguished the primary, secondary and tertiary sectors as stages of economic development. The division of business activity is based on the income elasticity of consumer demand (e):

- The primary sector ($e \leq 0.5$) – activities producing basic products necessary for life: agriculture and mineral extraction;
- The secondary sector ($0.5 < e \leq 1$) – manufacturing;
- The tertiary sector ($e > 1$) - trade, transport, communications, catering, personal services, entertainment, music, art, health, insurance, education and public administration.

A. Fisher "did not say that services are equivalent to the tertiary sector, only that some of Smith's unproductive activities may be considered productive in terms of labour that is useful to societies that have progressed beyond the basic needs of agriculture and manufacturing" [Vargo and Morgan 2005, p. 47]. Still, it is usually attributed to him that services constitute the tertiary sector. He observed that as a result of progress and development, employment has shifted from primary activities through secondary and finally to tertiary activities.

Colin Clark (1905-1989), similar to A. G. B. Fisher, does not concentrate on the tertiary sector, but he rather presents the results of his work on the growth of the national product in the three sectors.

Based on differences in labour productivity and the size of the workforce in various economic activities C. Clark distinguished:

- The primary sector – activities using and transforming natural resources (agriculture, forestry and fishing); the contribution of nature implies the diminishing of returns to scale – labour productivity per employee decreases with the increasing scale of production; there is the fastest outflow of labour force from this sector;

- The secondary sector – manufacturing activities which continuously transform, on a large scale, natural resources into transportable products; labour productivity per person rises with the increasing scale of production; initially there is a strong increase in the number of employees, followed by a slowdown and a slight decrease;
- The tertiary sector – service activities (consumer and producer services and construction); labour productivity per employee is independent of the scale of production; here a constant and slow growth in the number of employees follows.

C. Clark makes an important statement that there is no systematic productivity gap between industrial and tertiary activities. He justifies the shift in employment towards services with the changes in consumers' demand. He uses the Engel's law stating that with the increasing incomes of household, a decreasing share of it is spent on agricultural products. The same happens eventually with the manufacturing of products [Delaunay and Gadrey 1992, pp. 77-78].

Finally, it was Jean Fourastié (1907-1990) who gave a clear criterion of the three-sectors split in his book *Le Grand Éspoir du XX Siécle*, published in 1949 (Fourastié 1949). According to him, the classification is based on the differences in productivity, which he used as a measure of technical progress. He divided all the economic activities as follows:

- The primary sector – activities for which the productivity growth (and the level of technological progress) is about average (i.e. agriculture and mining); there is a constant outflow of the labour force from this sector because of relatively stagnant demand on the one hand and relatively fast increasing supply on the other;
- The secondary sector – activities with a higher than average productivity growth (technological progress) (i.e. manufacturing); until saturation is achieved, a strong inflow of the labour force from the first sector is observed due to strong demand increases being met by a strong supply rise;
- The tertiary sector – activities with slower than average or stagnant productivity growth rates (technological progress) (i.e. services, including construction); the only sector with a growth in employment (swift increase in demand without signs of saturation at a moderate growth rate of supply).

On the basis of changes in the employment structure J. Fourastié identified three stages of Atlantic civilization. Traditional civilisations were characterized by a high share of employment in the primary sector (about 70-80%), with societies which were scientifically not yet very developed, demonstrating a negligible use of machinery. The state of development corresponds to that of European countries in the early Middle Ages, or that of a modern-day developing country. The transitional period began with industrialisation: far-reaching mechanisation (and therefore automation) of manufacturing. The number of workers needed in the primary sector was reduced accompanied by the increase in the number of machines deployed therein. The demand for machinery production in the secondary sector increased and so initially did employment. After it reached a maximum level (approximately during the 1950's-1960's in advanced economies), a decline in employment in the secondary sector is observed and the dynamic growth in the tertiary one began. The tertiary civilization

begins when employment in manufacturing fell to about 10-20%, in agriculture it reached a maximum of 10%, and services accounted for approximately 70-80% of total employment. This situation corresponds to modern-day societies in advanced economies.

The works of subsequent authors in the mid-20th century increasingly dealt with more detailed aspects of development within the tertiary sector. This term was eventually substituted with the word "services". Victor Fuchs [1968] played a key role in popularizing the term "service economy" and making it an object of study and research in its own right. He was the first person to make an attempt to survey services for their own sake and to explain their relative growth (in terms of employment and output) on the basis of their specificities [Delaunay and Gadrey 1992, pp. 99-100].

The relative heterogeneity of the sector became more obvious, so different sub-groups were gradually distinguished. Joachim Singelmann [1974] classified services into four subgroups: distributive services (transport, communications, trade), producer services (banking, business services, real estate), social services (health care, education, postal services, public and non-profit services) and personal (or consumer) services (home-help, hotels, restaurants, travel, repairs, etc.) [Delaunay and Gadrey 1992, p. 101]. This typology is among the best-known and widely used to the present day.

The notion of the post-industrial society was also discussed in the period under consideration. This concept was popularized by Daniel Bell (1911-2011) in his 1974 work: *The Coming of Post-Industrial Society*. Since the 1970's D. Bell has been the main reference on post-industrial ideas. He distinguishes four stages that are associated with the functioning of society: (1) the post-industrial society as a service society (where the services sector generates the overwhelming part of employment in the economy); (2) the essence of the post-industrial society is knowledge, science and technology (the central problem of the post-industrial society is the organisation of science and technology and intellect based on information and theoretical knowledge); (3) the pre-eminence of the professional and technical class (which includes: educators (at all levels), medical and healthcare staff, scientists and engineers, technicians and a number of categories of professionally qualified people in management, law, culture and information provision); and (4) the change in value systems and forms of control (interpersonal relationships, talking to other individuals rather than interacting with machines is of much greater importance than they were in the industrial society) [Delaunay and Gadrey 1992, pp. 86-90].

1.4. Neo-industrial concepts (1975 – today)

The mid-1970's brought a change in the attitude towards the development of the service economy. Unfavourable changes in economies, such as unemployment, inflation and lower rates of economic growth resulted in concerns about the further continuation of the dominance of services. The so called neo-industrial concepts were developed.

Jonathan Gershuny explained the major social developments based on the foundation of the theory of consumer behaviour. He brings to this theory the work done within a house-

hold. "The rational consumer includes in his projected expenditures not only a budget constraint (the price and nature of the goods he wants to buy) but also a time constraint (the time required for the use of those products)" [Delaunay and Gadrey 1992, p. 104]. He argues that the main trend in modern economies is not toward a service society, but rather a self-service society. He predicts that the growing needs for services will be increasingly satisfied at home by self-service, using domestic labour and privately or collectively owned equipment. That should lead to the increased purchase of goods, rather than from the formal services sector. [Delaunay and Gadrey 1992, pp. 104-105]. Examples include private cars as a substitution for public transport, washing machines as a substitution for outside laundry services, ready-made meals instead of going out to restaurants, entertainment at home (via television, radio) rather than going to cinemas, theatres, concerts, etc. This means that even though there exists a shift in demand from elementary needs to more advanced, it does not have to be accompanied by the increase of the services sector. J. Gershuny also explains why employment in the services sector may increase even if the final consumption is dominated by goods. He presents two arguments. The first one is based on lower labour productivity growth in services compared to industry. The second refers to a large share of employment in the services sector attributed to industry-related works (services going into the production of goods) – their development is caused by the changes in the methods of producing goods, not because of the rise of a service society.

Other authors publishing around the same time disagree with both Bell's post-industrial and Gershuny's self-service views. They rather emphasize that the methods of production have changed, which means that they are more service intensive. The authors who explain the development of services on the basis of changes in the structure of production (e.g. Stanback 1980, Noyelle and Stanback 1982] claim that increasing demand for services arises primarily from the growing need for intermediary or complementary services, which are so much needed because the goods and methods of production are more and more sophisticated and differentiated. This category of services is characterised by the following features: 1) they supply directly to firms, 2) are part of the distribution and finance process of trade in goods, 3) are required in the context of human capital formation as needed by the new production structures, or 4) they are needed in order to coordinate or regulate the spatial dimension of the production system as a whole. These four points appeared to be, in relation to changes in technology and organisation, the core of the new service economics [Delaunay and Gadrey 1992, p. 110].

Another concept, elaborated in 1976 by Marc U. Porat uses the term "the information sector". He tried to define and measure a bundle (cluster) of activities (both goods and services) relating to the production, diffusion and handling of information. He calls them the "primary information sector", which includes services such as research, education, consulting, media and goods associated with them (computers, television sets, photocopiers, computer diskettes, books, stationery), together with the corresponding infrastructure (schools, libraries, networking facilities) as long as they are involved in providing information economics [Delaunay and Gadrey 1992, p. 112-113].

Chapter 2

The services sector in the modern economy

2.1. What are services and what are their characteristics?

There are many different definitions of services, ranging from those pointing out their microeconomic features to those referring to macroeconomic aspects. "The Economist" popularised Harker's definition of services as products of economic activity that you can't drop on your foot, ranging from hairdressing to websites [Harker 1995][2]. Regan [1963] describes them as activities, benefits or satisfactions which are offered for sale, or are provided in connection with the sale of goods. According to the System of National Accounts [SNA 2008, para. 6.17] services are the result of a production activity that change the conditions of persons or their belongings, or facilitate the exchange of products or financial assets. Changes can take a variety of different forms as follows:

- changes in the condition of consumer's goods: the producer works directly on goods owned by the consumer by transporting, cleaning, repairing or otherwise transforming them;
- changes in the physical condition of persons: the producer transports the persons, provides them with accommodation, provides them with medical or surgical treatments, improves their appearance, etc.;
- changes in the mental condition of persons: the producer provides education, information, advice, entertainment or similar services in a face to face manner.

The changes may be temporary or permanent. For example, medical or educational services may result in permanent changes in the condition of the consumers from which benefits may be derived over many years. On the other hand, attending a rock concert is usually a short-lived experience. In general, the changes may be presumed to be improvements, as services are provided at the demand of the consumers.

Some scholars define services in dimensions of activities, interactions and solutions to consumer problems [e.g. Edvardsson et al. 2005; Grönroos 2000]. Moreover, services are often co-produced by consumers who define them on the basis of value in use and the resulting consumer experience. According to Gummesson [1995], consumers do not buy goods or

[2] "Services - products of economic activity that you can't drop on your foot, ranging from hairdressing to websites" http://www.economist.com/economics-a-to-z/s#node-21529672 [date of access: 10.02.2014].

services, but rather purchase offerings that render services, which create value. The variety of services definitions may be partially explained by the fact that some of them aim at portraying services, while others are constructed in terms of value creation. In the first case services are regarded as activities that are the object of exchange, while in the second case service is used as a perspective on value creation [Edvardsson et al. 2005].

Services are also defined as a tertiary sector, a diverse group of economic activities not directly associated with the manufacture of goods, mining or agriculture [OECD 2000, p. 6]. According to this approach services are considered as residual activities: the remaining part of the economy after defining agriculture and manufacturing. This is a negative definition as it focuses on what services "are not": intangible, non-transportable, non- storable, non-durable, etc. As a result, services are composed of a large variety of heterogeneous activities.

According to the official statistics on services in Europe (NACE rev. 2), the service sectors are included in sections G to U. This classification, introduced in 2008, pays greater attention to business services than the previously used NACE rev. 1. The sections of the services included in NACE rev. 2 are as follows:

G wholesale and retail trade; repair of motor vehicles and motorcycles;
H transport and storage;
I accommodation and food service activities;
J information and communications;
K financial and insurance activities;
L real estate activities;
M professional, scientific and technical activities;
N administrative and support service activities;
O public administration and defence; compulsory social security;
P education;
Q human health and social work activities;
R arts, entertainment and recreation;
S other service activities;
T activities of households as employers; undifferentiated goods- and services-producing activities for households for their own use;
U activities of extraterritorial organisations and bodies.

Table 2-1 contains an illustrative list of different service activities, based on the above classification. A common theme among all of them is that they usually involve the provision of human value added in the form of labour, advice, managerial skill, entertainment, training and intermediation and so on.

Table 2.1. Illustrative list of services.

Service	Activities related to the:
Wholesale and retail trade	Sale of goods.
Transport and warehousing	Distribution of goods.
Accommodation and food services	Provision of lodging, or the provision of meals, snacks or beverages.
Information	Gathering and dissemination of written, audio or visual information, including films and records.
Finance and insurance	Facilitation of financial transactions, including those related to risk management.
Real estate, rental and leasing	Temporary transfer of property, and the temporary or definitive transfer of real estate.
Management of companies and enterprises	Management of companies and enterprises, such as holding companies.
Professional, scientific and technical	Provision of specialised, generally "knowledge-based", expertise (e.g. legal, accountancy and engineering).
Administrative and support, and waste management	Day-to-day support of other organisations (e.g. clerical assistance agencies, travel agencies and personnel firms).
Public administration	Governing or administration of public entities and programmes.
Education	Provision of instruction and training (e.g. schools and specialised training centres).
Heath care and social assistance	Provision of health care and social assistance (e.g. doctors, hospitals and clinics).
Arts, entertainment and recreation	Provision of entertainment on a broad scale (e.g. museums, opera, theatre, sports and gambling establishments).
Other	Provision of personal services, repair and maintenance activities, professional societies, religious institutions, etc.

Source: OECD 2000.

Services differ from other types of economic activities in a number of ways. The early services marketing literature usually lists four characteristic distinguishing services from goods. These are[3]:

- intangibility,
- inseparability of production and consumption,
- variability (or heterogeneity),
- perishability.

They are discussed in more detail in table 2-2.

[3] Edvardsson et al. 2005 provide a comprehensive overview of the literature on service characteristics. Vargo and Lusch's [2004a] critics of the four features of services is the seventh-most-cited article published in the history of the Journal of Service Research.

Table 2.2. Characteristics of services.

Intangibility	Inseparability	Variability/Heterogeneity	Perishability
• Cannot be seen, tasted, felt, heard or smelled before purchase • The degree of intangibility is a means of distinguishing between products and services	• Delivery and consumtion of services cannot be separated • Consumers are able to affect or shape the performance and quality of the service	• Quality depends on who provides them, where, when and how • Standarisation is more difficult • Higher labour content results in greater variability as the performance of people can vary from day to day • The opportunity to provide a degree of flexibility and customisation of the service	• Cannot be stored for later sale or use • "Time dependent" and "time important" • Service supplier stores capacity to provide them on demand

Source: author's table based on Levitt, 1981; Regan, 1963; Rathmell, 1966; Shostack, 1977.

It is still arguable whether all these features are necessary for a certain activity to be considered as a service, and – if not all of them have to apply – which are essential. What is more, nowadays it is well understood that all products are situated on a continuum. At one end there is a complete tangibility, at the other – complete intangibility, although there are very few completely tangible or intangible products. Most of them are positioned somewhere between these two extremes. In this concept, first introduced by G. L. Shostack (1977), fast-food outlets were somewhere in the middle of the scale starting with salt and ending with teaching, as they require more or less balanced tangible and intangible inputs.

Recently another paradigm is recognised in the literature. It is based on the notion that no transfer of possession or ownership takes place when services are sold. What services actually offer are benefits through access or temporary possession, instead of ownership, with payments taking the form of rentals or access fees. This rental/access perspective and the notion of services as a means of sharing resources offer the most promising new direction for services research [Akehurst 2008, p. 2].

Together with technological progress, the four distinctive features of services lose their importance as the differences between services and goods are narrowing. Of course, the physical contact in many cases cannot be replaced with services provided from a distance, but there is an increasing number of services that can be provided thanks to information and communications technology (ICT) without physical presence in the same location and at the same time. Music performance, films, software can be recorded and sold as any other goods. In these cases services have, in a sense, taken on the characteristics of commodities – one provider mass-produces a common product for many people. Service providers are thus increasingly able to benefit from economies of scale (see Box 1).

Box 1. Technological advances are transforming services

In the 1920s, the Ford Motor Company built the River Rouge assembly plant in Michigan. Coal and iron ore were brought in at one end and finished automobiles came out the other. Today, this would seem aberrant, some sort of bizarre theme park, but in fact, at that point in time, the technology of scale made it an entirely rational way of working. There is a great similarity between banks today and the automobile industry that built that plant nearly 80 years ago. And that is, today's banks, like Henry Ford in the 1920s, are learning the techniques of mass production for the first time.

There was a time when a bank would lend to a business or provide a mortgage, would take the asset and put it on their books much the way a museum would place a piece of art on the wall or under glass – to be admired and valued for its security and constant return. Times have changed. Banks now take those assets, structure them into pools, and sell securities based on those pools to institutional investors and portfolio managers. In effect, they use their balance sheets not as a museums, but as parking lots – temporary holding spaces to bundle up assets and sell them to those investors who have a far greater interest in holding those assets for the long term. The bank has thus gone from being a museum where it acquired only the finest assets and held and exhibited them in perpetuity into a manufacturing plant which provides a product for the secondary market. Just as Henry Ford did 80 years ago, banks today are focusing on producing a standardised product at a predictable rate, under standard norms of quality, and are teaching their workforces to produce that product as quickly and as efficiently as possible.

Technology has been key to this process. The reason that we see a service economy today, and gather to talk about it and recognise its importance is because technology has allowed services to gain the operational leverage that manufacturing achieved 100 years ago. In addition to banks, health systems, telephone and telecommunication networks, and distribution and retailing firms are further examples of sectors that have been able to benefit from economies of scale. As a result, we are now living in a world where global-scale service companies exist for the first time, whereas we have seen global manufacturing companies for 50 years or more.

Source: OECD 2000, p. 8.

Technology also allows providers to produce a single product, which is not mass-produced, but which is capable of being mass-consumed, either on a standardised or customised basis. This is the case of online access to dictionaries, encyclopaedias, newspapers, museum collections, etc. Microsoft has recently introduced its new software, which replaces the boxed versions with the online one. The difference between the two different versions is that one is owned, bought for a one-time fee (MS Office 2010 or earlier versions) while the other is rented, with the consumer paying a monthly or annual subscription (MS Office 365). The latter solution clearly shows Microsoft's shift toward software as a service.

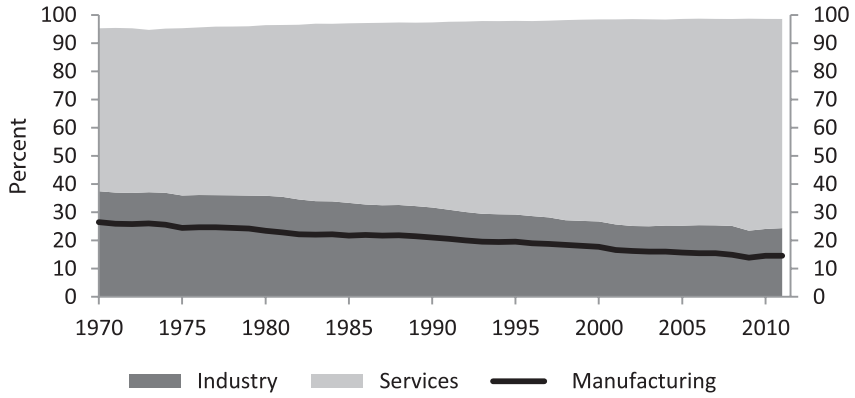
Technology is also affecting the relationship between providers and consumers in areas previously unthinkable. Electronic (e-) services can be provided any time from and to any place provided that there is access to the Internet. E-lectures and video-conferences can be attended without leaving the bedroom. Telemedicine provides clinical healthcare at a distance. Internet banking, real estate, retail shopping, online auctions are some other examples of the new kinds of services which can be provided via Internet without the need for simultaneous physical interaction between the service provider and customer.

2.2. The increased importance of the services sector in economies

2.2.1. The share of services in GDP

The past several decades have brought significant changes in the structures of the world's most developed economies in Europe, North America and Asia. Industry, once regarded as the backbone of these societies, has lost its significance, while service sectors have become the main source of economic output and employment. In approximately 1970, sociologists came up with the term "post-industrial society"[4], recognizing the fundamental changes then taking place. They affected the ways of producing, consuming, and also of living. The once existent industrial society has disappeared [Delaunay and Gadrey 1992, p. 1]. In general, this trend might be explained by the increasing demand for services as income rose in most OECD countries beginning in the 1970's. Whatever the roots contributing to the de-industrialisation process, the shift toward the service economy (i.e. economy where the services sector dominates in output and employment) is profound. With the industry share in GDP in 2011 reaching nearly 25% (and manufacturing only 14.6%) and services almost 75% in developed economies, services are seen as playing a principal role in these economies (figure 2.1).

Figure 2.1. Value added by the kind of economic activity in developed economies, 1970-2011, in %



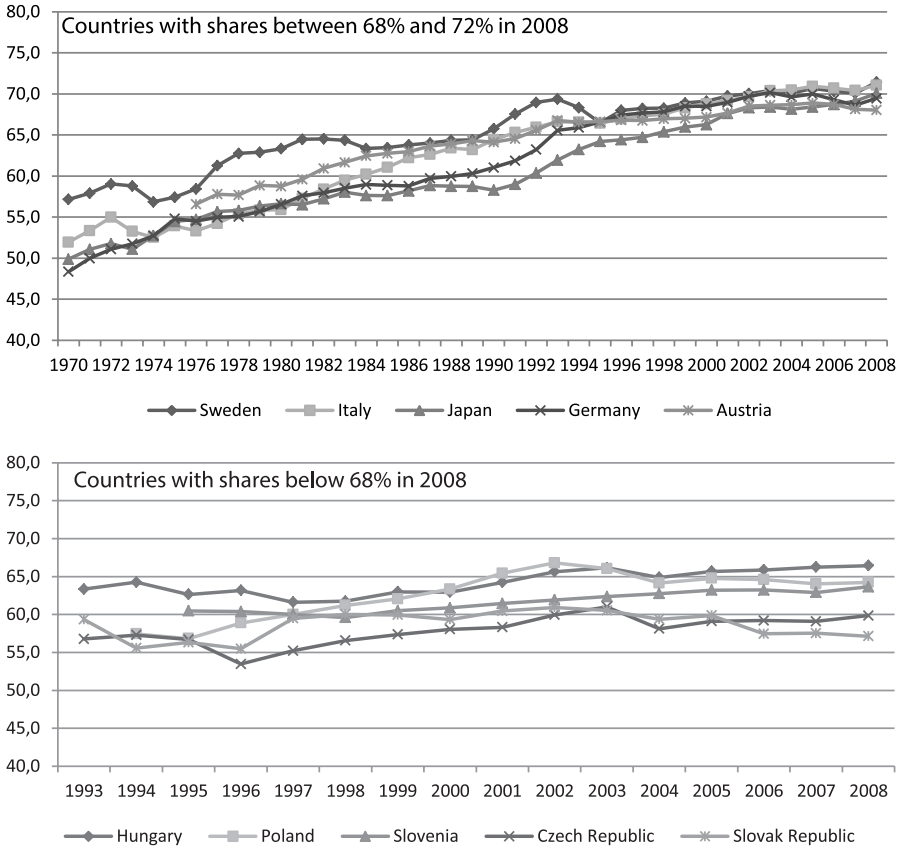
Note: According to UNCTAD "industry" includes mining and quarrying, manufacturing, electricity, gas and water supply and construction (it corresponds to ISIC Rev.3 divisions 10-45); "services" include all other economic activities (it corresponds to ISIC Rev.3 divisions 50-99). Agriculture, hunting, forestry and fishing is not directly shown in the figure for its clarity.

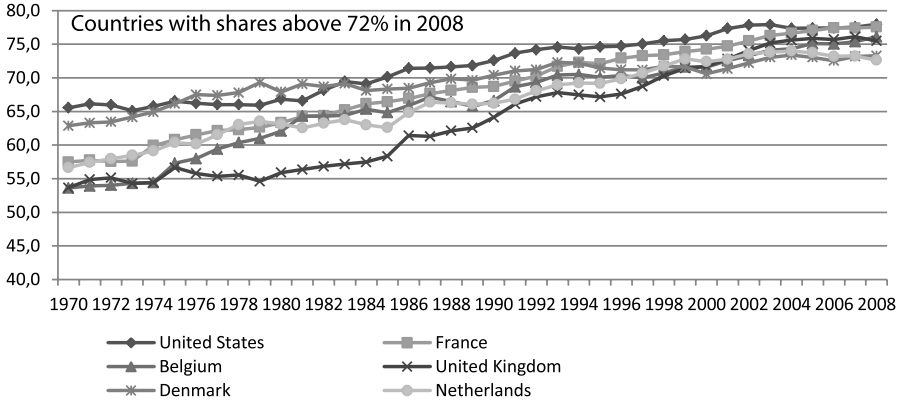
Source: author's calculations based on UnctadStat: http://unctadstat.unctad.org/ [date of access 15.03.2014].

[4] Bell began to use the term post-industrial sector referring to the service sector in 1973. The post-industrial society meant the one where the service sector was dominant. This terminology reflected the common assumption that the service sector developed only after the industrial one. Whereas it is very true for many developing countries, in most developed economies there was a direct shift from agricultural to services dominance in employment [Riddle 1986, p. 4].

Some patterns can be distinguished among the groups of countries. The first group of countries, including the United States, France, Belgium, the United Kingdom, Denmark and the Netherlands have had a relatively high share of services since the 1970's. In 2008 the share of services in value added exceeded 72% in all of them. The second group, consisting of countries with a relatively moderate share of services between 68% and 72% in 2008, such as Sweden, Italy, Japan, Germany and Austria show strong increases in their value added share from the initially low levels. Finally, there is a third group of countries - post socialist European economies, where value added shares are still relatively low. These countries include Hungary, Poland, Slovenia, the Czech and Slovak Republics. Data before 1993 for most of them are unavailable. In 2008 services accounted for a little less than 68% of value added (figure 2.2).

Figure 2.2. Value added shares of the services sector, 1970-2008, in %.





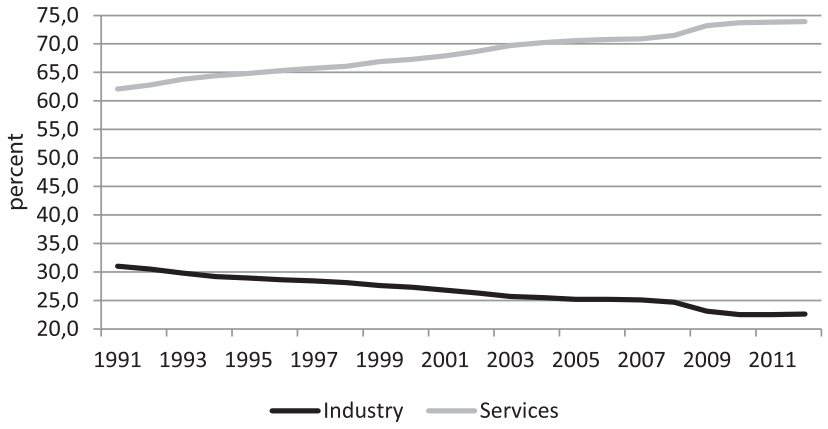
Note: shares in total value added at current prices.

Source: author's calculations based on OECD STAN Database for Structural Analysis [date of access 15.03.2014].

2.2.2. The share of services in employment

The impact of services development on the labour market has also been substantial. About three quarters of employment in most developed countries now lies in services, while the industrial sector, on average, accounts for less than one quarter (figure 2.3.). For example, in 1990 about 26% of the economically active population of the United States was working in industry. In 2010, this share had decreased to around 17%. The share of services has increased in that time period from some 71% to 81%.

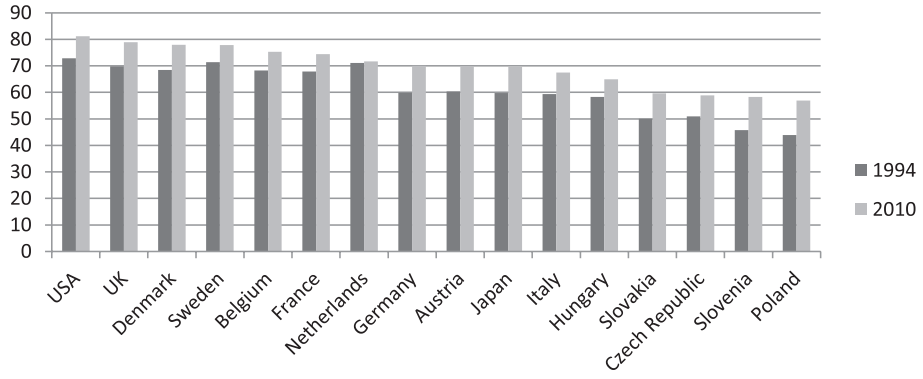
Figure 2.3. Employment by sector in developed economies, 1991-2012, in % of total employment.



Source: author's calculations based on Key Indicators of the Labour Market (KILM) 8th edition, ILO http://www.ilo.org/empelm/what/WCMS_114240/ [date of access 20.03.2014].

In OECD economies employment statistics follow similar patterns to those observed in output statistics. The three groups of countries based on the importance of services in total employment can also be distinguished (over 72% employed in the services sectors, between 68% and 72%, and below 68%). The groups consist of the same economies as previously mentioned. The services' share of total employment in some cases is slightly higher than its share of GDP. This is due to the labour-intensive nature of many traditional services, including distribution, construction, education, health and social services, as well as the rapid expansion of the sector overall.

Figure 2.4. Employment by sector in selected OECD economies, 1995-2010, in % of total employment.

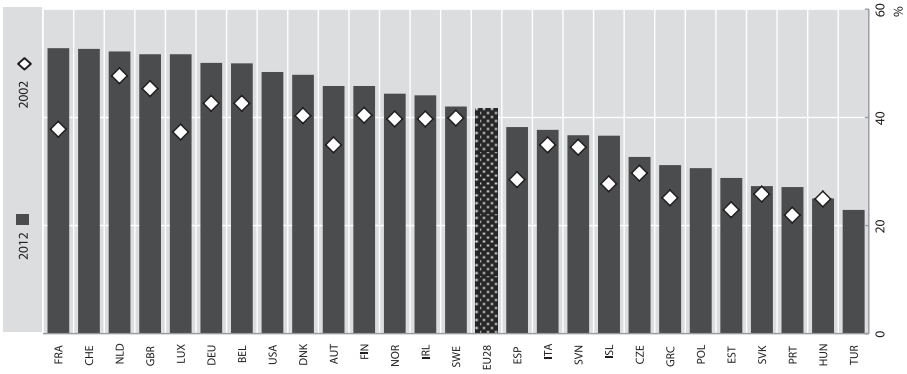


Note: data before 1994 are not available for most of the post-socialist European economies. Data after 2010 contain a lower number of countries.

Source: author's calculations based on Key Indicators of the Labour Market (KILM) 8th edition, ILO http://www.ilo.org/empelm/what/WCMS_114240/ [date of access 20.03.2014].

Apart from jobs classified as "pure" service sector jobs, there are an increasing number of service-related occupations in the manufacturing industries. This is due to the greater use of technology in production, the international sourcing of manufactured goods and a range of social factors (such as the changing skills of populations). These occupations include managers, accountants, lawyers and IT professionals. In 2012, the share of service-related jobs in manufacturing in the EU-28 had reached about 41% and varied between 25% (Turkey) and 53% (France) (figure 2.5.).

Figure 2.5. Service-related occupations in manufacturing, 2002 and 2012, as a percentage of total employment in manufacturing.



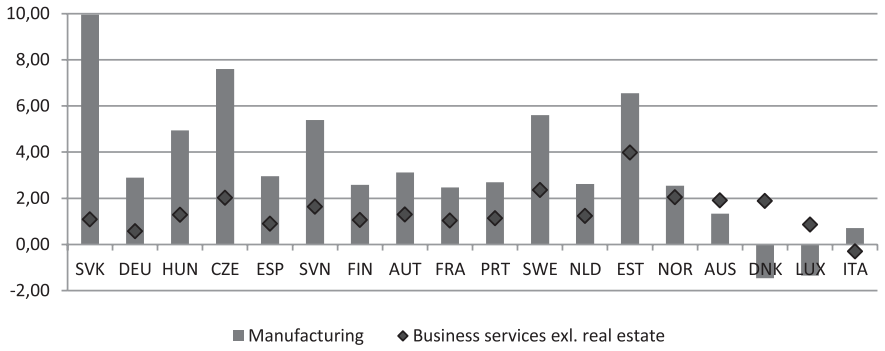
Source: OECD Science, Technology and Industry Scoreboard 2013, http://dx.doi.org/10.1787/888932904127 [date of access 25.03.2014].

2.2.3. Trends in labour productivity

Factors that have contributed to the increased role of services in economies include the characteristics of consumer demand and differences in the relative labour productivity of main economic sectors. As consumers become richer, they want to buy relatively fewer manufactured goods and relatively more services. This is because the demand for material products has reached a natural limit (as in the case of food) and the nature of need changes – people can afford more health care, education or entertainment services instead of material products. At the same time labour productivity in agriculture and industry tends to grow faster than in services because new techniques and machinery are invented and employed there. In the case of many service jobs it is not possible to use machines. This makes services relatively more expensive further increasing their share in GDP. Lower productivity growth also explains the reason for the continuous growth of employment in the services sector. Technological progress does not eliminate human jobs to such an extent as it happens in manufacturing [Soubottina and Sheram 2000, pp. 51-52]. There is a natural shift of employment from the more productive manufacturing sector, where fewer workers are needed to produce a given increase in output, to the services sector where more workers are needed.

Current data support this view. In all but three OECD countries for which data are available, the average annual growth rate of labour productivity in manufacturing outpaced the rates in services during the last decade (figure 2.6.).

Figure 2.6. Growth in real value added per hour worked by main activity, 2001-2012, selected OECD countries. Percentage change at the annual rate.



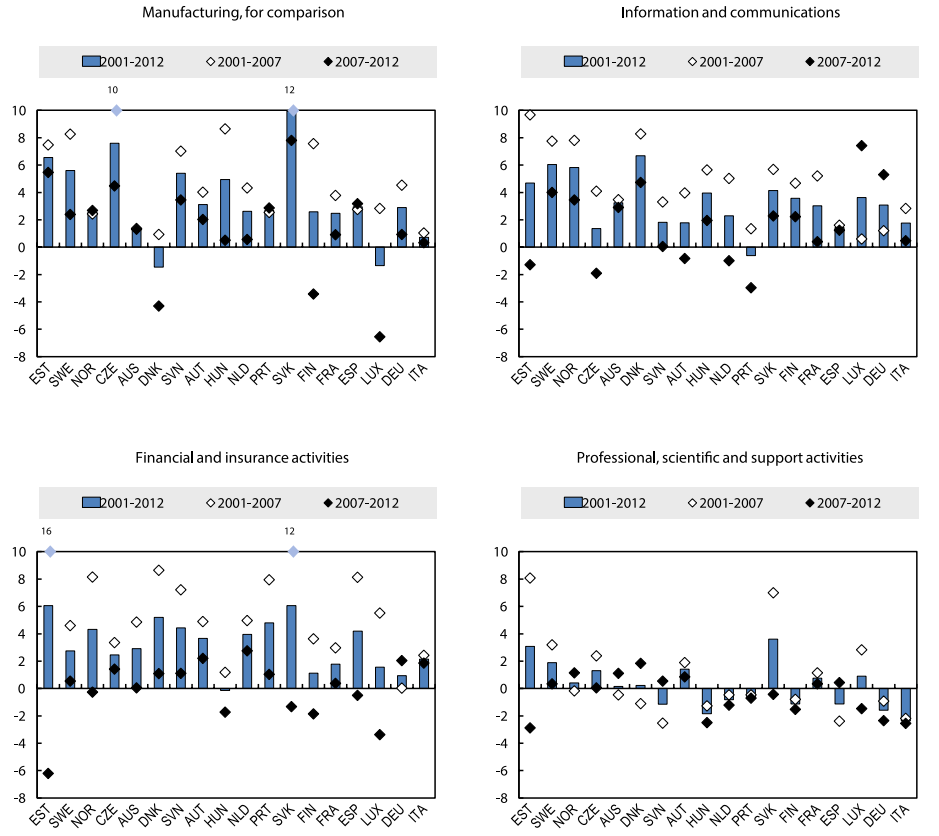
Note: the order of countries reflects the decreasing difference between productivity in manufacturing and services.

Source: OECD Compendium of Productivity Indicators, 2013, DOI :10.1787/pdtvy-2013-graph12-en [date of access 25.03.2014].

The typical reasons of differences between the sectors' productivity include the intensity with which sectors use capital and skilled labour in their production; the scope for product and process innovation and the absorption of external knowledge; the degree of product standardisation; the scope for economies of scale; and the exposure to international competition. Most of these factors are disadvantageous in the case of services. Additionally, slow productivity growth is influenced by measurement problems. This is due to two reasons: 1) market prices may not be observable for publicly provided services and 2) it is often difficult to identify precisely what constitutes the service activity in a particular sector and to account correctly for the quality changes in services. The measurement of output requires the identification of whether the output consists of the transaction performed or the outcome achieved through the service [OECD 2000, p. 23]. For example, should a doctor's output be measured by the number of patients examined or by the number of patients healed? If the former, there is a risk of a decrease in the quality of service (which may be dangerous for health and may discourage future patients). If the latter, there is only limited influence of the doctor's activity on the ratio of recovery. Another problem is to identify the individual elements that usually comprise a service. Some functions are difficult to measure statistically. For example, one of the functions of banking is safekeeping. But there is no straight measure of these activities, so some proxies are used (for instance the number of accounts or transactions). Evidence show that in some services, such as distribution, telecommunications and parts of the financial services, technological change has strongly affected the production process and the organisation of production, and has contributed to significant improvements in productivity, but this is not always adequately measured [OECD 2000, p. 22].

Where measurable, productivity growth rates range in different industries from low or negative rates to growth rates exceeding those of high-growth manufacturing industries. Developments in information and telecommunications technologies (ICT) combined with internationally fragmented production processes are making business services increasingly dynamic, transportable and tradable. As a result, several business sector services show characteristics similar to the high-productivity manufacturing industries; they are intensive in physical (mainly ICT)-capital, innovative, show economies of scale and are exposed to international competition. For instance, finance and insurance services as well as ICT services show labour productivity growth rates that are as high as – or even higher than – average productivity growth in the manufacturing sector [OECD 2013, p. 36]. Such business services also show a more volatile productivity growth over time as compared to, for example, professional services – figure 2.7.

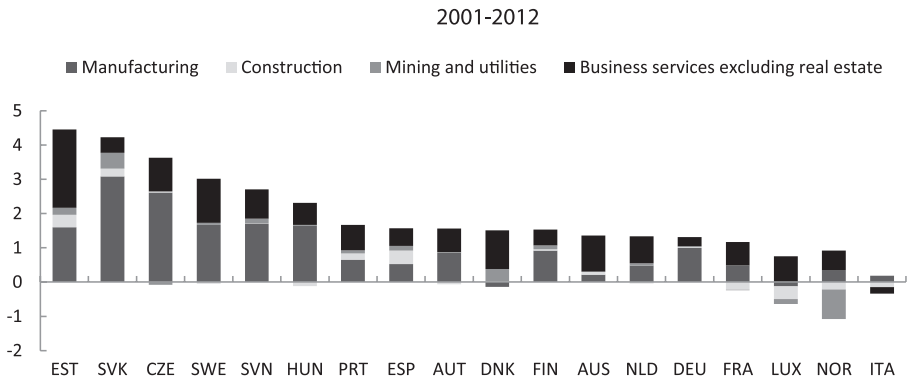
Figure 2.7. Growth in real value added per hour worked by business services, 2001-2012, selected OECD countries. Percentage change at the annual rate.



Source: OECD Compendium of Productivity Indicators, 2013, DOI :10.1787/pdtvy-2013-graph12-en [date of access 25.03.2014].

Even though productivity growth is generally lower in the services sector than in manufacturing, it nevertheless accounts for a large share of aggregate growth in output per employee. This is so because the contribution of individual service sub-sectors depends not only on their productivity growth but also their share of value added and hours worked [OECD 2013, p. 35]. Plus, the services share in value added is large. As can be seen in figure 2.8., in 2001-2012, productivity growth was almost entirely driven by manufacturing and business services. In the case of manufacturing, this reflects the typically higher productivity growth rates. In the case of business services, this is to a large extent due to a large share of the overall activity.

Figure 2.8. Contribution of industry and services to growth in real business sector value added per hour worked, 2001-2012, selected OECD countries. Percentage change at the annual rate.



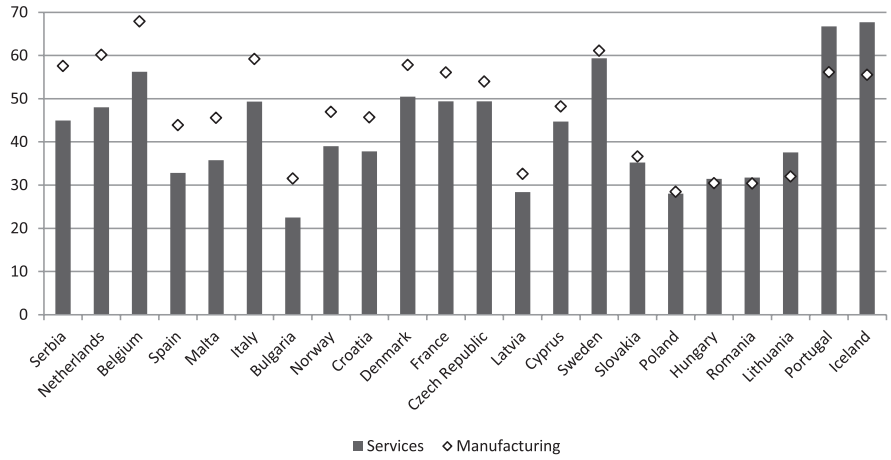
Source: OECD Compendium of Productivity Indicators, 2013, DOI :10.1787/pdtvy-2013-graph12-en [date of access 25.03.2014].

2.2.4. Innovations in services

Because of services' role in economies and other sector development and competitiveness, improvements in living standards are likely to depend more and more on productivity improvements in business services than in manufacturing. Much of the productivity increase is due to different types of innovation (technological and non-technological). Joseph Schumpeter argued that innovation is not just a new idea or invention, but the increased productivity that stems from its application. It means that innovation is inseparable from the economic value that it generates and should be reflected in value creation [Uppenberg and Strauss 2010, p. 43].

The results of innovation surveys indicate that even though service firms are innovative they are less so than manufacturing companies (see figure 2.9). Among European countries, the largest gap was found in Serbia, the Netherlands, Belgium and Spain in 2010.

Figure 2.9. Innovative enterprises (as a percentage of all firms, 2010).



Note: the order of countries reflects the decreasing difference between the share of innovative enterprises in manufacturing and services in the total number of firms.

Source: author's calculations based on the Eurostat Community Innovation Survey 2010, CIS-7 [date of access 25.03.2014].

The role of service-sector innovation has long been under-appreciated. The analysis on innovation has always tended to centre on manufacturing. However, services become more innovative and in some cases they are more innovative than manufacturing. What follows are efforts to better understand the innovation in services. The third edition of the Oslo Manual (OECD 2005a) provides a revisited definition of innovation which captures the complexity of it in an improved manner. Innovation is now understood as the implementation of:

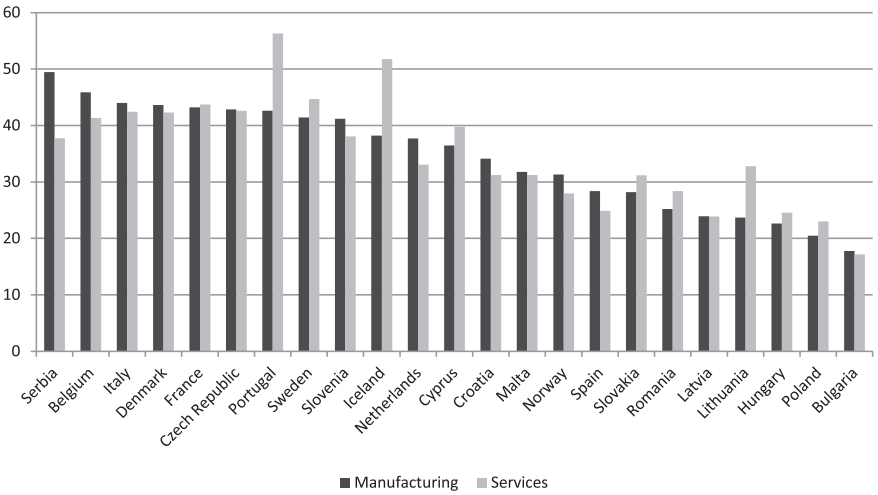
- a new or significantly improved product (good or service) or process (production or delivery method),
- a new marketing method (involving significant changes in product design or packaging, product placement, product promotion or pricing),
- a new organisational method (in business practices, workplace organisation or external relations).

Some examples of innovations in service industries are listed in Box 2.

Product and process innovations are usually more technologically based. Marketing and organisational innovations are new additions to the *Manual* and represent non-technological innovations. The latter are the ones where the gap between manufacturing and services in European countries is the smallest, as is reported by the Eurostat's Community Innovation Survey (CIS). Figure 2-10 presents the results of the most recent results of CIS-7. The data show clearly that in 2010 there are no substantive differences in the percentage of all manufacturing and services sector firms that introduced the non-technological innovation (in the case of product or process innovations the difference in favour of manufacturing

reaches about 25-30%). A few countries have recorded higher innovation rates in services rather than in manufacturing (e.g. Portugal, Iceland, Lithuania).

Figure 2.10. Non-technological innovators (as a percentage of all firms, 2010).



Source: author's calculations based on the Eurostat Community Innovation Survey 2010, CIS-7 [date of access 25.03.2014].

Box 2. Examples of innovations in selected service branches

Wholesale of machinery, equipment and supplies
- Creation of web sites on the Internet, where new services such as product information and various support functions can be offered to clients free of charge.
- Publication of a new customer catalogue on CD. The pictures can be digitally scanned and recorded directly on the CD where they can be edited and linked to an administrative system giving product information and prices.
- New data processing systems.

Road transport companies
- Use of cellular phones to reroute drivers throughout the day. Allows clients greater flexibility over delivery destinations.
- A new computer mapping system, used by drivers to work out the fastest delivery route (i.e. from one destination to another). This makes it possible to offer clients faster deliveries.
- The introduction of trailers with eight globe-shaped containers instead of the usual four.

Post and telecommunications companies
- Introduction of digital transmission systems.
- Simplification of the telecommunication network. The number of layers in the network has been reduced by using fewer but more highly automated switching centres.

Banks
- The introduction of smart cards and multipurpose plastic cards.
- A new bank office without any personnel where clients conduct "business as usual" through the computer terminals at hand.

- Telephone banking which allows clients to conduct many of their banking transactions over the phone from the comfort of their own homes.
- Switching from image scanning to OCRs (Optical Character Readers) in the handling of forms/documents.
- The "paperless" back-office (all documents are scanned for entry into computers).

Software consultancy and supply companies

- The development of a whole range of different customer packages in which clients are offered varying degrees of assistance/support.
- The introduction of new multimedia software applications that can be used for educational purposes and thus eliminate the need for a real life human instructor.
- Making use of object-oriented programming techniques in automatic data processing systems development.
- The development of new project management methods.
- Developing software applications through computer-aided design (CAD).

Technical consultancy companies

- A new method of purifying water extracted from lakes for use as household drinking water.
- Offering customers a new "supply control system" which allows clients to check that deliveries from contractors meet specifications.
- The development of a standard for construction work carried out in already densely built-up areas (where care has to be taken not to inflict damage on any of the surrounding buildings).

Advertising and marketing companies

- Delivering lists of potential customers on diskette together with a list filing system (software) that allows the client firms themselves to analyse and draw samples from the list.
- Being able to assist clients in direct marketing campaigns by offering to distribute pre-labelled advertising leaflets, etc., addressed to selected households.
- Initiating a control process to check by phone with random households that they are actually receiving the information sent, i.e. adverts/leaflets they are supposed to.
- Delivering the software applications needed for clients themselves to be able to analyse data along with statistical databases.

Source: OECD 2005b, p. 33.

So far it is not well understood how innovation occurs in the services sector. Compared to manufacturing, most innovations in services appear to be non-technical and result from small, incremental changes in processes, organisational procedures that do not require much formal research and development (R&D) [OECD 2005b, p. 134]. This makes the measurement of innovation in services more difficult. R&D expenditures, as an innovation indicator, are usually relatively smaller in the services sector. Patenting (another innovation indicator) is rarely used in services as a means of intellectual property protection (trademarks and copyrights are much more popular). Intangible (non-technical) forms of innovation are not captured by any of these indicators at all. The innovation surveys attempt to capture these complementary dimensions of innovation.

Because of the heterogeneity of services, it is difficult to generalise too much about their innovative process. The most innovative services include those with high levels of technological opportunity, such as research and development, transport, financial services, distribution and retail trade, telecommunications and computer services. There is a heavy investment in

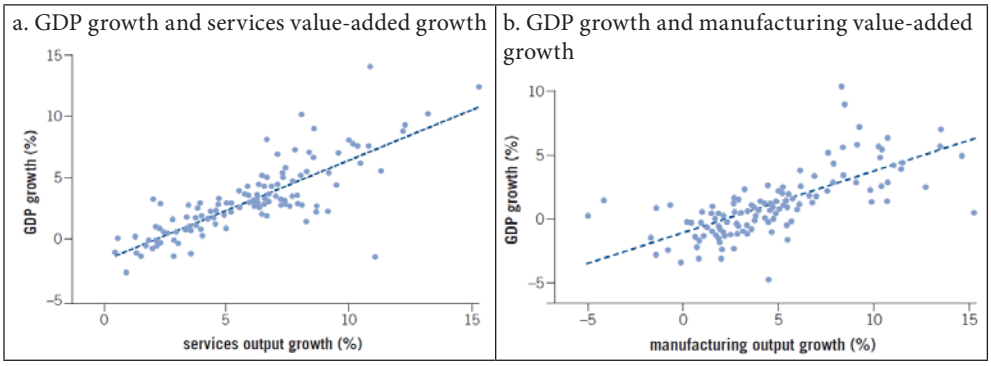
ICT in these sub-sectors and many new products are developed and adapted to meet changing consumer demands or increase competitiveness. On the other hand, there are some personal services with a large input of physical labour or services that are strictly regulated and thus not very competitive, which lag behind the innovation [OECD 2000, p. 11].

2.2.5. The phenomenon of the service economy

The growth of the services sector has long been considered as a consequence of a country's economic progress. Nowadays it is more often regarded also a precondition of economic growth and development. They are important in satisfying many basic needs, either directly, in the form of healthcare, education and housing, or indirectly, in the form of the creation of jobs and income. In addition, services are often an essential component of the process of agricultural and industrial production; they are part of the economic infrastructure and often act as a catalyst for the development of markets.

Figure 2.11a compares the real GDP growth with services value added growth in 136 countries between 2000 and 2005. Each point on the graph represents one country. The positive relationship between the two variables implies that countries with a high growth in services also tend to have a high overall economic growth or, conversely, that countries with a high overall economic growth have a high services growth. One cannot identify causality from this relationship. Figure 2.12b shows the relationship between the manufacturing value added growth and GDP growth. There is a positive relationship, but the slope is flatter, which means that if the relationship is causal, then the effect of services growth on aggregate economic growth seems to be stronger than is the effect of manufacturing growth [Ghani and Kharas 2010].

Figure 2.11. GDP and value-added growth, 2000–05.



Note: Each point in both charts corresponds to a five-year growth for a specific country. GDP growth rates control for the level of initial income per capita. All values are in constant 2000 USD. Growth rates are compounded at annual averages. The sample consists of 136 countries.

Source: Ghani and Kharas 2010.

Various labels have been given to this profound economic development of services such as, for example, the post-industrial – or information – society; de-industrialisation; the knowledge or the service economy. They underline different aspects of changes, but they all underline the difference from the traditional industrial society or economy. They also share the assertion that it is the production of non-material (or intangible) values that will become the driving force of the economies. Such an attitude represents a big change to what could be found in the literature even some 25 years ago. McKenzie in 1987 claimed that "the emergence of the service economy may be as much of an artefact of the classification system as it is a real phenomenon". Peck and Tickell in 1991 argued that "service industries[5] are essentially 'parasitic' in that they do not actually add to wealth in the economy, although they can help to realise the value of wealth created elsewhere" [Akehurst 2008, p. 3]. With improvements in data collection and the measurement of productivity, services nowadays are widely acknowledged as an important component of wealth creation.

It is difficult to correctly interpret the major characteristics of what has been called the "services revolution". No doubt there is a shift in value creation from one based almost entirely on physical production towards one based on the exploitation of skills, know-how and other intangible assets with the international outsourcing of services to lower labour cost regions of the world [Akehurst 2008, p. 4]. The services sector itself is also going through revolutionary change, which affects both business and consumers. New services are continually being launched to satisfy our existing needs and to meet needs that we did not know we even had. Nearly fifty years ago, when the first electronic file sharing system was created, only a few people anticipated the future demand for online banking, website hosting, or email providers. Today, many of us feel we cannot exist without them. Similar transformations are occurring in business-to-business markets[6]. However, it is worth remembering that technological and product changes have been a constant feature of human societies since the beginning of time and we do not live in a somewhat unique time of economic changes. "There have been similar periods of intense innovation and product development over the last 500 years. For example, in the 1800s when the railways were primarily developed, for the first time products and people could be transported with relative ease, low cost and safety. People at that time were probably astounded by the developments as much as we are now by the rapid development of the Internet. However, what is undeniable is the speed of the current changes – for example, it was just 66 years between the first powered air flight by the Wright brothers and the first manned landing on the moon" [Akehurst 2008, p. 2].

As economic activities, services have appeared fragile and unimportant, not suitable to ensure employment or economic prosperity [Delaunay and Gadrey 1992, p. 1]. Yet services have fundamentally changed economic and social structures. Their growth has exceeded

[5] In order to avoid confusion in using the term "industry" as the description of one of the three sectors in the economy (apart from agriculture and services) we would rather say services branches or types, instead of industries.

[6] https://www.boundless.com/marketing/services-marketing/the-importance-of-services/the-service-economy/ [date of access 17.02.2014].

overall economic performance for decades, which has resulted in the share of services in total economic activity increasing over time. As knowledge-based, service-oriented activities increase their prominence in developed economies, we may expect a further rise in the performance of the services sector. The growing role reflects higher consumer and business demand plus the outsourcing of service-related activities from manufacturing firms and the major role played by IT [OECD 2000, p. 13].

Services also play a vital role in facilitating all aspects of economic activity, as they hold an important position in the production of all goods and services. This is not easily reflected in statistics. Transport, communications and financial services are not only consumed in their own right but they also provide the support necessary for any type of business. Educational, health, and recreational services influence the quality of labour available to firms. Professional services provide specialized expertise to increase firms' competitiveness. In short, no economy can prosper without an efficient services infrastructure [WTO 2014, p. 78].

What we witness nowadays is the emergence of a new industrial order with a central role of know-how in the changes (table 2.3.). An important distinguishing feature of services is the relatively high emphasis placed on intellectual capital, or intangibles, in many service activities. While difficult to measure, intangibles can hold the key to value creation [OECD 2000, p. 11].

Table 2.3. Old and new industrial order.

Old industrial order
•Standardised output often with factory assembly lines
•In-house or in-company services with very little outsourcing
•Very localised markets or at most at a national level
•Large corporations with a vertical integration of production
•Technical progress moving relatively steadily with occasional "quantum leaps" when a new invention emerged
•Production based primarily on physical (tangible) inputs and outputs
•Primarily blue-collar factory employment
•Government regulated service functions
New industrial order
•Services, especially business services, are present and integrated into every stage of the value chain, with services a crucial necessity for all large and small enterprises (in terms of attracting and retaining customers and sustaining competitive advantage)
•Customised products and services bundled in increasingly different ways based on a strong customer focus and the encouragement of long-term relationships
•Growing internationalisation and competition, with growing interdependence of national economies, with large transnational corporations particularly in banking, finance, insurance, telecommunications, car production and energy
•Increasing international sourcing of services particularly in banking, telecommunications, finance and travel
•Increased networking and linkages between businesses, between suppliers and across sectors
•More effective use in enterprises of intangible assets such as intellectual capital, human, structural and relationship capital
•More flexible production methods with production changing from dominant physical inputs and product characteristics to know-how and information-based inputs
•Smaller government sectors with more private services which had previously been provided by the state
•A growth of specialised intermediaries providing products of higher quality and making intensive use of ICT

Source: Akehurst 2008, pp. 7-8.

2.3. Interaction between manufacturing and services

The relative importance of manufacturing and services in economies, and the interrelationship between the two have been the subject of much discussion. Some researchers have argued that the decline in manufacturing and the corresponding shift to services is unsupportable in the long run, since services depend critically on manufacturing for their existence. In the absence of manufacturing, the services sector would collapse. According to H. Greenfield [2002, pp. 19–20] the problem is that there is a "widespread acceptance of the bifurcation of goods and services – so much so as to consider them as discrete entities – the one completely disassociated from the other and being influenced by separate supply and demand forces". In fact goods and services are interdependent and no services can be provided without a prior investment in capital goods having been made. H. Greenfield clarifies the argument in the following way:

- "The demand for the services of teachers cannot be met without the prior construction of school buildings (allowing for a suitable lag).
- The demand for the services of dentists cannot be met without the prior investment in offices and dental equipment.
- The demand for auto repair services cannot be met without prior investment in buildings, tools, and other equipment.
- The demand for transport services cannot be met without prior investment in transport equipment (trains, lorries, planes, cars, etc.).
- The demand for a range of services provided by lawyers, architects, engineers, accountants and other business consultants cannot be met without prior investment in specialised educational facilities and currently in computers and associated technology".

On the other hand, services have become considered as a major driving force in economic growth. Rather than services following and supporting manufacturing, the latter is seen as flowing to those countries where the services infrastructure is efficient and well developed [OECD 2000, p. 9]. The discussion shows that there is a very close relationship between services and manufacturing. Without demand for education, the need for school buildings would not exist. If no need to see the dentist anymore, the dental equipment is also not needed. The same is true for all the examples quoted above.

There is no more need to explicitly distinguish services and manufacturing, especially that these activities have become more interconnected over the last decades. What is more, in the 1980's it was necessary to differentiate the two sectors distinctly and even to overstate the case for treating services as different to manufactured products due to the lack of knowledge and data on services, but it is neither necessary nor justifiable anymore. As early as in 1988 S. Vandermerwe and J. Rada [1988, p. 314] noticed in their seminal paper that: "It is no longer valid for either industries or individual corporations to draw simplistic distinctions between goods and services or assume they can do one without the other". In addition to interacting with one another, services are increasingly being embodied in manufactured

products. It is easily observable that products today have a higher service component which provides us with additional benefits and satisfaction than in the previous decades. In the management literature this is referred to as the servitization of products and business (the term servitization was first used by S. Vandermerwe and J. Rada, 1988). It refers to the increased use of services in manufacturing, both in terms of the production processes and sales. Virtually almost every product today has a service component to it. Its final value contains many different aspects of services, commencing with research and development, to design, branding, marketing, distribution and after sale service, just to mention few examples. Such changes result sometimes result in the way some companies perceive themselves. For example, software product firms experience the decline of traditional product sales or license fees and the shift in product company revenues to services. The production of physical goods has become secondary to firms that instead focus on the provision of "business solutions". One prominent example is IBM, which now considers itself primarily a service business, although it still makes computers. This trend is part of a shift in the comparative advantage of advanced economies. They have been able to stay competitive in part by shifting towards business solutions rather than the sale of products, as the price elasticity of demand for business solutions is lower than for hardware [Uppenberg and Strauss 2010, p. 15].

This shift has been accompanied by a shift towards subscription pricing. Rather than receiving a single payment for manufactured equipment, many manufacturers are now receiving a revenue stream for ongoing contracts, which include a service component (as in the case of MS Office 365 afore-mentioned) [Uppenberg and Strauss 2010, p. 15]. The business and pricing models had to go even further and take into account the growing demands from customers opposing payment of a lot of money for a standardized or commodity type software product [Cusumano 2008]. What has become common is delivering customers free software in exchange for their time to watch advertisements (e.g. Google, Yahoo, Facebook, Skype, etc.). Even some steel producers consider their service-related activities to drive their business, with the manufacturing aspects playing an important but less dominating role.

As a result of these changes a new term is being used: "manu-services", which describes a broad group of activities that involve combining manufactured goods with services. It is based on the argument that manufacturing is more than just *making things*. Modern manufacturing is a very complex industry, which includes a wide range of different activities, ranging from the quite simple combination of goods and complementary services (such as maintenance and installation) to the complex integration of manufacturing and services (which may involve providing services such as development, design and after sales care in close integration with the production of a good). It is estimated that in the United Kingdom manufacturing companies generate up to 20% of their revenues from services [Sissons 2011, p. 6]. The report *More than making things* [Sissons 2011] argues that much of the future growth in manufacturing will come from "manu-services"[7]. It is not however perceived as

[7] http://oecdinsights.org/2011/10/03/manu-services-best-of-both-worlds/ [date of access 20.02.2014].

a separate sector of the economy, it is more about the distinction of a group of activities that share common characteristics. They include:

- "An ownership model where the customer does not own a good, but pays a regular fee to rent it or derive a service from the good;
- A redistribution of risk between the buyer and seller, with the producer bearing more of the risk associated with a product;
- Longer service contracts instead of a series of one-off transactions;
- Manufacturers develop relationships with customers, rather than interacting in a transactional style;
- Increased customer involvement in designing and producing goods (such as bespoke manufacturing)" [Sissons 2011, p. 6].

As has already been shown, services are present in almost every activity in an economy. This is particularly true in the case of so called producer services, such as transport, communications, finance, distribution and business services. These services have sometimes been referred to as "the glue that holds supply chains together and ensures that they function in a fluid manner" [Elms and Low 2013, p. 63]. They influence the efficient and cost-minimizing production of final goods. They are instrumental for the effective design of global supply chains.

The term global supply chain is frequently used interchangeably with the term global value chain, but there is an important distinction between them. While supply chains are more connected to the "industrial sector and engineering" [Maurer and Tschang 2011] and refer to the technical or operational aspects of the production and consumption relationships that make up the chain, global value chains (GVC) are an extension of a concept that goes back to Michael Porter's view of the economic process as "activities organized as separate but coordinated phases" [Maurer and Tschang 2011]. Global value chains are more focused on the sources of value associated with the operation of the chains, whether such value accrues to producers, consumers or the economy at large [Low 2013]. Traditionally global value chains have existed in the manufacturing sector, but nowadays they are also present in services. However, it is a challenge to value services in production and trade. This is especially the case when services are provided in-house. In such a case services such as product design, advertising, bookkeeping or cleaning that are supplied by manufacturing companies are typically counted as goods. This understates the true contribution of services and leads to an under-appreciation of their contribution to value [Low 2013].

Enabling and facilitating the trade in goods is only one aspect of what services do. There are numerous services – other than producer services – which are involved in the production and sale of final goods and services. They play a role at every stage of production and consumption, from product conception, design and branding, through the manufacturing or production process itself, to the marketing, selling and the provision of post-sales services such as training, technical assistance, maintenance and repair [Low 2013].

Modern communications and transport technologies have enhanced the tradability of services. It has facilitated their incorporation in supply chain production as traded inputs.

For example, a chemical company could package and label its products prior to their departure from the production plant and then send them directly to each export destination. Alternatively, the firm might consign bulk shipments to a third country and package, label and market them from a hub [Low 2013]. What is crucial for the alternative solution to be picked up, is the good management of the services component of production.

In addition, products are more often bundled nowadays in order to create offerings that bear unique characteristics so suppliers may benefit from higher prices in the market. This bundling can involve a combination of goods and services, or services or goods alone. By adding, for example, product guarantees, after-sales service and repair arrangements, products are differentiated and markets segmented not on the base of different quality or product characteristics but by including some services in the process [Low 2013].

The problem which occurs here is how to separately identify all the individual service components that make up the full value of a product. There were several attempts to investigate this issue. For example Ali-Yrkkö et al. [2011] conducted a study of the Nokia N95 to find out what exactly constitutes its value. The results showed that the value of the physical components (including CPU, memory, integrated circuits and camera) accounted for approximately 33% of the phone, assembly accounted for a further 2%. The remaining two-thirds were divided between Nokia's internal support services (31%), licenses (4%), distribution (4%), sales (11%) and operating profit (16%) (Table 2.4.). Still, some of the services that have been involved in the production process were not detected in this case.

Table 2.4. Breakdown of the N95 EUR 546 (+tax) retail price circa 2007.

Item	Value in euros	Share in %
Physical components	178	33
Processors	34	6
Other integrated circuits	32	6
Memories	15	3
Display	22	4
Main camera (5 mill. pixels)	17	3
Other physical components	59	11
Licenses and software	21	4
Nokia's value added	269	49
Internal support functions	169	31
Operating profit	89	16
Final assembly	11	2
Distribution and retailing	79	14
Distribution	19	4
Retailing	60	11

Source: Ali-Yrkkö et al. 2011.

In an earlier study, Linden et al. [2009] estimated that distribution and retail services accounted for approximately 25% of the value of iPod (at a USD 299 retail price). Another

example, given by Elms and Low [2013, p. 65] assigns 81% of the jacket value (a USD 425 retail price) to invisible assets, and only 9% of this initial price is associated with making the jacket (including costs of labour and materials). Invisibles in this case consist mainly of services (retail, logistics, and banking), intellectual property and profits.

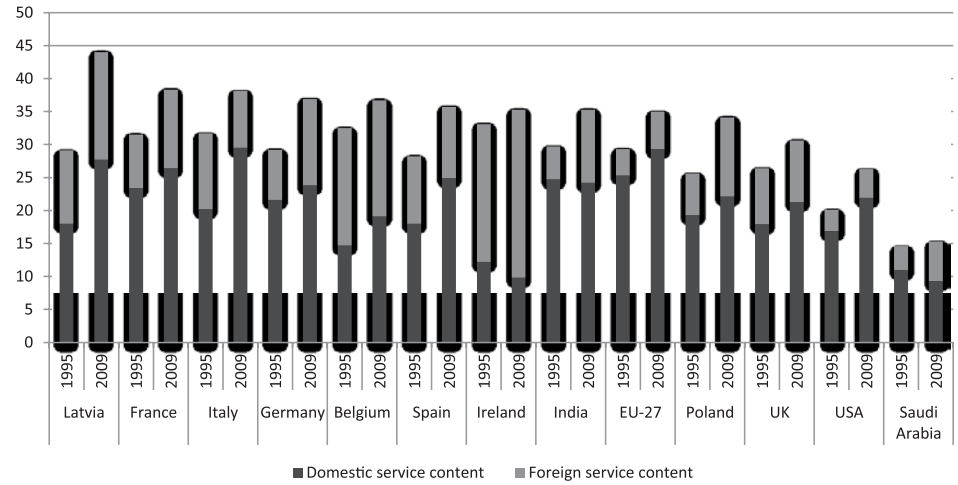
OECD statistics based on input-output tables reveal the contribution of services value added needed to satisfy final demand for manufactured products. This indicator measures the extent to which services are embodied in the manufacturing processes, i.e. the extent to which services contribute inputs to the manufacturing production at any stage of the production process. In the mid-1990s, services accounted directly or indirectly for about 22% of manufacturing production on average in OECD economies for which data were available [Pilat, Wölf 2005, p. 12]. In many cases the share has doubled since the 1970's. In the mid 2000's this share varied between 10 and 30%[8] in different countries. McKinsey [2012] in turn, estimates that in developed countries the share of services in industrial production varies between 20 and 25% (depending on the industry).

These and other studies show clearly that the share of services in value added greatly exceeds the value attributed to them by the statistics produced in the traditional way. This valuation is extremely important, because the cost and quality of many services determine today competitiveness of companies and economies.

Relationships between the two sectors are clearly visible also in the new WTO-OECD Trade in Value Added (TiVA) database. The data show that the contribution of value added derived from services embodied in the exports of manufactured goods in 2009 averaged 17.5% and ranged from 15.3% (in Saudi Arabia) to 44% (in Latvia). In the EU-27 the average share reached 35%, while in Poland it was a little less – 34.1% (but over 8 percentage points more than in 1995). In most countries there has been a significant increase between 1995 and 2009. This was mainly due to an increase in embodied foreign services engaged in domestic manufacturing production destined for export (see figure 2-12). Service branches which accounted for a large part of services embodied in the manufacturing of exports included wholesale and retail trade, hotels and restaurants, as well as business services. Their high level of development is crucial to ensure the competitiveness of the industries in which they are used for further production process.

[8] http://dx.doi.org/10.1787/888932487628 [date of access 20.02.2014].

Figure 2.12. Services content of manufacturing exports in selected countries with the highest and lowest values of 1995 and 2009, in%.



Note: the order of countries according to decreasing value added in 2009.

Source: author's calculations based on Trade in Value Added (TiVA) Database, http://oe.cd/tiva and OECD Science, Technology and Industry Scoreboard 2013. Innovation for Growth, http://dx.doi.org/10.1787/888932904127 [date of access 24.02.2014].

Similar relationships exist between services and the exports of the primary sector (agriculture and mining). Although the involvement of the services is on average slightly lower than in previous case (in 2009, the value added by services to agriculture and mining production destined for exports was on average approximately 14%), but in the top ten countries this ratio reached the relatively high level of 32% on average. Services accounted for approximately 23% of primary exports in the EU-27 countries and 22% in Poland in 2009. A relatively high value of the services value added share in some developing countries rich in natural resources (such as South Africa and Brazil) may be an important argument for increasing the emphasis on the development of the services sector there, which clearly contributes to exports of other industries.

Chapter 3

Services on international markets

The conventional definition of trade – where a product crosses a border and an export or import transaction occurs – omits a large range of international transactions in services. Well known service characteristics, such as intangibility, inseparability, variability and perishability have a crucial implication for the nature of the services trade: very often a necessary condition of international transaction is the movement of either the consumer or provider. Trade in many services is therefore linked to foreign direct investment and labour movement. Of course, it is possible to give examples of services that have "always" been present in international trade, as they are natural complements to merchandise trade. In particular these are: finance, insurance and maritime transport. There are also services that can be separately exchanged internationally, for example computer and information services, communications, architectonic designs, etc. On the other hand, large segments of the service economy, from hotels and restaurants to personal services, have not been traded internationally. Additionally, the lack of technical possibilities to provide services over the borders has resulted in the common opinion that services are generally non-tradable.

The Uruguay Round of multinational trade negotiations in 1986 took into account the rising importance of international trade in services and the differences in the provision of goods and services on international markets. Hence, the service sector was included in negotiations for the first time. Almost 50 years after the creation of the General Agreement on Tariffs and Trade (GATT) the General Agreement on Trade in Services (GATS), which entered into force in January 1995, has become an inseparable part of the world trade system. It is the first and only set of multilateral rules covering the international trade in services. GATS defines the ways that services can be traded. They are known as the so called modes of supply.

a) Cross-border (mode 1): services supplied from one country to another; a consumer in one country receives access to services from abroad through telecommunications or postal infrastructure. Such supplies may include consultancy or market research reports, tele-medical advice, distance training or architectural drawings.
b) Consumption abroad (mode 2): nationals of one country move abroad as tourists, students, or patients to consume services. Also covered are activities such as ship-repair abroad, where only the property of the consumer moves.

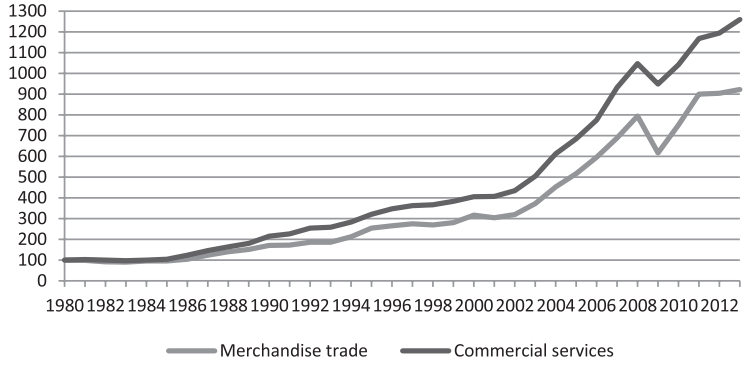
c) Commercial presence (mode 3): the service is provided in a country by a locally-established affiliate, subsidiary or representative office of a foreign-owned and controlled company (bank, hotel group, insurance company, etc.).
d) Presence of natural persons (mode 4): a foreign national provides a service abroad as an independent supplier (e.g., consultant, health worker) or employee of a service supplier (e.g. consultancy firm, hospital, insurance company).

So far the available trade statistics do not allow the accurate assessment of the value of international transactions according to the modes of supply. The only service trade statistics available on a global basis are the IMF Balance of Payments (BOP) Statistics, which register transactions between residents and non-residents. If the factors of production move to another country for a period longer than one year, a change in residency is deemed to have occurred. In such a situation the transaction is not recorded as international trade and is not covered by the BOP statistics. The BOP statistics provide relatively good coverage of transactions in modes 1, 2 and part of mode 4. In the case of the delivery of services via mode 3 (commercial presence) two main sources of data are used: The Foreign Affiliates Trade in Services (FATS) and the Foreign Direct Investment (FDI) statistics. FATS covers information on the operations of foreign affiliates, such as turnover and employment, as well as the direction of transactions (activities of foreign affiliates in the compiling economy and activities of foreign affiliates of the compiling economy that are established abroad). The problem with FATS is that there are not many countries that compile the relevant data. That is why the FDI statistics are often used for assessing the magnitude of commercial presence. Their weakness is that they cover a larger subset, not only (majority) controlled companies as required by the GATS definition of mode 3. However, due to the lack of better data, they will be used to assess the commercial presence in this chapter.

3.1. How do the characteristics of services influence international trade?

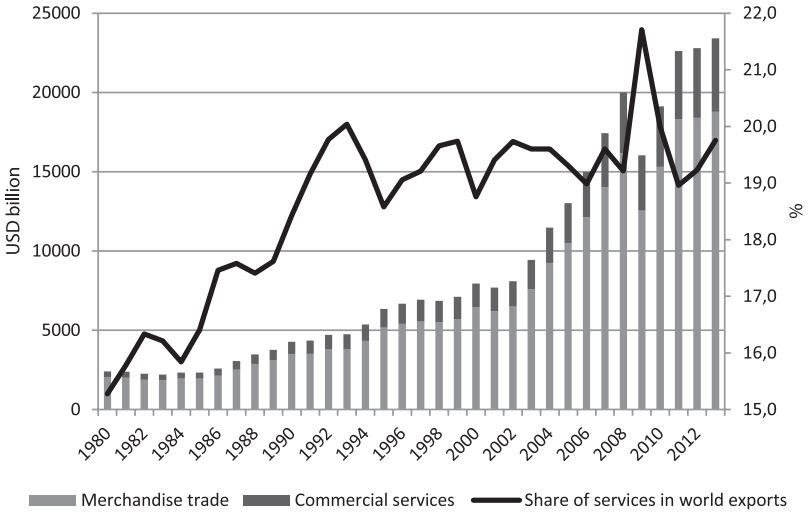
The contribution of services in the domestic economies remains in huge contrast to the relatively minor share of services in global trade. World exports of service accounts for some 20% of total world exports, despite the fact that since 1980 it has been the fastest-growing component of global trade (see figure 3.1.) and the share grew (from 15.3 % in 1980 to 21.7% in 2009 and then fell to 19.8% in 2013, see figure 3.2.).

Figure 3.1. Trends in world exports of total merchandise and services. Index 1980=100.



Source: author's calculations based on WTO Statistics Database, http://stat.wto.org [date of access 1.03.2014].

Figure 3.2. World exports of merchandise and services, 1980-2013.



Source: author's calculations based on WTO Statistics Database, http://stat.wto.org [date of access 1.03.2014].

Moreover, comparison of the value of services provided to those internationally traded reveals a very low level of services internationalisation in relation to agricultural and industry products. It is estimated that only around 7% of the value of services created domestically is internationally traded, while in the case of merchandise it is approximately 50%.

In order to explain the above mentioned asymmetries, a distinction of services with regard to their potential for trade could be useful. International trade in services is dominated by so called infrastructural services, i.e. enabling international transactions both in goods

and other service sectors. Examples include transport, communications, finance and insurance services. All together they account for about 70% of world service exports, while their share in GDP and employment is relatively small (excluding financial services). The opposite takes place in the case of the service sectors almost absent in international trade but representing a huge part of domestic output and employment. Two categories of services can be distinguished here. Firstly, these are public utility services (water and energy distribution, post and telecommunications, some social services) and retail and wholesale trade. Together they account for the largest share of GDP and employment in most countries. Their absence in international trade can be partially explained by the need of their simultaneous provision and consumption and thus lack of technical possibilities of cross-border trade and partially by closing them to international competition. Many services are still regulated by governments and no trade can develop there.

Secondly, there are some business services (for example professional, computer and advisory services) which have quite a large influence on domestic economies, but a disproportionately small representation in international trade. Demand for many business services is structured by local culture and can hardly be satisfied by any external suppliers. What is more, the international supply of services is often more complicated and more expensive than the supply of manufactured goods. Higher transaction costs thus occur. Firstly, it is because of the higher level of consumer tailoring and services uniqueness. Secondly, since there is generally a greater human element in service provision, their quality can rarely be standardised. Thirdly, until recently most of the information provided as well as the knowledge and experience essential for interpreting the information was tacit and non-codified. It required expensive, personal contact to provide such services. Additionally, the possibility of the unauthorised use of the information or knowledge (for example by means of copying) creates a threat for its legitimate owner [Sauvant, Mallampally 1993, p. 55]. Fourthly, business organisations in services are usually systems interacting with customers and therefore their internationalisation involves relatively more sophisticated organisational structures and inputs of higher quality human resources than in most manufacturing activities. As a result, changes in enterprises planning to export services are also usually larger and deeper than in the case of exporting physical goods. Finally, the low level of internationalisation of business services is due to the lack of incentives of enterprises to develop international activity. This is because many services are provided by small, private, family firms (for example retail trade, but also the services of lawyers, physicians, engineers). Their basic objective is to maximize the owner's profit rather than to increase the output and market share [Guile, Quinn 1988, p. 174-175]. Needless to say that these possibilities are in a way limited because of a small production output, marketing and other capabilities.

The above mentioned features of services create substantial problems with an appropriate assessment of the value of the services trade. As a result, this value (i.e. their share in world trade) is most probably underestimated. Primarily, there is a difficulty in registering a service crossing borders, for the simple fact that it is intangible and invisible. Data are collected through systems based on bank settlements, from foreign exchange controls (which

rarely provide information on the kind of service transaction) or market surveys (which are usually not complete). It is even more difficult as services are often closely linked to manufactured goods: either embodied in them (e.g. computer programmes) or the supporting sales of them (e.g. advertising campaigns) and therefore unable to be separately assessed. Some service export transactions are never recognised. This is especially common in the case of selling services to non-residents staying temporarily abroad. For example, it is almost impossible to say how many of them buy tickets to cinemas or sports events in Poland.

The second set of problems concerns the data which is not comprehensive, creditable, detailed or internationally comparable. Countries use different statistical systems and definitions of service sub-sectors. For example in 2002 India recorded exports of computer and information services worth USD 9.6 billion while its main trade partners (the US, Canada, the EU and Japan) imported the same services worth USD 294 million [IFS 2004]. There are many possible reasons for huge bilateral and multilateral asymmetries in trade. For example, what may be registered in one economy as a transport service, in another could be recorded under tourist expenses. Some developing countries do not collect data on many business services. Significant asymmetries are also caused by international offshoring as multinationals tend not to record electronic transactions fulfilled within the organisation. It is also worth noting that bilateral trade data exist only for OECD countries.

The credibility of service statistics is limited also by the fact that many service activities are undertaken in the "grey zone", e.g. foreign language lessons offered by native speakers. Moreover, as services are often provided by small and medium size enterprises, they are more likely to hide some revenues because of the less strict accountancy regulations.

Finally, the emergence of the General Agreement on Trade in Services (GATS) has created new needs for information that fit the definition of modes for the supply of services. This definition goes beyond the conventional balance of payment statistics, which cover only transactions between residents and non-residents. Sales from foreign affiliates and the activities of the natural persons providing services abroad on a temporary basis are difficult to assess. As indicators of commercial presence, foreign direct investment (FDI) statistics and the Foreign Affiliates Trade in Services (FATS) are used. Data on services provided by natural persons are partially covered by the balance of payment statistics, i.e. trade in business, computer and construction services, compensation of employees and workers' remittances. However, the last two categories apply to all the sectors of the economy, not only services.

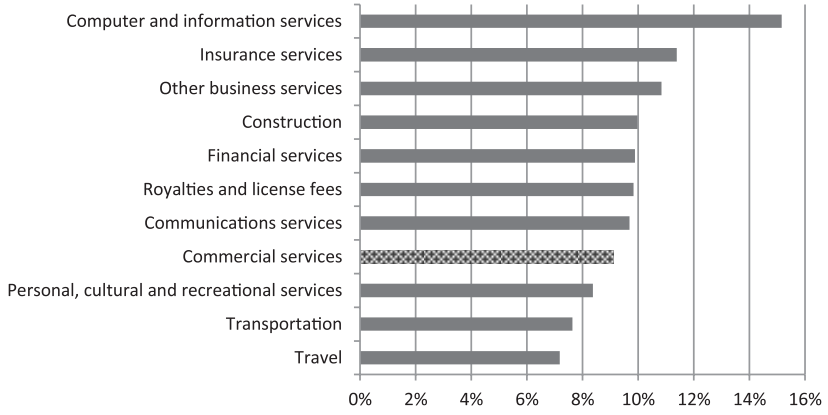
The growth of the service trade recorded in statistics springs partially from the better estimation of international trade in this sector. Services as such have relatively recently become a subject of economic analyses, new needs are identified, new methods are being developed. It seems that it is only a matter of time that the assessment of trade in services in accordance with the GATS definition will be undertaken. Some technical (e.g. relevant human resources and equipment in developing countries) and conceptual (e.g. a method enabling clear division between goods and services) problems must be overcome. During the last two decades much has been done to form service statistics at least partially as good as the merchandise ones.

3.2. The impact of technological progress on international trade in services

Technological progress opens up increased possibilities for international trade in services. It helps to overcome the specific features of services, so far impeding their international trade. In the case of some service activities, telecommunication achievements have actually abolished borders between states and nations. The costs of many other services have also dramatically decreased, thus making international trade profitable. Many services have gained the opportunity to be embodied in goods that are traded internationally (e.g. software, films and music on compact discs).

The most dynamic force behind the internationalisation of services is the expansion of the electronic network (i.e. the Internet). The emergence of the Internet has helped to create a range of internationally traded new services (e.g. telemedicine) and remove barriers to others, formerly perceived as non-tradable (e.g. advisory services). It enables the unbundling of the production and consumption of many services (e.g. research and development, computing, quality control and other information-intensive services). Due to advanced information and communications technologies in the creation of new possibilities in the fields of processing and transmitting data, more services can separately cross borders. Services are made available in one place and immediately consumed elsewhere. Where technical advances allow, personal contact is being replaced with long-distance communications. This can be clearly seen in the statistical data available. A far higher dynamics of exports growth is recorded in sectors where no migration of the provider and/or consumer is required (Figure 3.2.).

Figure 3.3. Average annual growth rate of exports of commercial services, 2000-2013, in %.



Source: author's calculations based on WTO Statistics Database, http://stat.wto.org http://stat.wto.org [date of access 1.03.2014].

Technological progress positively affects the so called consumption services, directly satisfying consumers' needs. Thanks to technological developments many services have become

much cheaper. Lower prices together with higher real incomes create an additional demand for services, often perceived as luxury products. The share of services in total expenditures of more and more wealthy individuals is growing. People can afford to travel more, attend cultural events, secure financial assets, education or health services. The increasing amount of them can be purchased abroad. Many international transactions, formerly prohibitively expensive, have now become commonplace, because people can easily move and communicate across borders. Moreover, the tastes of consumers are becoming more homogeneous, due to the unifying influence of media, travel, information transfer, etc. It has accelerated the move of service concepts and corporations worldwide. At the same time consumers are becoming more techno-literate. The increased demand is satisfied by service providers, offering more services, delivered in different forms.

The impact of information technology on the tradability of producer services (services that serve as inputs into the production of other goods and services) is even greater. Information and knowledge intensive service activities can be codified and sent abroad via the telecommunications networks. The process of production can be separated and the economies of scale can be achieved. Only intellectual and (sometimes) cultural proximity between cooperating enterprises is required.

The growing sophistication and variety of services, together with specialisation emerging from economies of scale have led companies to rely more on outsourcing than on in-house departments to provide services necessary for production. The examples are accounting, computer services, and warehousing. From an international perspective, particularly interesting is the situation when supplies are sourced from a company located abroad (either affiliated or non-affiliated). The provision of services can be more easily located in low-cost countries or those offering better quality, economies of scale, access to certain skills or markets. Offshoring frequently involves foreign direct investment. It can be undertaken either by service transnational corporations (TNC) or goods TNCs, which are supported by affiliates in their international activities (such as sales, marketing, financial intermediation and R&D). In addition, offshore investments of multinationals positively influence the service trade when they are followed by other service providers. As TNCs are usually important clients of smaller enterprises, the latter also decide to locate abroad. Some service companies (e.g. banks, distributors) take the similar decision because of the improvement in infrastructure in the host countries after multinationals decide to locate there.

The demand for producer services is also driven by the very complex environment surrounding companies. They have to be innovative to survive. Thus they need more capital. It is more often raised on international financial markets which, on the one hand – require high qualifications and on the other – generate the threat of mergers and acquisitions. As a consequence, more services are demanded (mainly information, consulting and financial services).

Technological progress creates new possibilities for services closely connected with goods. Some of them, as afore-mentioned, can be more easily traded when embodied in goods. Sometimes a service is critical for the successful sale of a commodity (e.g. marketing

or after-sales maintenance). High-tech equipment would be useless if not supported by services. Therefore the importance of services has risen relatively to the value of manufactured commodities. More sophisticated consumers' tastes play a role here, too. They encourage and force producers to diversify products and to enrich the market offer. Mass production is replaced by a short series of production. Thus designing, marketing and distribution services are of special importance.

3.3. The impact of changes in domestic and international economic policy on the international trade in services

Apart from the impediments to international trade in the services afore-mentioned (resulting from the characteristics of services), there are also barriers diminishing the value of this trade resulting from ever existing sound protectionism in the services sector in many countries. Many of the barriers are not found at the border between countries, but are rather of a domestic nature. Because of the specific features of services it is quite difficult to spot the service crossing the border, and therefore to impose tariffs. The limited scope for border restrictions implies that domestic regulations have a much stronger influence on trade in services than in goods. Moreover, these regulations rather than traditional trade policy instruments impede international trade in services. As regulations differ between countries (for example different technical standards, prudential regulations, qualifications requirements), they incur substantial costs. Contrary to foreign trade policy instruments, domestic regulations are still relatively seldom included in trade agreements.

Governments use regulations to support a wide range of public policies. They help overcome market failures (mainly natural monopolies, the asymmetry of information, inadequate access to services), protect the environment, improve the safety of products, etc. Natural monopolies occur in sub-sectors that require a fixed infrastructure (distribution networks). These are so called network services, for example telecommunications, railway transport, energy and water services. The examples of services with the asymmetry of information include most of the professional services (doctors, lawyers), public transport (safety) and financial services (the credibility of banks). Inadequate access to services is most probable to occur in network services and areas where the costs of networks are higher (for example telecommunication services in rural regions). Despite some positive effects, many regulations are responsible for the inappropriate allocation of resources, the lower productivity of production processes and higher prices. They slow down innovation and job creation, reduce competitiveness and the overall wealth of nations.

In order to address these kinds of problems many governments started to withdraw from the strict regulations of service activities in the mid-1980's. All OECD countries launched regulatory reforms, emphasising the need for increasing the competition in the sector. At the same time the processes of privatisation were also started. State ownership rather than regulatory measures was for a long time considered (especially in Europe) a means to ensure

public policy objectives. State companies were present in the utilities, telecommunications, transport and financial services. Until the beginning of the 1990's the privatisation covered enterprises operating in competitive services branches (banking, insurance), later it gradually began to include telecommunications, transport, utilities [OECD 2001(a), p. 54].

Changes in domestic policies enable foreign investors an easier access to services so far closed to competition or accessible only after the fulfilment of rigorous conditions. Large companies based in developed countries took the opportunity to expand and invest in newly privatised and deregulated sub-sectors (e.g. electricity, water supply).

Substantial changes occurred also in international economic policy. A growing number of countries have noticed the need to liberalise trade in services. If all four modes of supply are taken into account, the number of possible barriers to trade is very lengthy. Barriers can impede the cross-border flow of services, the movement of consumers and/or providers. A country has an alternative: it can liberalise its markets unilaterally (by an autonomous liberalisation), or it can cooperate with other governments (bilateral or multilateral liberalisation). The liberalisation of service markets is essential in achieving increased efficiency and competitiveness in the provision of services. It can lead to the growth in the value of trade.

The first multilateral trade agreement relating to international transactions in services to have broad industry coverage and wide membership was the General Agreement on Trade in Services. It was an important step towards world-wide liberalisation of import regimes for services, even though the effects achieved until now are not fully satisfactory. Services liberalisation is also negotiated under the Doha Round mandate, but the outcome is still uncertain.

There are also many regional integration agreements covering the issues of liberalisation of the services trade (usually in addition to the merchandise trade). The most noteworthy ones involving developed countries are: the European Union (and its Services Directive), the European Free Trade Association, the North America Free Trade Agreement (NAFTA), the Comprehensive Economic and Trade Agreement (between the EU and Canada). Developing countries also signed a number of such agreements, for example the Group of Three Trade Agreement, Mercosur (Protocol on Services), the Andean Community and the Association of South Eastern Asian Nations (ASEAN).

To sum up, the structure of international trade is transforming in favour of services. The growth of the services trade in relation to the merchandise trade is a fact. The disproportions between these two kinds of products in international trade are decreasing. It is also true for the internationalisation of services: the value of trade in relation to their production increase in time. These changes are possible thanks to many factors. The most important is the technological progress, increasing the tradability of services. It would also be hard to overestimate the role of the processes of liberalisation, privatisation and deregulation, facilitating foreign providers access to service markets. Last but not least, the improvement of statistics on international trade in services plays an important role as well.

3.4. Foreign direct investment in services

Contrary to merchandise, service providers do not often have a choice between the different ways of entering foreign markets. The Toyota company can decide whether to export its cars manufactured in Japan to the United States or open a factory in the USA and sell the cars directly there. In the case of many services the only way of delivering them to foreign nationals is to establish a company abroad and sell them locally. For instance, you cannot export "Rent a car" service or hotel services – they must be made available and sold in a consumer's country. Other examples include restaurants, hospitals, hairdressers, amusement parks, etc. In most services, the only way to serve foreign markets is by establishing an affiliate through FDI or by using non-equity arrangements (e.g. licensing) [UNCTAD 2004, p. 97]. Apart from the technical incapability of delivering many services directly across borders, many countries require the establishment of a business in order to supply services in the local market. They do so because of the need to protect the consumer's needs and safety as well as the need for ensuring the correct quality of service. Additionally, in many service sub-sectors FDI is a more effective way of supply because of the cultural proximity and security of transactions.

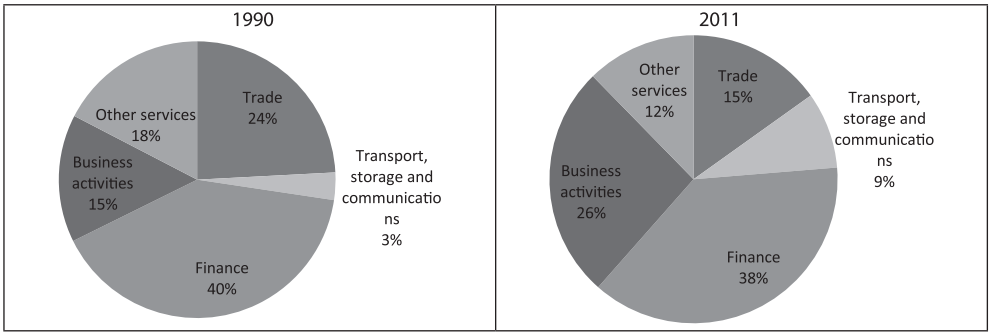
Foreign direct investment is increasingly shifting towards services. In the 1970's the FDI for service accounted for approximately a quarter of the total of FDI, in the 1990's the share of services reached some 50%, whereas nowadays (2011) it is above 63% (UNCTAD 2013, annex table A24). At the same time, the shares of both agriculture and manufacturing FDI stock have been continuously declining between 1990 and 2011, from 9% to 7% and from 41% to 25%, respectively.

Developed economies are the largest recipients of FDI in services. In 2011 they accounted for 69% of the inward FDI stock in services, while the developing countries share was 29% and transition countries – 1.8%. The share of the developing countries has grown substantially since 1990, when they attracted 17.7% of inward FDI in services (see table 3-1).

The FDI for services has grown more rapidly than the FDI in other sectors. They were growing on average 26.4% annually in the years 1990-2011, while manufacturing and primary industries were growing 17.9% and 20.8% per year respectively.

The structure of investment has also changed over time (see figure 3.4.). During the last two decades the share of FDI inward stock in more traditional services sub-sectors, usually accompanying merchandise exports (such as trade and finance) decreased in favour of business activities, transport and communications and some other services (mainly electricity, water supply), previously highly regulated.

Figure 3.4. Distribution of FDI stock in services, 1990 and 2011, in %.



Source: author's calculations on UNCTAD 2013, annex table A24.

The composition of FDI services stock changed both in developed and developing countries. The latter group attracted sizeable FDI in some services. In some sub-sectors the changes over time were very large. Developing countries' share in construction and trade doubled, while in hotels, restaurants and business activities it has tripled over the years 1990-2011. Conversely, the share of developing countries decreased in two sub-sectors: transport, storage and communications, as well as electricity, gas and water (see table 3.1.), despite a noticeable rise in multinational corporations' participation in telecommunications. This is partly because of significant FDI in these sub-sectors among developed countries and transition economies (the average annual growth rate in these sub-sectors in the two groups of countries was about 5 pp higher than in developing economies in 1990-2011).

Table 3.1. Distribution of FDI stock in services, by group of economies, 1990 and 2011, in %.

	1990			2011			
Sector/Sub-sector	Developed economies	Developing economies	World	Developed economies	Developing economies	Transition economies	World
Primary	83,3	16,7	100	60,0	36,2	3,9	100
Manufacturing	80,4	19,6	100	67,4	30,7	1,8	100
Services, of which:	82,3	17,7	100	69,2	29,0	1,8	100
Electricity, gas and water	68,9	31,1	100	74,1	24,3	1,6	100
Construction	75,7	24,3	100	52,3	43,9	3,8	100
Trade	88,8	11,2	100	74,2	24,1	1,7	100
Hotels and restaurants	81,7	18,3	100	43,5	54,5	2,1	100
Transport, storage and communications	56,6	43,4	100	65,5	32,9	1,5	100
Finance	75,3	24,7	100	74,2	24,7	1,1	100
Business activities	88,3	11,7	100	58,4	38,4	3,2	100
Other services and unspecified tertiary	95,5	9,1	100	84,1	15,1	0,7	100

Source: UNCTAD 2013, annex table A24.

On the outward side of FDI there is the larger dominance of developed economies as investors in services, but also greater changes in favour of developing countries' share. Their share in the global outward FDI stock in services rose from 1% in 1990 to 15% in 2011. Changes in some sub-sectors are even larger. The share of developing countries in the global FDI stock in particular service sub-sectors was at best 2% in 1990. Over the following 21 years FDI increased particularly in construction (29% share of developing countries), hotels and restaurants (26%), business activities (21%) and trade (17%), transport, storage and communications (16%)[9].

According to UNCTAD, the main drivers of rising FDI in services are "economic activity, the externalization of services to independent providers, the growing service intensity of the production of goods, the deregulation of service markets and the liberalisation of FDI policies" [UNCTAD 2004, p. 115]. The competitive pressures in service markets have also increased, especially in developed countries pushing firms to seek market opportunities abroad. Yet there are still many national policies that discourage investments in services, mainly in public utilities (electricity, gas, water supply, telecommunications), transport (notably air and maritime transport) and financial services. Some recent policy actions are presented in Box 3.

Box. 3 Attitudes towards FDI in services

The Committee on Foreign Investment in the United States (CFIUS), an inter-agency group that screens foreign direct investment for national security concerns, has recently been in the limelight with several high-profile cases, notably one involving the acquisition of a US port by investors in Dubai. A recent 'open skies' aviation agreement between the United States and the European Union was scuttled in part because the United States refused to ease its restriction that all US airlines must be at least 75% owned by US citizens. Japan rejected a takeover offer from the UK-based Children's Investment Fund in the energy company J-Power. China has been moving, under pressure from the United States, to open its financial services to foreign investors. Likewise, India is also gradually opening wholesale and distribution services to large foreign firms such as Wal-Mart despite strong local opposition. Venezuela and other Latin American countries with left-wing governments, on the other hand, have recently increased restrictions on foreign investment in telecommunications. Thailand has also recently moved to reduce control by foreign investors in its telecommunications industry.

Source: Golub 2009.

Benefits of FDI in services are in many cases similar to the benefits of FDI in manufacturing and they include the creation of jobs, the accumulation of capital, transfer of technology and increased competition. Additionally, the productivity of manufacturing can increase due to the increasing quality of services used as inputs in the production processes. On the other hand, some costs may also occur, such as the displacement of local firms and reduced competition [Golub 2009]. Newly established "infant" service firms may also need temporary protection from foreign competition.

[9] UNCTAD 2013, annex table A25.

Chapter 4

Offshoring of services

4.1. Basic concepts and global trends

The concept of outsourcing has been a feature of the US economy since the Ford Motor Company offshored its Model T assembly to a plant in England in 1911. But it was only in the 1960's and 1970's that offshoring emerged in its more familiar form. American companies started moving some of their labour-intensive production and service processes to offshore locations in order to reduce the costs of goods and services intended for the US market [Lapid 2006, p. 343]. Gradually other countries joined the process of fragmentation of production stages into several different locations. For example, IKEA established production facilities in Poland in the 1970's.

During the late 1990's, offshoring adopted yet another face as it began spreading through the services sector. Initially, low-value-added service jobs, such as back office transactions and call centres were being displaced to developing countries. These have now expanded to jobs associated with more "knowledge work", such as software programming, engineering, design, accounting, legal and medical advice and a broad array of other professional services. India became the main beneficiary from the trend as it has a large pool of English-speaking and technically skilled labour. [Lapid 2006, p. 344]. "Already in the late 1980's Swissair had moved a lot of its accounting tasks to India; the City of London also turned to India for computer maintenance services" [WTO 2008, p. 99]. India's case is more extensively described in Box 4.

Trade in specific tasks or – in other words – offshoring involves moving different service tasks, such as those involved in software programming, design, accounting and payroll operations, medical records transcription, or telephone call centres to lower-wage locations. Examples include North East China with many call centres for Japan (because Japanese is widely taught in this region), Central and Eastern Europe serving Western Europe, Central and South America's call centres taking advantage of the large Hispanic market in the United States or Philippines, with a large English-speaking population competing with India for contracts from the US.

Box 4. Beginnings of offshoring in India

When American Express launched its Indian rupee card, the operations at its Indian division were revealing. The company found that the cost per transaction from India was significantly lower than those of the more advanced markets and that the quality of the output was also significantly superior. According to Raman Roy*, touted as the father of the Indian outsourcing industry, who was in charge of the operations, 'The real gains were greater because of our execution efficiency, the number of first-call resolutions of customer problems, and the ease with which we resolved the issues (which was purely a function of our more qualified and better educated staff)'. Realising the substantial advantages of the Indian operations, John McDonald, the controller at American Express, soon added more responsibilities and the Indian unit became a key part of American Express' global operations. Overcoming a number of technological hurdles, Raman Roy, in charge of the Indian unit, was able to show superior work and also the resultant cost savings that were possible. Soon a number of Fortune 500 companies started offshoring their operations to India. Indian IT service providers also leveraged the offshoring boom and provided services to a number of clients, the majority of whom were based in the US. Over the years, the services offered shifted to more high-end ones, with foreign multinationals using India as their innovation base (…).

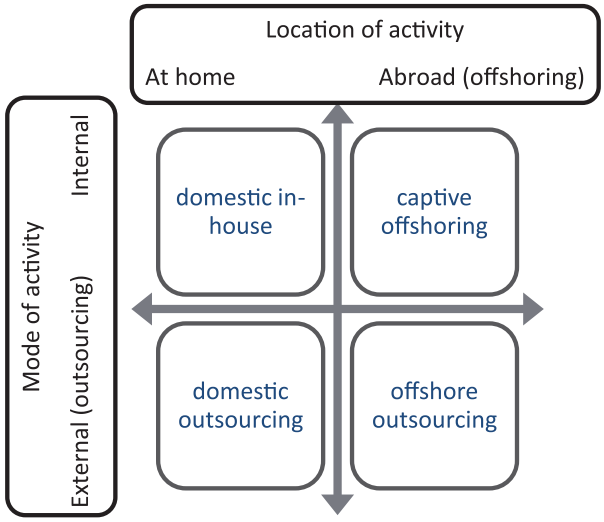
In the early 1980s, British Airways and other global airlines started conducting back-office operations in New Delhi. This was soon followed by firms like American Express that consolidated regional back-office operations in India. In 1985, Texas Instruments set up the first multinational technical design centre in Bangalore. Companies like General Electric (GE) took the lead and thus was born the offshoring story. By the late 1990s, the Y2K syndrome and the Internet boom drove up demand for IT services. During the same time, the increased investment in fibre optic infrastructure helped improve communications quality, and drive down the cost of communications. Ironically, the telecom and Internet burst in 2001–2003 also drove growth in offshoring to India. Over the years, Western firms were looking to cut costs, and offshoring to India was a great cost-saving opportunity. One of the pioneers in India's offshoring boom was GE, which has been lauded for triggering the growth of the offshore outsourcing in India. 'GE has helped seed the growth of the entire Indian software services and BPO industry,' noted Mohan Sekhar, former chief delivery officer for iGate.

* Raman Roy is regarded as the pioneer of India's BPO and ITES. He is credited with setting up India's first offshore service centre for American Express and is instrumental in building the country's stature as the locale for remote processing, delivering world-class solutions and services.

Source: Yesudian 2012, pp. 49-50.

The terms outsourcing and offshoring have been used in a number of different ways, and there is some amount of confusion around them. There is no commonly accepted definition of "offshoring", and the term has been used to include various international trade and foreign investment activities. Figure 4.1. explains the differences between offshoring and outsourcing based on the location. Outsourcing can be undertaken domestically (domestic outsourcing) or internationally (offshore outsourcing, where goods or service inputs are sourced from a foreign non-affiliate through arm's length contracts). Captive offshoring (establishing subsidiaries abroad) is conceptually identical to foreign direct investment (FDI) and involves intra-firm trade.

Figure 4.1. Outsourcing vs. offshoring.



Source: Peng and Meyer, 2011.

For example, if a US based company purchases services from abroad it would be considered imports. If the same company has invested in an overseas affiliate and relocated some of its services previously provided in-house with provision abroad, then it is called captive offshoring or FDI. If the company has decided to replace its domestic services provision with services acquired from a non-affiliate abroad, it would be called offshore outsourcing, while if these services were acquired from a domestic company – it would be considered domestic outsourcing.

The global offshoring market has grown rapidly from its first phase of evolution in the 1990's. However, the available data does not allow the direct measurement of offshoring in goods and services. As there is no consensus on how to collect the data that corresponds to the appropriate definitions of services in offshoring processes, various proxies are used by economists. They include:

- trade data statistics – trade in intermediates used as a proxy measure for the offshoring of manufactured goods; trade in "computer and information services" and "other business services" usually selected as a proxy measure for the offshoring of services since these categories are more commonly demanded by firms rather than final consumers; the problem is that a good or a service might be either final or intermediate depending on the context and trade statistics do not allow for a clear distinction;
- input-output tables – intermediate inputs may be distinguished from those for final consumption; unfortunately, the availability of input-output tables is limited;
- firm-level information – business surveys based on questionnaires or interviews are the source of information; they provide very detailed information but they have a very limited coverage and the development over time is often not captured by the data [WTO 2008, pp. 100-101].

Depending on the methodologies adopted and available data sets, estimates for the offshoring in services vary. A number of different institutions have published their estimates. Table 4.1. provides a list of the various estimates from private consulting firms, business associations and international organizations, collected by Gereffi and Stark [2010]. These figures vary significantly. Estimates for offshore services range from a low of USD 117 billion (NASSCOM) to a high of USD 198 billion (OECD) in 2009. GARTNER, Inc. has measured the entire outsourcing activities (which include offshoring services), so the figure is as high as USD 424 billion as of 2009.

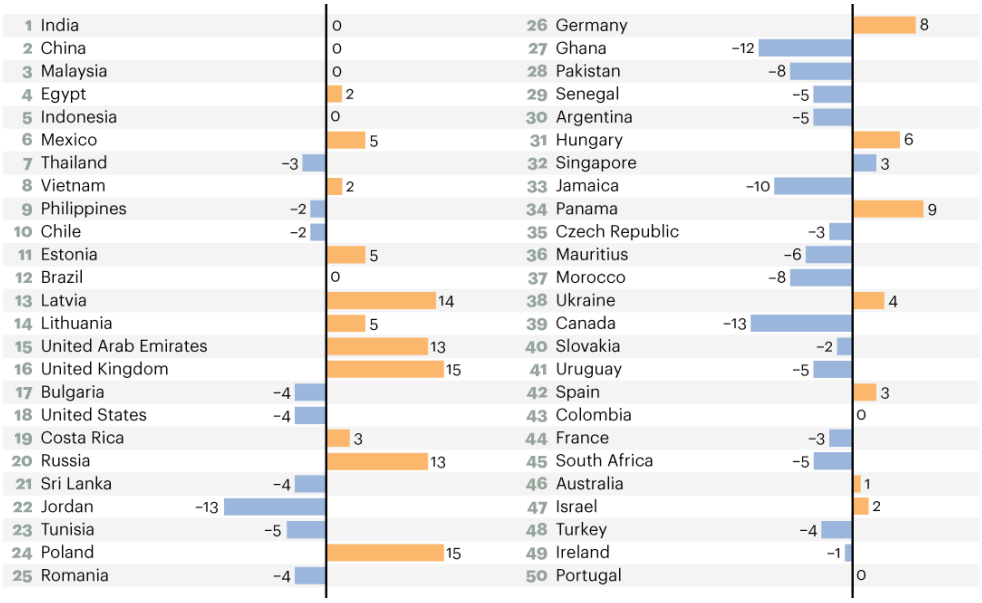
Table 4.1. Global offshore services market size.

Source			Revenues (USD Billions) Year						Comments
			2005	2006	2007	2008	2009	2010 (est.)	
OECD	Global offshore services market		81.4	100.8	125.6	157.4	198.6	252.4	Includes ITO, BPO, KPO and some other advanced activities.
NASSCOM	Global offshore services market		44.25	59	78.3	101	117.5		Includes ITO, BPO, KPO and some other advanced activities.
BCG	Global offshore services market	ITO	19.2	22.7	26.9	31.9	37.3	43.2	BPO includes KPO and some other advanced activities.
		BPO	27.4	42.3	65.1	100.3	154.5	238.1	
		Total	46.6	65	92	132.2	191.8	281.3	
GARTNER	Global outsourcing and offshoring services market	ITO					268		BPO includes KPO and some other advanced activities.
		BPO					156		
		Total					424		
NASSCOM and EVEREST	Global offshoring BPO market					26-29			
McKinsey & Company	Global Offshoring ITO-BPO market	ITO	16.7-19.6						McKinsey calculates the offshoring market potential with a range. They state that the market has captured only 10% of its full potential. ITO: 147-178 (captured only 11%) BPO: 122-154 (captured only 8%) From these estimates the real market in 2005 was calculated.
		BPO	9.8-12.3						
		Total	26.5-31.9						
A. T. Kearney	Global offshoring BPO market	BPO				30			22% of the Global BPO market is offshore.

Source: Gereffi and Fernandez-Stark 2010, p. 24.

The recent A.T. Kearney report [A.T. Kearney 2011] highlights dramatic changes in the services offshoring trends since their first report on the subject was published in 2003. The phenomenon has grown significantly and in many cases has exceeded previous expectations. More complex and new types of services are offshored. Also the geography of offshore delivery has expanded to include a larger number of countries. The A.T. Kearney Global Services Location Index™ measures the attractiveness of countries as potential locations for offshore services. Three major factors are assessed: financial attractiveness, people skills and availability, as well as the business environment. The top three most attractive locations for delivering information technology (IT), business process outsourcing (BPO) and voice services in 2011 were India, China and Malaysia. Their position has not changed since the first edition of the Index. Wage changes and currency devaluations during the financial crisis, however, have led to major changes in other rankings within the Index. Examples of the advances in ranking include the Baltic states (Estonia, Latvia, Lithuania), the United Kingdom, Poland, Hungary, Mexico, Egypt and the United Arab Emirates (see figure 4.2.). On the other hand, countries such as Canada, Jordan, Ghana or Jamaica have fallen in the Index.

Figure 4.2. The A.T. Kearney Global Services Location Index™, 2011 (change in rankings, 2009-2011).



Source: A.T. Kearney 2011.

As already mentioned, India has traditionally been the most important offshore service destination. The Index confirms the country's leadership. The second country in the ranking, China has been considered for a long time as a less attractive option mainly because of

concerns about the language capabilities and intellectual property security. If several parameters such as the talent pool, government support or education are compared, clearly China lags behind India (see table 4.2.). However, nowadays the Chinese government is more supportive in attracting BPO and KPO services to the country.

Table 4.2. Country comparison for IT outsourcing: India vs. China.

Parameter	India	China
Labour Pool	High	Medium
Education System	High	High
English Proficiency	High	Low
Cost Advantage	High	High
Infrastructure	Medium	Medium
Government Support	High	Medium
Quality	High	Low
Cultural Compatibility	Medium	Low
Business Environment (includes political scenario)	High	Low

Source: http://www.tutorial-reports.com/business/outsourcing/india/comparison.php [date of access 15.04.2014].

4.2. Motives for service offshoring

In recent years, service offshoring has been facilitated by many factors. The decreasing costs of transport and communications, the expansion of the Internet, infrastructure growth in developing countries, the expansion of production networks in East Asia and the economic transformation of Eastern Europe are among the most important that have significantly intensified these phenomena [GAO 2004, p. 11]. As reflected by companies, the top 10 reasons for outsourcing or offshoring are[10]:

- lower operational and labour costs; when properly executed it has a defining impact on a company's revenue recognition and can deliver significant savings;
- possibility to continue focusing on the company's core business processes while delegating other time consuming processes to external agencies;
- ability to access world class capabilities;
- freeing up internal resources that could be put into effective use for other purposes;
- gaining access to resources not available internally when internal resources are not sufficient;
- saving costs and providing a buffer capital fund to companies that could be leveraged in a manner that best profits the company;

[10] http://www.flatworldsolutions.com/articles/top-ten-reasons-to-outsource.php [date of access 25.03.2014].

- possibility to delegate functions that are difficult to manage and control to external agency companies while still realizing benefits;
- avoiding risk;
- ability to realize the benefits of re-engineering;
- expanding and gaining access to new market areas, by taking the point of production or service delivery closer to their end users.

Economic theory gives three main reasons of firms' decision to offshore. First is the possibility to exploit the advantages of location, such as lower labour and other inputs costs, so that production costs can be reduced. Increasing labour overheads and rising labour standards in developed countries (including pay rate and policies) make the offshoring of labour even more economical [Feenstra 1998]. The second reason is that some tasks can be contracted-out in peak periods so the regular workforce is not overloaded. And finally, the economies of scale can be achieved. Organizations' decisions to offshore services are also influenced by potential risks, such as geopolitical issues, infrastructure instability in countries that supply the services, differences between countries (such as the costs of studying new laws and government regulations of another country, different languages across countries or different currencies) as well as managerial costs (e.g. monitoring and coordination costs), costs of searching for the appropriate supplier, negotiating costs, etc. The decision to offshore is driven by the trade-off between the advantage of lower production costs and the disadvantage of incurring these other types of costs [WTO 2008, p. 105].

R. W. Jones and H. Kierzkowski [1990 and 2001] developed a simple model of offshoring. They explain the reasons for increasing the fragmentation of production. According to them, the law of comparative advantage holds, but it applies at the level of components. Various stages of production may require different types of technology and skills, or inputs in different proportions. If this is so, firms can locate different stages of production in a country that offers cost savings and benefits from fragmenting production across countries. On the other hand, the process of fragmentation generates costs of coordination and monitoring of different stages of production. Other costs, such as transport, communications and insurance also occur. When these costs decrease, as is in case of technological improvements and deregulation processes, the international fragmentation is more likely to increase. The process is additionally fostered by the growth of the world economy (a large scale of production implies lower average costs).

More recently, G. M. Grossman and E. Rossi-Hansberg [2006] developed an idea of trade in tasks. They argued that firms not only locate production stages in different countries and import components, but they also separate office tasks and offshore at least some of them. Therefore international competition takes place on the level of individual tasks rather than at the level of the industry or a firm. A pre-condition for offshoring and outsourcing is the possibility to separate tasks or inputs and trade in them. This is largely facilitated by technological improvements. With developments in IT more service tasks can be offshored [WTO 2008, p. 106].

4.3. Controversies with the results of offshoring

Offshoring is a hot topic in many developed countries, where the increasing number and range of jobs is under threat of relocating to developing countries. The debate is particularly strong in the United States, which runs a huge trade deficit. While China is usually mentioned in the manufacturing debate, India is talked about when the loss of service jobs is discussed.

Opinions on the effects of offshoring vary. Offshoring causes controversy because some jobs are lost immediately and visibly, while other potential impacts such as lower costs, job creation in other sub-sectors and economic growth are less visible, more diffuse, and typically delayed [GAO 2004, p. 1].

Classical theorists argue that this phenomenon is nothing more than applying the law of comparative advantage, with – say – India specialising in its abundant, low-wage, yet high-skill sectors (e.g. IT) and the Unites States – in higher-skill, higher-paid jobs and both nations gaining from trade. According to J. Bhagwati et al. [2004], classical theories still hold. Even if the gains from trade are diminished for the US, the alternative will be to close the market and give up all possible gains.

Also, there are some unquestionable benefits of outsourcing some functions to India or other developing countries. First of all, these are reduced costs and increased competitiveness for companies, which hire low-wage workers. For example, McKinsey reported that for every dollar spent by US firms in India, the US firms save 58 cents. Overall, USD 1.46 of new wealth is created, of which the US economy captures USD 1.13 through cost savings and increased exports to India. India captures the other 33 cents through profits, wages, and additional taxes [Peng 2013, p. 55]. The outstanding difference between the United States and developing countries is labour costs. Table 4.3. presents a large gap between computer programmer wages in the United States and other countries. In 2002 Polish or Hungarian programmers' wages represented around 10% of their American counterparts. Indian wages were reported to be slightly higher than in these two Central European countries, which may be explained by the surged demand on services of Indian programmers in the late 1990's. due to the so-called Y2K crisis: US firms, in response to a tight supply of computer programmers at that time, turned to companies located in India to make the code fixes needed to avert problems with computer systems when the year 2000 arrived. As a result of the increased demand and rising levels of human capital the wages have increased.

Table 4.3. Average salaries of computer programmers in USD, 2002.

Country	Salary range
Poland and Hungary	4800 – 8000
India	5880 – 11000
Philippines	6564
Malaysia	7200
Russian Federation	5000 – 7500
China	8952
Canada	28174
Ireland	23000 – 34000
Israel	15000 – 38000
United States	60000 – 80000

Source: Garner 2004, p. 13.

The costs reductions are also enhanced by the fact that in the United States, many offshore jobs are viewed as relatively undesirable or of low prestige; whereas in India they are often considered attractive. Thus, Indian workers may have higher motivation and out produce their U.S. counterparts. The higher productivity of Indian workers leads to falling unit costs for American companies [Carbaugh 2010, p. 59].

Another source of benefits is new exports. As business expands, Indian subsidiaries may purchase additional goods from the United States – a call centre in Bangalore, for instance, might be filled with Dell computers, Siemens telephones, HP printers, and Microsoft software. These purchases result in increased earnings for U.S. companies and additional jobs for American workers; Diana Farell – Director at the McKinsey Global Institute - estimates that for every dollar of US corporate spending that moves to India, US exports to India increase by an additional five cents [Farell 2005, p. 677].

Finally, repatriated earnings also bring benefits for companies. Many Indian subsidiaries are owned in whole or in part by US companies, and they return their earnings to the parent companies. They generate some 30% of the revenues of the Indian IT and business process outsourcing industries. An additional four cents of every dollar spent on offshoring services in India returns to the USA in the form of repatriated profits [Farell 2005, p. 677].

Apart from this, proponents claim the threat posed by Indian innovation is exaggerated and offshoring is too small to matter much. Although Forrester Research, Inc. forecasted that approximately 3.4 million US jobs may be outsourced between 2003 and 2015, the US economy in any given year destroys 30 million jobs and creates slightly more, thus minimising the effect of offshoring. Also, higher-level jobs will replace those lost to offshoring [Peng 2013, p. 76].

Critics concentrate on strategic, economic, and political effects. As for strategy, they indicate that with offshoring fewer and fewer activities are carried out by the firms in developed economies. Sourcing out the core activities leave the firms with nothing and additionally nurtures rivals abroad.

The economic arguments refer to job losses in high-end areas, such as design, R&D, and IT/BPO and a possibility that the net impact on developed economies may be negative. For example, Paul Samuelson [2004], once a great proponent of free trade, was eventually not so sure of the beneficial effects of offshoring. He suggested that the lower prices of exported US software (due to the benefits of the relocation of some jobs to India) could have an adverse effect on the wages of American IT workers and the net effect of the whole process may be that the US is worse off as a whole. Also, critics note that the theory of comparative advantage is weakened as the resources, immobile in Ricardo's times, can nowadays move to other countries (e.g. technology and ideas can be used in a more productive way in countries with an abundance of cheap labour). In this case, according to the critics, there are no longer shared gains – some nations win and others lose [Carbaugh 2010, p. 58].

The political arguments refer to the statements that Western companies are not ethical and all they care about is access to the cheapest labour force they can exploit. They are accused of destroying jobs at home, ignoring corporate social responsibility, violating customer privacy (for example, by sending medical records, tax returns, and credit card numbers to be processed overseas), and in some cases undermining national security [Peng 2013, p. 55]. The wages are affected as well. Over the past three decades, the wages of low-skilled American workers, those with a high school education or less, decreased both in real terms and relative to the wages of skilled workers, especially those with a college education or higher [Carbaugh 2010, p. 63].

The question remains open whether Western companies have the option to not offshore. The increased economic interdependence and fierce competition leaves little choice, limited just to the location, time and range of offshoring decisions. Actually anyone whose job does not entail daily face-to-face interaction may now be replaced by a lower-paid, equally skilled worker across the globe. What is necessary to make changes less harmful for workers affected in industrialised countries is to adapt trade policies, educational systems, social welfare programmes and politics to the new realities. Just as the structural changes in the past have transformed societies and decreased the share of, first, agriculture and then manufacturing, a similar process is happening right now. Most probably offshoring will make workers in developed countries find other things to do rather than make them unemployed. In the long term, as it was before, the world should gain enormously from increased productivity.

4.4. Service sectors vulnerable to offshoring

Researchers make efforts in order to find out which jobs are most vulnerable to offshoring. They try to discover which attributes make jobs more offshorable.

One such empirical analysis was undertaken in the early years of services offshoring by A. Bardhan and C. A. Kroll [2003]. According to them more than 14 million jobs in 49 service occupations, representing about 11% of the total U.S. employment in 2001, have attributes that could allow them to be sent overseas. The attributes include no in-person

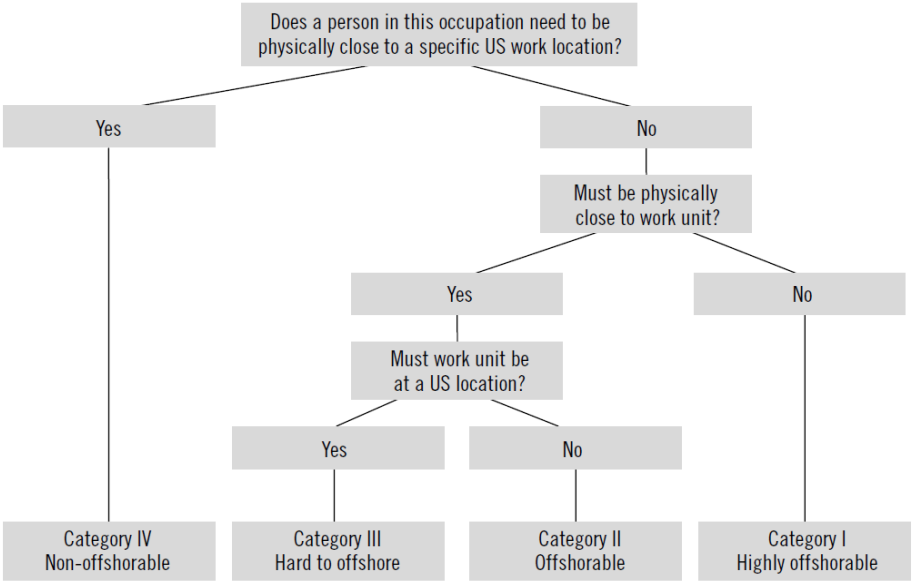
customer servicing required; an IT-enabled work process that can be accomplished via telecommuting; jobs that can be routinized; a fairly wide gap between a job's pay in the United States compared to in a destination country; and a destination country having few language, institutional, and cultural barriers. The jobs which were considered as highly offshorable include office support (e.g. data entry and payroll clerks), auditors and tax preparers, computer programmers and software engineers, medical transcriptionists, and technical writers. The concentration of these aspects lie in such services such as information, finance and insurance and professional and business services [Levine 2012, p. 5].

J. B. Jensen and L. G. Kletzer [2010] examined the task content of 457 service occupations to rank their relative vulnerability to being offshored. The measures of task content they used included facts of whether the job requires face-to-face contact with others, is tele-commutable or involves an IT-enabled work process and involves routine or complex activities. They estimated that highly offshorable categories of jobs include: computer and mathematics; architecture and engineering; legal; life, physical, and social sciences; business and financial operations; and office/administrative support. They also found that a service occupation's relative degree of offshorability was positively associated with its level of educational attainment; that is, service occupations having a larger percentage of bachelor's degree holders were ranked as more vulnerable to offshoring [Levine 2012, p. 6].

The link between the education level and vulnerability to offshoring was also examined by the U.S. Bureau of Labor Statistics [BLS 2008]. It was estimated that more than one-half of offshorable occupations are in various professional and technical categories, with almost all computer and mathematical science occupations being to some degree vulnerable to offshoring. But the same study reveals that among the 33 most offshorable occupations, 15 were those with relatively low education or training requirements (office and administrative support jobs) [Levine 2012, p. 6].

A. S. Blinder [2009] also took an occupational approach and created an index of offshorability for occupations based on the degree to which the jobs required personal interaction that necessitated workers to be in close proximity to customers. He proposed four categories of occupations, from non-offshorable to highly-offshorable. The algorithm he proposed is presented in figure 4.3.

Figure 4.3. The four broad occupational categories according to Blinder.



Source: Blinder 2009, p. 54.

He estimated that a majority of occupations (65.2%) and employed persons (71.1%) are non-offshorable – that is, they are completely immune to offshoring (see category IV in Table 4.4).

Table 4.4. Occupational categories by the degree of offshorability, USA, 2004.

Category and description	Number of occupations (millions)	Share in All	Number of workers (millions)	Share in All
I Highly offshorable	59	7.2%	8.2	6.3%
II Offshorable	151	18.5%	20.7	15.9%
I+II	210	25.7%	28.9	22.2%
III Hard to offshore	74	9.1%	8.8	6.8%
IV Non-offshorable	533	65.2%	92.6	71.1%
III+IV	607	74.3%	101.4	77.8%
All	817	100%	130.3	100%

Source: based on Blinder 2009, p. 55.

Adding the "hard to offshore" category creates an estimate of some three quarters of occupations and the employed hardly affected by the offshoring process. The minority that is vulnerable to offshore falls mainly to category II (offshorable), rather than I (highly off-

shorable). Some occupations which are regarded as highly to go offshore in the United States are presented in table 4.5.

Table 4.5. Selected US occupations regarded as highly likely to go offshore, ranked by the offshorability index from the highest to the lowest, 2004.

Occupation	Number of workers
Computer programmers	389090
Data entry keyers	296700
Computer and information scientists, research	25890
Actuaries	15770
Mathematicians	2930
Statisticians	17480
Film and video editors	15200
Medical transcriptionists	90380
Telemarketers	400860
Telephone operators	29290
Office clerks	749343
Computer systems analysts	492120
Economists	12470
Bookkeeping, accounting and auditing clerks	1815340

Source: Blinder 2009, p. 55.

Blinder stated that "contrary to conventional wisdom, the more offshorable occupations are not low-end jobs, whether measured by wages or by education. The correlation between skill and offshorability is almost zero" [Blinder 2009, p. 69]. This means that it is a great challenge for students in advanced countries to choose an occupation that will not be threatened by the offshoring process (on the other hand, this creates opportunities for students in emerging countries). This is not easy, especially if rapid changes in technology and economic structure are taken into account.

Some predictions might be made based on factors driving service-sector offshoring. Firstly, more likely to be outsourced are labour-intensive services (because of large differences in wages; e.g. telephone call centres or legal transcription services). Secondly, thanks to recent advances in information technology, it is easier to offshore information-based jobs (e.g. billing and accounting, computer programming and customer service jobs). A third factor that makes jobs more vulnerable to offshoring is the ability to codify tasks, so that instruction can be relatively easily followed by workers (e.g. call centres as opposed to doctors or lawyers). Finally, the transparency of information to be transmitted between the worker and the customer is also an important factor. When customer information is easily available and verifiable (e.g. as in the case of credit information on households), the transaction can be more readily conducted at a remote location (e.g. the decision of who is eligible for a credit card) [Garner 2004, pp. 16-18].

4.5. Segments of outsourcing

Offshored (or outsourced) services are usually categorized under three major classifications: information technology offshoring/outsourcing (ITO, e.g. software coding, testing and maintenance), business process offshoring/outsourcing (BPO, e.g. finance and accounting, procurement, logistics) and knowledge process offshoring/outsourcing (KPO, e.g. market intelligence, business analytics, legal services). Additionally, the advantages and disadvantages of shared services centres (SSC) as an alternative to outsourcing are often debated and presented at the end of this chapter.

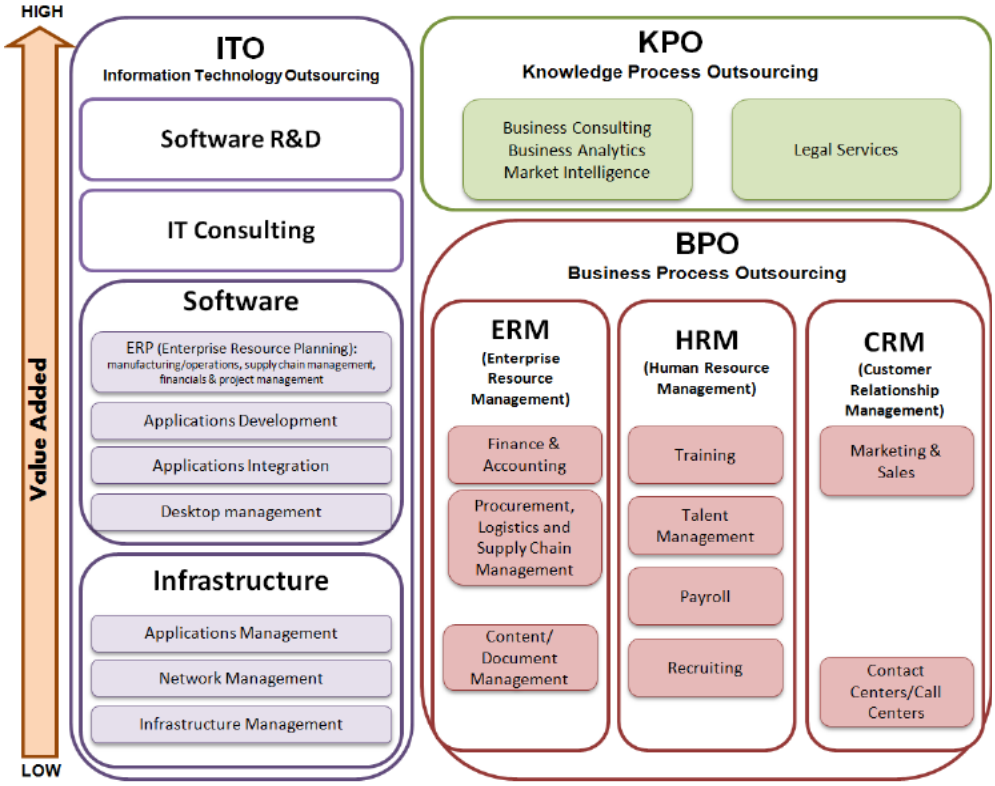
Initially, offshoring began with low-end IT services (such as software coding, testing, and maintenance). It has been a result of increased demand from business adopting computer technologies and the labour shortage for skilled programmers in the United States and other countries. Prior to the ICT revolution, services had to be done in-house because communications facilities in other locations were often inadequate or expensive to set up. New technologies in ICT allowed digitization which in turn allowed the separation of service tasks. Much of this IT offshoring went to India. It is estimated that in 1999, software exports from India amounted to USD 4 billion. By 2009, global ITO had grown to USD 56 billion. [Palugod and Palugod, 2011, p. 14].

Offshoring services have evolved mainly from those IT services towards business process services. Business process offshoring has thus expanded. By 2009, BPO had grown to USD 38 billion from USD 12 billion in 2004 [Palugod and Palugod, 2011, p. 14].

Offshore activities have also moved from low end to higher value added services and more knowledge based services. Usually ITO and BPO are considered as lower value segments of the value chain, while the KPO segment is considered as the higher end of it. However, as can be seen in figure 4.4., ITO makes up the low, mid and high segments of the offshore services value chain, BPO activities are in the low and mid segments, while KPO are indeed considered the highest segment of the chain.

The value of each activity is correlated with human capital, which means that lower end services are performed by people with fewer years of formal education. Call centres or routine BPO activities, for example, are performed by employees with just a high school diploma. Market research or business intelligence is typically carried out by employees with the minimum of a Bachelor's degree, while the highest-level research and analysis is carried out by employees holding specialized master's degrees or PhDs [Palugod and Palugod, 2011, p. 14].

Figure 4.4. Main segments and activities of the offshore services value chain.



Source: Gereffi and Fernandez-Stark 2010, p. 14.

The ITO segment is usually classified into the following categories:

- software R&D (e.g. programming languages, application development tools, new design);
- IT consulting (services which help in transforming enterprises by aligning IT strategy and priorities to their business objectives);
- software (which includes activities such as ERP (Enterprise Resource Planning, dominated by ORACLE, SAP, Microsoft Business Solutions, The Sage Group), applications development (e.g. applications to be run in mobile phones), applications integration (e.g. development of software to integrate legacy applications with modern computers) and desktop management (e.g. installing-updating and maintaining software);
- infrastructure (applications management – network support to companies; network management – application management; and infrastructure management – technical support for computer networks).

BPO is often categorized into:

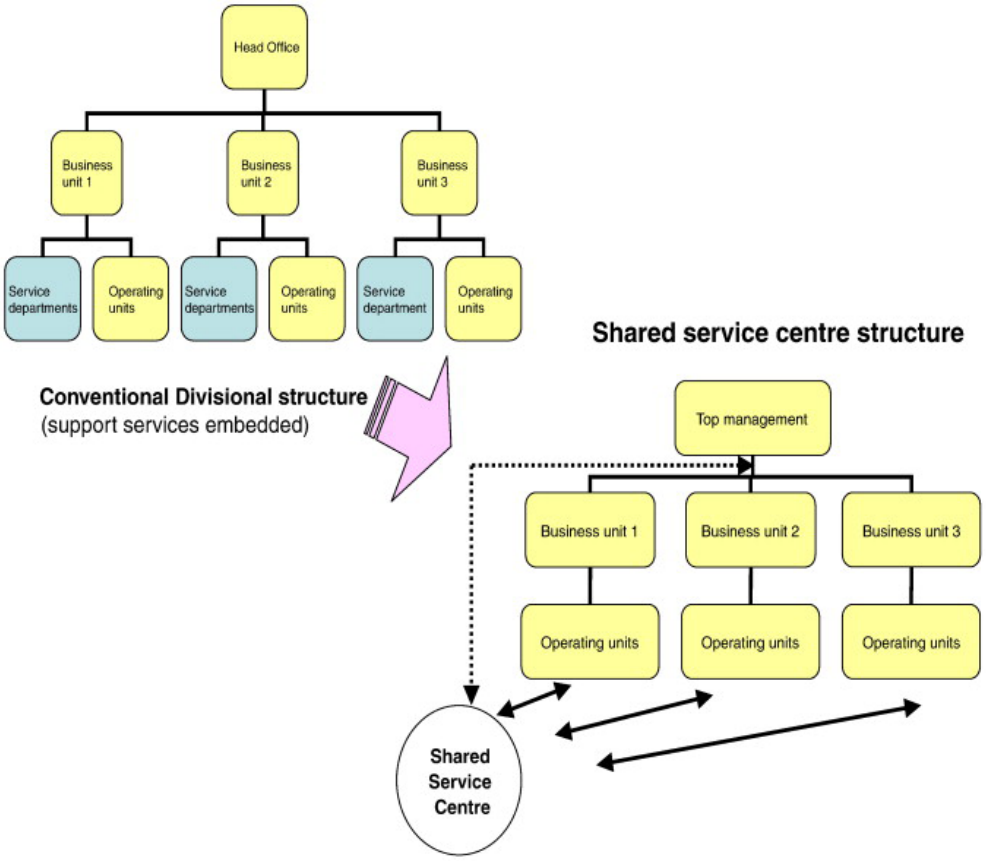
- Enterprise Resource Management (ERM) consisting of: finance & accounting; procurement, logistics and supply chain management; and content and document management;
- Human Resource Management (HRM) made up of training, talent management, payroll and recruiting;
- Customer Relationship Management (CRM), composed of marketing & sales, contact centres and call centres.

Finally, the KPO segment includes business consulting, business analytics, market intelligence; and legal services. The first group includes research activities and advice strategies in areas such as business opportunity assessment, market research and customer retention and growth, operations improvement and business optimisation. Legal services outsourced include activities such as managing contracts, leases or licenses to more specific activities such as intellectual property services, legal research and litigation support services [Palugod and Palugod, 2011, pp. 15-16]. KPO should not be regarded as a simple extension of BPO. According to PWC, the core essence of KPO is about including global talent (i.e. skills and knowledge) in an organisation's processes, while BPO is about excluding processes and sending them abroad [PWC 2005]. Another difference between KPO and both BPO and ITO is that it seeks for intellectual arbitrage rather than cost arbitrage.

The common characteristics of ITO, BPO and KPO functions is that they can be provided across all sub-sectors (so called horizontal services). Apart from these there are many vertical services, which are specific for the sub-sector (e.g. medical transcripts in the health sub-sector).

A decision to outsource activities often competes with the decision to introduce a shared service centre (SSC). This concept was first introduced in the USA by large corporations in the early 1990s, to tackle the excesses caused by decentralisation (popular in the 1980's). It appeared that this new model could eliminate organisation-wide redundancy of resources and enable organisation-wide consistency of processes (as in a centralised structure), while at the same time offering responsiveness and flexibility to customer needs (of the decentralised model). Activities previously carried out in different business units or in head office are consolidated in a new central unit and (contrary to outsourcing) retained within the organisation (see figure 4-5). For example, IT, finance or human resources management can be centralised and used by multiple divisions of the same company. A newly created semi-autonomous business unit has its own management structure designed to promote efficiency, value generation, cost savings and improved service for the internal customers of the parent corporation, like a business competing in the open market [Bergeron 2002, p. 3]. The funding and resourcing of the service is shared within an organisation. Some companies use a chargeback system to bill divisions that use the service, other companies absorb the cost of shared services as part of the continuing cost of running the business.

Figure 4.5. From a conventional business structure to a shared service model.



Source: Rothwell, Herbert, Seal, 2011.

There is an on-going debate about the advantages of shared services over outsourcing. Just as outsourcing, SSC can provide for some economies of scale and scope, together with arbitrage opportunities with respect to labour and infrastructure costs. Thanks to a new structure, redundancy can be eliminated, business divisions can focus on their core competencies and goals and their resources can be used more effectively. In practice, relatively expensive workers in developed countries are replaced with a cheaper labour force in developing countries. Unlike outsourcing, SSC is a relationship between many clients and one internal vendor, both belonging to one and the same organisation (in the case of outsourcing we would have one client having one or more external vendors). The consequence is that SSCs are restricted by the boundaries and capabilities of the internal organization, often not being allowed to serve external clients and being able only to use internal resources, restricting the limits of potential economies of scale and skill. Moreover, the outsourcing model is different

because of its external orientation, which involves a formal contractual relationship, where clearly defined responsibilities are legally shifted to the outsourcing vendor [Janssen & Joha 2006]. The critics of the SSCs list reasons for shared services failures, including[11]:

- high entry or up-front costs (IT, legal, staff),
- long time to realise small savings,
- high failure rates,
- loss of local knowledge,
- loss of service visibility,
- large numbers of mistakes (increasing cost over time),
- loss of control and accountability,
- loss of local jobs,
- locking-in failure and waste,
- worker dissatisfaction and union troubles (industrialization and standardization),
- costs of failure pushed onto service users,
- costs pushed into other budgets,
- providers complaining of low returns,
- litigation between partners,
- savings in one budget as costs are pushed into other parts of the system.

However, these failures do not have to be associated solely with the shared services model, the cost- and scale-driven approach many organizations take can also be blamed for them.

[11] http://calchaspss.wordpress.com/2012/11/15/the-biggest-cause-of-shared-services-failure/ [date of access 25.03.2014].

Chapter 5

New trends in service management

5.1. Value based management

Companies have always been undertaking different management approaches to improve their performance. Some of them include: total quality management (TQM)[12], flat organizations[13], empowerment[14], business process reengineering[15], kaizen[16] and so on. Although their common goal is to efficiently and effectively run a firm, not all of them have been successful. The reason was often performance targets unclear or incorrectly aligned with the ultimate goal of creating value [McKinsey 1994]. This problem is solved by the value based management (VBM) – a management strategy developed in the early 1980's. It is based on a belief that a firm should only pursue those activities that create value for their stakeholders (employees, shareholders, customers, suppliers, etc.) while at the same time the core competencies of a firm are improved. Creating value for employees takes the form of investments in their development and ensuring they have jobs. Creating value for shareholders, in the form of increases in stock price, insures the future availability of investment capital to fund

[12] A holistic approach to long-term success that views continuous improvement in all aspects of an organization as a process and not as a short-term goal. It aims to radically transform the organization through progressive changes in the attitudes, practices, structures and systems. Read more: http://www.businessdictionary.com/definition/total-quality-management-tqm.html#ixzz33OKewOq5 [date of access 3.04.2014].

[13] An organizational structure in which most middle-management levels and their functions have been eliminated, thus bringing the top management in direct contact with the frontline salespeople, shop floor employees and customers. Read more: http://www.businessdictionary.com/definition/flat-organization.html#ixzz33OLTl4bX [date of access 3.04.2014].

[14] A management practice of sharing information, rewards and power with employees so that they can take initiative and make decisions to solve problems and improve service and performance. Read more: http://www.businessdictionary.com/definition/empowerment.html#ixzz33OK8BeSQ [date of access 3.04.2014].

[15] Thorough rethinking of all business processes, in order to break away from old ways of working and effect radical (not incremental) redesign of processes to achieve dramatic improvements in critical areas (such as cost, quality, service and response time) through the in-depth use of information technology. Read more: http://www.businessdictionary.com/definition/business-process-reengineering-BPR.html#ixzz33OL7ztvL [date of access 3.04.2014].

[16] Japanese term for a gradual approach to ever higher standards in quality enhancement and waste reduction, through small but continual improvements involving everyone from the chief executive to the lowest level workers. Read more: http://www.businessdictionary.com/definition/kaizen.html#ixzz33OLj2cbS [date of access 3.04.2014].

operations. Creating value for customers helps sell products and services. Suppliers in turn are provided a consistent revenue stream.

The traditional financial point of view perceives the creation of value when a business earns revenue that exceeds expenses. But nowadays a broader definition is more commonly used. For example, according to ValueBasedManagement.net "stock price is less and less determined by earnings or asset base. Value creation in today's companies is increasingly represented in the intangible drivers"[17]. Major categories of these intangible drivers include technology, innovation, intellectual property, alliances, management capabilities, employee relations, customer relations, community relations and brand value.

Companies need not only financial but also non-financial goals, for instance concerning customer and employee satisfaction or product innovation. The main importance is that these objectives do not contradict (financial) value maximization, though they should carefully consider a company's financial condition.

VBM can be applied to any firm and in every sector. Managers are encouraged to use value-based performance metrics for making better decisions at all organisational levels.

According to McKinsey [2004], when VBM is working well, an organization's management processes provide decision makers at all levels of the organisation with the right information and incentives to make value-creating decisions. For example, for the head of a business unit, the objective may be explicit value creation measured in financial terms. In product development, the issues might be the time it takes to develop a new product, the number of products developed and their performance compared with the competition. Line managers and supervisors can have targets and performance measures that are tailored to their particular circumstances but driven by the overall strategy. A production manager might work to targets for cost per unit or quality. A functional manager's goals could be expressed in terms of customer service, market share, product quality or productivity.

Among the performance variables those which actually create the value of the business and have the biggest impact on value need to be identified. They are called key value drivers. Although they constitute a rather small part of the total business system, they have a significant impact on value and once identified – are measurable and are under the control of management. Managers can focus capital and talent on them increasing the value of the organisation.

Once the value drivers are found, managers must also establish processes that bring the value-based way of thinking to the daily activities of the company. There are four steps that are usually undertaken in the process of adoption VBM [Taylor and Ortega 2004]:

1) a strategy to maximise value is developed – issues that greatly impact the firm and need attention are audited;
2) the strategy is translated into performance targets defined in terms of the key value drivers;

[17] http://www.referenceforbusiness.com/management/Tr-Z/Value-Creation.html [date of access 3.04.2014].

3) an action plan and budget are constructed on the basis of previous steps; outsourcing of operations which were found to dilute the competencies of a company is a common action;
4) continuous control of the implementation of the processes is carried out to encourage employees to meet their goals. Such monitoring of operations is regarded as a key to future value creating activities.

5.2. Services in the process of value creation

Creation of value for firms and customers has always been the key concept in marketing which is more and more dominated by literature focusing on customer relationships rather than on product offerings. This trend implies that services are increasingly viewed as more important in firms' offerings.

One of the most influential articles on the evolution of marketing logic, towards one in which service provision rather than goods is fundamental to economic exchange, was written by S. L. Vargo and R. F. Lusch [2004b]. Because of its importance the main ideas are summarised below.

The formal study of marketing evolved from being focused on the distribution and exchange of manufactured products (tangible goods) toward the exchange of intangibles, specialized skills, knowledge and processes. Somewhere in between a new sub-discipline emerged: services marketing. Many scholars believed that marketing was becoming more fragmented (as new sub-disciplines were emerging, for instance relationship marketing, quality management, market orientation, supply and value chain management, resource management and networks). Other scholars began to indicate that perhaps marketing was not so much fragmented as it was evolving toward a new dominant logic. S. L. Vargo and R. F. Lusch name it the "service-dominant logic" (S-D), in which intangibility, exchange processes and relationships are central. S-D logic has gained significant attention from scholars internationally as it centres the basis of value creation on services, not products exchanged (goods or services). S. L. Vargo and R. F. Lusch share the opinion that the traditional division of goods and services is no longer appropriate and their new logic integrates goods with services. They define services as the application of specialized competences (knowledge and skills) through deeds, processes and performances for the benefit of another entity or the entity itself. This definition captures the fundamental function of all business enterprises. Thus service-centred dominant logic is applicable to all marketing offerings, including those that involve tangible output (goods) in the process of service provision.

The foundational premises of the S-D logic is presented in table 5.1.

Table 5.1. Service-dominant logic foundational premises.

	Foundational premise	Explanation and comment
FP1	Service is the fundamental basis of exchange.	The application of operant resources (knowledge and skills), "service," as defined in S-D logic, is the basis for all exchange. Service is exchanged for service.
FP2	Indirect exchange masks the fundamental basis of exchange.	Because service is provided through complex combinations of goods, money, and institutions, the service basis of exchange is not always apparent.
FP3	Goods are a distribution mechanism for service provision.	Goods (both durable and non-durable) derive their value through use – the service they provide.
FP4	Operant resources are the fundamental source of competitive advantage.	The comparative ability to cause desired change drives competition.
FP5	All economies are service economies.	Service (singular) is only now becoming more apparent with increased specialization and outsourcing.
FP6	The customer is always a co-creator of value.	Implies value creation is interactional.
FP7	The enterprise cannot deliver value, but only offer value propositions.	Enterprises can offer their applied resources for value creation and collaboratively (interactively) create value following acceptance of value propositions, but cannot create and/or deliver value independently.
FP8	A service-centred view is inherently customer oriented and relational.	Because service is defined in terms of customer-determined benefit and co-created it is inherently customer oriented and relational.
FP9	All social and economic actors are resource integrators.	Implies the context of value creation is networks of networks (resource integrators).
FP10	Value is always uniquely and phenomenologically determined by the beneficiary.	Value is idiosyncratic, experiential, contextual, and meaning laden.

Note: *Operand* resources as resources on which an operation or act is performed to produce an effect. Usually static and finite. Considered primary in a goods-centred dominant logic. *Operant* resources are resources that produce effects (they are employed to act on operant resources and other operant recourses). Usually dynamic and infinite. Often invisible and intangible. Enable humans both to multiply the value of natural resources and to create additional operant resources.

Source: Vargo and Lusch 2008, p. 7.

As S. L. Vargo and R. F. Lusch realized later, some of the original FPs could be derived from others and, thus, they identified four FPs from this expanded set. These four FPs are: FP1, FP6, FP9 and FP10.

FP1, which says that service is the basis of exchange, is the heart of S-D logic. It implies that in economic and social exchange service is exchanged for service; when goods are involved, they are best understood as service-delivery mechanisms. It is important to emphasize that this "service" (singular), understood as a process and should not be confused with "services" (usually plural), usually intended to denote a unit of (intangible) output.

FP6 establishes that value is always co-created by the customer. The term value co-creation was initially introduced by C. K. Prahalad and V. Ramaswamy [2004] who suggested

that customers co-create value for themselves with the help of a firm's resources. This concept of value co-creation was further highlighted by S. L. Vargo and R. F. Lusch. They distinguished the difference between co-production and the co-creation of value. Co-production is a component of the co-creation of value and refers to the customer's participation in the creation of the value-proposition (the firm's offering), such examples are co-design, customer-assembly, self-service, etc. The co-creation of value is intended to capture the essential nature of value creation: it always involves the beneficiary's participation (through use, integration with other resources, etc.) in some manner. They argue that value is determined by each actor (including customers or consumers) who is involved in a collaborative process of value creation.

FP9 identifies the other core activity (besides service provision) of economic and social actors: resource integration. S. L. Vargo and R. F. Lusch identified the parties involved in exchange relationships as "economic and social actors". S-D logic suggests that these actors do not create value in isolation. Other actors such as personal (family, friends and peers) or public (government, society) are resource integrators also facilitating the customers ability to create value. It sets the stage for thinking about the mechanics and the networked nature of value co-creation, as well as the process through which the resources for service provision are created.

FP10 states that value is always uniquely and phenomenologically determined by the beneficiary. Here "phenomenological" is intended to capture the experiential nature of value. That is, value must be understood in terms of the holistic combination of resources that lead to it, in the context of other (potential) resources[18].

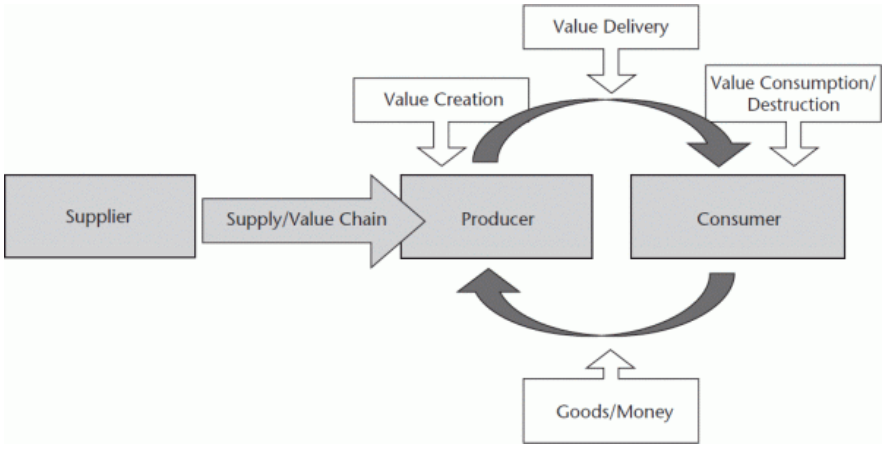
5.3. Consumers as co-creators of value

There are two general meanings of value – "value in exchange" and "value in use", reflecting a different way of thinking about value and its creation. The first one originates from the economic literature dating back to the end of the 18th century. Economists, such as A. Smith, believed that value was created in the process of the exchange of goods – a transaction represented the exchange of value between two parties, normally taken to be the exchange of producers' goods and services for their value in money. This is the dominant way in which value has been viewed for centuries. In the marketing and management literature it is reflected by the fact that value has been defined as a trade trade-off of benefits for sacrifices and value creation has mainly adopted a transaction-centric approach. It is manifested in two streams of literature: firstly, centred on the appropriation of value by the producer through exchange with the customer (value creation is often defined as the economic worth of a customer to the company); and secondly, focused on the creation and distribution of value to the customer through the provider's offering. In Vargo and Lusch's terminology [2004b; 2008] this

[18] http://en.wikipedia.org/wiki/Service-dominant_logic [date of access 10.04.2014].

approach is called a goods-dominant logic, whereby value is considered to be created by the producer and distributed to the consumer [Haynes and Grugulis, 2014, p. 176]. This model can be presented graphically as in figure 5.1. Value is created for consumers through the manufacturing and delivery of an offering in the process of the transformation of raw materials and activities into goods and services demanded by customers (therefore these needs have to be first researched and analysed). In this process, value is added to the offering in the production process through a value chain. This valuable offering flow in one direction (that is from producer to consumer) in exchange for money. At the point of exchange, value is captured in value-in-exchange (i.e. the price). The customer then consumes or destroys this value embedded in the offering they have purchased [Haynes & Grugulis, 2014, p. 177]. Customers are regarded here as exogenous to value-adding activities.

Figure 5.1. Model of value-in-exchange.



Source: Haynes and Grugulis, 2014, p. 177.

This has two important implications. Firstly, that the enterprise cannot deliver value itself – it can only offer value propositions. And secondly, that the customer is always a co-creator of value, influencing the success of a company's value proposition. It further implies that the design and management of service systems is a major challenge (as value creation remains outside the scope of the company's control).

More recently value is perceived in more dimensions in management literature – a wider range of factors apart from economic ones are incorporated. For instance, M. B. Holbrook [2005, p. 46] defines value as an "interactive, relativistic, preference and experience". Such concepts allow one to focus on actions and experiences and not simply costs and benefits. Much of the literature has also moved away from the transaction-centric understanding of value in exchange towards the concept of value in use. This concept describes costumer value as that which is experienced by the customer in use situations, rather than what is

determined by the producer for exchange [Haynes and Grugulis, 2014, p. 177]. S. L. Vargo and R. F. Lusch [2004b, 2008] also contend that value is perceived and determined by the customer on the basis of value in use.

The concept of value in use is not new, as the customer's perception of value has always been part of the notion of utility. According to P. F. Drucker "what the customer buys and considers as value is never a product; it is always utility – that is – what a product does for him" [Drucker 1974, p. 61]. Modern perspective goes beyond the utility understanding of value – as already mentioned, S-D logic proposes that value is co-created by the customer, whose role is no more only passive and limited to evaluating the benefits of a good or service. Customers are increasingly better informed, more knowledgeable, demanding and able to share their opinions with others. This makes them able to make more informed decisions and assess value on their own. The information no more flows in one direction only (from firms to customers) – customers give their feedback, co-develop innovations, interact with firms [Rettinger 2013].

Interaction rather than exchange is fundamental. Modern understanding of value in marketing and management literature emphasises the processual nature of its creation. It is suggested that the firm, network partners and customers co-create value through interactions. Traditionally it was understood that value is created by a firm and then transferred to the customer. Now it is recognised that customers use resources provided by firms and combine these with their own resources, to generate value for themselves [Rashid, Varey, Costley, 2013]. This is a central principle in S-D logic described in a previous subchapter. According to this logic, every individual who interacts with a firm is regarded as a customer whether that individual is a human being, a business organization or a household.

As a result customers become active participants in the provision of services – they determine the value and co-create it with the company. What is more, until the customer realizes the value of the goods or services through co-creation, it remains only a potential value. That implies that the social or environmental surrounding is endogenous in the process of value co-creation, even though not possible to control. The second implication is that customer's resources to co-create value become central towards realizing a firm's value proposition [Haynes & Grugulis, 2014, p. 179]. Prahalad and Ramaswamy [2004] mention: "companies can no longer act autonomously, designing products, developing production processes, crafting marketing messages, and controlling sales channels with little or no interference from consumers". They built a DART model of value co-creation which helps to understand the process of co-creation through four building blocks:

- **d**ialogue – this implicates that customers and firms interact, share and exchange knowledge and skills; it leads to the creation of a loyal community, for example thanks to giving the consumers the opportunity to express their opinions through social media platforms;
- **a**ccess – customers are provided with information and tools which enable them to access the knowledge base of a company providing them; no longer have customers to be

owners of the offered products – they may have access to them without actual ownership (e.g. commercial car sharing, holiday time-share homes, etc.);

- **r**isk assessment – as consumers become more active co-creators of value, they also increasingly demand information on potential risks; they want not only data but also methodologies which allow them to fully assess the risks associated with goods and services;
- **t**ransparency – the information asymmetry between customers and firms is rapidly disappearing, mainly due to technological developments; hence, firms can no longer assume the opaqueness of prices, costs and margins; they rather have to increase the level of transparency in order to build mutual trust.

Combining these blocks enables companies to better engage customers as collaborators. New capabilities can also emerge as a result of different combinations of building blocks. For example, combining access with transparency increases the possibility of consumers to make informed choices, whereas coupling access and dialogue enhances the ability to develop thematic communities [Prahalad and Ramaswamy, 2004].

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