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STRATEGIC SCENARIOS IN THE POSTAL SECTOR

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Strategic Scenarios in the Postal Sector

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Strategic Scenarios in the Postal Sector (Application of the theoretical background to the possible strategic scenarios of the Hungarian universal service provider)

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"Even if you are on the right track, you will still get run over if you just sit there."¹

1. Introduction

Over the last twenty-five years, the European postal sector has undergone a transformation of unprecedented scale and speed in a significant number of the member states of the European Union. Service providers, which previously enjoyed monopoly positions, are having to face changes and challenges that had already been encountered in other industries (to take a not too distant example: telecommunications, an industry that shares its roots with postal services) more than two decades previously (1990), and at a much faster rate. The consequences of the European process of liberalisation, the changes in the national level regulatory environments, the expectations of shareholders, the technological environment and customer requirements are forcing the so-called universal service providers (USPs) to face problems of a kind with whose solution they have had no experience. What's more, the effects of the radical changes in the environment were exacerbated by the financial and economic crisis that began in 2008, thereby accelerating the changes.

Why is all that interesting? One would be justified in saying that all that has happened is that the market has finally caught up with the incumbent posts, so they need to (or have already needed to) learn to play by the new rules, just like everyone else – It is not possible, and indeed there is no point in trying, to swim against the current in a competitive market. Or has it had some value, after all? In 2007, to the great surprise of experts in the field, the national posts achieved something that the energy companies and the telecommunications multinationals had failed to do: a deceleration of the liberalisation process, a postponement of the target date for liberalisation – and in retrospect, that achievement was a crucial one. Through effective lobbying, the majority of the posts have been given extensions until 2011, while some less prepared service providers were given an additional 2 years (which expired on 1 January 2013). That moratorium – again, now in retrospect – proved important in two respects: on the one hand, the less highly developed USPs were given more time to prepare for the transition

¹ The quote is attributed to either Arthur Godfrey or Will Rogers (in Ghemawat, 2007, p.219.)

(which placed them in better positions to enter the competitive field of which they had been forewarned and which they were expecting), while on the other hand, during that time, the attraction of the market to new entrants had decreased considerably (as a result of the 2008 financial crisis, the volumes of mail carried dropped in all European countries). As a result, the extension of the period of protections put the post offices concerned in a doubly advantageous position with respect to the impending liberalisation of the letter mail market.

Even after liberalisation, it is still the case that the national postal corporations are not merely market players but also public service providers (designated universal postal service providers), and in that capacity, naturally, their obligation to provide a universal service is accompanied by social responsibilities (the explicit or implicit requirement of achieving social objectives).

The European postal sector is one of the most significant employers, directly employing some 1.2 million people at universal service providers, and the figure is some 270 thousand more if the employees of letter and parcel post providers who are not universal service providers are also taken into account. Within Europe, in 2011, the sector's direct contribution to GDP totalled EUR 91 billion (equivalent to 0.72% of the total EU GDP), and in addition, it also makes a contribution, albeit one that is difficult to quantify, to the economic performance of customers.. Based on those data, it is clear that the development and the future of the postal sector (though its weight is decreasing) still constitute an important issue within the European economy, while it is facing challenges that may overwrite earlier political and economic considerations. (the appearance of new market players, substitution by digital, radical changes in customer requirements, etc.).²

Furthermore, the universal service provider companies concerned operate in a labourintensive industry in which the labour unions and advocacy organisations traditionally play a strong role, while the number of employees is high relative to the output produced, so the requirements that the national posts are subject to often also reflect some social criteria. And even beyond those aspects (e.g. ensuring availability of service, maintaining jobs, setting salary levels, etc.) the fate of the posts is also a political issue in all European countries, often with

² Copenhagen Economics (2010), pp. 22-23. and EP (2016): Explanatory Statement, p. 13.

objective functions that are difficult to reconcile (previously, for instance, a conflict arose between the need to keep the tariffs of products subject to regulatory pricing low and the objectives aimed at generating profits while also maintaining the level of employment in the sector).

Some years ago (2001-2004), I had the opportunity to direct the strategic area of Magyar Posta Zrt., the Hungarian post, and it was there that, while attempting to proceed in line with shareholder expectations, I experienced the great difficulty of managing the level of uncertainty, which had been unprecedented in my experience. Despite an approved strategic document and a series of efforts at communication that followed, the forces that would have been required to implement the strategy successfully failed to be mobilised.

During the more than ten years since, I have been observing and researching the postal sector with undiminished interest, but more from the perspective of an outsider. In a rapidly changing environment and faced with a degree of uncertainty that surpasses all previous levels (and this is exactly the case in the postal sector today) strategic management must shift the focus of attention from quantified strategic plans, alternative plans and the extrapolation of earlier trends to the identification of key strategic issues and themes and the analysis of the forces that act upon the system as a whole. Having studied in greater detail the literature on uncertainty and the strategic management toolkit that is (more) suitable for the management of uncertainty (scenario planning, game theory, chaos theory, real options, system dynamics, etc.) I found the following issue particularly interesting: how can strategic management provide support for answering the question of how to make better strategic decisions in this (at least) two-faced postal sector (primarily, I have the double facets of the sets of objectives for a public service, on the one hand, and a for-profit business, on the other), which is undergoing the most radical changes of its history so far. Perhaps the only comparable transformation was the introduction of motorization at the beginning of the 20th century, when the organisations providing postal services had to keep up with clearly growing market demand, while today, the traditional postal services (revenue from letter mail, which generates a decisive part of the revenue of USPs, and the revenue from handling traditional, cash-based financial transactions) clearly exhibit a decreasing trend.

2. Research concept

My research concerns an investigation of the strategic factors that influence the future of the incumbent universal service provider players in the postal sector over a 10-year period, and the

consequent strategic scenarios that may be envisaged for the Hungarian universal service provider. In order to identify those factors, I shall review the experiences of the postal sector, understood in a wider sense, to establish the factors that are worth considering, to identify toe potentially most important (key) factors and their impacts on the various possible scenarios. In addition, the research is explicitly focussed on the factors influencing the possible scenarios for national posts, for the national universal service providers. During the research, I will gradually employ an increasingly narrow focus so as to identify the scenarios that are relevant to the Hungarian universal service provider. After a general identification of the relevant drivers, I will determine the strategic group that the Hungarian universal service provider belongs to on the 'postal world map', and then I will apply the research results to the case of the Hungarian universal postal service provider, and attempt to formulate relevant strategic scenarios for it. During the research, it will be an exciting methodological question to investigate the possibilities of using strategic scenario planning to the case of the rather diversified Hungarian universal service provider.

The theoretical background of the research is furnished by the strategic management literature on scenario planning, the economic analyses of postal (and network) industries and the analyses and data available about the postal sector.

Even more important than the choice of research methodology is the value-judgment issue of the choice of research paradigm, the approach, within *the philosophy of science, that one takes towards research*. "This later is defined as the fundamental system of belief or world view, that determinatively guides the reseracher not only in the choice of research methodology, but also from the ontological and epistemological point of view." (Guba-Lincoln (2000), p. 105³). As a research paradigm that fits the subject of research I chose the *interpretative or constructivist paradigm*. In line with that, my methodological approach is essentially *qualitative* (the quantitative method – the analysis of statistical data – appears in a supplementary role during the preparatory phase of the qualitative research). The specific research method/technique consists of document analysis and semi-structured in-depth interviews.

³ The source of the quotation is Radácsi (2003, p.8.). The original article is in Guba, E.G. and Lincoln, Y.S.: "Competing paradigms in qualitative research", in Handbook of Qualitative Research, N.K. Denzin and Y.S. Lincoln (eds.), Sage, Thousand Oaks, 1994, pp. 105-117, the actual quote is from p. 105.

We will see that the European universal posts travelled down various paths over the last decade, they chose and are implementing diverse strategies. A significant proportion of the European posts (including the Hungarian one) are in the group of developed postal service providers. These European national posts form a homogeneous group on the world map of national posts in a number of senses (e.g. they fall in the same categories as regards their level of development and changes in letter volumes), but they also differ in a number of respects. In my dissertation I shall make the assumption that by analysing the identical/similar factors influencing the sector it is possible to identify the driving forces that characterise the industry in general. The national posts that are the designated universal service providers face similar challenges everywhere in Europe. Once those are incorporated into the strategic thinking of organisations (be they more or less developed entities, designated USPs or not), they can influence and lend support to the strategy formulation process of any national post in Europe – provided they are employed consistently with the organisation's strategic position. At the same time, the variations in initial conditions (level of development, level of diversification, characteristics of the individual national markets) and the varied national-level strategic answers lead me to assume that the individual national posts are actually on different strategic pathways, so it is not possible to formulate scenarios that are generally relevant for all universal service providers.

During my review of the literature on the postal sector I didn't find a single example of the methodology of scenario planning being applied in a complex manner to the issues concerning the future of diversified universal postal service providers.⁴ Therefore I hope that my research can contribute a novel approach in that field as well. From the perspective of theory and methodology, I wish to make a contribution to the literature of scenario planning (Ringland, 2006; Godet, 2006, Roland Berger, 2010) and qualitative strategic management research. Accordingly, the logical structure of the dissertation is shown in the figure below. After a review of the literature relevant to my topic of strategic management and the postal sector, I

⁴ The most frequently used methodological approach is the establishment of "scenarios" centred on the expected development of letter volumes, but those are not entirely consistent with the classical definition of scenarios. Rather, they represent optimistic or pessimistic forecasts. One example is the 15-year scenario analysis of IPC (IPC, 2009c, p.3).

will use document analysis and semi-structured interviews to establish the factors that will determine various scenarios.

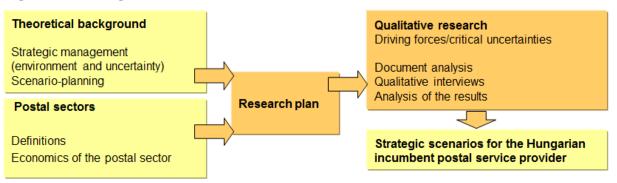


Figure 1.: The logical structure of the dissertation

In the course of my research, I shall initially limit the analysis to developed posts⁵, and then I will narrow to focus to the Hungarian universal postal service provider. My research attitude is basically qualitative (I only use quantitative techniques in a supplementary role). As an external researcher using participative techniques, I shall study the following questions: *Over the next ten years, what driving forces and critical uncertainties can be identified that impact the future of national posts that are designated universal service providers? And on their basis, what are the possible strategic scenarios available to the Hungarian Post Office (as an incumbent universal service provider)? The research questions to be answered are as follows:*

- What are the most important strategic issues in the postal sector? (Reviewing the available literature will provide assistance with that question.)
- What strategic categories can be discerned among the developed posts (and which of those does the Hungarian universal service provider belong to)?
- What are the most important trends, driving forces and fracture lines?
- Of all those factors, which are the ones that can be predicted with high probability?
- Which of those factors are shrouded in uncertainty?

⁵ For practical purposes, I shall concentrate on the developed posts that are members of IPC (International Post Corporation). The organisation, which operates as a share corporation, is an association of the developed posts of Europe, America, Asia and Australia, which together carry 80% of global volume of letter mail. The Hungarian Post Office is a member and shareholder of IPC. The greatest quantity of long sequences of consistent data is available about the members of IPC.

• Through determining the effects of and the system of relationships between the critical and uncertain factors, what strategic (internally consistent and probable) scenarios are possible for the incumbent Hungarian universal postal service provider (at the levels of divisions and the entire company)?

The planned research will gain important input from, and use as a starting point:

- a review of the theoretical literature and the documents available to the public along with a summary analysis of the present situation of developed posts,
- the quantitative analysis of the available statistical data (based on data up to the end of the year 2014, with the population subject to statistical analysis being the national posts of Europe, as, at present, all the national posts dominate their own markets).

The period studied by my research shall be 10 years. Over such a period of time, it is possible to interpret the expected changes in the regulatory environment (including the effects of liberalisation) along with the effects of other environmental and competitive factors and changes in customer requirements, while it is also a period of time that is comprehensible for the participants in the research.

The *scope* of the research shall cover developed postal markets (in particular, the European posts and the Hungarian universal service provider.

The planned methodology of the qualitative research is a combination of two components:

- document analysis (analysis of secondary information),
- qualitative, in-depth interviews conducted in Hungary,

I propose to identify the driving forces and factors that impact the postal sector through the analysis of documents and data. The expert interviews will be used to validate the findings, and to supplement them, resulting in identification of the key factors. It is highly probable that those key drivers will allow me to define strategic scenarios that may be relevant both for the Hungarian universal service provider and other universal postal service providers in the same strategic group.

3. The theoretical background of the research

In this chapter I present the preliminaries and main directions of development in the literature of strategic management that are relevant to my theme (particularly those concerning the relationship between organisations and their environments, and the issue of uncertainty), I locate scenario planning within that background, followed by a description of the development, essence and methodology of scenario planning in detail.

3.1 Management of the environment and uncertainty in the literature of SM

If the environment is stable and constant, management have a simpler task, as the organisation's strategic plan may then be based on a few reliably predictable factors. For instance, from the 1970's until the 90's, service providers in monopoly positions could essentially plan the classic core postal activity, i.e. letter mail based on economic activity (changes in GDP) alone. If the environment changes frequently and radically, strategic planning faces more serious challenges. That is why (among other reasons) the handling of the environment and uncertainty is of crucial importance within strategic management.

The concept of the environment and the methodology of environmental analysis have gone through a number of stages of development in the literature of strategic management. In the first half of the 20^{th} century, the literature on management and organisation simply ignored the environment, or considered it to be stable. "Each of these early perspectives – Weber's bureaucratic model, Taylor's scientific management, and the various administrative principles – emphasised nonhuman elements of the organisation such as goals, structure, policies, and procedures, and the theorists of this period implied that their models were applicable under all types of environmental conditions... Attacks on universalistic, and usually prescriptive, organisation and management theories began in the thirties and forties and became more heated in the fifties." (Miles and Snow, 1978, 251) The first theory to question that approach in the 1950's was the so-called open system concept (the interaction between the organisation and its environment already appeared in it⁶), while the next stop was represented by the birth of the contingency theory approach in the 1960's. With its "it depends" approach, contingency theory placed the emphasis on identifying and describing the variables, factors on which the behaviour of the organisation depends. In the 60's, the adherents of contingency theory primarily studied

⁶ In addition to Bertalanffy, whom I shall mention later, the name of Herbert A. Simon should also be mentioned here, who, in his work entitled The Structure of Complex Systems (1968) developed general systems theory further: among other things, he introduced the analysis of the intensity of interaction and the divisibility and evolution of organisations into the analysis of social systems.

the relationship between environmental uncertainty and organisational structure. The analysis of the link between the uncertainty of the environment and the level of diversification in the organisation formed an important part of their theory. According to Burns and Stalker (1961, 119-121), the form of organisation is determined by the rate of environmental change: the mechanistic form is the right choice for a stable environment, while an organic form should be adopted in fast-changing, dynamic environmental conditions. In the view of Lawrence and Lorsch (1967)⁷, the most efficient companies meet the following two criteria simultaneously: they are sufficiently differentiated in order to be able to adapt to the environment, while they also ensure sufficient integration.

A forerunner and pioneer of the specialist literature dealing with the environment, Alfred Chandler reached the conclusion in his famous 1962 book, *Strategy and Structure* that there is a causal link between corporate strategy and organisational structure. Ludwig von Bertalanffy (1967) also made a noteworthy contribution to the literature on the environment. His general systems theory focuses on the relationships of dependence between people, groups, organisations and societies within the framework of open and dynamic system theory, placing great emphasis on the interrelationships and feedback links between partial systems and the flow of resources between the organisation and its environment.

From the mid-1970's – with the further development of contingency theory – interest increasingly turned towards the relationship between environment and organisation, from a number of perspectives. Child (1972) analysed the relationship between structure and environment in relation to the role of strategic choices, and recognised that ensuring a match between organisation and environment is an important success factor. From that perspective, three characteristics of the environment play crucial roles. They are variability, complexity and limitations⁸. According to Child (1972), although these environmental characteristics have a fundamental determining/constraining effect on decisions concerning organisational structure, they do not fully determine the strategic choices of the organisation in question. This is because

⁷ Based on Antal Mokos, Zoltán; Balaton, Károly; Tari, Ernő and Drótos, György, 1996, p. 129.

⁸ Based on Child (1972, pp. 2-3).

other factors (e.g. the decision-makers themselves, the dominant coalition, the decision process) also influence them. This approach lifts strategy into the "environment-structure" system of relationships, thereby solving one of the problems of contingency theory: the deterministic distortion which led to contingency theory's failure to take the role of executive decisions into account at all.⁹ (In the case of the Hungarian postal service provider, that aspect played a particularly important role in the past, as frequent changes of management were accompanied by frequent changes of strategic directions. Such changes of directions were primarily based on varying perceptions as regards adequate responses to political requirements and environmental changes. That situation was not unique, several posts in the region have been in similar situations in the recent past (e.g. the Romanian or the Croatian provider).) In addition to the questions of whether the organisational strategy is consistent and appropriate (Miles-Snow, 1978), the question of how the organisation itself is able to influence/shape environmental factors was also raised.¹⁰ In the case of the universal postal services that also fulfil public service functions, this aspect primarily materialised in the form of the advocacy and lobbying activities aimed at influencing legislation. The next great change in the concept of the environment occurred in the middle of the 1980's: the environment was no longer seen as an objective and external entity, but as a subjective and social construct that is organisation-specific (Burt et al, 2006, 55).11

The hitherto most popular and well-known environmental analysis methodology was furnished by traditional PEST analysis (the structured analysis of the political, economic, social

⁹ Miles and Snow (1978, p. 259) – point out two limitations of contingency theory. Firstly, the emphasis is on unique and situational differences. As a result, the previous "all situations are the same" approach, which had left the environment entirely out of account, is replaced by an "every situation is different" approach, which is at least as problematic. The other shortcoming is the above-mentioned "deterministic bias", which ignores management choices as an important variable.

¹⁰ The idea is particularly, and practically relevant from the perspective of universal postal service providers: in relation to entry into new areas of business, the establishment of an appropriate organisational structure is an important issue, while in the letter mail market in particular, there is particular emphasis on influencing the regulatory environment and the competitive context.

¹¹ This approach was borne out by events when, in 2004, we discussed the legislative and competitive environment of the Hungarian Postal Service with its competitors in a workshop. The evaluation and assessment of a particular external environmental factor was influenced to a fundamental degree of the organisational affiliation of the party doing the evaluating (authority role, state role, etc.).

and technological environment) and its various upgrades (e.g. PESTEL, PESTLED). PESTEL extends the classical PEST analysis by adding the analysis of the natural and the legal environments, while PESTLED augments all of that with the emphatic addition of the analysis of educational and demographic factors. STEER (Socio-cultural, Technological, Economic, Ecological, Regulatory) analysis lays the emphasis on the regulatory and the natural environment). The end result of the analysis is the determination of the environmental factors that have a significant effect on the company. Simplicity is unquestionably an advantage of those methods, but it is also their main methodological limitation. SWOT (strengths, weaknesses, opportunities, threats) analysis is a similarly simple and popular technique that partly covers environmental analysis, too: it is aimed at identifying the internal strengths and the weaknesses of the company along with the relevant opportunities and threats. In relation to the two factors that involve the external environment (opportunities and threats) environmental uncertainty is introduced into the scope of the analysis. These methods, which aim to list (and analyse – they aim to deliver somewhat more than simple lists) environmental and internal contextual factors are too general, and in themselves, they are not capable of mapping dependencies between variables and causal links. But the creation of strategy requires an understanding of those driving forces and the links behind them. According to Burt et al (2006), scenario planning is capable of transcending the limitations of traditional environmental analysis methods to discover interrelationships between the critical uncertainty factors.

During the 1980's, interest shifted from the analysis of environmental variables to analyses of particular industries and competitors, and early scenario planning methods and the Porter school mutually influenced each other. According to Porter (1985), the purpose of scenarios is to widen the range of thinking about the future and to extend the range of future alternatives. If we are unable to predict the future, we should at least speculate upon it. Porter distinguishes between macro-scenarios, generated from various macroeconomic factors, and industry scenarios, which are relevant to competitive strategy. In relation to the former, the factors influencing the structure of the industry are the most important ones, while in relation to the latter, the factors of uncertainty (scenario variables) influencing the industry and the external and internal causal factors driving them are placed in the five-fold force-field of industry analysis which has now achieved classical status (Porter, 1985, 457).

In relation to the analysis of the latest trends, Grant (2005) emphasised that as environmental turbulence and uncertainty increase, the option value of individual strategic decisions and projects also becomes increasingly significant along with already keeping the issue in mind during the creation of strategy. In that sense, the creation and management of options is one of the tasks of strategic management. An industry with more options, and a strategic alternative that creates more options are more attractive to any given company. The concept of *dynamic capabilities*¹² is also linked to this, as those dynamic capabilities may be precisely the capabilities with high option values. From the perspective of scenario planning, it is usually the capabilities and resources that can be reconfigured and varied in accordance with environmental changes that are needed in order to develop a strategy that remains robust regardless of which scenario actually comes true. (There is a possible and relevant point of connection with the resource-based theories that can be said to have dominated during the 90's¹³.)

The most difficult task during scenario planning is the identification of the factors and uncertainty and driving forces that break the trends of the present and the past. Those technological changes representing trend-breaking innovations are the most difficult to envisage/imagine in advance.

The Austrian Schumpeter, the pioneer of theories of innovation in the first half of the 20th century, made his hero the entrepreneur whose ability to innovate allows capitalism to develop. So-called "creative destruction" plays an important role in that development, which overwrites economic cycles. It is a natural characteristic of capitalism –change is a permanent feature of that system. Schumpeter recognised that the forces of creative destruction reorganise

¹² For more detail, see Teece, J. David (2009) – the book integrates resource-based and evolutionary enterprise theory approaches.

¹³ The following are some representatives of the resource-based approach to enterprise theory: Wernerfelt (1984, 1995), Barney, Jay. B. (1991), Grant, R.M. (1991), Peteraf, M.A. (1993.). Resource-based approaches first appeared in the 1980's, gathered strength in the 90's and since then, they have been developed further in several directions: capability-based, evolutionary or knowledge-based approaches. The definition of fundamental capacities was elaborated by Prahalad, C.K. and Hamel, G. (1990). According to Hodgson (1998, 25) the evolutionary approach can be regarded as a subgroup of resource-based theories.

the markets, and do so to the advantage of those able to recognise discontinuities faster.¹⁴ Their lower levels of flexibility and innovation resulting from their large size and bureaucratic traditions are among the significant disadvantages of universal postal service providers. Various solutions have been and still are used to eliminate that problem: decentralisation (the establishment of divisions or outsourcing to subsidiaries), partnerships, project organisations, strategic alliances, etc., aimed at improving flexibility.

At the end of the 20th century, Grove, previously the CEO of INTEL, introduced the inflection point theory, which concentrates on the moments of radical environmental change. When the inflection point is reached, "the old strategic picture dissolves and gives way to the new"¹⁵. Grove calls attention to the fact that sooner or later, fundamental changes will inescapably take place that will change the previous business model radically, and if a business organisation concerned fails to notice this, the moment of change becomes a perilous leap. The radical change can be brought about by technological change or a competitor, and such radical changes represent tremendous opportunities and terrible danger at the same time, depending on whether the company is able to recognise the situation and come up with an appropriate response in time (Grove, 1999). In the case of the US Postal Service, the predicted radical change in letter volume brought attention to the fact that in the interest of survival, the flexibility of the organisation had to be increased radically, taking steps to redesign components of the operating model that were previously treated as givens (network size, frequency of deliveries) (BCG, 2010).

Hogarth and Makridakis (1981) go as far as to say that while certain repetitive patterns can be predicted, the forecasting of technological breakthroughs and extraordinary events is essentially impossible. Innovation theories discuss the "disruptive innovations that redraw industry maps¹⁶ in great detail. As Christensen et al (2004) noted concerning disruptive

¹⁴ Based on Schumpeter (1962, Chapter VII) The first edition was published in 1942.

¹⁵ Grove (1999): Only the paranoids survive,

http://www.intel.com/pressroom/kits/bios/grove/paranoid.htm, 15.01.2011

¹⁶ Christensen (2004) deals specifically with these themes and explains the following theories in detail: disruptive innovation theory, resources, processes and values theory, value chain evolution theory, jobs to be done theory, sustaining innovation, schools of experience theory, emergent strategy theory (with supporting discovery-driven planning tool), motivation/ability framework.

innovations: 1. disruption is a process and not an event, 2. disruption is a relative phenomenon (something that is disruptive for one company may be sustainable for another one), 3. different or radical technology is not necessarily disruptive, 4. disruptive innovations are not limited to hi-tech markets. In the case of postal services, substitution by electronic communications seems to be a threatening force for traditional letter mail, yet for many competitors or for postal service providers that have entered the market of electronic substitution products, it also opens new opportunities and markets (hybrid consignments, e-postcards, authenticated e-mail, etc.). Although economics does not have deterministic laws like those of the natural sciences, that does not mean that we are at the mercy of the elements when we try to forecast the future. According to Georgoff and Murdick (1986) there are three fundamental types of forecasting strategies:

- The *deterministic* strategy, which assumes that the future is a direct causal consequence of the present.
- The *symptomatic* strategy assumes that certain indicators that are observable in the present indicate (but do not determine) the direction of development in the future. That approach focuses on leading indicators.
- The *systematic* strategy assumes that while the world appears to be chaotic and random, careful analysis can reveal certain regularities (principles, correlations).

Georgoff and Murdick (1986) provide an excellent and lasting classification and comparison of the 20 most frequently used forecasting techniques and their main characteristics (e.g. time horizon, required resources, available data, their consistency and spread, form and content of output) (see Table 1). Each technique has its advantages and disadvantages, therefore the quality of forecasts may be improved by combining several techniques (and thereby transcending the limitations of individual ones), by changing assumptions (with particular regard for critical assumptions) and the active application of subjective opinions. Georgoff and Murdick classify the scenario method among methods based on judgment. From the perspective of my research, it is an important point that the authors actually expressly recommend the use of several methods in parallel, so as to allow the largest possible number of perspectives and approaches to be combined in the analysis.

Judgment methods	Counting methods	Time series methods	Association or causal methods
Naive extrapolation	Market testing	Moving averages	Correlation methods
Sales-force composite	Consumer market survey	Exponential smoothing	Regression models
Jury of executive opinion	Industrial market survey	Adaptive filtering	Leading indicators
Scenario methods		Time series extrapolation	Econometric models
Delphi technique		Time series	Input-output models
		decomposition	
Historical analogy		Box-Jenkins	

 Table 1: The classification of forecasting techniques

Source: Georgoff and Murdick (1986, online version, 2)

Johnson and Scholes (1999) also recommend scenario planning as the strategic planning tool of choice in a complex and dynamic environment (see Figure 2). The development of the postal industry has brought dynamism to the environment: whereas traditional postal services had operated in a simple and static environment in the 1970's and 80's, where traditional forecasting and planning were perfectly adequate to the character of the environmental changes that occurred. Most national postal services produced long-term strategic plans based on just a few key variables.

Figure 2. Hiba! A hivatkozási forrás nem található.: Managing environmental changes

Source: Johnson and Scholes (1999), p.101.

As the environment became increasingly dynamic and variable, the tools in the strategic toolkit that handle uncertainty better (plan versions, scenarios) came to the fore.

Chaos theory and complexity theory go even further, and, grounded in the post-modern paradigm, they radically question deterministic positivism and accept the diversity and complexity of experience (Levy, 1994). The table below provides a brief summary of the differences between system theory (mentioned above), chaos theory and complexity theory.

	General Systems View	Chaos View	Complexity View
Prediction & Planning	Conceptually possible Short term and less volatile systems are more predictable. Long term and dynamic markets require extensive feedback loops.	Prediction is impossible and the future has many potential outcomes. Scenario analysis as a tool for preparing for the future.	Supports chaos' unpredictability elements and accepts short-range prediction, with some ability to plan and manage. We can learn – we have memories.
Leadership	Direction and more communications structures.	Implies use of vision with full delegation for action	Clear purpose and accountability for outcomes. Focus on interaction roles & web connections. Boundaries for action, processes.
Organization	Highly integrated and structured systems.	Self-forming - free flowing	Self-organization is a natural law.
Monitoring methods	Extensive positive and negative feedback loops, computer systems, expert models.	Non-linear tools, holistic approaches – Use of trends and triggers.	Nonlinear feedback mechanisms. Active scanning.
Managing Change	Organization will gravitate (and should be guided) towards equilibrium.	Change should be embraced and adaptation is the proper response. Facillitate change.	Adaptation is key. Learn and respond. Interpret patterns and select path that matches skills of organization. Manage boundaries.

Table 2: A comparison of systems theory, chaos theory and complexity theory

Source: Nastanski, 2002, p.37.

Mintzberg and Lampel (1999) place chaos theory and the evolutionist approach at the intersection of the learning and the environmental schools. Among the environmental schools, both population-ecological approaches and writings based on contingency theory are interested in how organisations may respond to and manoeuvre between environmental changes. Similarly, according to the adherents of complexity theory (Grant, 2005), the world of business itself is also a complex system that is essentially impossible to predict. The variability of the environment of universal postal services is not yet at a level warranting the use of either chaos theory or complexity theory, but the logic of general systems theory may be practically relevant. According to Pascale (1999), complex adaptive systems must meet four criteria: they must consist of several mutually independent players acting in parallel which are not organised into a hierarchy. The system continuously reorganises those basic components, generating multi-level structures. The system operates in accordance with the second law of thermodynamics: it exhibits entropy. In addition, complex adaptive systems are able to recognise patterns and to

adapt on their basis. Complex systems move on the borderline between rigidity and randomness, stable equilibrium is their death. The presence of predictability, a self-organising capability, inertia and chaos characterise these systems at the same time. They occur in nature (e.g. anthills) as well as in social systems (mass behaviour, group dynamics). In business systems, evolutionary processes may generate three different outputs: order, chaos, and the transitory state between the two, in which even minor changes can elicit radical change¹⁷. Industries can be seen as complex, dynamic, non-linear systems that exhibit some unpredictable (random) effects and some behaviours suggestive of an underlying order (Levy, 1994).

Recently, the environment of the postal sector has certainly shifted towards a more open section of the environmental state space with a higher level of uncertainty. Reviewing the development in handling the uncertainty we can state that the medium level of uncertainty that the postal sector needs to handle is clearly manageable using the methodology of scenario planning.

In the last decade (and particularly during the 2008 financial crisis), universal postal services encountered situations in which management decisions couldn't always be made purely on the basis of a careful analysis of the available data and information. That traditional notion proves false, and decisions that had seemed well-founded on the basis of the data prove wrong particularly often in the world of strategic decisions.¹⁸

That finding is not surprising, as, on the one hand, it is obvious that we only ever have data concerning the past, and in an uncertain environment, that does not warrant extrapolation into the future. On the other hand, when we have sufficient data and information about a particular phenomenon, according to Mintzberg (1994), the seemingly hard data often have soft underlying factors which only 'harden up' with time, and by then it is too late. The 'hard' data is also often gappy, aggregated and unreliable. So soft factors must also be analysed, so as to add binoculars in place of, or to supplement, the rear-view mirrors.

¹⁷ About the latter process, with examples, see Gladwell (2002).

¹⁸ Based on Christensen, Clayton M. – Anthony, Scott D. – Roth, Erik A. (2004).

The second pioneer of scenario planning, Wack (1985), emphasises that predictions of the most probable future tend to prove wrong when it is the most painful: when fundamental changes, breaks in trends take place. As a rule, strategic decisions are not routine, but rare and unique decisions, in which the problem is poorly structured and complex; the outcome has a definitive effect on the future of the company, while the decision is often accompanied by a high level of uncertainty.¹⁹ As the future is not stable, strategic planning involves firing shots at a "moving target". According to Mintzberg (1998, p. 73), the creation of strategy is a complex process in which, along with formalised and institutionalised processes, cognitive and social learning processes are also integrated; it is through the latter that it is capable of being creative, innovative and synthesising.

The world has always been a risky and uncertain place (e.g. there have always been epidemics, wars and world crises), and it will always remain so. Is it a perceptual illusion (e.g. resulting from changes in our ability to tolerate risks or problems with our perception of risks²⁰), or is it objectively true that our environment has become more uncertain and more risky, that the world has become more turbulent around us? According to Cleary and Malleret (2007, 1-16.) there are five factors that actually and objectively increase risk (see Figure 3), implying that their answer to the above question is 'yes':

- 1. increasing interconnectedness and mutual dependence (a threat at one end of the world can escalate and cause disturbances at the other end);
- asymmetry (minor players and seemingly insignificant events can have disproportionately large effects);
- 3. increased time pressure (product and industry lifecycles are getting shorter),
- 4. increased volatility (the value of assets and instruments can increase or decrease by a great deal and fast);

¹⁹ Based on Zoltay-Paprika, Zita (ed.): Döntéselmélet (*Decision Theory*) (2005) (p. 46.).

²⁰ Our perception of risks is imperfect due to cognitive distortions (availability, reinforcement distortion, excess self-confidence, anchoring, representativeness), but that has always been the case (for more detail see Cleary – Malleret, 2007, p.25.).

5. an increasing amount of signals and noise (an unbelievable amount of information is available).

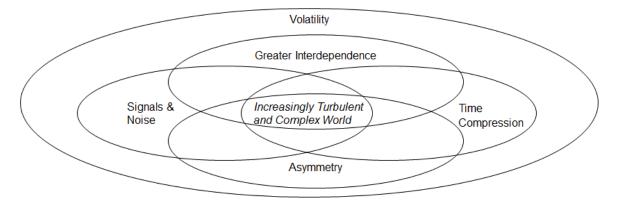


Figure 3: A turbulent and complex world

Source: Cleary - Malleret, 2007, p.11

At the end of the 20th century²¹, the literature of strategic management focussed on risk and uncertainty to such an extent that the critics of the traditional (classical) schools of strategy²² (e.g. Mintzberg (1994) and (1998)²³) enlarged upon the failures of formalised strategic planning while they emphasised the importance of strategic thinking. Strategic thinking combines the values of analytic strategic planning with intuition and creativity. Instead of detailed analysis, it is centred on achieving synthesis while recognising that accurate forecasting is an impossible

²¹ Actually, back in 1979, Ansoff already made the claim that turbulence was increasing progressively throughout the 20th century, due to the novelty of changes, the increasing intensity of the environment, the increasing rate of environmental changes and the increasing complexity of the environment (Ansoff, 1979).

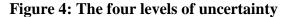
²² According to the adherents of the classical perspective on strategy, both the environment and the organisation are predictable and plastic. All that controlling the external and the internal environment requires is careful, thorough planning, and long-term success requires objective decisions made on the basis of rational analysis (e.g. Ansoff and Porter in Whittington, 2001, 3).

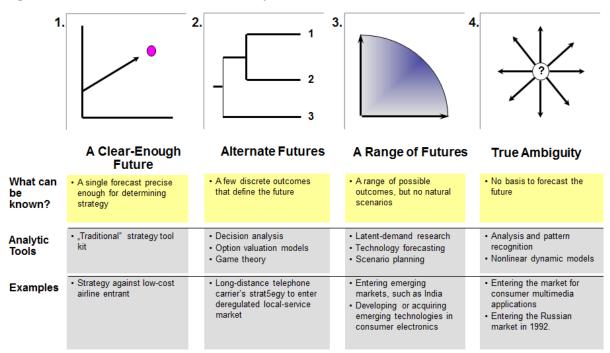
²³ Mintzberg (1998), in his book entitled *Strategy Safari*, didn't simply offer a critical analysis of the schools of planning, he also presented and analysed the entire range of strategic planning schools, which he categorised into 10 groups.

task. As Pierre Wack (1985) put it: forecasters are wrong more often than they are right. Therefore, conscious management of uncertainty is the main task.²⁴

There are four levels of uncertainty (see Courtney et al, 1997), whose characteristics are shown in Figure 4. With the exception of the first type of uncertainty (when it is possible to predict the future, so there is a dominant view of the future, so setting up scenarios would be pointless), scenario planning is applicable to all the cases, but differently to each one. In the 2nd case, a set of mutually exclusive scenarios that collectively cover all possibilities should be generated, which, collectively, also describe all the possible outcomes. In the 3rd case (many different possibilities in the future) a maximum of 3-5 representative scenarios can be used to cover the greatest part of the spectrum of possible outcomes. In case of "real" uncertainty, the possible scenarios represent various possible strategic options, based on various packages of assumptions. That last case is the most challenging task, and in those cases it can be an expedient methodological approach to work backwards from the strategic options in order to choose the individual strategic options (Courtney, 2003).

²⁴ The list of erroneous forecasts is indeed very long. Here are two of the most famous examples: Watson, the chairman of IBM, predicted that the world market would only ever generate demand for five computers, and even Chaplin himself predicted that there would be no demand for cinema as people are interested in flesh-and-blood actors.





Source: Courtney et al,(1997), pp. 70-71.

The levels of uncertainty and the factors that impact the strategy of incumbent postal services fall not in one but in several categories. The future always involves some degree of uncertainty, but at the first level, the possibilities are within a narrow enough range to determine a single direction, "residual uncertainty is irrelevant during strategic decision-making" (Courtney 2011, p. 166); such factors in the present case include the negative effect of digitalization on demand for daily newspapers or for paper-based communication (letter mail).

The second level of uncertainty is exemplified by radical changes in the regulatory/legal environment, or the appearance of significant new players in a liberalised market, as they may determine distinct, well-delineable scenarios. At the 3rd level, the high degree of uncertainty makes even the identification of distinct possible futures problematic. Examples include the expected consequences of technological innovation, or the uncertainty associated with entry into completely new markets. In such cases, the recommended technique is to narrow the focus on the probable scenarios among the possibilities in several steps (and the ambition to cover the total spectrum of possibilities with the scenarios created must be abandoned). Courtney lists five instruments as parts of the toolkit suitable for managing uncertainty (in: Courtney (2001), 159-186): scenario planning, game theory, decision analysis, system dynamics models and

management flight simulators. As we shall see, the factors of uncertainty that influence the future of incumbent postal services largely belong in the first two (occasionally the first three) categories, hence that level of uncertainty can be handled using the toolkit of scenario planning, while there are objective obstacles to using the other four techniques listed (lack of data or technology, range of participants, etc.).

Based on a similar categorisation of uncertainty with three rather than four types (risk, structural uncertainty, the unknown) (Van der Heijden, 2005, p. 93), scenario planning is of the most utility in the case of structural uncertainty, when it is possible to imagine and define possible future events, but their probabilities are impossible or hard to estimate.

Looking inside the methodological toolkit of strategic management, scenario planning is a suitable method for the conscious management of the predictable components and the uncertainty of environmental factors; to reveal the existing and potential correlations and causal links between both general and specific environmental factors and to map the possible moves of the participants of the system and their feedback or effect on the environment.

3.2 An overview of the development of scenario planning

The word 'scenario' itself means a scene²⁵. Herbert Kahn (the father and godfather of scenario planning) borrowed the concept of 'scenario' from the author Leo Rosten in the 1960's. Kahn chose the word 'scenario' precisely because the analogy with the theatre/cinema brings attention to the fact that during scenario planning, a story, or a myth, is being brought to life²⁶.

The scenarios defined as a result of the scenario-planning process furnish an opportunity to perform a thought-experiment in which the possible scenes can be rehearsed before the actual show. One of the tasks of management is exactly to prepare for probable events through the

²⁵ The word 'scenario' is derived from the Latin word 'scaena'.

²⁶ In Ringland-Young (2006, p. 208).

experience of the "rehearsals", i.e. the individual scenarios²⁷. The notable figures among the pioneers of the early history of scenario planning include Herman Kahn (RAND, then the Hudson Institute), who gained experience about the military-purpose application of the method, Pierre Wack (as the head of the planning group of Royal Dutch/Shell), and Peter Schwartz (SRI, Global Business Network, Shell). The method became particularly popular after the oil crisis, with the "Shell success story" playing an important role in that.

The case of Shell received a great deal of publicity in the specialist literature (see Wack and de Geus on the published scenarios of Shell): through the use of scenario planning, Shell was able to prepare for unexpected turning points and to react quickly to environmental changes, thereby achieving a major competitive advantage. It was precisely through the early and innovative application of the methodology of scenario planning that Shell was able to handle the grave consequences of the oil crisis better than its competitors. That success story proved that dress rehearsals before the actual performance can indeed generate value. The learning process that takes place during scenario planning is intended precisely to allow organisations to recognise "indicators in the periphery" and thereby to be able to react faster and more proactively to changes in the environment and the competitive situation.

²⁷ Perhaps the only difference relative to the theatrical analogy is that in business, the opening night is in most cases also the only show. But the quality of the rehearsals has an effect on the success of that performance in both fields.

Period	Application of scenario planning		
16 th to 19 th century	Futuristic literature: Thomas More – Utopia (1516), Francis Bacon – The New Atlantis (1626)		
World War II	The method of scenario planning used in military planning (US Air Force)		
1960's	<i>Herman Kahn</i> (building on the experiences of the US Air Force) refined the method further in order to make it applicable to business forecasting. At the RAND Corporation, Kahn was the pioneer of the "future-now" way of thinking (and also the introducer of the term 'scenario'). Still in the 60's, he also founded the Hudson Institute.		
	The <i>Stanford Research Institute</i> (SRI), established in 1947, creates SRI-scenarios for predicting the future of societies.		
	Jay Forrester analysed mutual dependencies between population, demand and supply and used the results for his pioneering work on supply chain management (1961, Industrial Dynamics).		
1970's	The <i>Club of Rome</i> simulated the future using five key variables (Meadows).		
	<i>Pierre Wack</i> moved scenario planning into a new dimension when, with the planning group of Royal Dutch/Shell, he placed the factors influencing oil prices in the focus of the corporate planning process.		
1973	The oil crisis brought attention to the significance of applying scenario planning to business. The second half of the 1970's was the first golden age of scenario planning.		
1980 to the present			
1980	John Naisbitt's famous book <i>Megatrends</i> represented a new direction in futurology, launching a new Renaissance of the field.		
1985	Porter made a positive appraisal of the significance of thinking through alternative scenarios for understanding trends and gaining an advantage over competitors.		
1990's	The literature on learning organisations can be considered to be the third root of scenario planning (Peter Senge). Several concepts associated with strategic flexibility and adaptation were introduced: hypercompetition (D'Aveni), dynamic capabilities (Teece-Pisano), strategic flexibility and innovation (Hamel), adaptive enterprise (Haeckel). It was an important new feature that greater emphasis was placed on monitoring the environment: scenarios can help organisations to recognise important peripheral indicators (Haeckel, Day-Schoemaker).		

Table 3: A few milestones of the development of scenario planning

Source: My own compilation based on Schwartz (1996), Lindgren-Bandhold (2003) and Rindland et al (2006)

Lindgren and Bandhold (2003) identify three roots of scenario planning: 1. futurology, 2. strategic planning, 3. organisational development and organisational learning from the 1990's. In relation to the first of those, the process of the investigation of the future becoming a science is divided into two stages (prognostics and futurology, for details, see Nováky, 2006). As regards the second root, let us recall the words of a recognised specialist in strategic planning, Henry Mintzberg, about scenario planning. Mintzberg (1998, p. 51) regards scenario planning as a variety of the basic motto of the planning school ("predict and prepare") It is an important principle of the planning school that planning requires the predicting it is an indispensable step of planning. Accordingly, building scenarios can be seen as an instance of "planners at their best", an approach that affords us a glimpse of the future beyond that afforded by formal

environmental analysis and figures (Wack, 1985), and assists us in establishing a common interpretative framework through which scenario planning also becomes a favoured approach of learning schools (Mintzberg and Lampel, 1999).

Grant (2005) also proceeds along the same line when he emphasises that in the case of scenario planning, the process of development – the learning process itself – is usually more important than the output. And this takes us directly to the third root (the role within organisational learning), which has clearly been receiving the greatest amount of attention since the 1990's (Ringland, 2006, Van der Heijden, 2002). According to Van der Heijden (2005),all three of the schools of thought of strategic management (the rationalist, evolutionist and process schools) play a role in this process of organisational learning, and all three schools can and should be used in the course of the scenario-building process.

Scenarios are an internally consistent, probable futures, of which there are always more than one. Van Notten (2004) analysed almost twenty definitions to formulate a definition of scenario that is a synthesis of the most important common elements. According to that definition, scenarios are coherent descriptions of alternative hypothetical futures that reflect different perspectives on past, present and future developments, which can serve as a basis for action. Since the birth of the concept, scenarios have had many definitions in the literature, some of which are summarised in the table below.

Author	Definition of scenario	Purpose and explanation
Kahn –	Hypothetical sequences of events	Stories help us to demolish mental barriers and to imagine
Weiner	constructed for the purpose of focusing	"unthinkable" futures.
(1967)	attention on causal processes and	
	decision-points.	
Godet	Coherent sets of hypotheses issuing from	If we imagine the future, we also experience and shape the
(2006), 2, 22	a given original situation to a future	present differently. The "la prospective" has three
	situation.	distinguishing features: 1) it looks at the future differently, 2) it
		looks at the future collectively, 3) it applies as strict and
		participative a method as possible in order to reduce
D.C		unavoidable distortion.
De Geus	Scenarios are stories describing possible	The objective is to promote and accelerating institutional
(1988)	futures that facilitate institutional	learning – scenario planning is the art of re-perceiving.
Schoemaker	learning.	The formation of an analistic star fortune but an arbitrain a
(1991), 550	A <i>script-like characterisation</i> of a possible future presented in considerable	The focus is not on predicting the future but on achieving <i>bounded uncertainty</i> . Scenarios assist us in
(1991), 550	detail, with special emphasis on causal	mapping/structuring the problem and mapping the sources of
	connections, internal consistency, and	uncertainty.
	concreteness.	uncertainty.
Schwartz	a tool for ordering one's perceptions	The objective is to use scenarios to be able to make better
(1996), 4	about <i>alternative future environments</i> in	decisions <i>today</i> by understanding their possible outcomes
(1))0), !	which one's decisions may be played out.	better. Emphasis is placed on the fact that scenarios are the
	······································	foundation-stones of strategic discussions that promote
		institutional learning (in relation to key decisions and
		priorities).
Wells (1998)	A scenario is a narrative about the future	The essence of the process is that we write about the future as
104,	describing a coherent, plausible, and	if we were looking back at the past. Scenarios need to be
	challenging picture of the confluence of	interesting enough to stimulate strategic thinking. It is
	patterns, environmental forces, and	important to identify strategic options for each scenario.
	players. () a few distinctive pictures of	
	the future that are likely to have	
	substantively different effects on strategic	
	decisions.	
Mintzberg et	"If you can't predict the future, then	Support for strategic decision-making: a good strategy is
al (2005), pp.	maybe you can imagine various futures	robust, i.e. it is successful in several possible scenarios. They
64-65	scenarios are specially constructed	help us see through the strategic issues that cloud the horizon.
	stories about the future, each one	
	modeling a distinct, plausible world."	

 Table 4: The definitions of 'scenario'28

For the purposes of my research, I shall accept and use Schoemaker's definition, under which *individual scenarios are script-like descriptions of possible futures*, which describe those futures at an appropriate level of detail, placing strong emphasis on relationships of cause and effect, internal consistency and specificity. The focus is not on predicting the future but on

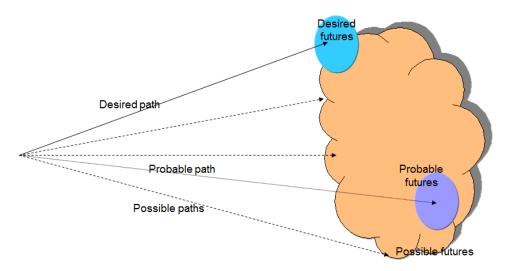
²⁸ Further collections of definitions: Kristóf (2002a, p. 19), Van Notten (2004, pp. 18-20).

limiting uncertainty, while scenarios provide assistance with mapping/structuring the problem and mapping the sources of uncertainty.

Scenario planning is among the process approaches to strategy creation (Van der Heijden, 2005), and the learning process that takes place during the process provides an opportunity for the participants (including the researcher herself) to recognise which components of the environment of the organisation concerned are defined in advance and which are not possible to predict.

The scenarios are a subset of the set of theoretically possible futures and they do not necessarily coincide with the desirable future, the target condition. That important relationship is shown in the figure below. Experience shows that one third of all possible scenarios covers 80% of probable scenarios. (Godet, 2006, 113).

Figure 5: The relationships between possible, probable and desirable futures



Source: Lindgren, Mats and Bandhold, Hans (2003), p. 23

This approach is primarily true of *vision-driven scenarios* (to use the classification of Courtney (2003)), because those concern the longer term (5-20 years) and work with a wider range of macroeconomic and global variables and drivers in order to identify possible futures and/or new strategic ideas. The method helps the parties concerned to step outside the usual patterns and to question their previous assumptions. In contrast, so-called decision-driven scenarios focus on specific uncertainties and the possible outcomes of a concrete decision, and usually – in

accordance with the situation requiring the decision – only concern a shorter term. In my research, I shall use the vision-driven concept of 'scenario'.

Scenarios are most often contrasted (and compared) with forecasts: one of the most important distinguishing features of scenario planning is that a scenario planner's objective is not to predict the future. The quality of the output of scenario planning is not determined by whether one of the scenarios actually comes true, i.e. whether the future was predicted successfully, but by whether the end result actually assists the decision-maker in making decisions that are workable in the case of several possible scenarios, i.e. which are sufficiently robust. If the most probable scenario was also identified correctly, and it actually occurs, the organisation in question can gain a competitive advantage over its competitors.

According to Schoemaker (1991), scenarios have particularly advantageous features relative to traditional forecasts in cases involving high-levels of uncertainty and complexity: in such cases, the most frequent sources of forecast errors are precisely the fundamental assumptions, and scenarios question those very assumptions.

The scenario is not identical to the company's vision, which is a definition of the target state that the organisation believes to be desirable. There may be a scenario that happens to coincide with the envisaged desirable future, i.e. the vision, but this is by no means a norm, and that particular future only occurs rarely.

Table 5 summarizes the differences between the three concepts mentioned (forecast, vision and scenario).

Scenarios	Forecasts	Visions
Possible, plausible futures	Probable futures	Desired future
Uncertainty based	Based on certain relations	Value based
Illustrate risks	Hide risk	Hide risk
Qualitative of quantitative	Quantitative	Usually qualitative
Needed to know what we decide	Needed to dare to decide	Energizing
Rarely used	Daily used	Relatively often used
Strong in medium to long-term	Strong in short-term perspective	Functions as triggers for voluntary
perspective and medium to high	and low degree of uncertainty	change
uncertainties		

Table 5: A comparison of Scenarios, forecasts and v	visions
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Source: Lindgren, Mats - Bandhold, Hans (2003), 24

According to Schoemaker (1995), scenario planning differs significantly from contingency analysis, sensitivity analysis and computer simulations as well. What is the difference? A

contingency plan focuses on the occurrence of a negative event (exception) that jeopardises the default version, sensitivity analysis investigates the effect of a single variable and assumes that all other variables are the same, and, finally, scenario planning is more than the output of a complex simulation model. That is because scenarios often contain components that cannot be formally modelled, and they also include the subjective interpretation of all the factors, and those are incorporated in narratives that therefore direct attention to possible combinations of factors. At the same time, Schoemaker (1991) also contends that scenario planning and stochastic simulation or decision analysis can be used successfully as complementary methods.

Van Notten (2004) calls attention to the fact that the majority of visions are based on the evolutionist paradigm and as such, they handle incremental changes well, but they fail to handle significant and radical changes, disruptive factors and unconventional events, relegating those to the "realm of fantasy". One of the advantages of the scenario method is precisely that it has the mandatory feature of calling the imagination of the participants in the process into play, as it is able to integrate critical uncertain factors along with (apparently) deterministic ones.

Necessarily, whenever we make a strategic decision, we make some assumptions. Assumptions do not eliminate uncertainty, in fact, they are specifically intended to manage it. The most important thing is to formulate those assumptions explicitly (Wells, 1998, 184). The factors that are important (i.e. they have a large impact) and uncertain can be the main drivers behind the individual scenarios (for a typology using that two by two matrix, see Table 6).

	High-level uncertainty	Low level uncertainty/predictability
Strong effect	Critical uncertain	Critical, predictable
(important)	scenario drivers	Trends, planning issues
Minor effect	Non-critical uncertain	Non-critical, predictable (monitoring is
(less important)	scenario drivers	sufficient)
	(regular review required)	

Table 6: A	framework	for a	typology	of	assumptions

Source: based on Wells (1998, p. 197) and Ringland (2006, p. 221)

The relationship between determined and critical uncertain factors is like a choreographed dance – the components form an interconnected, contiguous system. In every case, the assumptions behind the predetermined factors must be investigated. What affects the effects of determined factors? (Schwartz, 2006, pp. 115-116) The answers to those questions may lead to

components that had seemed determined drawing attention to critical uncertainties, the possible surprises, the "what-if" questions. According to Wack (1985), scenarios are like wind-tunnels in which strategies can be tested in various future conditions.

Imre (1996, p. 40) contends that the investigation of whether uncertainty factors are independent or dependent is an important criterion for the further analysis of uncertainty factors. The uncertainty of independent factors does not depend on the other constituents of the system, while dependent factors do depend on independent factors (and hence they can be considered as effects). Scenarios usually have shared components (constant and determined factors) and they have some differentiating components that differ by virtue of the independent uncertain variables.

Verity (2003) warns against creating three scenarios, because in that case, the parties concerned are inclined to interpret them as a trio of pessimistic, realistic and optimistic predictions and will tend towards the realistic one, or lean towards the middle, which they will believe to be the most likely one. On the other hand, the literature is united in warning against too many scenarios as well, so the practical examples I have reviewed generally dealt with two to four scenarios.

Scenario planning is not an end in itself, but a tool for making better strategic decisions. We have seen that when environmental conditions are stable and a passive or reactive strategy is required, there is not much sense in creating scenarios. In order to avoid making the classic 'hammer and nail' error ('Everything seems to be a nail for a man with a hammer in his hand'), it is worth asking the question about the conditions under which using scenario planning is actually worthwhile.

In the table below, in addition to listing the possible criteria based on Schoemaker (1991), I also provide brief assessments to support the view that the changes that have already occurred, or which are expected to occur or may possibly occur in the postal sector warrant the use of the scenario-planning method for industry scenario planning.

Criterion	Evaluation and example from the postal sector
Uncertainty is high (relative to one's ability to predict or adjust)	True – For instance, new entrants may appear, and the decision by a single major client to change service providers may reshape the balance of power in a liberalised market radically.
Too many costly surprises have occurred in the past	True – There has been an example of this – in the Hungarian market, the Hungarian Post Office lost a significant part of its revenue from delivering press publications in a matter of months.
Insufficient new opportunities are perceived and generated	True – identifying new sources of revenue is a problem for most national posts.
The quality of strategic thinking is low (e.g. because strategic planning has become too routinized)	Partly true – The national posts have experience in formalised, classical strategic planning, but the dynamic analysis of the environment and alternative plans (e.g. USA) or scenario planning (e.g. Austrian Post) have also appeared.
The industry has experienced significant change or is about to	True – Changes in the regulatory environment, client requirements, the appearance of substitute products and new (including disruptive) technologies.
A common language and framework is desired, without stifling diversity	Not known.
Strong differences of opinion exist, each of which has its merits	Yes – The literature is clearly divided on the effects of regulatory change and the issue of substitution.
Competitors are using scenario planning	Partly known – The German Post has participated in logistical scenario planning (and DHL is an important player/competitor in the Hungarian market, too, while in some segments (international parcel post) it is a partner of the Hungarian Post Office).

Table 7: What are criteria under which scenario planning should be used?

Source: Schoemaker (1991), p. 550

The literature quotes many examples of scenario planning, which can be classified according to the level of the original question (depending on the decision that is in the focus of scenario planning), or ordered in a hierarchy (if the process spans several levels). An example of the latter is the experience of Shell with scenario planning – Wack (1985) organised the levels of scenario planning into a hierarchy on the basis of that case, too. Global scenarios (which contain the environmental drivers) can be considered to be the trunk of the tree, the country-specific, predetermined and uncertain drivers of the individual Shell companies constitute the main branches of the tree (here, along with environmental factors, the steps taken by individual institutions and market players also appear), while the concrete strategic issues, markets and investments appear as fruit hanging from the smaller branches.

The classic method for analysing the macro-environment is PEST (political, economic, social and technological) analysis, while one possible framework for industry-level analysis is furnished by Porter's five forces model of industry analysis. Porter (1985) himself talked about macro-scenarios in relation to the analysis of the independent factors of uncertainty influencing an industry as a whole. Those factors have an effect on the industry structure that may develop.

Subsequently, it is worthwhile to narrow the analysis to the uncertainty factors influencing the structure of the industry directly.

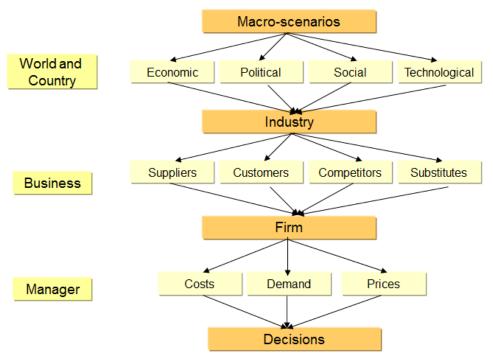


Figure 6: The levels of scenario analysis

Although I have found several examples of industry scenarios in the literature (for instance Godet (2006), Ringland (2006), Fahey et al (1998)), I found proportionately less than I had expected. Yet the expected development of the industry is a cornerstone of strategic planning. According to Fahey et al (1998, 190), this is a result of the fact that integrating industry analysis and scenario planning is no easy task. Industry scenarios serve four interrelated objectives (Fahey et al (1998, 191)):

- 1. Identification of the possible futures of the industry and definition of the differences between them.
- 2. Presentation of how the individual visions may develop, and a description of what different paths are possible.

Source: Schoemaker (1991), p. 558.

- Promoting better strategic decision through using industry scenario planning in order to assist with identifying unexpected market opportunities and threats and to illustrate the dynamics of competition in various industry contexts.
- 4. Preparation of the organisation for various industry scenarios (so that it knows what to do at all the levels of the organisation in order to be a winner in any scenario).

Van Notten (2004) offers a possible typology of scenarios for the analysis of the cases published over the last fifty years. Naturally, hybrid solutions between the extremes defined are also possible, and there are several examples of such solutions. Within the table below, I have indicated the direction that my research takes within that typology by using bold type.

Macro chara	cteristics	Micro characteristics	
Goal	exploration vs.	<i>Function</i> process versus product	
	pre-policy research	Inclusion of norms	descriptive versus normative
		Subject	issue- or area-based versus instruction-based
Process	intuitive vs.	Input	qualitative versus quantitative
design	analytical	Method	participatory versus model-based
		Group composition	inclusive versus exclusive
Scenario	complex vs.	Temporal nature	chain versus snapshot
content	simple	Factors	heterogeneous versus homogeneous
		Interconnection	integrated versus isolated

Table 8: A possible classification of scenarios

Source: Van Notten (2004, p. 36)

In their classification of scenario projects, Lindgren and Bandhold (2003) distinguish between projects based on expert, participant and institutional models. The present research project falls in the *expert category*, as I wish to develop strategic scenarios as an outsider, relying on a heterogeneous range of experts and information base.

Over the last fifty years, scenario planning has been applied in an increasing number of sectors, for an increasing number or purposes, and in the course of those applications, the methodology of scenario planning itself also changed, evolved. As regards the practical implementation of scenario planning, there is no accepted, fixed methodology, a single best practice. Its flexibility

is one of the advantages of the method²⁹, but at the same time – as Godet (2006) points out – methodological consistency is required in order to make scenario planning authentic and useful. That, in turn, requires compliance with the following five conditions: relevance, coherence, plausibility, *importance and transparency*.³⁰ Although scenario-planning techniques show great variety, the process always contains the following components: system analysis, retrospective analysis, analysis of the strategies of the participants and outlining of scenarios.

With sufficient methodological rigour, the technique of scenario planning is suitable for eliminating or reducing the errors of estimation and perception as well as cognitive errors associated with uncertainty as well. The distortions in the estimation of extreme possibilities (which characteristically involve a systematic underestimation of the probability of events with negative effects) can be particularly harmful, and scenario planning places particular emphasis on those³¹. As Goodwin and Wright, (2001, 118) note, it is one of the advantages of scenario planning that a result can be achieved without subjective estimation of probabilities, which is fraught with the risk of many possible errors resulting from cognitive distortion.

The limits of scenario planning should be mentioned along with its advantages. As with any methodology, it is also true of scenario planning that is only as good as the data, information and knowledge that it builds on (Mercer, 1995). What's more, we may even say that it can only produce output that is entered in it as input by the participants (the human factor). One documented failure of scenario planning (MacKay and McKiernan, 2006) was attributable precisely to the cognitive limitations of the human factor, namely to the fact that we tend not to notice or disregard the "weak environmental signals" that actually bring important messages to the observer as precursors of significant changes. In addition to the constraints represented by

²⁹ It is no accident that for instance Schwartz, in his book The Art of the Long View (1991) considers scenario planning to be an art form.

³⁰ Godet (2006) recommends the use of a special toolkit (or certain components thereof) in order to allow inconsistencies and distortions to be reduced (e.g. structural analysis, morphological analysis, the Delphi method, relevance tree, competency tree, etc.).

³¹ Among others, it is due to cognitive reasons that experts do not recommend "best-case" and "worstcase" type scenarios and forecasts, because if those are used, decision-makers characteristically tend towards the middle ground and underestimate risks.

cognitive distortions and past experiences (and the resulting fixed patterns of cause and effect – cognitive inertia), environmental noise also masks over these often barely perceptible signs. Therefore, during scenario planning we must devote special attention to that deficiency by consciously managing human cognitive dysfunctions (e.g. by making interrelationships in the past explicit and by using maps of causal links).

Scenario planning is truly characterised by methodological diversity, but the majority (70%) of applications use the intuitive logic used by Royal Dutch/Shell or some refinement of it. And that method integrates hard data and facts with the "soft" perceptions of the participants of the process (MacKay and McKiernan, 2006). In my research, I endeavour to combine the available hard data (statistical analyses and information about the past) with the soft factors, and in the research phase I shall present both.

What are the possible steps of scenario planning? How does the process itself take shape? In the table below, I present three possible sequences of steps/processes, each of which may have some interest for my subject.

	The steps of classical scenario planning	Industry scenario planning	Strategic scenario planning (combined with game theory)
1	Identification of the strategic issue or decision	Description of the present industry context	Identification of key players
2	Identification of micro- environmental factors	Determination of the objective of scenarios	Identification of key decisions for each player
3	Identification of drivers	Definition of individual drivers	Identification of probable and relevant steps for each and every strategic decision
4	Ranking of drivers by significance and degree of uncertainty	Identification of aggregate drivers	Identification of critical structural uncertainties – performance of scenario analysis
5	Choosing the scenario logic	Determination of end states	Identification of the timing of steps
6	The scenarios take shape	Determination of certain, uncertain and impossible decisions/events/circumstances	Determination of the information structure
7	What are the implications of the scenarios for the initial issue?	Definition of the logic, compilation of the stories (scripts) for each end state	Construction of game tree
8	Determination of important indicators and markers (for monitoring)		Determination of payoffs for each outcome of the game tree. Each outcome is a strategic scenario.
9			Where necessary, the ideas of each player concerning uncertainties should be estimated.
10			Based on steps 8 and 9, the internal consistency of the strategic scenarios should be checked (1. uncertainty 2. players' moves – i.e. can the players choose an optimal strategy in the scenario concerned?).
	Schwartz (1996, pp. 241- 249)	Fahey (1998, p. 193)	Gertner and Knez (2000, p. 254)

Table 9: The possible steps of scenario planning – three illustrations

For the purposes of my dissertation, I shall proceed along the first of the above chains of logic, concentrating primarily on identifying the drivers impacting the sector. Theoretically, the game-theoretical approach is interesting, but it can only serve as a supplementary viewpoint in practice for my area of research. The primary area of interest there is the inclusion of international expansion strategies and the appearance of new competitors (national posts entering each other's markets and new companies entering the market) in scenario planning, but, with the planned research methodology (and lacking such data and information), quantification of the payoffs is not feasible.

The methods supporting scenario planning are described briefly by Lindgren and Bandhold (2003) – I have summarised the methods they describe in the table below. Over the last decade, a number of practical manuals (e.g. Ringland, 2006, Glenn and Gordon, 2003, Nováky, 2006) and comprehensive works have been published about the methods supporting scenario planning, so the list below is only one of several possible lists and categorisations. In my research, I shall primarily use interview-based methods.

Method types	Methods	
Media-based methods	media scanning, trend monitoring groups, media monitoring, keyword analysis, content analysis	
Interview-based methods	Delphi questionnaire, Delphi structured interviews, opinion surveys, expert panels, guru groups, executive panels, creative futurologist groups, future dialogues, participant future studies	
Time sequence based methods	archetypal patterns of development, trend extrapolation using time sequences, multi- variable analyses and time sequence analyses, analogies, long wave, S-function analysis, paradigm change	
Intuitive, generative methods	intuitive timeline construction, headings and posters, imaging, future history, paradoxes	
Actor-oriented methods	actor analysis, competitor analysis, competitor monitoring, value chain analysis	
Inference focussed methods	theme management, simple marginal analysis (SIM), consequence tree, future event creation, probabilistic effects	
Systems methods	complexity and uncertainty analysis, impact analysis (CIM), four fields analysis, systems analysis, causal analysis, systems analysis as a tool for learning, system modelling/dynamic simulation	

Table 10: Methods supporting scenario planning

Source: based on Lindgren-Bandhold (2003), Appendix 1.: Methods, pp. 130-162

Among interview-based methods, I intend to place the decisive emphasis on the methodology of semi-structured interviews. It is also important that the group of experts interviewed should be as heterogeneous as possible, as that would allow me to take conflicting opinions into account, which will enrich the results obtained from a review of the available specialist literature.

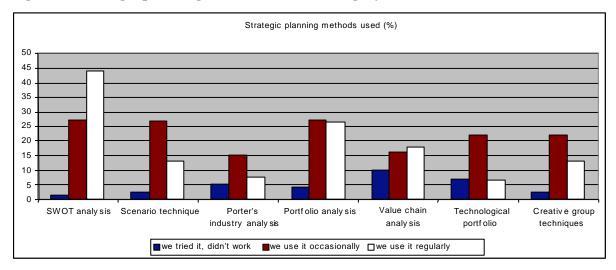
Given that it has such a wide field of application and that it is so flexible, it is justified to ask the question about how widely scenario planning is used in practice. I shall present the results of an international and a Hungarian review of the practical application of the scenario-planning method.

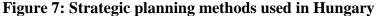
Rigby and Bilodeau (2007) used a sample of over 8500 to analyse the use of various management tools and satisfaction with those tools between 1993 and 2006³². In 2006, scenario planning was clearly placed among power tools, i.e. methods that are used by many and whose results elicit satisfaction. In 1993, scenario and contingency planning scored lower in both

³² The authors divided to management tools reviewed into four groups: power tools (high frequency of use, high level of satisfaction), speciality tools (low frequency of use, high level of satisfaction), blunt instruments (high frequency of use, low level of satisfaction) and rudimentary implements (low frequency of use, low level of satisfaction).

dimensions (particularly in the case of practical application). That result, however, is still significantly better than the results for the end of the 1990's (Rigby, 2001), which indicated a significant reduction in the use of scenario planning relative to the beginning of the decade.

As for the situation in Hungary, a 2004 questionnaire survey entitled "Versenyben a világgal" (*Competing with the World*) used a sample of 300 companies to assess what Hungarian executives think and say, among other things, about the strategic management tools and techniques they use. According to the results, 26.7% of the responders use the technique on occasion, while 13.3% claimed that they use the tool of scenario planning in strategic planning on a regular basis.





Source: Chikán, Czakó, Zoltayné Paprika (2004, 49)

As the questionnaire survey was based on subject reports only, it is quite conceivable that the results reflect a positive distortion as regards the frequencies of usage in Hungary, but it is still quite telling that even 10 years ago, 40 of the respondents claimed to know and to have used the method successfully or unsuccessfully, occasionally or regularly.

In summary, we can conclude that scenario planning offers a suitable methodology and framework for the subjectivist and constructivist exploration and mapping of environmental uncertainty and the complexity and systems of interrelations of strategic decisions. The use of the methodology of scenario planning appears to be expedient for universal postal service providers, as they are now facing environmental conditions with greater uncertainty than before. My objective is to combine hard and soft data, and for that purpose I intend to add semi-structured expert interviews to the review of secondary information and statistical analyses. Based on the theoretical literature, I will endeavour to create 3 to 4 scenarios as the result of the classic scenario planning process based on in-depth research.

4. Situation analysis of the postal sector

In this chapter, *I shall use the available literature to summarize and analyse the external factors* that influence the strategic choices of market players in, or wishing to enter the postal sector. First of all, I shall define the field of my research, i.e. the postal sector itself. Subsequently, I will primarily concern myself with the factors that market players cannot influence (or which they can only influence partially and indirectly). The study of those drivers will be important later on for determining the assumptions that we may make concerning them in our scenarios.

4.1 The narrow and the wide definition of the postal sector

In the narrow sense, the postal sector is defined as the receipt, processing, transportation and delivery of consignments (letters and packages). The definition of *postal services* stipulated in effective Hungarian law is also based on that logic: "A communication service involving the acceptance of postal items, their clearance as needed, their forwarding and delivery and the performance of operations corresponding to such jointly or in part, against a charge. The exchange of documents also qualifies as postal service (...) *Postal item:* An item compliant with the weight and size limits specified in separate legislation, with an address on the item, its cover or the associated list. Postal items may be of the following types: private mail, direct mail, printed matter and postal packages"³³

The legislative definition also includes the hierarchic structure that characterises the traditional value chain of mail: the delivery/transportation of accepted items (possibly in several stage) to central processing facilities of increasing size, then transportation to points of delivery where, depending on the depth of processing required, further processing takes place until delivery to the actual destination addresses may begin. In essence, letters and packages flow through the postal network in a system like that at all the national posts.

In their competition law analysis, Baker and Dodgson (2002) come to the conclusion that both the product-based and the geographically relevant definitions of markets vary in time,

³³ Act no. CLIX of 2012 on postal services, Article 35

and in the case of the postal sector they may both be expected to extend: the post is becoming *increasingly international, while the letter, package and express markets are converging.*

Wells (1998, p. 185) also notes that for the purposes of the analysis of the competitive landscape, the narrowest and the widest definitions of the sector should both be assessed, as that is the only way to get an image of the expected future development of the industry, the possible changes to the boundaries of the industry and emergent new industries.

One question is whether it is permissible to narrow the analysis to those services if the objective is to analyse the possible strategic scenarios of national postal services (from the perspective of the incumbent universal postal service providers). Although it would simplify the research significantly, my answer to the question is a clear 'no', as almost all of the designated universal postal service providers/incumbent service providers that I am focussing on actually conduct a wider scope of activities. In addition to the fundamental postal services covered by the above definition, national postal services also perform many other activities, some of which belong in other industries. The most common ones include courier, express item and parcel logistics (CEP logistics), financial services, and retail services. As one of the most important strategic questions that the incumbent service providers are facing is whether the costs arising from their universal service obligation (and within those, the maintenance of the widely available postal network to the extent prescribed by legal provisions) can be financed by the revenue from those fundamental services, the survey may not be narrowed to the postal sector only. As a result of the diversification histories of the individual service providers, their present ranges of services are rather varied, and that fact has a significant impact on the possible and viable strategic scenarios.

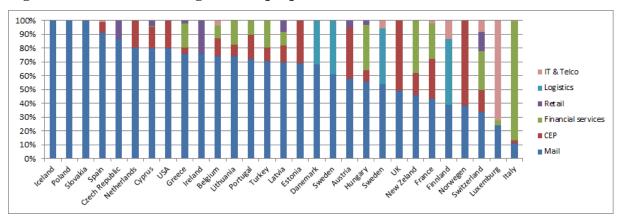


Figure 8: Revenues from segments in proportion to total sales revenue (2014)

Source: IPC Statistics, based on https://www.ipc.be/en/toolkit/statisticaldatabase/query_tool?getsearchcriteria=true.

Figure 8 shows that the number of posts limiting their activities to the letter post market in the narrow sense is quite small (there are only three such entities in the figure, and even those include one that only appears to be so homogeneous – the Polish Post is also present in the market of financial services through subsidiaries). Within the sales revenue structure of the developed posts, revenue from the CEP market is generally in second place, followed by financial and logistics services. Based on that data, particularly as the volume of letter mail is decreasing significantly in the developed world, the decision concerning the directions of diversification to follow is an important strategic issue.

The next figure shows the main sources of postal revenue in the past in a classic BCG matrix, and it confirms my previous claim. Although the largest division is letter mail, the growth potential was already low at that time, and since then, the volume of the market has actually been decreasing. As regards sales revenue from CEP, the universal postal service providers were in a weaker relative market position, but already then, that market was exhibiting positive growth, and since then, the difference increased to the advantage of CEP (between 2008 and 2011, the European parcel post grew 33%, largely thanks to the impact of e-commerce (EP (2016), p. 5). The financial and IT services markets had and still have significant growth potential, but it is questionable whether the universal postal service providers are able to join competition in those markets, as their relative market postal service providers, where revenue from financial services is quite significant and the market positions of those posts are strong, too).

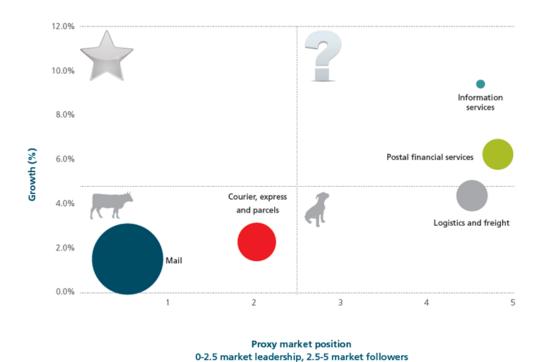


Figure 9: The portfolio of the postal services strategic business unit (2006-2009)

Source: IPC (2010c): Global Postal Industry Report (based on 2009 data), Appendix. Fig. 1.19.

The BCG analysis of the developed posts (IPC members) in the above figure also supports the conclusion that in addition to the letter post unit, which is considered to be a cash cow, several services are of interest for a strategic analysis. According to the IPC analysts (2010c), the CEP business unit characteristically also falls in the cash cow quadrant, but the posts that compete in that sector are market leaders by a much smaller margin (or may no longer be market leaders, only significant players). Financial services and IT services are in a very different position, among question marks, while logistics and haulage occupies a position on the borderline between question marks and dogs. Table 11 also summarises the supplementary services not featured among the characteristic strategic business units analysed above that also occur in the portfolios of national posts.

Basic postal services				
Service	Product	Competitors (substitute products)		
Mail	Letters, registered letters, telegrams, newspapers	In-house mail services (private providers, fax, e-mail, partly monopoly)		
Parcel	Parcels (up to 20 kg)	Local courier companies and express service competitors (DHL, FedEx, UPS, TNT, GLS, local companies)		
Express mail	Express letters and parcels	Local courier companies and express service competitors (DHL, FedEx, UPS, TNT, GLS, local companies)		
	Other services			
Service	Product	Competitors		
Mailing services	Management and (pre)processing of mail for large users (business clients)	Private mail companies, direct marketing companies		
Hybrid mail	Physical delivery of electronic mail	Telecommunications companies		
Electronic mail	Internet, SMS, post office telecentres	Internet service providers, Internet cafés, etc.		
Logistics	Storage, reception, packaging, transportation, distribution, complex logistics	Transportation and haulage companies, logistics companies		
Financial services	Cash-based payment services, current account services, savings accounts, disbursals, insurance, etc.	Banks, insurance companies, Moneygram, Western Union		
Retail sales	Telephones, top-up cards, stationery, other retail (tobacco products, food, newspapers, etc.)	Shops, newsagents, stores		
Access in small towns	Access to people (delivery of diverse services)	Schools, local community centres, religious centres		
Public administration services	Driving licences, permits, tax, pension, benefits, allowances, information – access to those	Municipalities, healthcare providers, schools, public administration offices, etc.		

Table 11: Segmentation of the services provided by universal postal service providers

Source: Guislan (2004), based on p. 13, with additions

A range of existing studies on the analysis and future of the European postal sector also cover that wider range, and that is no accident. Although the decisive majority of the sales revenue of European posts is derived from postal services in the narrow sense (and the decisive majority of the letter post sector is still – even after liberalization – covered by the universal providers), depending on their strategic path of choice, a number of universal postal service providers are or may be assigning significant roles to CEP-logistics and financial services within their present sales revenue structure or their future plans. On the other hand, it is also true that in these competitive markets, the national posts usually don't even play significant roles at the national level and so far they have rarely entered regional markets at all. Therefore, during my research,

I shall not reduce the scope of my analysis to the postal sector in the narrow sense. In reality, national posts are present and have future options in the four markets in whose cross-section they are competing (see Figure 0) to varying extents.

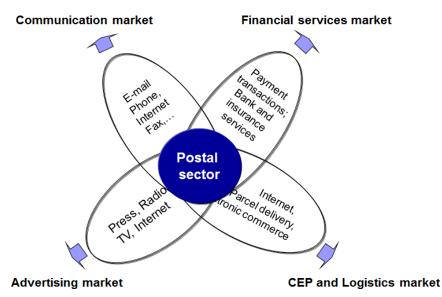


Figure 10: The "postal sector" in the "cross-section" of several industries

Source: WIK (2006), based on p. 1, with modifications³⁴

Even the posts that derive the decisive majority of their revenue from the letter mail segment need to face up to the changes that have taken place in the communications and advertising markets, as they unavoidably influence (generally negatively) strategy in the letter mail segment. In the communications market and the advertising market, communication involving paper-based letter mail have a number of digital substitutes, so in the wider sense, there the post office is competing with all the service providers (Microsoft, Google, Hotmail, etc.) that

³⁴ Original source: COM(2002) 632 final, 25.11.2002. – EC Report on the application of the Postal Directive. The original figure did not feature the market of financial services.

forwards 'messages, information' between two parties (persons or organisations) using any digital channel (mobile phones, television, radio, etc.).

In the CEP and logistics market, competitors range from small courier companies (such as Hajtás-Pajtás in the Hungarian market) and parcel delivery companies (e.g. Sprinter) through the subsidiaries of universal service providers in other countries (e.g. GLS, DPD) to the large, international logistics integrators (DHL, TNT, UPS). But in that market, the DIY (do-it-yourself) solutions of e-commerce companies (e.g. the distribution solutions introduced by Amazon) as well as peer-to-peer solutions (an 'Uber for deliveries' could become a competitor, too).

In the market of financial services, all today's financial service providers (banks, investment companies, insurance companies, pension funds, etc.) are potential competitors. In addition, the providers of new, innovative financial transaction services (PayPal, BitCoin, etc.) are also already competitors today in Porter's sense. In addition, any number of currently unknown or not widely used FinTech solutions – should they undergo mass adoption – may also become substitute products for the generally 'the people's bank' type of standard postal products (payment transactions, savings) of postal service providers.

As a consequence of the above considerations, in my dissertation I shall understand the term "postal sector" in the title in a wide sense, including, in addition to the scope of the narrow definition, the markets defined the various (both physical and electronic) extensions of fundamental postal services as well as the other related industries that are relevant to the incumbent posts (primarily CEP-logistics and financial services). In other words, in my dissertation I shall examine the activities with significant sales revenue potential that can be realistically considered for the present or future portfolio decisions of universal postal service providers.

4.2 The economic background

Among the analyses available to me I didn't find any that provided a comprehensive view of the economic issues relevant to the postal sector. As a starting point for my economic analysis, I created a logical schema of the issues that I believe are worth considering (see Figure 11). The opening (liberalisation) of the mail market, and the subsequent financing of the universal service is the largest theme. It raises interesting economic questions primarily in relation to the range of universal services. The regulation of non-universal services and other competitive markets raises an interesting question (in addition to e.g. the classic competition law issues that concern all industries) that is closely related to the first question, namely the question of cross-financing, which may result in the appearance of practices that distort competition. Some of the national public service posts are also present in markets that can be considered to be artificial monopoly markets (such as delivery of pensions, or previously the acceptance of payment orders in cash) which, as a result of the advance of alternative solutions, have entered the declining phase of the market cycle and which will also face regulatory risk in the future.³⁵ Of those three issues, I shall discuss the first one (USO) in detail, I shall touch upon the second one briefly (cross-financing), but I will not discuss the third one, because other than the general regulatory risk I have mentioned already, I have not identified any issues there that relate to the entire sector, only individual services of individual market players may be impacted in an organisation-specific manner.

³⁵ Two specific illustrations: 1. In Great Britain, the postal delivery of pensions and other benefits was eliminated by a political decision. Today, all state benefits are transferred to bank accounts. 2. The requirements applicable to the form and content of cash transfer orders (in everyday parlance, "yellow cheques") changed in Hungary in 2008 due to EU regulations aimed at combating money laundering.

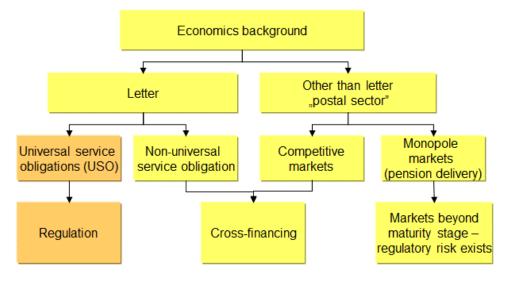


Figure 11: The logical schema of economic issues

Source: My own figure

4.2.1 An economic analysis of the letter mail market

In public parlance, traditional postal services are often referred to in parallel with telecommunications. There are some historical reasons for the analogy, as in most countries, telecommunications (still including telephony at that time) used to be run by the Post, but several authors also believe that there are economic similarities as well, and classify postal services – in my view, erroneously – among the classic network industries and/or natural monopolies.

Government involvement in postal services is attributable to a number of causes: 1. the Post was once one of the symbols of national unity; 2. the Post was the only technology for transporting information; 3. the Post supported the development of steam shipping and later air freight (in the UK and the USA); 4. postal services constituted a potential source of public revenue (Visco Comandini, 1994, pp. 8-9).

The postal sector under the narrow definition is a *network industry* with several special characteristics that set it apart from the other, traditional network industries (gas, electricity, telecommunications, water). One of the most important differences is that relative to all the traditional network industries, it has relatively low sunk costs and a lower requirement of capital

expenditure. A significant part of the physical resources used by postal services are scalable today (e.g. processing machines), or can be used for other purposes as they are (properties and machines, transport vehicles), while the network infrastructure required for transportation consists of public goods (roads) that are not financed by the postal service providers (based on Panzar, 1994, 4-5).

In Table 122, I summarise the similarities and differences between traditional network industries and the postal sector. As the table shows, I have identified significant differences over and above the level of sunk costs and required capital expenditure. For the definition of my criteria, I used the findings of so-called the transaction cost theory established by Coase (1937) and Williamson (1985), in particular the notion that in cases of high transaction and equipment specificity, the most efficient solution may not be the market coordination mechanism but rather a bureaucratic coordination mechanism (hierarchy, vertical integration), which would support the idea that the sector exhibits the characteristics of a natural monopoly.

The "market vs. hierarchy" (the coordinating role being taken by the pricing mechanism in the former, a system of instructions in the latter) decision should be made not merely on the basis of the transaction costs associated with the transaction, but a comparison of neo-classical production costs (which may be influenced by economies of scale and scope) and the total of transaction costs (Williamson, 1985, 61). Therefore particular attention should be divided to studying those issues.

	Traditional network industries	Postal sector (letters)
Natural monopoly	(telecommunications, water, gas))	?
Infrastructure	yes significant equipment-specific	human resources, transportation
mirastructure	network investment required	equipment, scalable processing
		capacities
Irreversible capital	significant	not significant
expenditure (sunk costs)		(mostly buildings and vehicles)
Duplication of infrastructure	not effective economically or	possible and
_	ecologically	may be effective
Technology	capital-intensive	labour-intensive
Availability of capacities	continuous	incremental
Entry barriers and costs	high	low
(using the dynamic approach)	Ŭ	
Monopolistic bottleneck	yes	no
(critical facility)	-	
Ratio of fixed costs	high	low (divisible, scalable)
Ratio of personnel	low	high
expenditure	-::f:t	anista hat not significant in all
Economies of scale	significant	exists, but not significant in all areas
		(significant in collection and delivery ³⁶)
Economies of scope	significant	significant in the case of associated activities
Product/service	homogeneous	may be differentiated
		(quality, region, customer segment)
Substitutability	limited	there are non-postal alternatives
		(electronic communications, CEP)
Lock-in/transition costs	high	low/none at all
Weight of universal service	significant	not significant
within the basket of commodities		(and dropping)
Flexibility of demand	low	low among residential customers, high with corporate clients
Requirement of regulatory	yes	not necessarily
intervention for establishing		5
and maintaining competition		
Requirement of regulatory	yes	probably required for the present
intervention for provision of		USO ³⁷
USO		
Market advantage of the	large	medium
incumbent service provider	-	
Source: my own table		

Table 12: Comparison of the postal sector and traditional network industries

In the postal sector, the most important economic argument for maintaining the (state) monopolies in postal services was that postal services are a natural monopoly (for the framework for reviewing the issue, see Figure2). But is that true? And if postal services meet some or all of the criteria for a natural monopoly, the next question is whether that in itself is a sufficient reason to maintain the monopoly³⁸. Proceeding along that line, the next question we reach is the one about the appropriate regulatory environment to keep the (natural or artificial) monopoly service provider "in line", about regulating the sector for the public good.

That latter one is the simpler branch of the logical schema, as, if the letter mail market is a natural monopoly, we may choose to test that proposition in the market (i.e. we may liberalise that market), or we may maintain the artificial monopoly (e.g. to be cautious). In both cases, the single-player letter market must be regulated as regards both prices and quality (the expected service level). If the regulations are not efficient (and the monopoly service provider is not efficient), new players may enter the liberalised market despite the fact that the market is a natural monopoly (provided there are no severe obstacles to entering it)³⁹.

If our answer to the first question is *no* (i.e. if we assume that the letter mail market is not a natural monopoly), we may still decide to maintain the monopoly in a range of services, which, essentially, would mean the conservation/further development of the present situation. If the decision is to liberalise (the European Union made that decision in January 2008), the structure that takes shape is fundamentally influenced by the answer to the second question. In that case, the question is about the *entry barriers* present in the market, and the possible entry strategies (and their consequences).

³⁶ In the case of mailings, there are economies of scope, while on the delivery side, the available economy of scale increased with the reduction of the frequency of deliveries (Sidak, in Panzar, 1994, 15).

³⁷ USO is the acronym for universal service obligation.

³⁸ In itself, a natural monopoly is not an absolute barrier to entry. So, from the regulatory perspective, the issue of barriers to entry is particularly important.

³⁹ For an analysis of this theme, see Schmalensee (2004), who argues that the incumbent's advantage in economies of scale (except for the case where significant sunk costs are also involved in entry) is not sufficient to allow the incumbent to realise extra profit, because in that case it actually "pulls" competitors into the market (contestibility theory).

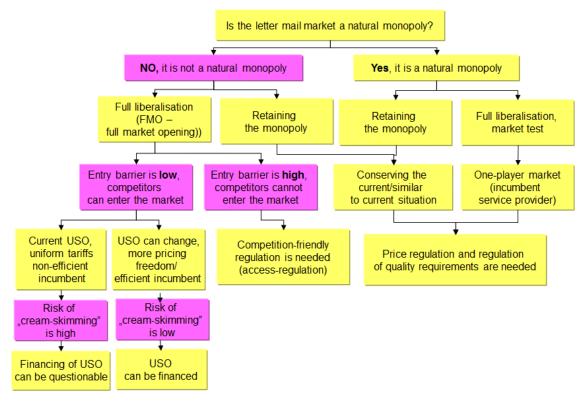


Figure 12: Simplified logical map of the economic questions relevant for letter mail

Source: my own figure

Let's look at the first question! A *natural monopoly* means that production can be organised in the most efficient manner with one company in the market, i.e. one company can operate at a lower cost than two or more companies (assuming identical cost functions and technologies).

Many highly influential economists claim that postal services do not meet *the criteria for a technical/natural monopoly*. In his criticism of US legislation, Milton Friedman⁴⁰ doesn't mince

⁴⁰ In the interest of making the next few paragraphs more comprehensible it is certainly worth adding that the US Post (USPS) has a special, so-called "Private Express Statute", under which it has a number of privileges and immunities, for instance it has comprehensive protection and state-guaranteed monopoly rights in the market of letter mail delivery over the entire territory of the United States, and it doesn't pay corporate tax and dividend and has a number of other privileges as well. As a result, the letter mail market is state owned and controlled by the government in the USA.

his words: "...there is no way to justify our present monopoly of the post office. It may be argued that the carrying of mail is a technical monopoly and that a government monopoly is the least of evils. Along these lines, one could perhaps justify a government post office but not the present law, which makes it illegal for anybody else to carry mail. (note: *the analogy to an allocated service*.) If the delivery of mail is a technical monopoly, no one will be able to succeed in competition with the government. If it is not, there is no reason why the government should be engaged in it." (Friedman, 2002, 29) In case of a technical monopoly, Friedman prefers a private monopoly, arguing that a private monopoly is more likely to be able to adapt to environmental changes after comparing the responsiveness of private monopolies, public monopolies and public regulation. It is possible that a public monopoly would be efficient, but we can only find out by testing it. It is not natural in any of the regulated industries that the monopoly service provider is generating the given output at the smallest possible cost. If that is not the case, and market players are able to perform the same tasks at lower cost levels, the opening of the market may generate resources for compensating those who lose out.

Coase (1961) provides an interesting and instructive analysis of the British postal monopoly. It is through an analysis of a case at the end of the 19th century (Alfred Marshall himself contributed to the debate) that Coase arrives at the conclusion (while recognising economies of scale and the fact of cross-financing) that from the point of view of economics, neither the monopoly, nor the necessity of maintaining uniform tariffs is obvious, and he also calls attention to the fact that the monopoly licences of the British post actually result in losses for consumers.

Geddes (2004) offers an analysis to lend support to the notion that Friedman is not alone with his opinion – the majority of the 12 influential economists⁴¹ spoke out in favour of the abolition of the monopoly in America or privatisation. According to Crew and Kleindorfer, "There are no strong technological, strategic or economic reasons why postal service should be

⁴¹ The following economists were analysed: Douglas K. Aide, Robert H. Cohen, Michael A. Crew, Paul. R. Kleindorfer, George Priest, Peter J. Ferrara, Sharon M. Oster, John C. Panzar, J. Gregory Sidak, Daniel F. Spulber, Paul Samuelson, Joseph Stiglitz. Only the last two (and partially Panzar) spoke in favour of maintaining the monopoly.

publicly operated." (in Geddes, 2004, 67). Yet they also recognise that elimination of the special monopolies in postal services is a political issue both in Europe and the USA⁴².

In contrast, Panzar (1994), among other arguments, uses analogies from telecommunications to support the position that postal services are highly likely to be a natural monopoly, precisely due to the nature of the local posting and delivery process (primarily the economies of scale present there).⁴³ Ginsberg (in Panzar, 1994) disputes whether natural monopoly status is obvious in the case of either mailing or delivery. In relation to mailing he notes that there exist several retail networks in competition, and that it seems that the recent development of delivery services has also pointed in the direction of the establishment of (partly or wholly) parallel delivery networks (see competing express service providers, the delivery models of newspaper delivery providers, alliances being formed, etc.).⁴⁴

Returning to the original definition of a natural monopoly I am confident in asserting on the basis of both theory and practical experience that the entire value chain of the postal sector is certainly *not a natural monopoly*.

According to Oxera (2007, 2), there is consensus among economists that although some segmenst of the postal sector can be characterized by significant economonies of scale, in general there are no natural market entry barriers to the market in the form of monopolistic bootlenecks. Thus the elements of the business modell of the incumbent can be duplicated. As the market structure is not developed in a greenfield manner, as the national posts are already in a dominant position in these markets, it may happen that while the market concerned is in

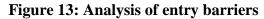
⁴² From the very beginning, government involvement in the USA was not motivated by market considerations but rather by political ones (e.g. the prevention of espionage, ensuring the free flow of information and supporting settlement in remote, areas with low population densities).

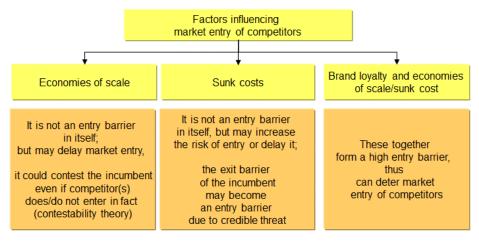
⁴³ According to Panzar, mailing and delivery are critical points of customer contact in the case of postal services akin to the local loop in telecommunications. Based on internal postal studies, the USPS came to the conclusion that the economies of size in deliveries are due to the fact that the cost of the time-consuming delivery activity is a function of the number of stops made at addresses, and that does not increase in proportion to the growth of letter volumes. On the other side, using the same capacity for picking up mail also has obvious economies of scope. It should be noted, however, that in the US, the mailman picks up mail to be sent from the mailboxes as well, and that practice is not common in Europe.
⁴⁴ I should note here that in the case of small towns and areas that are difficult to access, the latter tendency doesn't really come into play – especially if the *number of consignments/address* figures are low.

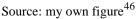
theory not a natural monopoly, competition still does not develop, which may be caused by entry barriers. So let's look at the entry barriers!

The theoretical literature is divided on the definition of an *entry barrier*, including the issue as to whether economies of scale could be considered entry barriers at all (for a comprehensive analysis of the definitions, see McAfee et al, 2004). Given an efficient capital market and adaptation costs, neither economies of scale, nor sunk costs will keep competitors away from the market, so they do not constitute entry barriers, but they may both delay entry, and, taken together with other, primary entry barriers (such as strong consumer loyalty to the incumbent brand resulting in a low propensity to switch⁴⁵) they may even prevent it. The significance of the question is indicated by a survey that the British authority conducted among corporate clients, which showed that reliability/trust (possibly reinforced by testimony - i.e. including reliance on the fact of a service already being provided to other, similar clients) outweigh the promised price advantage when considering the option to switch. We could say that trust is a qualifying criterion, and on the other hand its existence in the case of service providers already in the market may raise entry barriers. In addition, the new regulatory environment of the liberalised market may create entry barriers of a legal nature, of varying heights, itself (e.g. licensing regulations, USO-compensation rules, etc.). What we have been seeing since liberalisation is that in many countries (including Hungary), this has indeed happened. In some cases, experience indicates, a bureaucratic licensing procedure requiring significant investment of time and resources may be sufficient even without any real barriers to entry to deter potential new entrants, or to make them withdraw or postpone that decision.

⁴⁵ A 2005 market study performed in Hungary revealed relatively low brand loyalty and high price sensitivity among corporate clients (Minőségvizsgálat szerződéses ügyfélkörben – *Quality study among contracted customers*, 2005). The study performed by PostComm (2006) among corporate clients came to similar, though somewhat more favourable conclusions: 58% of the largest clients would consider switching (20% in part, 38% fully) if they could thereby reduce prices by 5%.







Bijl et al (2005)⁴⁷ argue that there exist no entry barriers in the postal sector that would delay or prevent the entry of competitors into the market:

- 1. sunk costs are negligible,
- 2. economies of scale are significant, but in themselves they do not represent an entry barrier,
- 3. there exist several potentially successful entry strategies other than copying the business model of the incumbents (such as focusing on special consumer segments, regions, quality or individual components of the value chain, forming alliances, etc.) – there are already practical examples of business models that are profitable on a very small scale today.

⁴⁶ Base on McAfee at al (2004), Carlton (2004) and Schmalensee (2004).

⁴⁷ The study was commissioned by DPWN and TNT, and came to the conclusion that very "light" regulation is sufficient in the liberalised market, because competition law provides sufficient guidelines. There is no need to introduce particular regulation of downstream access, for instance (indeed, the study concluded that such regulations would distort competition and hinder innovation). With low barriers to entry, the market superiority of the incumbent is not very large (it is easy for customers to switch), so regulatory intervention is not required there, either. This approach (by no means accidentally) is consistent with the IPC (2007) recommendation which is also in favour of "light" regulations (for their 10 assertions, see **Hiba! A hivatkozási forrás nem található.**).

Dranove and Marciano (2005) provide a summary of factors deterring entry. In my opinion, exploitation of the reputation advantage, limit pricing practices and the exploitation of production constraints are the most important factors deterring entry in the postal sector.

Entry barrier	Most effective if	Notes	Position of the USP (postal sector)
Sunk costs	they have already been incurred by the incumbent, but not by the new entrant.	Costs really need to be sunk. If the incumbent can sell its fixed assets, so can the new entrant. This may mean that a failure is not that expensive, which makes it more difficult to deter entrants.	Sunk costs are not high.
Production constraints	economies of scale and scope, access to critical inputs/sites, processes, patents or government subsidies.	They need to be asymmetrical. Technological innovation may eliminate this entry barrier. Not all patients are equally defensible, and costs may be too high.	There are some production constraints but there are also opportunities for innovation.
Reputation	the incumbent has long- standing relationships with customers and suppliers.	Reputation includes some difficult-to- measure factors such as quality and reliability. Entrants are not necessarily able to make correct judgments about those.	USPs have excellent reputations.
Switching costs	there are only a few entry barriers on the supply side.	Can imitation be prevented? Can customers really distinguish between the incumbent and the new entrant?	Switching costs are not high for customers, but they can be increased by integration in the value chain.
Access to sales channels	there are only a few channels, which are difficult to duplicate.	Profits need to be shared with the channel. May result in antitrust investigation.	Not relevant.
Limit pricing	Entrants are uncertain about demand and/or prices.	Continuous reduction of prices may be required, which may erode profit margins.	Relevant and there are some examples, too.
Predatory pricing	the company has the reputation that it plays hard or it is present in several markets.	The incumbent can afford to lose more than the new entrant. A "deep pocket" and a real threat to the new entrant is required. It may result in an antitrust investigation.	The incumbent can afford to lose a lot, but there are some entry strategies that make this unlikely.
Maintaining excess capacity	limit costs are low and flooding the market results in a reduction of prices.	The investment in capacities must be a sunk cost. Demand is not increasing.	The investment is partly sunk, but demand is not increasing.

 Table 13: Factors deterring market entry

Source: Dranove and Marciano (2005, 173)

The second often-heard "argument" for maintaining the government monopoly is the need to exploit *economies of scale and scope*⁴⁸, i.e. the claim that the cost advantages of having a single service provider can only be assured if private service providers are kept out of this market.

⁴⁸ A production or service process shows the signs of economies of scale in the output band in which the average cost (AC=TC/Q) decreases. In that case the marginal cost is less than the average cost (MC<AC). Economies of scope exist if the given venture can realise a saving if it increases the variability, the range of the products/services it offers ((TC(Q_x, Q_y)<TC (Q_x,0) + TC (0, Q_y)).

However, if applied to the entire postal sector value chain, that assertion is certainly false. (Sidak and Spulber, 1996, 40). On the other hand, there appears to be agreement in the literature that economies of scale are present in certain components of the postal sector value chain (in particular, delivery).⁴⁹ The economy of scale of delivery is primarily dependent on the number of addresses and the density of consignments, and not the distances between addresses (London Economics, 2003).

That argument leads to a justified question about the effect of economies of scale in the letter mail market and the size required in order to exploit the economies of scale. The econometric analysis of the NERA study (2004) lays the emphasis on the economies of scale resulting from increased density: according to their calculations, a 10% increase in traffic only increases costs by 6.5%. Although that does not appear to present an absolute barrier to entry, let's look at the scale that an appropriately efficient new entrant would have to achieve in order to compete successfully with the incumbent. The various models estimate the required market share between 1% and 50% (!) depending on the cost function of the entrant (this is driven by the entry model) and the efficiency of the incumbent (and, of course, the methodology used) (see Bijl at al, 2005). It seems that copying the business model of the incumbent is not a viable path, but a number of alternative strategies can already be successful with a market share of a few percent.⁵⁰ According to Sidak and Spulber (1996, 51), if the frequency of deliveries was market-driven, the economies of scale would be eliminated in deliveries as well.

⁴⁹ A summary of the empirical studies of the issue is provided by the 2002 study of London Economics. ⁵⁰ A few real-life examples (Bijl et al, 2005): in Holland, Sannd and Selektmail generate profits with a merkt share of 2.5%; in Germany, PIN-AG, focussing on Berlin only, became profitable in 4 years; in Sweden, CityMail is also successful with a market share of 7.5%.

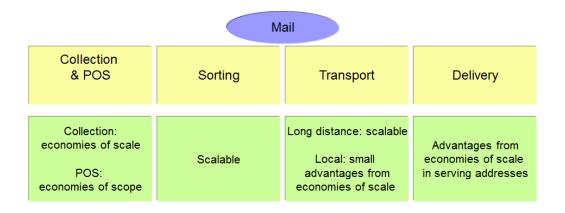


Figure 14: Letter value chain – economies of scale and scope

Source: my own figure

The third argument that is quoted frequently in support of maintaining the monopoly position of the post is *the requirement of maintaining uniform rates (as a fundamental component of the universal service)*. The supporters of the monopoly claim that this requirement, and the universal service obligation can only be maintained by implementing cross-financing between urban and rural customers. The liberalisation of the market is a threat to the viability of the universal service and uniform rates primarily because of *the possibility of cream-skimming*⁵¹ urban and large customers. However, the research conducted by Cohen (2003) in the American market refutes that argument with the following results:

- the cost of the universal service is surprisingly low relative to the total costs of the entire postal service provider;
- there is no significant cross-financing between urban and rural customers it is volumes and not the density or the urban nature of the population that is the decisive factor behind service profitability;

⁵¹ In other words, cream skimming = "inefficient entry into profitable areas" (Oxera, 2007), which places financial pressure on the incumbents that jeopardises the financing of the universal service.

- maintaining the monopoly is not required to maintain the universal service the new entrants only have a chance of taking small fractions of the market;
- the costs of the monopoly exceed its benefits.

According to Ginsburg (in Panzar, 1994), experiences of the development of already liberalised industries (e.g. telecommunications) or the pricing practices of those in competitive markets (e.g. express service providers) do not support the worry that liberalisation will lead directly to unavailability of service in towns that are difficult to access and/or insupportable price increases (see telecommunications, aviation, transportation). The London Economics (2003) also dispute whether liberalisation in itself would lead to the closing of post offices, although they do recognise that the process may accelerate as a result of decreasing revenue and the consequent reduction of coverage. It seems that the assessment of the viability of the universal service is highly dependent on the position that the analyst occupies.

It is also a question whether today (in the 21st century) the maintenance of *uniform tariffs*, whose introduction was originally politically motivated, is still a real requirement of consumers. (That question may soon be raised concerning the justification of the universal postal service as such.) Today, when the proportion of private mail has dropped so much that the weight of postal services (see Appendix 8) is insignificant within the commodities basket, is it all that important to maintain uniform tariffs? And, as in the case of postal services, it is the sender and not the addressee that pays, it is also a justified question whether the large letter mail customers could not be made to pay cost-based, differentiated tariffs that track differences in regional delivery costs?

According to Ginsburg (in Panzar, 1994, p. 12), the requirement of uniform tariffs was justified in the historical period when reaching remote areas was difficult, and people needed incentives to moving into those areas, but today, that objective no longer seems relevant.

At the same time, a number of European studies (PwC (2006), Oxera (2007), Copenhagen Economics (2010)) argue that if the market is liberalised, the universal service obligation may place burdens on the incumbent universal service providers (partly due to the risk of cream-skimming) that may have to be counterbalanced – after the reserved area is eliminated – by finding the appropriate financial mechanisms (prior to full liberalisation of the

market)⁵². On the other hand, there are also analyses that claim that liberalisation does not

threaten either the provision of the universal postal service at an appropriate level of quality or uniform tariffs (London Economics, 2003).

Although Sidak recognises the risk of cream-skimming, in his view it wouldn't be a tragedy of the national posts (in that case, USPS) was left with the services that are not interesting for the competitive companies aiming to maximise their profits. The result would be an exact definition of the part of the market in which government intervention is required due to market failure, and in that case – in theory – the only remaining question would be which method of subsidisation is the most effective means of using the taxpayer's money to ensure that services are still provided in those areas.⁵³

In relation to cream-skimming, Hansmann calls attention to the fact that it is only a problem if the pricing of services is incorrect (distorted). "The problem is one of adverse selection. As we stated, if you cannot accurately discriminate among different types of mail, then the customers will discriminate for you." (in Panzar, 1994, p. 17). Guislain (2004, pp. 36-37) agrees and believes that the threat of cream-skimming is real in case of incorrect pricing, but he also claims that cross-financing by a monopoly service provider is the worst, the least efficient model for supporting access to services (as it can be seen as a special tax that distorts the market significantly⁵⁴). In this case, large urban consumers pay for the extra costs of providing access to the service for small rural customers, which provides an incentive to the mailers contributing the majority of the turnover of letters (and hence financing the universal service) to find substitutes. In addition, it will also be that very segment that loses the innovative and efficiency gains that may be generated by competition.

 ⁵² Possible financing models (in Oxera, 2007): reserved services, compensation fund, state subsidies, "play-or-pay", access surcharge, competitive tenders (reverse auctions to get subsidies).
 ⁵³ In Panzar (1994), p. 16.

⁵⁴ IPC (2007) also come to the conclusion that maintaining the universal service obligation is not justifiable, because the market is able to meet requirements in a profitable fashion, and there are instruments available for the redistribution of economic goods (e.g. in the form of direct transfers) that are more efficient than the distortion of prices.

The possibility of liberating the *innovative strength* and experimental spirit of the private sector and ensuring entrepreneurial freedom are among the arguments advanced for liberalisation. It is beyond doubt that a number of innovations could be potentially exploited if the state were to move out of this market. But we don't need to go far to prove that there is scope for development there. We need only to remind ourselves that at present we cannot purchase higher quality and/or tailored services from the universal postal service providers because in most cases we are not granted an opportunity to do so⁵⁵. Relatively few authors discussed the issue (e.g. Sidak, 1996) of how limiting the freedom of choice reduces consumer surplus and welfare through the reduction of customer satisfaction. That is exactly why it is expedient to look at the sum total of the community and private costs of the postal service.

Based on those economic arguments and the experience of the period since the decision was made, the European Union probably made the correct decision when it liberalised the market. On the other hand, in the years since then, the experience in Europe has been that competition has not grown stronger as much as expected. In my opinion, this is partly attributable to the fact already mentioned in the introduction, namely that the entire market has become significantly less attractive. The emerging – actual or potential – threat of substitute products (digital competitors) has cast doubt on the question of whether it is worthwhile at all to enter this market. It should also be noted that while the incumbent universal service providers have proven creative in their market protection actions, both through influencing the legislative background (in the now liberalised market) and through developing and introducing new, innovative pricing and product strategies. So it is not surprising that the European Union is unhappy with the implementation of the Postal Services Directive, and has called upon member states to do their best to eliminate unreasonable bureaucratic obstacles to entry (network access and transformation of the licensing procedures) in the single European market (EP, 2016).

⁵⁵ For instance we do not have the option of ordering less frequent deliveries or deliveries at specific times.

4.2.2 The "non-letter" postal sector

There is a general consensus that the letter segment needs to be self-financing, cross-financing is clearly prohibited in one direction (towards the competitive segments) and it cannot be competitive in the long run in the other direction (using the profit of competitive services to cross-finance the universal service). The European Parliament noted that a number of universal service providers balanced out the major reduction in letter mail volumes by using market services to finance the universal service (EP, 2016), which distorts competition, and it is not going to be sustainable.

Baker and Dodgson (2002) criticise the other direction of cross-financing, wherein the existence of the reserved area offers (or in Europe, only used to offer) an opportunity to use the profit generated in that field for the cross-financing of other universal services and competitive market services. But that is unacceptable from the point of view of competition law.

In a liberalised market, diversification is a business decision, but in all cases wherein the postal service provider conducts some or all of its operations in a protected market or not (or not only) in line with market objective functions, the appearance of pricing practices that distort competition is all but unavoidable⁵⁶. It is no accident that almost all the incumbent posts have become targets of attacks of varying intensity due to their cross-financing practices that distort competition.⁵⁷ This is partly the result of the system of incentives, which may distort both the appropriate resource allocation mechanisms and the practices of dividing costs and setting prices.

⁵⁶ Some potential distorting effects: 1) It is in the interest of the monopoly provider to lower the prices of the services (based on short-term VC rather than long-term MC) that competitors are also offering, thereby scaring some of the (potential) competitors away and bankrupting others; 2) the monopoly provider is trying to get into service areas that the market could serve well; 3) capital expenditure decision may be made (based on short-term MC) in these areas that keep efficient service providers out of the market (and raise the requirement of cross-financing); 4) there may be strong incentive to build up excess capacities, thereby reducing short-term MC and applying a capital expenditure rate that is higher than the efficient level; 5) overpricing may also send distorted signals to the competitive market, which may result in providing false incentives to competitors to enter the market. See Tye (1983). ⁵⁷ Among those cases, the successful lawsuits against Deutsche Post on account of cross-financing generated the greatest amount of publicity.

In regulated markets, as long as the postal service provider enjoys any kind of protection, advantage or positive discrimination relative to players in the competitive market, we must devote particular attention to the prevention of pricing and cross-financing practices that distort competition, as they will almost certainly result in a loss for consumers and society at large.

Sidak and Spulber (1996, 57) take an even stronger position and claim that the existence of economies of scope between monopolistic and competitive services is a direct argument for eliminating the monopoly or prohibiting the provision of competitive market services by monopoly service providers, or by transfer to the free-market service providers (the issuing of licences for the universal postal service). After all, the scope of government involvement should be regulated by the scope of the market failure rather than the interests of the monopoly service provider.

4.2.3 Summary of the economic background

In summary, I believe that the postal sector may not be regarded as a traditional network industry in the economic sense (of course, physically it is one). The most important differentiating factors include the scope and characteristics of the universal service (primarily the presence of cross-financing due to the present requirement of uniform tariffs) and a cost structure that differs significantly from traditional network industries (a much larger role for labour). The postal service is not a public good that market entities are unable to provide (I see no market failure that would support considering it a public good). The barriers to entry into the market are low (sunk costs are negligible, and actual market entries also support this view), and while there are some economies of scale, in themselves they do not justify the social disadvantage resulting from maintaining the monopoly (Sidak and Spulber, 1996, 9). As we have seen, the concept of a vulnerable market supports the notion that even the possibility of market entry will reduce the probability of abusing market superiority towards customers.

If it is possible to enter the market, the probability and success of actual entries may be affected by a number of factors, such as the costs borne by the entrant relative to the incumbent, the possibility of cream-skimming, the expected reactions of the customers and the incumbent, etc. If there is a new entrant to the market, the threat of cream-skimming may only be averted if the incumbent is given greater freedom in pricing and/or more flexible USO requirements.⁵⁸

In that case, the starting advantage of the incumbent may ensure that criteria of supply (USO) and efficiency are asserted in a competitive market in which the incumbent service provider has a good chance of maintaining its dominant position in the medium term, while competitors can also enter certain segments of the market successfully, all of which will certainly result in an improvement of the position of customers. However, this positive scenario requires the incumbent to react correctly to the new market situation and the new incentives. Increasing the efficiency and competitiveness of the incumbent reduces the probability of successful entry strategies (particularly if coupled with a greater degree of freedom), i.e. the risk of losing its market.

If that does not happen, the final result can be an unprofitable incumbent service provider getting pushed out of a market in which financing the USO with an incumbent with a smaller market share and higher unit costs can truly become a problem. Especially if the EU pays particular attention to monitoring unjustified state subsidies in the postal sector.

⁵⁸ There are already examples of this in the German market, for customers posting more than 50 items.

5. The research plan

In the course of presenting my research plan I shall first define the subject of research, then I shall outline the methodological criteria and requirements taken into account during the planning of the research, and finally I shall present the main characteristics of the planned research.

5.1 The subject of research and the research paradigm

The subject of my research is an investigation of the strategic factors that influence the future of the incumbent universal service providers in the postal market over a period of 10 years, followed by the elaboration of strategic scenarios (a maximum of 3 or 4) on that basis for the Hungarian universal service provider. In order to be able to answer that question, I shall first examine which factors are worth considering on the basis of the experiences of the postal sector in the wider sense, which ones may be the most important (key) factors and how their interdependencies figure into the various scenarios. In addition, the research is explicitly focussed on the factors influencing the possible scenarios for national posts, for the national universal service providers. During the research, I will gradually employ an increasingly narrow focus so as to identify the scenarios that are relevant to the Hungarian universal service provider. After a general identification of the relevant drivers, I will determine the strategic group that the Hungarian universal service provider belongs to on the 'postal world map', and then I will apply the research results to the case of the Hungarian universal postal service provider, and attempt to formulate relevant strategic scenarios for it. During the research, it will be an exciting methodological question to investigate the possibilities of using strategic scenario planning to the case of the rather diversified Hungarian universal service provider.

The *purpose* of the research is the practical application of the theory of scenario planning to the postal sector, and a specific universal service provider, the Hungarian Post. This has practical relevance (a practical objective)f for both today's USPs and the (potential) competitors, as the research may provide a theoretical framework for their own strategic planning processes and may promote the early recognition of environmental warning signs and their significance.

The philosophy of science *paradigm*⁵⁹ that the researcher bases the research plan on is a crucial issue for the success of the research: in the present instance, I shall base my work on the *interpretative* (Hallebone and Priest, 2009, 45; Denzin and Lincoln, 2000, 19) and the *social constructivist* (Easterby et al, 2008, 58) paradigms. The paradigm is the net, the interpretative framework that contains the epistemological, ontological and methodological premises of the researcher (Denzin and Lincon, 2000, 19). The characteristics of the planned research from that perspective are summarised in Table 14. The scientific paradigm selected must match the character of the subject of research as well as its content, purpose and motivation. During research it is an important requirement that the subject of research, the research paradigm (i.e. the activity of defining the paradigm) and the process of planning and executing the research (i.e. the implementation of the paradigm) should be mutually consistent (Hallebone and Priest, 2009, 7).⁶⁰

Table 14: Ontology	, epistemology,	, methodology, method
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	Definition	The present research	
Ontology	Philosophical assumptions about the	Relativist (Easterby, 2008; Guba and Lincoln, 2000)	
	nature of reality	Constructionist (Bryman, 2004)	
Epistemology	General assumptions concerning the best	Constructionism (relativism) – Easterby (2008)	
	path of gaining knowledge about the	Interpretativism (Bryman, 2004)	
	nature of the world	Transactionalist/subjectivist (Lincoln and Guba, 2000)	
Methodology	The combination of techniques used for	Qualitative methodology	
	gaining knowledge about the specific		
	situation		
Methods	Individual techniques of gathering data,	Analysis of documents,	
	analysis, etc.	Semi-structured in-depth interviews	

Source: Easterby-Smith-Thorpe, Richard and Jackson, R. Paul: Management Research (2008) - first and second columns

According to my approach, the researcher herself plays a role in every component of gaining knowledge and research – I accept this as a necessity. In the words of Polányi: "as human beings we inevitably view the universe from a center in ourselves, and speak about it in a language

⁵⁹ The concept of paradigm was introduced by Kuhn (1962).

⁶⁰ In reality, perfect consistency is not always a simple matter, and indeed there are some specifically mixed-method investigations. Although Easterby, Smith et al (2008, 71) do recognise that using several perspectives or points of view may generate additional value, they advise caution, particularly when mixing more remote methods: there is a risk of arriving at contradictory results.

that evolved from the randomness of human interactions. Every rigorous effort to elininate our human point of view from our viewpoint, can lead only to absurdity." (Polányi, 1994, 19)

According to the interpretation of the environment offered by the *realist paradigm*, "the environment is singular, given, able to be detected, understood easily and it is set apart from the individual and the organisation... the *constructionist approach*, whereby reality is based on observing natural objective phenomena as well as internalizing such phenomena and experiences through social processes such as conversation, has gained importance in the strategy-research arena, because there is a growing recognition of the active role of a manager in managing strategy and the existence of multiple realities in percepcions of the environment" (Burt el al, 2006, 58). In the course of my research, I shall accept the latter interpretation of the environment and reality: I do not believe that I can reach generalizable scenarios based on an objective analysis of the environment in the course of my research (the very logic of scenarios is inconsistent with that positivist interpretation), but I don't aim to do so, either. "Scenario-based future research is based on the assumptions that the future is not foreseeable or at least not completely foreseeable and that it is dependent on the objectives of society and people" (Nováky, 2005, 95).

Table 15 summarises the main differences between the positivist and the constructionist traditions in the philosophy of science. While positivism tends to follow the logic of the natural sciences, seeks objective truth and investigates external reality, the fundamental concept of constructionism is that reality is a social construct defined by people.

	Positivism	Social constructionism	
The observer	needs to be independent	is a part of what she observes	
Human interest	irrelevant	the main driving force of science	
Explanations	must be cause and effect connections	the objective is a general understanding of the situation, increasing associated knowledge	
Research	proceeds by hypothesis and deduction	generates new ideas and theories from a rich collection of information	
Concepts	must be defined on order to be measurable	must include the points of view of the parties concerned	
Unit of analysis	must be reduced to the simplest concepts	includes the complexity of the "complete" situation	
Generalisation	statistical probability	theoretical abstraction	
What does sampling require	large populations selected randomly	small populations selected according to specific criteria	

Table 15: A comparison of positivism and social constructionism

Source: Easterby-Smith, Mark, Thorpe, Richard and Jackson, R. Paul: Management Research (2008, 59).

5.2 Research methodology

In the present chapter on research methodology I shall discuss the research methodology chosen in line with my paradigm of choice, the methodological issues that arise in relation to qualitative research and, finally, the methodological dilemmas that face research subjects that concern the future. The *research methodology* I have selected *is qualitative*.

Table 16: A comparison of quantitative and qualitative research

	Quantitative	Qualitative
The relationship between theory and research	Deductive, testing theories	Inductive, creating theories
Epistemological approach	Natural science models, primarily positivism	Interpretativism
Ontological approach	Objectivism	Constructionism

Source: Bryman, 2004, p. 20.

How can I ensure that the research is consistent with fundamental methodological requirements? The requirements of *reliability* and *validity* applies to all research. Compliance with those requirements has an essential effect on the quality of the research. In general outline, "validity refers to the extent to which an empirical measure adequately reflects the real meaning of the concept under consideration (...) reliability is a matter of whether a particular technique, applied repeatedly to the same object, yields the same result each time." (Babbie, 2001, p. 344) Those two criteria, along with the requirement of *generalizability* were primarily invented within the realist, positivist paradigm, and for quantitative research.

5.2.1 Research methodological issues associated with qualitative research

In the case of *qualitative research*, these requirements are not directly applicable. According to one approach, the above two criteria can (and should) be adapted to qualitative research, and, accordingly, in the interest of external and internal reliability, researchers should endeavour to allow the research to be tracked in an authentic manner (e.g. by documenting the research process in detail), while in the interest of internal validity, they should ensure maximum congruence between observation and concepts (Bryman, 2004, 273). According to another approach (Lincoln and Guba, 2000), the adaptation of criteria applicable to qualitative research is logically invalid, instead, different measures should be applied to qualitative research: they claim that the two most important criteria are *trustworthiness* and *authenticity*. Trustworthiness is fleshed out by the quartet of credibility, transferability, dependability and confirmability. Methodologically, these can be ensured by good research practices, triangulation, validation by participants and so-called thick (that is to say very deep and detailed) documentation along with the auditing of the process and the results as required.

5.2.2 The management of the "future research" issue from the methodological perspective

Reliability raises specific questions in relation to research about the future (in addition to the methodological issues associated with qualitative research in general). What does reliability mean in relation to research about the future, about events that have not happened yet? According to Nováky (2005), a prediction is reliable (and reliability is a highly complex concept to be interpreted dynamically) if "it has internal content of a level of quality that facilitates the optimal preparation of decisions, and if its inferences and effects, within the given system of environmental conditions, it promotes progress or averts threats best, and if its probability of coming true is high." (Nováky, 2005, 83).

The methodological and process planning of the research process is particularly significant as a means of filtering potential distortions and the effect of the researcher's own point of view, prejudices and views to the greatest possible extent. In that regard, the sources

used during the research are exceptionally important along with the precise and thorough documentation of the phases of the research.

The authors working on scenario planning propose the integrated (complementary) use of several methods in order to maintain *validity*, while also laying emphasis on the importance of methodological rigor (Godet, 2006). The choice of appropriate data collection and analysis methods is not evident. The selection of the correct methodological toolkit is influenced by a number of factors: in addition to the system of objectives, among others, the nature of the available data and information, the character of the question to be investigated and the nature and quantity of the available resources. Although there is no perfect methodological recipe, some principles are worth complying with (Armstrong, 2001):

- Structured methods should be preferred as far as possible
- Quantitative methods should be used if a sufficient wealth of data is available
- If we anticipate significant changes, methods for discovering causal links should be preferred (rather than so-called naive methods such as trend extrapolation)
- The simplest method that is sufficient for the objective should be selected unless a more complex method has obvious advantages
- The method should be selected in line with the situation and the question, and if there is no "best" method, we should combine several

Following the latter "advice" and in order to better comply with the requirements on qualitative research concerning validity (credibility), the integration of various methods is advisable both in the data collection and the data analysis phases. This constitutes the implementation of *triangulation*, whose essence is that the researcher uses several methods or data sources while researching a social phenomenon. Under the broadest interpretation, this may involve several observers, several theoretical perspectives, several data sources, several methods, but the focus is on using several methods of observation and data sources (Bryman, 2004, 275). According to Lincoln and Guba (2000), although paradigms are essentially incommensurable (hence they should not be mixed), the mixing of various research strategies and methodologies can be very useful.

How are we to interpret the third requirement, *generalizability* (the characteristic of a research result that allows us to claim that the results are applicable to a wider range than the actually observed and analysed sample, that they have a wider message or, in the case of

qualitative research, they can be used as feedback to inform the theory)? "Theory consists of supposed plausible connections between concepts and group of concepts" (Babbie, 2001, 413). In the present instance, the theoretical and conceptual result will take shape in an evolutionary manner during the research process, as the objective is not the testing of any predetermined hypotheses or correlations. Qualitative research is often characterised by an *emerging research strategy*, in which, in the course of the process, theory is developed through the interactions and repeated feedback between the researcher and the participants (almost as a dialogue). My research will be characterised by a combination of methods (documentary analysis, analysis of statistical data and the semi-structured interviews), and I hope that during the research, an interpretation of the field of drivers that represents added value (i.e. is generalizable in certain respects, but such generalizability cannot be set as an objective during the determination of organisation-level strategic responses, due to the differences between the organisations concerned) for universal postal service providers will be revealed step by step.

5.3 Research model

During my research I shall limit the analysis to the developed posts first, and then I will focus on the Hungarian universal postal service provider. My research stance is essentially qualitative (with quantitative methods only applied as supplements), and I shall use participative techniques as an external researcher to investigate the question: *What driving forces and factors of critical uncertainty can be identified that impact the futures of national, designated universal postal service providers? And what strategic scenarios are possible for the Hungarian Post (as incumbent universal service provider) on their basis?*

In addition to the requirement of synthesising research results (the objective of creating theory) the research also has practical significance by possibly providing information to all the stakeholders of the European postal sector that may contribute to a better understanding the forces acting on the postal sector and the interrelationships between those forces, a better recognition of the events and signals that may occur in the future and to improving the quality of their own, organisation-specific strategy-making processes.

My investigative research has three objectives:

- 1. I wish to investigate the factors, and their interrelationships (a plausible system of relationships) between the macro and industry-level factors that will influence the future of the European postal sector in the next 10 years the most.
- 2. I shall examine the main strategic groups that can be established in the postal sector based on data from the past.
- 3. I wish to formulate the 3–4 scenarios (internally consistent, plausible storylines) that are possible in postal sector (over a period of 10 years, and those that are relevant to the Hungarian universal service provider).

During the preparation of the research plan I shall make the following *theoretical assumptions:*

- Several uncontrollable but predictable *exogenous variables (trends)* can be identified that are relevant to the future of the postal sector.
- Several important and common, uncontrollable and *uncertain exogenous variables* (*drivers*) can be identified. Based on various plausible combinations of the possible values of those *common, uncertain* variables (critical factors of uncertainty), several scenarios are possible in the postal sector.
- Several (exogenous and endogenous) *differentiating* variables relevant to the future of national posts can be identified. The European national posts can be classified into several groups based on combinations of those *differentiating* factors.
- There are fundamental variations between members of individual groups, therefore the macro-scenarios may only serve as a starting point, as an intellectual framework for the organisation-level strategy-making.

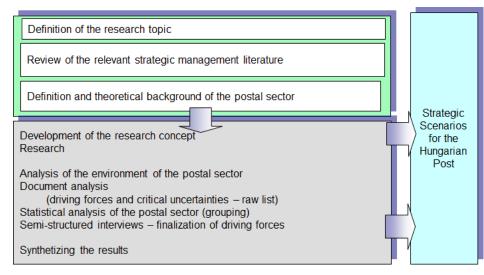
Due to the objective of my research and its *investigative character* aimed at discovering connections, I do not believe it is necessary to formulate concrete hypotheses, as *my objective is not to confirm or falsify predetermined hypotheses but to discover deeper connections in the course of the research*. However, while I was reviewing secondary information, I have already formulated and expect to formulate certain conjectures which are required in order to be able to compile the interview outlines for the research and to be able to come up with relevant questions during the interviews.

Some of these preliminary conjectures, or propositions, are as follows:

- 1) Preliminary conjectures associated with macro-environmental factors:
 - a) The most powerful external, common, uncertain macro-environmental factor in the letter mail market is represented by the changes in *the regulatory environment of the European Union*.
 - b) The most powerful external, differentiating, uncertain macro-environmental factor in the letter mail market is represented by the changes in *the national level regulatory environments*.
 - c) *Electronic substitution* is one of the most important external, uncertain macroenvironmental factors.
 - d) On the demand side, the letter mail market is primarily influenced by *changing customer requirements* in the B2C relation.
 - e) The future of the CEP and logistics market will be determined by fundamental issues concerning globalisation, in particular the development of electronic commerce.
- 2) A relationship will be possible to establish between the *ownership structures* and the economic success of the national posts. The ownership structure of national posts will influence the *target function of management*, but in an organisation-specific manner.
- Preliminary conjectures associated with the possible strategies of the incumbent posts (particularly the Hungarian universal service provider):
 - a) The initial (present) condition and competitiveness of the posts will influence the success and the expedient strategies of the individual European national posts in the various industry scenarios (path dependency). The survival/success of posts in the letter mail market will be primarily a function of whether they are able to deter potential entrants from their markets and to retain their customers. This will be primarily decided by price levels, quality and brand loyalty (and the national liberalisation regulations).
 - b) It is a fundamental condition for the success of the diversification strategy that the national post should be competitive in its core activity (the postal sector in the narrow sense), and in addition, success in the individual markets will be decided in individual competitions (and not primarily on the basis of synergies).
 - c) The success of the international expansion strategy will depend to a significant degree on capitalisation and timing.

These conjectures can be useful for planning the data collection phase and during the attempt to generate a new theory after the interpretation of the data. They shall also assist the researcher (that is to say, myself) in consciously reducing the distortions resulting from my assumptions through reflecting on those conjectures⁶¹.





The period covered by the research is 10 years, because it is possible to interpret the expected changes of the regulatory environment (including the effects of liberalisation) as well as other environmental and competitive factors and the changes of customer requirements over that period.

The scope of the research is the postal market, in particular the group of universal postal service providers.

The planned methodology of the qualitative research is a combination of three components:

⁶¹ Reflexivity, self-reflection is the process whereby the researcher reflects on herself consciously as a researcher (as a "human resource") in a critical manner. During that process, the researcher has a conscious experience of and manages her own subjectivity within the entire research process (Lincoln and Guba, 2000).

- document analysis (analysis of secondary information),
- analysis of statistical data (identification of strategic groups),
- qualitative, in-depth interviews conducted in Hungary.

The planned methodology of the qualitative research is as follows:

- Data collection phase, during which the research shall gain important input from and use as a starting point (document analysis (analysis of secondary information)):
 - a review of the theoretical literature and the documents available to the public along with a summary analysis of the present situation of national posts in Europe, concentrating primarily on uncertainty factors and factors that influence the structure of the industry,
 - the quantitative analysis of the available statistical data (based on data up to the end of the year 2014, with the population subject to statistical analysis being the developed posts). Quantitative analysis, as a methodology, shall only play a supplementary role and will not affect the basic orientation of the research.
- Qualitative, investigative research with open-ended interviews (aiming at heterogeneity in the choice of interview subjects); interpretation of data collected from several sources, establishment of the conceptual framework
- Analysis of the information, scenario creation

The logical steps of *scenario planning:*

- 1. Identification of the most important strategic issues in the postal sector.
- 2. What strategic clusters can be identified among the incumbent posts?
- 3. Identification of the factors that are important from the perspective of the future.
 - i) What is highly likely not to change, to remain constant?⁶²

⁶² It was Naisbitt (2006, 3-9) who drew my attention to this aspect. Although the dissertation primarily focuses on change, I have spoken less about that, but determining the stable points that are highly likely not to change over the next 10 years will also be an important question.

- ii) What are the most important (uncertain and critical) driving forces and breaking points?
- iii) Of those factors, which are predictable with high probability, which are uncertain (and of those, which are critical and which are not) from the perspective of the sector's future?
- 4. Based on a determination of the impact and the system of interrelationships of critical and uncertain factors, what are the possible outcomes to prepare for?
- 5. What (internally consistent and probable) strategic scenarios are possible in the postal sector?
- 6. What does that imply for the Hungarian universal service provider?

In line with the foregoing, I have summarised the planned steps of the research and their sequence in the figure below.

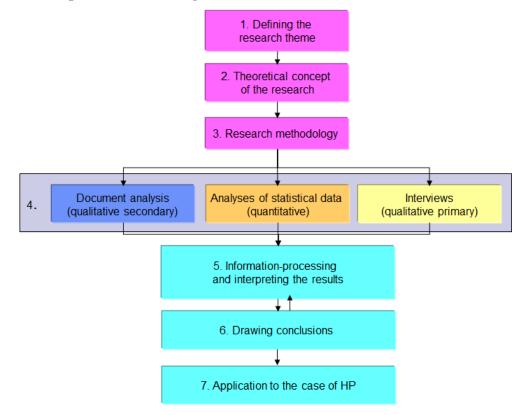


Figure 16: The process and the logical structure of the research

Document analysis will primarily involve the analysis of academic papers and public documents about the postal sector as secondary information. The strategic and analytical documents published by the national posts shed light on the official positions of the incumbent posts. A further range of publicly available studies, largely produced by consultancy firms (commissioned, for instance, by the European Union or IPC) reflect the views of experts who (may) exert significant – and in many cases formal – influence over the development of the political environment and the strategic decisions of incumbent posts and potential entrants.

The objective of *the analysis of the available statistical data* (primary quantitative research) is primarily a descriptive characterisation of the postal sector, the discovery of potential features to be used for classification, followed by the critical application of the results during the identification of drivers and the formation of groups (clusters). In relation to the statistical analysis, I shall primarily use the IPC database, as that database is suitably reliable and also sufficient for my purposes. At the same time, I must note that the reliability of the primary data cannot be verified in every case and the available data is not even comprehensive in the IPC database. I shall use the following methods from the toolkit of statistics to analyse available data from the past:

- descriptive and investigative data analysis,
- cross tabulation analysis,
- regression calculation,
- multi-variable methods of structural analysis (cluster analysis).

The expected output of the quantitative research shall be a grouping of the items in the population (the developed posts) and the determination of the factors that differentiate between the groups.

In the interest of enriching and validating the data collection phase further, I shall finalise the interview outline based on the experiences of a pilot interview, followed by *10-15 in-depth, qualitative (semi-structured, non-standardised) interviews* with experts with partly an internal and partly an external view of the factors influencing the postal sector.

Among others Kvale (1996) – the canonical source on the subject – and King and Horrocks (2010) discuss in detail the requirements applicable to interviews as a qualitative research methodology and the preparation, process and obstacles of interview-based research. Kvale provides metaphorical descriptions of two approaches to interviews. In the *miner* metaphor,

knowledge is mentally buried and the person conducting the interview has the main task of finding the valuable ore. Some miners look for objective, quantifiable facts, while others look for morsels of essential meaning. But under both approaches, knowledge is inside the interview subject, waiting for the miner to discover it, and bring it to the surface in a purified form. In the other, the *traveller* metaphor, Kvale presents the interviewer as a traveller coming home and telling a story about her travels. During her journey, the traveller meets people, strikes up conversations with them and she is interested in their stories of their experiential realities, and the experiences also affect the traveller. The first metaphor corresponds to the modern conception of science, while the second one is consistent with the post-modern interpretation or reality.⁶³ *As for my methodological approach, I propose to adhere to the miner metaphor.* In the present case, during the qualitative research, special attention shall have to be devoted to reducing the effect of the cognitive distortions of the participants, which will appear as a matter of course.

The seven stages of an interview investigation (Kvale, 1996, p. 88):

- 1. Thematising (formulation of the purpose of the interview, the WHY and WHAT questions should be clarified as the first step).
- 2. Designing (involving a reflective approach to the knowledge sought and the moral aspects of the research).
- 3. Interviewing: based on an interview guide, with a reflexive approach.
- 4. Transcribing: Prepare the interview material for analysis.
- 5. Analysing: Select a method of analysis suitable for the purpose of the research, perform the analysis.
- 6. Verifying: Ascertain the generalizability, reliability, and validity of the interview findings.

⁶³ Based on Kvale (1996, 3-5).

7. Reporting: Communicate the findings of the study in a form that lives up to scientific criteria.

During preparation, in the design phase, all seven stages of the investigation need to be taken into consideration in order to minimize (methodological or content) errors.

In the present case it is important to determine who the participants of the research should be: I wish to complement my own requests using a snowball technique. I shall devote particular attention to ensuring independence as well as heterogeneity, so I have excluded the potential experts that are in any sort of dependency relationship with me from the interviews.

The *content analysis of the interviews* is the final phase of the research, when the feedback to the theory (the system of connections) will take place along with the creation of intuitive scenarios. The results of a scenario planning project similar to the one I am planning is presented by Ringland (2006, 380-384) for the telecommunications sector: in that case, scenario planning resulted in four scenarios organised in relation to three axes of uncertainty (competition, convergence, channel). Godet (2006, 164-170) describes an aluminium industry scenario planning exercise, in which, after the internal (aluminium industry) and the external variables are identified, a detailed structural analysis was performed, resulting in the identification of the direct, indirect and potentially most powerful variables as well as dependent variables, followed by formulation of the scenarios themselves on their basis. Goodwin and Wright (2001) present a possible methodology for evaluating strategic alternatives using the example of scenarios in the letter mail market. The classification of the planned scenario-planning according to various typologies is summarised in the following list:

- 1) According to macro-features:
 - a) Investigative (while a specific USP could use the results for normative purposes)
 - b) A hybrid approach with intuitive and analytical components
 - c) Complex (investigating all the factors influencing the industry)
- 2) According to micro-features:
 - a) Product (not only the process but the quality and content of the end result is also important)
 - b) Descriptive

- c) Area-based (Europe) and institution-based (industry)
- d) Qualitative (with some quantitative elements this makes the results more robust)
- e) Participatory (collecting ideas from several participants)
- f) Inclusive (involving various specialists)
- g) Snapshot (with some chain components)
- h) Based on heterogeneous factors
- i) Integrated (interaction between the factors is significant)

The process of scenario planning is based on perceptions. During the selection of the relevant data and information and the analysis of statistical data I shall reach conclusions while applying my own unique researcher's perspective. During research, the perceptions of the researchers and of the participants influence the results. Therefore we shall work with the participants of the process to create "our postal scenarios", which will necessarily contain some unique, personal and subjective components. At the same time, it is the responsibility of the researcher during such a process to use methodological rigor and the detailed and frequent documentation of the entire research process, best practices, triangulation and the provision of feedback to the participants in order to increase the validity of the research. In that way, when a theoretical or practical specialist reads the results of the research, they will be better able to assess which parts, partial results of the research they find authentic.

6. The results of the research

In the first part, I shall attempt to explore the macro-environmental factors based on the logic of PESTEL analysis. Subsequently, I shall analyse the postal sector using Porter's model of industry analysis. The result of that work shall be a preliminary list of the factors that will influence the future of the postal sector. Using a multi-variable statistical analysis of the data of developed posts, I will attempt to group the players in the heterogeneous postal market into clusters, so as to be able to form more homogeneous subgroups for which the same, or similar environmental factors are relevant. Then, approaching the Hungarian Post Office, I will describe the past and the present of the Hungarian Post Office briefly, as during the interviews, the focus was on the national market and the Hungarian USP. Subsequently, I shall present the

results of the qualitative research, and by that point, I will be aiming to finalise the scenariodriving factors that are relevant to the Hungarian Post Office. Finally, I will synthesise the results and apply them to the case of the Hungarian universal service provider.

6.1 Environmental analysis – challenges in the postal sector

Based on my review of the literature, I grouped the factors and challenges that may have a decisive impact on the future of incumbent posts: changes of the regulatory environment (primarily the impact of liberalization and the new regulatory issues concerning the letter mail market that are placed on the agenda in a liberalized market) and changes in the regulatory system; changes in the economic environment and globalisation, the impacts of technological development (primarily the impact of e-substitution), the social environment and changes in customer requirements.

I shall review changes in the environment and factors of uncertainty using the logic of traditional PESTEL analysis:

- 1. changes of the political and legal environment⁶⁴,
- 2. changes of the economic environment,
- 3. changes of the technological environment,
- 4. changes of the social environment,
- 5. natural environment.

The reason is that while its limits are documented, there is a general consensus to the effect that *PEST method (and its derivatives and developments) is an excellent starting point for generating ideas as the first step of scenario planning* (Burt et al, 2006, Walsh, 2005, MacKay and McKiernan, 2006). PEST analysis provides a comprehensible framework for identifying external drivers, while its results can assist with mapping links, correspondences and chronological dependencies between factors during scenario planning.

⁶⁴ I shall analyse these two issues (legal and political) together due to the special position of the industry (politics, i.e. the government, is also the source of the most important legislation).

6.1.1 Changes of the political and legal environment of the postal sector

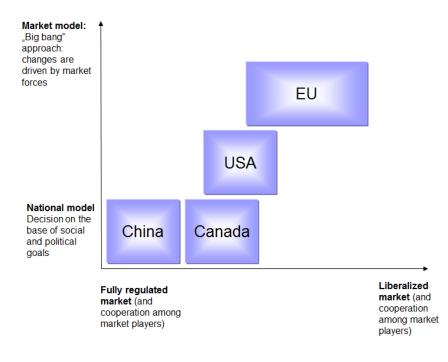
One of the most important external factors that has influenced and still influences the future of incumbent USPs – and primarily the letter mail segment – was the multi-stage modification of the European and national regulatory environment. The essence of the changes introduced by the relevant European Postal Services Directive (Directive 9767/EC, as amended by Directive 2002/39/EC) was that, while it maintained the obligation to provide the universal service, the Directive prescribed a gradual narrowing of the range of monopoly services. Although the latter, i.e. the gradual liberalization of the market, took place much slower than originally planned, and at various paces country to country, the trend was still clear, and the market has been liberalized⁶⁵. Today, an evaluation of the implementation of the directive that contains liberalization is on the agenda (see EP (2016)). While understanding of the difficulties of universal service providers, the EU is overall dissatisfied with the implementation of the directive and the results achieved, as competition is still limited, and in most national markets, the incumbent service providers retained their dominant roles in the letter mail segment. According to the literature and the data available it is very clear that the changes of the regulation of the sector that have already taken place (gradual, then full liberalization, or indeed the very threat of liberalization (!))have clearly improved the efficiency of the national posts (for an analysis of the issue supported by case studies, see London Economics, 2003). One traditional indicator of productivity, the number of letters per employee, has been increasing steadily since the beginning of the 90's, and sales revenue per employee and full-factor productivity are also on the rise. On the other hand, the number of people employed in the sector has been declining, particularly in recent years (IPC, 2010), and the reduction continued after 2010, too. From 2012 to 2013, the number of people employed in the sector in the 28 member

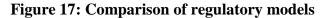
⁶⁵ Let me refer back to the question of whether the national USPs were able to influence the changes in their regulatory environments. The experiences of the recent period make it clear that the national post offices/national authorities do influence the changes in the regulatory environment with some intensity – and in their own interest. It was largely due to that fact that the original target date for full opening of the market was delayed several times, in several stages.

states of the EU decreased by 4.4% (EP 2016, p. 14). In the next chapter, I shall describe the current status of European and Hungarian regulations briefly.

6.1.1.1 International and national regulations

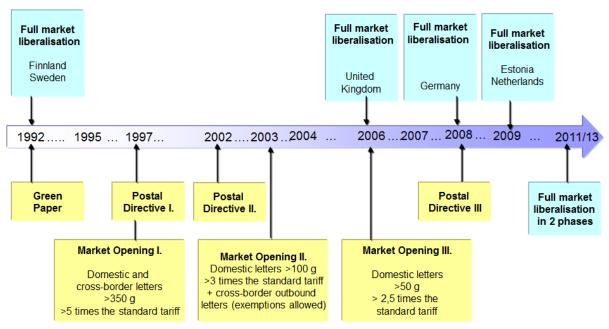
The European postal sector has been affected fundamentally by the changes that have taken place and those that are planned in the regulatory environment of the European postal sector. I do not intend to analyse regulatory practices world-wide, but it is important to state that the European regulatory environment is more liberal and market-friendly than the US or the Canadian ones, not to mention the posts of developing countries. At one end of the spectrum, there is the Chinese Post Office, which is a state-held monopoly regulated and operated as a national postal service, while at the other end, we find the European Posts, particularly those in the more market-oriented countries (the UK, the Netherlands) where in the first round of liberalisation, governments exposed the incumbent service providers to market forces quite early.





Source: To (2006), p. 8

The initiative to liberalise the European postal sector began with the publication of a Green Paper in 1991. The consequence, the Postal Directive adopted in July 1995 designated common directions for the development of the postal sector and favoured gradual opening of the market in several phases. The same principles also appeared in Directive 97/67/EC and its amendment, Directive 2002/39/EC. The main stages of liberalization are shown in Figure 18, below.





Source: WIK (2009), p. 2

The originally planned deadline for liberalisation, 2009, has lapsed, but several countries have already opened their markets completely (Great Britain⁶⁶, Sweden). The European Union's Transport, Telecommunications and Energy Council published its position on the issue of a third Postal Directive on 1 October 2007. The plenary session of the European Parliament (EP)

⁶⁶ In Great Britain, the market was fully liberalised in a number of steps. Mass mailings were liberalised in 2003, followed by Royal Mail providing downstream access from May 2004, while in 2006, the entire market was opened. In 2007, competitors held 1.5% of the total market (Postcomm, 2007).

voted about the Ferber Report on the Postal Directive before that, on 11 July 2007. At its next regular session, the Council of Ministers supported the two-stage opening of the market approved by the EP, namely 31 December 2010 as the primary deadline, and the postponement of the implementation of the directive in the case of the new member states (except Bulgaria, Estonia and Slovenia) and Greece and Luxembourg by a maximum of two years. The Council added more detail to the system of application of the reciprocity clause to the effect that the clause may be applied between 1 January 2011 and 31 December 2012 during the licensing of foreign postal service providers in member states whose markets are already liberalised which still enjoy the advantages of a monopoly in their own national markets during that two-year period. After political decisions by the governments of member states, the Council of the European Union finalised the so-called Council Common Position, which was then forwarded to the European Parliament, and the EP made a decision in favour of two-stage liberalisation in 2008. After the United Kingdom, 10 countries (Austria, Belgium, Bulgaria, Denmark, France, Ireland, Italy, Portugal, Slovenia and Spain) opened their postal markets (as of January 2011, 4 further countries had not yet informed the European Union about the adoption of postal acts regulating the issue). As a result, 95% of the EU market in terms of letter volumes is not liberalised. The remaining 11 countries (including Hungary) are required to liberalise their postal markets in two years (see Figure 19). 67

⁶⁷ Based on International Newsletter, 5 October 2007 and 10 January 2011.

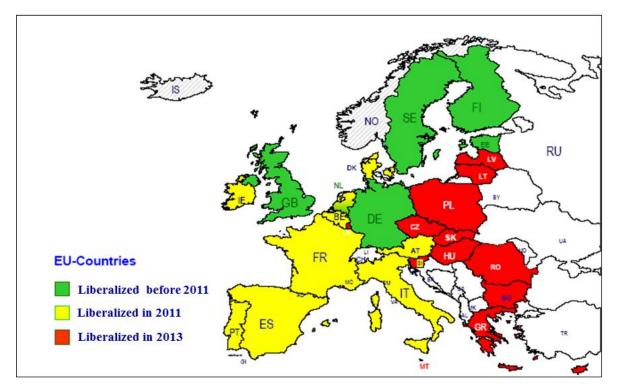


Figure 19: Multi-phase liberalisation in Europe

Source: WIK (2009, 20)

As the last component of the issue of regulations, I must note the theme on which there is a complete consensus among economists at the level of theory: liberalisation must be performed with a level playing field. Identical rates of VAT⁶⁸, identical labour law conditions and the subject of the next section, the prohibition of cross-financing and effective enforcement all fall under this heading. Yet, despite the consensus in economics, no political consensus has been reached on these questions.

⁶⁸ The essential feature here is that in most European countries the services under the universal service obligation are not subject to VAT, while the services of competitors are. That is certainly not a "level playing field" solution.

In the European regulatory arena (but also in the American region) the *redefinition of universal services* may have to be placed on the agenda in the future. The trend is clearly towards the narrowing of the range of the USO, so as to ensure that the universal service is consistent with changing customer needs while also meeting new technological, economic and social challenges (EP 2016, p. 6).

In the European regulatory area, the regulation of cross-border parcel deliveries was placed on the agenda as a new issue. The reason was that while e-commerce is growing, the growth is uneven (60% of the volume is generated by the UK, Germany and France). Although 4 billion parcels are sent in the EU, that number could be much higher if high delivery costs were not impeding cross-border trade. What's more, there is tremendous and (as regards costs) unjustified variation in the pricing of international parcels. Therefore, in the document entitled "A Digital Single Market Strategy for Europe", the EU has proposed to *regulate the cross-border traffic of parcels* so as to improve pricing transparency and the freedom of choice of customers (particularly small and medium enterprises) significantly, and to achieve a reduced price level caused by more intense competition (EC, 2016). That initiative has been billed as the postal equivalent to the regulation of roaming in telecommunications, and it is expected that it may generate increased volumes (through providing an incentive to e-commerce) accompanied by a reduction of profits for the service providers.

6.1.1.2 The Hungarian situation: national regulations

Act no. CI of 2003 on the post, which came into effect on 1 January 2004 (for excerpts, see Appendix 5) narrowed the reserved range of services in two steps. As of 1 January 2004, services associated with domestic and international letters with a maximum weight of 100 grams and addressed advertising material (provided that the charge payable for the service is less than three times the charge payable for the first weight class of the fastest service category of the universal service) remain in the range of reserved postal services. As of 1 January 2006, the Post Act reduced the range of reserved postal services further (maximum weight: 50 grams, and up to two and a half times the charge payable for the first weight class of the fastest service category of the universal service). Act no. CI of 2003 on the post defines **the range of universal postal services** as follows: postal services associated with domestic and international letter mail, addressed advertising material and printed matter not exceeding 2 kilograms; postal

services associated with domestic and international parcel mail not exceeding 20 kilograms; postal services associated with domestic and international consignments containing writing for the blind, not exceeding 7 kilograms.

The universal postal service provider must provide the entire range of services over the entire territory of the country. A government decree specifies the minimum number of inhabitants for towns in which the universal service provider must establish a fixed service point and those where mobile service points may be used (the limit for the latter is towns with under 600 inhabitants). In addition, collection and delivery of postal consignments at least once on each working day is also compulsory. Charges must be based on the costs of the service, tariffs must be clear and non-discriminating and affordable for users, the charges may not include surcharges resulting from the market situation.

In Hungary, the new Postal Services Act, which regulates a liberalized market, has been in effect since 1 January 2013, and it contains provisions allowing new players to enter the market of letter mail under 50 grams (e.g. utility bills), regulating the conditions and process of such entry. The designated universal postal service provider, the Hungarian Post Office, has only retained its monopoly over registered mail containing official documents. As the universal postal service plays an important role supporting social and territorial cohesion, Act no. XLIX of 2012 on postal services designates Magyar Posta Zrt. to perform the state's task of maintaining a universal postal service **until 31 December 2020**. Until the middle of 2016, the Hungarian National Media and Infocommunications Authority has only issued a single licence for postal services that may be substituted for the universal postal service. The authority registered City Mail Hungary Kft. on 13 December 2013, but as of the time of writing (the end of 2016), this has not resulted in a significant loss of volume for the Hungarian Post Office. In addition, the act also created an opportunity for financing the extra costs of the universal service (new market entrants are required to make contributions to a compensation fund).

In the interest of rationalising the post office network and ensuring its profitable operation, the 2016 amendment of the Postal Services Act (Article $27/A^{69}$) permitted restructuring of the postal networks, so that in towns with fewer than 10,000 inhabitants, financial institutions are now also permitted to provide postal services. As the only financial institutions with a physical presence in smaller towns are the savings cooperatives, the political will behind the change may have been related to the achievement of potential synergies between the postal and the savings cooperative networks.

6.1.1.3 Changes of the control system

The control systems of the European posts have undergone significant changes over the last 15 years. 20 years ago, the national posts (which, at the time, usually also conducted telecommunications and broadcasting activities) were usually government agencies. The possible legal structures, which also depict the characteristic path of development from left to right, are shown in the table below.

Public administration	Statutory corporation (special status)	Public company	Private company
The post is a department, entity or agency of government	The post is a corporation established by law, subject to the laws governing public administration	The post operates subject to the Companies Act, usually as a share corporation	The post operates as a company, it is fully or partially privatised and may be quoted on the stock exchange
Public administration law		Civil law	
Publicly held			Privately held
e.g. Poland, previously	e.g. USA	e.g. Hungary, Poland	e.g. Germany, the Netherlands

Table 17: Possible legal structures for the national public postal service provider

Source: Guslain, Pierre (ed.) (2004) p. 7, updated

⁶⁹ According to Article 27/A: "In the interest of providing services in towns where the population, based on registered residential addresses, does not exceed ten thousand people, the universal postal service provider may conclude a contract with a financial institution, under which the financial institution provides the postal services specified in Article 5 and the supplementary P.O. box rental service, postal article of value sales and services associated with the securities sold by the universal postal service provider only, and the sale of duty stamps." (Act no. CLIX of 2012 on postal services)

Over the last 20 years, the ownership structure of national posts has changed a great deal. The greatest majority of developed postal service providers is still state-held, but they have been transformed into share corporations almost everywhere, and the management of the post has increasing autonomy, while in many countries, private investors are also granted a role (see Appendix 3:). According to data collected by IPC (2014, p. 24) on 45 post offices, at the end of 2013, only four universal postal service providers operated as government departments (Cyprus, Hong Kong, India and the USA). In addition, 9 post offices were partially or fully privately owned (the Greek Post Office is not traded, but the Austrian, Belgian, UK, Singapore, German, Portuguese, Malaysian and Dutch post offices are also traded on the stock exchange), while the remainder operated as state-held corporations or share corporations with 100% public ownership.

The objective functions defined by the state for the universal service providers (USP) may vary. The issue has several dimensions. According to one approach, the two fundamental questions concern the range of services to be provided and whether the USP is fundamentally a business or a public service.

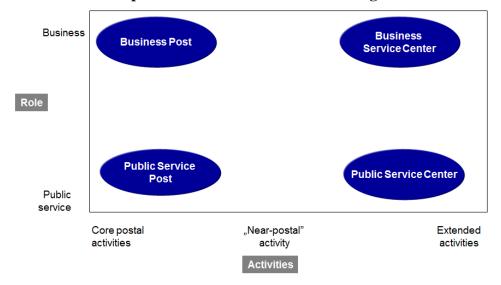


Figure 20: Positions in the public service/business and the range of services dimensions

Source: my own figure

According to the BCG (2006), national posts need to define their positions along three objective functions that are often irreconcilable.

- 1. Strict regulations concerning the universal service (deliveries, frequency, reliability, density of network, traditional financing mechanisms)
- 2. Strict social objectives (maintenance of salary levels, maintenance of employment)
- 3. Value generation objectives (overachieving competitors/the stock market, in-house financing of pensions, preparation for the stock exchange, etc.)

There are and will be significant differences between the national posts as to whether they wish to meet all three of those requirements (examples today include the Austrian, the Danish and the Spanish posts), or if they decide not to meet one of those objectives. The Dutch and the German post have focussed on objectives 2 and 3; the French and the Finnish post aim at the first two; at the Norwegian post, the social objective does not seem to be important.

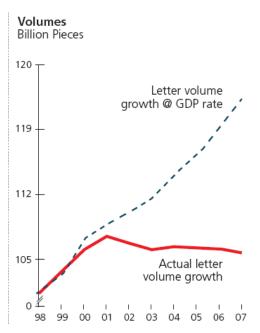
While the incumbent universal service provider has a favourable market position, it also has to deal with a number of factors that may potentially cause a competitive disadvantage – the most severe of those, which may really make today's market leaders vulnerable, is the cost associated with labour and the associated traditional system of institutions (e.g. strong unions, legacy rights and benefits, special labour status, stricter regulation of working hours, softer systems of incentives and productivity measurement – or a complete lack of such systems at the level of individuals). Busch and Dünnwald (2006) estimate the competitive disadvantage of the incumbent to be as high as 40% in the field of personnel expenditure (incumbent = 100, competitor = 60).

The labour-intensive nature of the postal sector has contributed to the issue of liberalisation becoming a politically charged one. One of the fears is that liberalisation may lead to downsizing, a reduction in employment and hence resistance from the labour unions. Experience so far to indicates that initially, employment by the incumbent posts does drop (it is not an insignificant circumstance that the level of employment has dropped across the sector, and it was exactly the posts that decided to follow business objectives (the German and the Dutch ones) that increased the numbers of their employees), but this may be counterbalanced by the labour requirements of the other service providers (London Economics, 2003). The fear has been confirmed as valid by the events of the years since then, as the number of employees did drop in the sector, but that was largely caused by the reductions in the volume of letter mail (and the capacities that had to be adjusted accordingly), and not the impact of competitors

entering the marketIn summary, we may conclude about the system of management that in the recent past, the field has clearly shifted in the direction of the business-oriented approach.

6.1.2 Changes of the economic environment

Two decades ago, the turnover of national posts in Europe was almost entirely a function of GDP. Although there is still a strong correlation today between per capita GDP and per capita numbers of letters (see Figure 21), but the relationship between GDP and letter volumes is no longer as clear (and not as strong) in the member states of the EU as it had been a decade previously (see Appendix 9). Past data allows us to identify certain important correlations: the number of households has a positive correlation with the volume of letters, while population growth and increasing incomes also have a positive effect: richer households send more letters (Nader, 2004).





Source: IPC (2010b, 7), the chart is based on Australia, the Czech Republic, Denmark, France, Germany, Greece, Hungary, Ireland, Italy, Japan, Portugal, Spain, Sweden and Great Britain

In recent years, the letter volumes of member states failed to keep up with the rate of growth of GDP, they have clearly dropped below that rate of growth. Over the last 4 years, average growth

based on the data of developed posts was actually negative, as shown in detail in the figure below (see Figure 22). Averaged over the last 5 years, only three post offices exhibit a small positive growth, so the trend is very clear. It is worth analysing a 5-year average because looking at data year on year, individual events (such as elections, performance of tasks prescribed by law) may have a very strong influence on the figures, but over a period of five years, the trend takes shape.

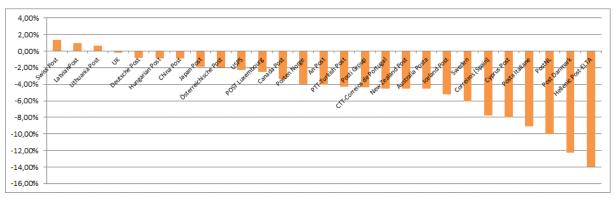


Figure 22: Letter volumes (CAGR - 2011-2015)

Source: my own figure based on the IPC (2016): Statistical Database

Revenue from the letter mail segment has shaped up better, primarily as a result of the counterbalancing effect of price increases, but today it is no longer a question that "the golden age of mail" is over in the field of physical forwarding of letters, and the future of the postal industry is now determined by many complex and uncertain factors over and above the general growth rate of the economy.

Nader (2004) notes that we obtain higher volumes than those reported by the incumbent posts if we also take into account the consignments handled by the competitors (national posts present in foreign markets and private service providers). The effect of printed matter and catalogues without individual addressing is particularly significant. In addition, the volumes of letter mail are also influenced by the pressure placed on large corporate mailers to reduce mailing costs by increases in the prices of postal services.

The industry has been an inherently global one from the beginning, as letters and packages have never stopped at national borders. However, our increasingly interconnected world (where distances are becoming shorter) has been and still is rewriting the rules of the game. Competition is getting stronger: through their subsidiaries (DHL, TNT, GLS, DPD), the global large posts (DPWN, TNT, Royal Post, French Post)⁷⁰ are already present in all the European markets. In addition, the smaller national posts are also entering each other's markets (a specific and close-by example is the regional logistics acquisition strategy of the Austrian post). What's more, market players that were previously only active in related industries (newspaper delivery, mail order companies, logistics service providers) are also raising competition – they are entering the markets of the national posts. If we interpret the concept of competition in a broad sense, we must also not forget that the players in the telecommunications industry are also competing through their range of substitute services (SMS, EBPP, Internet, etc.).

All in all it is clear that while a competitive landscape in the letter mail segment is being established slower than expected, there is already intense competition in the delivery of newspapers and printed matter without individual addresses, in which each of the national postal service providers have had to make significant concessions to their competitors. In the logistical, parcel and express market, competition is intense at all levels (national, regional global).

The strategic alternatives in global industries are as follows (Porter, 2006, 270-271):

- 1. Global competition in a wide scope
- 2. Global concentration
- 3. Concentration on a single country
- 4. Protected market space (by limiting market competition)

Does the probability of cooperation between the national posts increase or decrease with increasing competition? Traditionally, cooperation between national posts is strong in the field of the international traffic of consignments (international letters and parcels, express services). As competition increases, the demand and need for cooperation may also increase in areas where they had not been raised before. In recent years, we have seen several attempts at

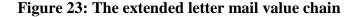
⁷⁰ The national posts of the four large markets carry about 70% letter mail and 80% of parcel mail in Europe.

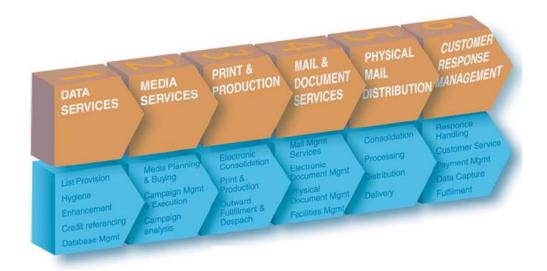
cooperation in the field of direct mail (e.g. the international cooperation contracts of the Swiss post).

In the interest of utilising their networks better, the national posts have also concluded strategic agreements with players outside the sector: the British and the German post sells telecommunications equipment, and the German post also sells electricity services as an agent. As we have seen during the overview of the economic background, it can be taken for granted that the competitors will not even try copying the business models of the incumbents, the experiences of liberalisation so far indicate that new entrants (and even incumbents entering other, foreign markets) think in terms of different business models.⁷¹

On the business (mailer) side, the structure of letter consignments is also influenced by the changing perception of the value chain. According to the traditional concept of the letter mail value chain, we envisage the physical transportation of letters, various documents and parcels. By today, that narrow interpretation has become partially obsolete and harmful – the latter in the sense that it limits the lines of thinking and thereby the business opportunities of postal service providers unnecessarily. Several postal service providers have recognised this, so they place increasing emphasis on infiltrating the consignment-production value chains of their clients (document management solutions) - this can increase efficiency (information about the parameters of the consignments can be used to optimise the physical value chain) and at the same time it can reduce the propensity of clients to switch providers. These areas indicate directions of diversification for postal providers where they are not at home and where they usually do not have the required capabilities, competencies. Therefore Walsh (2006) comes to the conclusion that in these real competitive markets it is more advisable for them to think in terms of partnerships, alliances, joint ventures or acquisitions. And all that can only be successful if the post is able to provide a reliably excellent service in its core field, the forwarding of physical consignments.

⁷¹ A few examples: In Great Britain, TPG attacked the market of Royal Mail by forming an alliance with Express Dairies for the delivery of parcels by milkmen.





Source: Walsh (2006), p.2

The related competitive markets have undergone exceptional development over the last three decades, indeed, based on segmentation of customer demand, these segments have essentially seen the birth of new industries (such as the above-mentioned CEP). In the past, all of those services were practically the exclusive realm of the national posts.

6.1.3 Changes of the technological environment

Over the last two or three decades, the telecommunications market has undergone changes that have had a fundamental influence on the role of postal services. It is easiest to comprehend the essence of the changes in the spread of alternative channels and instruments of communication (fax, telephone, mobile phone, e-mail, Internet – increasing penetration is accompanied by decreasing costs). The substitution effect has the direct consequence of reducing consumer demand for letter mail services. Increasing prices may counterbalance the drop in demand as far as revenue is concerned for a while, but it also reinforces the substitution effect towards alternative means of communication (Geddes, 2004, 62).

But the first question to ask is whether the substitution effect that the official communication of national posts takes for granted and points at as the culprit behind the reduction of letter mail volumes actually exists. In a series of studies in 2004-2005, Pitney

Bowes (Jimenez, 2005) attempted to perform a comprehensive investigation into the drivers behind the change in letter mail volumes in developed countries. *A true substitution effect* can only be asserted if a certain transaction/communication event takes place using an electronic channel in case wherein letter mail would have been used *otherwise*. From that perspective, the analysis of Internet penetration and web user statistics is only relevant to the extent that they facilitate substitute transactions. Experience and the data both show that the appearance of the new technologies cannot be described as a pure substitution effect. If we look a little deeper, we find a more complex and differentiated situation, in which four different mechanisms can be identified:

- 1. *A pure substitution effect* occurs when the appearance of a new technology or solution leads to the disappearance of the old technology in a short period of time (an example is the case of vinyl records and cassettes versus CDs). The same effect can be observed when paper-based tax returns are replaced by electronic tax returns, or when paper-based personal correspondence is replaced by the telephone.
- 2. *A complementarity effect* occurs when the old and the new technologies exist side by side for a longer period and for a while, demand for both increases in parallel. Catalogues and web browsing/Internet shopping constitute an example.
- 3. The appearance of new technology *generates new demand* if the new solution has a positive effect on demand for the old technology as well. Studies show that those with Internet access receive and send more postal consignments this is applicable to small parcels as well as advertising material.
- 4. *A new technology becomes a dead-end* when the use of the new technology grows for a while and then stabilises at a certain level. This happened with electronic greeting cards, whose market has stopped growing and for quite a long time they have only had a few percent of the entire market. It seems that the emotional charge and personal character of a paper greeting card is hard to replace.

It is an important conclusion of Jimenez (2005) and Szeto and Jimenez (2004) that access to and use of the new technologies has reached a level in developed countries that implies that

they (telephony, fax, Internet) may no longer be considered emerging technologies⁷², so it is now possible to assess their effect realistically. It is certainly the case that the substitution effect on letter mail volumes has remained significantly below earlier forecasts, but in the longer term, it has had a significant erosion effect.

According to Jimenez, there are other factors behind the reduction of volume or the reduction of the rate of growth that is usually ascribed to the substitution effect, such as economic recession (or boom), the market entry of competitors (and its effect in eroding volumes), the propensity of customers to rationalise costs (reduction in the frequency of sending letters, consolidation of letters, changing the structure of mail, usually towards lower added value categories) and unique and cyclic effects (election campaigns, charity drives, CRM programs, etc.).

	Drivers	Enablers	Constraints
Regulations	Electronic signatures	Possibility of electronic tax	Limiting spam
	Liberalisation	returns	
Technology	Favourable features of	Interconnectedness,	The fragility and reliability
	new technology	PC performance	of the Internet
		Internet penetration	
Economy/market	Price sensitivity	Economic environment of	The costs of reorganising
	Competition	sender/addressee	processes, costs accruing to
	Acquisition/retention of		the addressee
	customers		
Human factor	The comfort of e-mail	Technology usage skills	Emotional significance,
	communication		special features of paper
Business	Process innovation	Incentives for switching	Risk avoidance
practices		(e.g. electronic payment)	Limits of old IT systems

Source: based on Jimenez (2005) (with additions)

The innovation ability of new entrants and partners may result in the appearance of innovative business models, processes and products in the market. The integration experience and country-

⁷² Nader (2004) lists three arguments to support this assertion: 1) household Internet penetration is high; 2) if all stores and households access the Internet and get significantly (23 to 33 times) more e-mail, we can rightfully assume that substitution has already occurred in the areas where it was possible; 3) households with Internet access actually get more mail.

wide presence, capitalisation and brands of the incumbent service provider may help protect its market position. But it is still worthwhile to pay attention to the signs and to establish a strategy for handling such innovations. According to Christensen et al (2004), the incumbent's chance of coming up with a disruptive innovation is rather small. However, in the world of business it occurs quite frequently that the disruptive innovations become the property of the incumbent, but the majority of national posts do not have the enterprise culture or the established processes for such acquisitions/strategic partnerships. (Indeed, the expectations of the state as owner associated with corporate governance may make their introduction difficult.) A number of posts have recognised this, and used their own resources, or entered partnerships in order to become forerunners of the changes, to make a real connection to the new, digital flow of information. The hybrid and inverse solutions mentioned above fall in that category, along with authenticated email solutions or the taking over some of the state's authentication tasks. Such activities partially cannibalize the revenue from traditional letter mail (thereby accelerating the processes discussed), but at the same time, with a different cost structure and a new model they can contribute to the profitability of postal service providers.

While in the past, technological development had a negative effect on letter mail volumes, parcel mail has profited significantly from the previously more significant growth of e-commerce. Figure 24 shows the development of electronic commerce in the most significant markets during the five years between 2010 and 2014. The size of the bubbles indicates the market size (traditional and electronic together): the growth that has taken place recently is clear. If we consider that 15 years ago, electronic commerce practically didn't exist, the speed of the changes becomes truly perceptible.

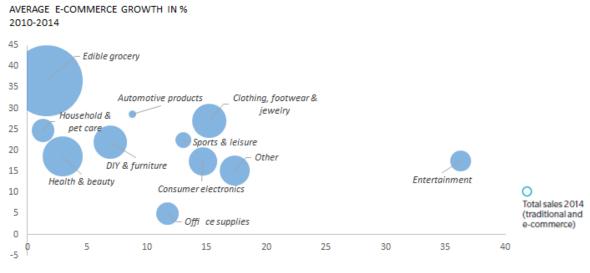


Figure 24: The development of electronic commerce (2010-2014)

E-COMMERCE SHARE OF TOTAL SALES, 2014

Markets: UK, USA, Germany, France. The 2014 data are forecasts. Source: Lierow, M., Janssen, S., D'Inca, J (2014) p.3.

The growth of e-commerce has been the engine driving the growth of volume in parcel post (including, in Hungary, the small parcels mostly ordered from China that arrive as letter mail), and experts are expecting e-commerce to grow further. In theory, it is possible to envisage a negative 'black swan' event that brings that growth to a halt: the reversal of globalisation, the rise of protectionism and increased security risks may have a detrimental effect on the development of e-commerce.

The statistical data of IFC shows that the recent trend (the growth of CEP-revenues) is reflected in the changing revenue structure of the developed posts.



Figure 25: Diversification in historical perspective (revenue structure, %)

Source: IPC (2015), p. 43.

Althought the mail revenue still represents the largest share in the revenue structure of developed post, but its share has decreased significantly between 2010 and 2014 (from 51,4%-tp 44,8%). On the other hand, the sahre of CEP-revenue showed dynamic growth. Financial services are significant and has shown slight increas, as well. All in all, both CEP-revenues and the levele of diversification has increased in recent years in the developed postal services providers.

6.1.4 Changes in the social environment

Before analysing the changes in customer demand in detail, we should clarify who the postal customers are and how the composition of the customer base has been changing. The structure of letter mail has undergone a transformation in the last ten years: the proportion of consumer mail is dropping in all European countries (since the study, the ratio of letters posted by private individuals has dropped even further), while the ratio of letters mailed by corporate customers is increasing at a significant rate. The previously bilateral communication is becoming increasingly unilateral (B2X) (see Figure 26). This also means that the future of the posts in the letter mail segment will be primarily determined by the needs and habits (demand) of corporate customers.

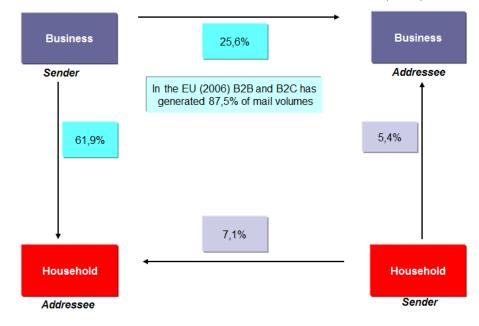


Figure 26: The structure of the flow of letter mail in the EU (2006)

Source: WIK, (2006, 198)

Within commercial mail, the ratio of unaddressed mail has been increasing (and is expected to keep growing in terms of numbers) – and those represent lower added value and revenue. It is also an important attribute that the concentration of corporate customers can be considered high in the sector – a relatively small number of customers generate the majority of revenue. As a result – in parallel with the elimination of the monopoly situation and the appearance of alternative solutions – there is increasing pressure from the corporate side on the universal service providers to reduce prices (for which improving efficiency is indispensable), to improve quality, service levels, and to provide tailored solutions (see Appendix 4: Analysis of customer segments). Walsh (2006) lays particular emphasis on the price pressure, because in the case of large customers, the propensity to switch is primarily a function of price, as the primary incentive there is the (TCO-based⁷³) reduction of mailing costs.

⁷³ TCO = Total Cost of Ownership basis, i.e. taking into account not only the procurement cost but also the various supplementary and connected costs throughout the process cycle.

In the developed countries, private correspondence has dropped to such a low ratio that even major changes in private correspondence habits would have a smaller effect than changes in the usage patterns of corporate customers. Naturally, the latter is influenced by *changes in the letter* receiving habits of the public as addressees, but, according to Jimenez (2006), the effect is smaller than that of the incentive to reduce costs. The changes in business correspondence habits are primarily influenced not by the receivers' (addressees') technological circumstances, but by cost-efficiency considerations, the utilisation of new opportunities arising in the course of process reorganisation and the communication channel preferences of addressees. The role of the human factor is definitive as regards our preferences for paper-based or electronic communication depending on the content of the letters concerned. Recent data and research seems to indicate that the so-called substitution effect is definitely slower and smaller than experts had previously predicted. It is interesting that customers mostly (72-91%) prefer to receive bills on paper even in the countries with the most developed information technologies (e.g. Finland, USA, Australia), while they exhibit a preference for the electronic channel when they actually make payments. It appears that at present, the effect of the human factor is most evident in the fact that we often insist on paper-based, traditional communication in cases in which we would have the option and the capacity to use some substitute channel. In addition to the worries about information security on the Internet, these choices may also be motivated by the several tangible advantages of letters: they are "hardware and software independent, portable, long-lasting and, in many ways, less vulnerable to destruction than digital alternatives" (Szeto and Jimenez, 2005, 3).

During the analysis of consumer habits, a great deal of interest is devoted to the analysis of the *generation effect*, i.e. testing the hypothesis that younger generations show a significantly lower use of letter mail. According to the available American studies (Szeto and Jimenez, 2005) this effect is as yet not sufficiently substantiated. Age and income status have a definitive (and in both cases positive) effect on the types and numbers of letters people get. Although as we get older, the number of letters landing in our letterboxes increases, it is also clear that younger generations exhibit a stronger preference for electronic channels for financial transactions and personal correspondence, but as to whether the businesses on the sender side will take into account those changing preferences in their mailing processes, that is still an open question. As

the bargaining position of customers improves in the decision-space, business senders will increasingly have to take the preferences of their addressees into account.

The extent to which the increasingly aging, mobile and technology-friendly society's correspondence habits will change within individual types of consignments is also an interesting question. According to Szeto and Jimenez (2005), at present there is only speculation about that subject, in order to understand consumers, postal service providers would have to change the way they look at the letter itself. From the perspective of the customer, the most important feature of the letter is not its price, weight, size, speed of delivery or registration, but the communication need that it meets (sending a reply, initiating or closing a transaction, written acknowledgement of receipt or an order, etc.). According to Nadar (2004), the choice between the paper-based and the electronic channel of communication is motivated, in addition to the character of the relationship (formal/informal) by the need for anonymity, speed, comfort and the cost factor as well.

6.1.5 The natural environment

The effect of the services on the natural environment is an increasingly important question in the case of postal services as well. The national posts have been working on the issue of sustainability for several years: the focus of interest and measures are the CO_2 emissions of the sector (primarily in relation to vehicles and buildings) and the use of paper. It was an important step forward when the most developed posts (which are responsible for 80% of emissions generated by the postal sector globally) "in 2009 committed to reducing CO_2 emissions by 20% by 2020" (IPC (2010b) p. 53). In 2008, the CO_2 emissions of developed posts totalled 8,360,000 tonnes. 51% of that amount was associated with the use of electricity, 35% was generated by transportation (road, rail and air haulage), while 14% was associated with heating (gas, oil, steam). The focus is on the promotion of the use of renewable energy and alternative fuels/vehicles (electric cars, bicycles, hybrid technology, etc.) (IPC (2009b) p. 17).

The other criticism – usually raised by laypersons – is the use of paper associated with physical correspondence and packaging technology. In the latter case, the main focus is on the use of environment-friendly (recycled and decomposing) materials, while the first is a non-issue based on lack of information: paper today is an increasingly environment-friendly product. Paper-producing forestries plant more trees than they cut, and paper itself is not a source of pollution

at all, particularly in comparison with the emissions of hazardous materials generated by the digital world.

6.1.6 Summary of the environmental analysis

The relationship between organisational performance and environmental changes can be best understood using a combination of environmental analysis, analysis of internal resources and scenario planning methods (Walsh, 2005). During the environmental analysis I have reviewed a number of factors, and among those factors there are some that may influence the postal sectors of developed European countries in the same way while others may have significantly varied effects. One objective of the research is to identify the shared factors (trends) and the differentiating drivers leading to the different scenarios in each of the scenarios, and then to select the factors with significant effect and to analyse their effects and system of interrelations.

Over and above the environmental factors, the initial conditions (competitiveness, resources and capabilities), strategic objectives and decisions of the individual national posts have a significant effect on the roles that the individual incumbent posts may play in the "new" postal sector (and thereby they themselves have a significant effect on the structure of the industry). In addition to preparing for the coming liberalisation of the letter mail market, the national posts must also make decisions concerning their *diversification* strategies (business scope) and their *expansion* strategies (regional scope). Those strategic decisions and their success will be influenced significantly by the ambitions of the individual owners, their takes on the role of national posts and the initial conditions of the incumbent posts concerned.

In the table below I summarised the factors that I found in the literature that may potentially influence the postal sector. The table presents the factors in accordance with the logic that I described in relation to the theoretical literature associated with handling uncertainty: they are arranged along the dimension of impact and uncertainty (0 to 6; 0 = no effect and certain, then 1-6 meaning increasing uncertainty and impact), also showing which segments are impacted by the individual factors. The main impacts are shown in yellow.

Com	Influencing feature	Description of faster	Letter	CER	FS	Expected
Group	Influencing factor	Description of factor	Letter	CEP	15	result
conom		Economic growth has a consistent inconst on all the industries				
	Economic growth direction and rate	Economic growth has a positive impact on all the industries.				
	Economic growth, direction and rate	A recession may have a severe effect on the letter, the CEP and the financial services markets.			-	+/
	of change		X	X	X	+/-
	Intensity of advertising (related to	The volume of DM postal items is strongly linked with the volume of advertising activities, and that is closely linked in				
	GDP)	turn to changes in GDP.	x			+/-
	(551)	ranges, increasingly international playing field. Free flow of	•			17-
		goods and services. Increased penetrability of national and				
		industry boundaries. (A step back towards a future state				
		characterised by national focus and protectionism is also a				
	Globalisation	remote possibility.)	x	x	x	+/-
		Appearance of micro-solutions in finance, relevant solutions	•	A	~	
		my be implemented for customer segments that are not being				
		served by anyone today. Consolidators may enter the				
		market who collect and handle all the expenses of individual				
	Creation of new financial markets				x	-/+
		New business models may appear, which can use virtual,				
	Threat of new entrants (from outside	mobile, Internet-based platforms to cover a part of the				
	the industry, using their own	current markets in financial services (mobile, FinTech) and in				
	solutions, P2P solutions)	logistics (DIY - own logistics, peer-to-peer solutions).		x	x	-
		Entry of competitors from the CEP market, from other			4	
	Entry of traditional market players	countries.	x			
	Changes in energy prices	Increased energy prices may increase overall costs.				
		increased energy prices may increase overall costs.	X	X		-
Fechnol	logical	TA				
		Electronic substitution has already put great pressure on				
		letter volumes, only the extent of the future effect seems				
	Distalization Floatensis	questionable (www, Google, smart phones, YouTube,				
	Digitalization - Electronic substitution	Instagram, online banks and companies, Internet				
	substitution	advertising).	X			-
	Toomaa in Totomat constantion	The only uncertainty is the speed at which Internet and				
	Increase in Internet penetration	-	X	X	X	+
		The expected growth of e-commerce will have a positive				
		effect on parcel post volumes. At the same time, negative				
	Development of e-commerce	black swan type events are possible, which would halt that development.		х		-
	Development of e-commerce	Government mail is transactional in nature, there is		л	X	-
		increasing pressure and demand for digital e-government				
		services, the lack of an authenticated signature solution for				
		the general public is currently the major obstacle to that. The				
		speed of transformation depends on the government's				
	E-government		х			
	2 50.000	Drones may offer a cost-efficient solution for reaching				-
		remote addresses in low population-density areas or in				
		places that are difficult to access, while automation may				
		make human labour superfluous in several areas (bi-				
	Spread of robotics and automation	directional parcel machines).		x		-
	-	Spread of solutions that eliminate the need to move physical				
	3D printing	goods: mass use of 3D printing.		x		-
		Spread of solutions that eliminate the need to move physical				
		goods: some goods can be delivered as data (e-books, music,				
	Virtualisation	films).		x		-
		New logistics methodology to optimise the supply chain, so				
		as the permit fast and flexible transport: goods are sent				
	Anticipatory logistics	before the order is received		х		+
	Anticipatory logistics			x		+
	Anticipatory logistics	before the order is received The current, national-level competition between companies		x		+
		before the order is received			X	-/+
	Anticipatory logistics New payment platforms and solutions	before the order is received The current, national-level competition between companies with physical networks can shift to a new, even global dimension using new business models.		x	x	+ _/+
		before the order is received The current, national-level competition between companies with physical networks can shift to a new, even global			x	+ -/+

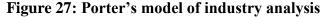
Table 19: Summary assessment of the environmental analysis

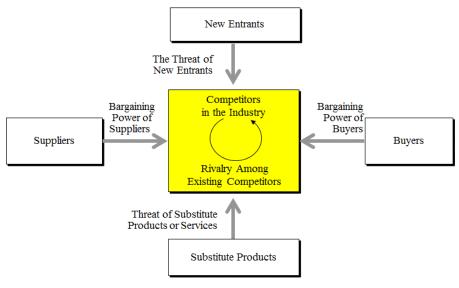
						Expected
Group	Influencing factor	Description of factor	Letter	CEP	FS	result
Social	6	•				
	Demographic changes					
	<u> </u>	In the developed world, average age is expected to grow				
		while birth rates remain low, which will have a negative				
		impact on demand, while it may also slow down the				
	Aging society	decrease in demand for traditional postal products.	x	x	х	-
		The demand from significantly higher numbers of				
		immigrants, and their higher birth rates, will act against the				
	Magnitude of immigration	impacts o aging society.	X	X	х	+
		3 fear and 3 and 4 and and a fear 4 fear 4 fear and a fear 4 fear				
		More mobile and less loyal workforce, higher expectations.				
	Changing requirements of workers	This can cause serious labour problems for the posts, which generally pay salaries below the national average.				
		generally pay salaries below the national average.	x	x	x	-
	Changes in customer requirements	Containing and factor of any confectable continue with a				
		Customers want faster and more comfortable services with a				
		customer experience; customers want to receive deliveries where and when they want (option to change time or				
	B2Me	address of delivery)		х		+
		Same-day delivery in a narrow time window (possibly in the		А		
	Increased value of speed			x		+
	increases value of speed	In order to counterbalance the depersonalisation effect of		~		
		digitalization, customers place higher value on personal and				
	Increased value of social relationships		x	x	x	-
	r					
		Growing data protection worries may hinder the				
		development of personalised services. In the extreme, it may				
	Increased misgivings about data	also make digital advertising more difficult, which may result				
	protection	in DM traffic being channelled back to service providers.			х	-
		Larger scales and standardisation may place pressure on				
	Standardisation	profitability (e.g. financial transaction services).			x	-
		Unfavourable customer experiences increases the value of				
		trusted brands (e.g. the posts), their role becomes more				
	Increased demand for trust	important.	X		х	+
	Faltering trust in institutions	Trust in state and near-state institutions falters.			х	-
		Business clients are already introducing major measures in				
		order to shift their customers towards electronic channels of				
	Cost and station and states and	communication (incentives, punitive fees for letters, default				
	Cost reduction requirements and measures of business clients	options, mobile solutions), and to reduce volumes (batching letters).	_			
D 1141 1		ierreis).	x			
Political						
		USO definition USO financing Brice completion of				
	Impact of the regulatory environment at	USO definition, USO financing. Price regulation of transborder services (cross border roaming), re-regulation of				
	the international level	financial services.	х	x	х	_/+
		Themes: protectionism - protection of the USP, redefinition	А	•	А	-7.5
		of USO, protection of letter volumes vs. e-government				
		solutions, regulations supporting the use of digital mail;				
	Impact of the regulatory environment at	establishment of new services at the post, support for				
	the national level	rationalisation of the network, etc.	Х	x	x	_/+
		A number of geopolitical fault lines and war zones represent				
		risks. They may even generate serious business continuity				
	Political stability	risk, and in some relations, it may reduce postal traffic.	х	x	х	-
		In case of serious incidents and appropriate government				
	Terrorist attacks (e.g. letter bombs,	backing, this can reduce postal item volumes and increase				
	anthrax)	costs.	x	x		-
	Increased cyber-security (IT security)	In an extreme case, trust in banking secrets and digital				
	risks	services may be undermined fundamentally.			X	+
Natural						
		Annual of datasis				
	Pressure caused by anyiconmental side	Appearance of rhetoric against paper-based communication	-	_		
	Pressure caused by environmental risks	may result in faster erosion of mail volumes. The requirement to make transportation greener, and fast,	x	X		-
	Impact of climate change	may increase costs.	v	v	v	_
	impact of climate change	1111 11010000 00010.	X	X	X	-

In the above tables, the last column indicates the expected effect that a change in the factor concerned would have on the markets concerned (indicated by *x*-es in the table). This list can be considered **the initial, preliminary version of the industry's scenario-creating drivers**. In what follows, it will be particularly interesting to see whether the further analysis yet to be done and the qualitative primary research yield similar results.

6.2 Industry environment analysis based on the Porter model

After the analysis of the macro-environment, let us review the environment of the posts using the so-called Porter model. Michael E. Porter made a stellar appearance in the field of strategic management in the 1980's, and today he is one of the most influential and well-known management gurus. Porter is considered the most important representative of Mintzberg's positioning school of strategy. He has introduced a number of models and concepts (e.g. value chain, basic strategies, the diamond model of national competitiveness, etc.), but his best-known model is certainly *the five forces model of industry analysis*. One of his major innovations was that he applied the knowledge and methodological toolkit of Industrial Organisation systematically in the field of strategic management. Based on that, as a result of using an as yet unknown field, structured industry analysis, the book *Competitive Strategy* (Kiechel (2010), pp. 121-134)) was written in 1980 – today it is considered a classic.





Source: Porter (2006), p. 30)

According to Porter, the degree of attractiveness of an industry is defined by five factors: the bargaining position of customers and suppliers, the threat from substitution products and new market entrants, and competition already present in the industry between companies already active in it (see Figure 27). Porter's model also expresses the fact that each company is unique (and the unique characteristics of individual companies have a fundamental impact of the company's competitive position within the industry), but, using experience and knowledge from IO, he primarily aimed to create a conceptual framework and a schema of thinking that is suitable for describing competition within an industry. The model created fulfils that objective, it's use is generalisable and may lead to the drawing of practical consequences. Figure 28 shows an example of such a practical, generalisable system of interrelations.

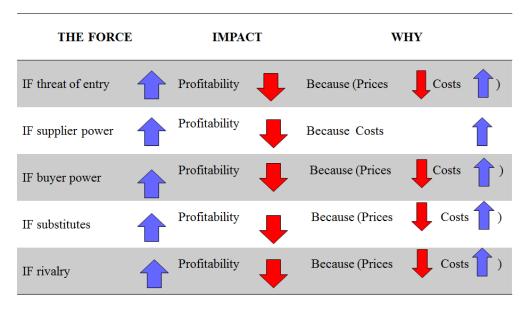


Figure 28: The market mechanism of action of Porter's forces

Along that chain of logic, the impact of changes in those five forces on the profitability of the industry (through their impact on prices and costs) can be predicted. Due to its predictive character, the model is suitable for identifying an recognising early warning signals – and that can clearly result in a competitive advantage (though probably only a temporary one) for those using the model (e.g. at the beginning of a recession in the market) against those who only notice the oncoming recession later.

Source: Magretta (2012), p. 41

It is important to note here that *the postal sector in the wide sense that I have been exploring does not meet Porter's definition of an industry*. An industry doesn't necessarily coincide with the competitive territory that a particular company chooses to operate in. Posts (with the exception of the few that concentrate on only letter mail) generally compete in a number of industries (in their order of frequency: letter mail, CEP, financial services, logistics, commerce and IT), and the competitive environments in those industries differ. The three most important industries in which universal postal service providers most often compete in are letter mail, the CEP market and the market of financial services. A brief structural analysis of those industries is presented in the next figure (concentrating on Porter's 5 forces). The elements that can be considered the most uncertain and critical factors with regard to the future structure of the industry in question are marked in grey.

	Letter mail	СЕР	Financial services	
Industry	Number of competitors	Strong competition, both at	Strong competition, largely	
competition	low, the USP is in a	the national and the	taking place in the national	
(today)	dominant position	international level	market.	
Substitute	Electronic substitution	Today, a minor factor, but in	The traditional financial	
products	(extent and rate of	the longer term, virtualisation	transaction products may be	
_	growth are questionable).	and 3D printing may pose	threatened by modern	
		threats.	financial services, which in	
		Alternative solutions may	turn may be threatened by	
		present significant risks (DIY,	FinTech solutions.	
		P2P, sharing, etc.)		
Threat of	Limited today, but the	Concentration of the existing	Within today's sector	
new entrants	threat of new entries	players is to be expected,	boundaries, the financial	
	aiming to take the best	together with international	sectors are expected to	
	customers or a part of the	expansion in line with	converge and be consolidated,	
	market, or from	globalisation and there is also	but there may be entries from	
	neighbouring countries,	a threat of alternative entrants	outside (FinTech).	
	does exist.	in the market	· · · · ·	
Bargaining	Increasing slightly.	The customers' bargaining	The customers' bargaining	
position of		position keeps improving.	position keeps improving.	
customers		Compliance is increasingly	Compliance is increasingly	
		important.	important.	
Bargaining	No significant change.	The role and bargaining	The role and bargaining	
position of		position of IT companies	position of IT companies	
suppliers		keeps growing.	keeps growing.	

Table 20: Changes of structural factors in the three industries

Based on the industry analysis we can conclude that as regards the future of the *letter mail market*, *electronic substitution* and the *threat of new entrants* are critical (high-impact and important) industry factors, but of those, the trend of the first one is not uncertain, only the rate

of change is variable, while the entry of new providers is highly uncertain. Therefore, from the perspective of the letter mail market, the entry of new players may be the factor that creates scenarios, and the pace and extent of substitution may also be included among those factors. In the *CEP* and *financial services* markets, the greatest uncertainty accompanies the *introduction of substitution products/solutions*, and its impact is also uncertain.

6.3 The strategic groups of posts

As I have mentioned repeatedly, universal postal service providers come in many shapes and sizes. This naturally leads to the question of the groups that could be identified by a statistical analysis of the world's 50 developed posts. I will use the multivariable statistical methodology of cluster analysis to attempt to answer that question on the basis of the IPC database, generally using 2014 data (unless I indicate otherwise). I used the following significant variables for cluster analysis: total revenue; proportion of letter mail revenue; proportion of parcel mail revenue; proportion of revenue from financial services; proportion of revenue from international transactions. The process classified 43 companies, 7 were lost due to lacking data. The results of the cluster analysis indicates three groups:

- The group with the highest proportion of revenue from letter mail is a rather heterogeneous group: 35 of the companies analysed were in this group, including Magyar Posta (e.g. Canada, Mexico, Hungary, Iceland, etc.) The average revenue and the proportion of international revenue are below average, while the proportion of HR-costs is the highest in this group. The group's average proportion of letter mail revenue is over 60% (but there are some lower values in the group, including the Hungarian USP). Profit-indicators tend to be the highest in this group on average.
- *The group with the highest proportion of revenue from financial services* generally includes Asian postal services, and, among European posts, the Italian Post Office (Chunghwa Post (Taiwan), Japan Post, Poste Italiane). They have proportionately the lowest HR costs. The group's profitability is lower than that of group 1.
- *The group with the highest proportion of revenue from parcel mail.* They include the so-called great integrators: Deutsche Post DHL, FedEx, TNT Express, UPS and Posten Norge.

They also have the highest proportion revenue from international transactions. The profitability in this group is below that in group 1.

The average values of the most important indicators of the groups are shown in the table below.

Clus- ter	Items	Average revenue (mEUR)	Letter mail within revenue	Parcels within revenue	Financial services within revenue	Propor- tional HR costs	Per capita revenue (mEUR)	Ratio of inter- national revenue	Average EBITDA %	Average EBIT %
1	35	2,536	62.09%	14.96%	8.18%	50.85%	0.083	7.64%	10.47%	6.30%
2	3	45,229	10.95%	0.69%	86.54%	19.18%	0.196	n.a.	5.75%	4.54%
3	5	29,560	11.05%	72.11%	0.00%	38.64%	0.137	49.95%	7.67%	3.94%

 Table 21: Main characteristics of the clusters of developed posts (2014)

Source: Based on the IPC statistical database, 2014 data

Based on the above it seems that the "traditional" posts, i.e. those whose main profile remains letter mail, have the highest profitability. This is attributable to the fact that that market (looking at all developed posts now) has the least competition (as we have seen, most of the posts are in a dominant or monopoly position within their own letter mail markets), while in financial services and parcel mail, the posts have stronger competition, so market competition results in reduced profitability. The reality is somewhat more nuanced, as within Group 1, the profitability data are highly scattered. I believe that this is connected with the highly heterogeneous markets as well as different company characteristics. That could also be the reason why the EBIT% and EBITDA% variables do not exhibit a strong correlation (at most a weak or a medium one) with the other variables used. Based on the correlations, the country's level of development (per capita GDP) and the better utilisation of human resources has a positive effect on profitability indicators (EBIT%, EBITDA%), but there is no deterministic link between them. (The level of heterogeneity was so high that neither the factor model, nor the regression model yielded any results on the sample.) The distributions of the individual indicators in the individual cluster groups is shown in Figure 29.

The four charts show the following variables: profitability (according to EBIT and EBITDA margins); per capita net revenue; ratio of HR costs to revenue. The figure shows quite clearly that in cluster one, all of the indicators are quite widely scattered.

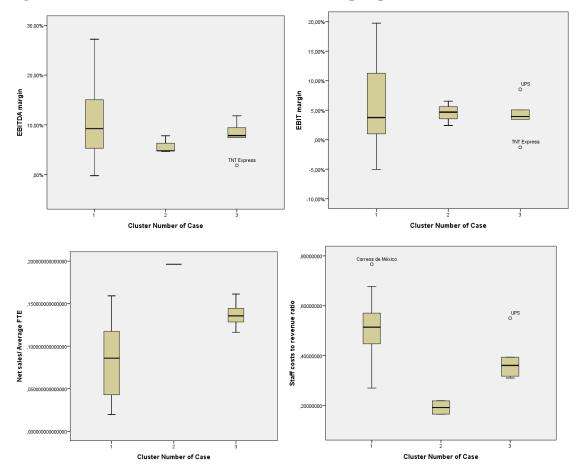


Figure 29: Demonstration of the clusters of developed posts

Using another method and applying cluster analysis to that single large, heterogeneous group, it can be divided into two parts:

Sub-cluster	Items	Average sales revenue (mEUR)	Revenue per employee (mEUR)	Average EBITDA %	Average EBIT %
1 / A	13	1,722	0.106	17.64%	12.66%
1 / B	19	3,183	0.065	5.19%	1.07%

Table 22: Subdivision of cluster 1 into sub-clusters

• In Group 1/A, *average sales revenue is less, but profitability is much higher*. For instance Correos (Spain), CTT-Correios de Portugal, POST Luxembourg, Swiss Post, Thailand Post.

• In Group 1/B, *the average sales revenue is higher, but profitability is lower* (E.g. Canada, Brazil, Mexico, *Hungary*, Australia, Poland, etc.).

Now looking at the changes in revenue and letter mail volumes during and after the years of the crisis for the entire sample (the original clusters 1, 2 and 3), we see significant differences. The posts that concentrate on financial services (Group 2) grew a great deal during the crisis, while among those that concentrate on letter and parcel post (groups 1 and 3), there is no significant difference in the changes of total revenue during the period.

Table 23: Change of total revenue and letter mail volumes – Developed posts

	Change of total revenue Change of letter mail volumes					s
	2010 / 2007	2013 / 2010	2014 / 2013	2010 / 2007	2013 / 2010	2014 / 2013
1	101.58%	108.84%	99.88%	94.79%	95.23%	96.97%
2	150.42%	99.37%	97.47%	92.32%	88.58%	98.16%
3	97.76%	108.41%	100.64%	95.64%	98.17%	99.28%

Looking at the same periods for only the European posts in Groups 1/A and 1/B, we get the following results:

Table 24: Changes in revenue and letter volumes -	- European posts (Cluster 1)
···· · · · · · · · · · · · · · · · · ·	

	Change in total	revenue		Change in letter mail volumes			
	2010 / 2007	2013 / 2010	2014 / 2013	2010 / 2007	2013 / 2010	2014 / 2013	
1 / A	96.78%	101.31%	99.53%	94.23%	90.80%	95.62%	
1 / B	94.11%	101.79%	100.73%	91.23%	79.58%	97.24%	

The above data lead to the following conclusions:

- 1. As a result of the crisis, between 2007 and 2010, the less profitable posts (those in less developed countries, Group 1/B) *suffered greater reductions of both total revenue and letter volumes*.
- 2. After the crisis, on the other hand, in the case of total revenue there are no significant differences between the two groups when comparing 2010 and 2013 or 2013 and 2014.
- 3. However, the total letter mail volume continued to decrease faster at the less profitable posts.

Both groups underwent a spectacular reduction of letter volumes: In the more developed countries (the more profitable posts in Group 1/A), over 7 years a reduction of 18% took place (2014/2007), while the national markets of the less profitable posts (1/B) lost almost 30% of letter mail volumes. The posts in neither group were able to fully balance out the effect of that drastic reduction of letter mail volumes either by increasing prices or by utilising new sources of revenue.

So what can we say about the position of the Hungarian USP in international comparison? According to the statistical data, the Hungarian Post Office belongs in the group in which the letter mail market is exceptionally important (responsible for a high proportion of sales revenue), but, relative to the average of those in that group, the Hungarian Post Office is *more diversified* (the ratio of letter mail revenue to the total revenue is less than the group average), *revenue from financial services exceeds the average by most*. Within its own group, the Hungarian Post Office is among the posts with *less favourable profitability indicators*, and its labour efficiency (sales revenue/employee) is also below average. The *reduction in letter mail volumes was more drastic* in that subgroup, and the financial crisis also had a heavier impact on those players.

6.4 A brief situation analysis of Magyar Posta Zrt.

I shall describe the most important data of the Hungarian incumbent provider and its current situation briefly, and in order to make trends more perceptible, I shall also review the recent past of the company analysing longer sequences of data. That will provide important information as - as we have seen - a number of trends can be considered to be almost certain and deterministic for the future, too.

Magyar Posta Zrt. is Hungary's designated universal service provider, whose sales revenue totalled HUF 188.8 billion in 2015, which means that the company generates about 0.6% of the Hungarian GDP.

The sales revenue history of Magyar Posta shows quite clearly (see 30) that over the last 20 years, the revenue from postal services has not grown significantly. In the first ten years, characterised by increasing GDP and high inflation, the nominal revenue from service fees did grow significantly, but if we correct the revenue data for inflation and calculate revenue at 1995

prices, too, we see a reduction over the entire period (though growth between 2002 and 2007) in real terms.

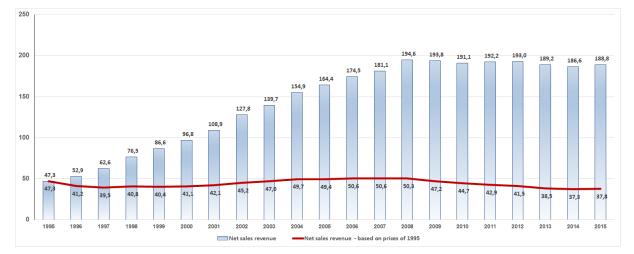


Figure 30: Sales revenue data of Magyar Posta Zrt. (1995-2015)

Source: My own chart based on data from public annual reports

Contrary to popular opinion, over the last 20 years, Magyar Posta has been usually making a profit. The figure below shows that over those 20 years, at the level of the balance-sheet footing, the Post Office only made a loss in two of those years (in 2002 and 2012). It is an interesting fact that both years were followed by a change of management, which may indicate that the annual result had been shaped by political motivations. At the level of operating profit, Magyar Posta made a loss in two additional years: along with 2002 and 1012, in 2001 and 2014 as well.

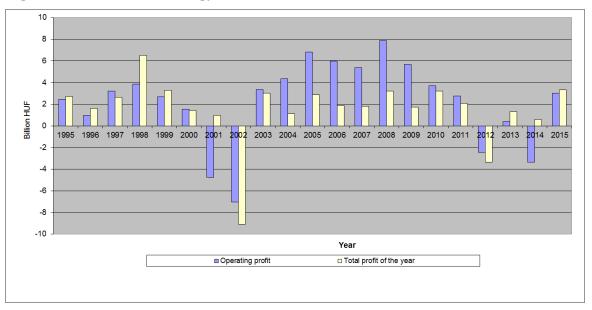


Figure 31: Profit data of Magyar Posta Zrt. (1995-2015)

Source: My own chart based on data from public annual reports

As we have seen, the postal sector is labour-intensive, yet the number of employees is dropping continuously. By 2015, the Hungarian service provider only employed approximately 30,000 people (average statistical number of employees: 29 thousand), while in 2001, that number had been about 44,000 people. Despite the significant reduction in the number of employees, the ratio of personnel type expenditure within the costs of the Hungarian Post remains stable and high (approx. 56%, which is a sector-specific characteristic, but not a Hungarian special feature; the reduction at the beginning of the 2000's was primarily caused by outsourcing). The actual amount, averaged over the last 5 years, was 107 billion forints. The changes in amortisation (dropping both relative to net sales revenue and in absolute terms) indicates that the company is consuming its assets: this figure was the highest in 2004, with a figure of 11.2 billion forints, while the average amortisation of the last five years has only been HUF 7.9 billion.

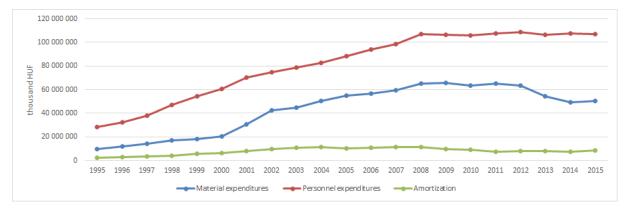


Figure 32: Data on the main cost components of Magyar Posta Zrt. (1995-2015)

Source: My own chart based on data from public annual reports

The fundamental mission of Magyar Post Zrt. is to perform its public service tasks in full and at a high standard of quality, while ensuring that all residents in the entire territory of the country have access to the service. It has to deal with increasing competition in all fields. The present range of postal services does not possess a significant immanent potential for increasing total revenue. The Post Office three major areas of business (letter mail, financial services (traditional financial transactions performed by itself, and as an agent selling modern financial services) and parcel mail), and – as we have seen during the international analysis – that range of activities means that in international comparison, Magyar Posta has medium level diversification (in 2015, 48% of the company's revenue was derived from letter mail). The traditional businesses of letter mail and financial transactions (yellow postal orders, delivery of pensions) is on a declining track, further reductions are unavoidable. At the same time, the parcel logistics market grew beyond expectations in the recent period, and it may remain the engine of growth in the future, but simply the differences in the size of the two divisions imply that in itself, the growth that can be expected in the competitive parcel logistics market (including MPL - the Post Office's CEP brand) will not counterbalance the revenue lost in letter mail and traditional postal orders completely. Figure 33 shows the changes in revenue from the various divisions over the last five years (detailed data is provided in Appendix 10). The significant reductions in revenue from commerce are remarkable: they are the result of government measures (e.g. legislative changes to the sale of tobacco products have meant that the Post Office can no longer sell those products at all).

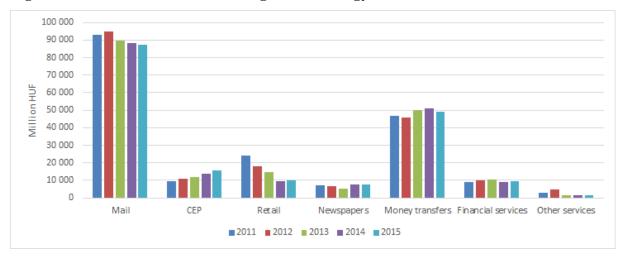


Figure 33: Domestic sales revenue segments of Magyar Posta Zrt. (2011-2015)

Source: My own chart, based on the public annual reports of Magyar Posta Zrt.

The weight of residential customers within the consignments posted is dropping, they only contribute 4% of letter mail sales (and further reduction is expected), while in the logistics division, 20% of revenue comes from residential customers. On the other hand, more than 95% of the revenue from the financial division is generated by retail business. Experiences indicate that a high-quality, stable core activity is the basis for successful diversification, if a post fails to present solid, high-quality and authentic performance in postal services, it cannot diversify in the direction of modern banking or any other business in an authentic/well-founded manner. The (physical) post office network is already, and increasingly sustained by financial services (postal orders, savings and insurance products) – the transformation of the network in the direction of a "people's bank" (simple, good value-for-money mass products) has been completed gradually over the last ten years. By converting larger post offices to bank-like configurations (open counters, customer calling system, discrete advisory offices), in effect the country's largest "banking (financial services) network" has been established. As a financial transactions provider, the Post Office is authorised by law to offer current account services (but it is not doing so), while it is not permitted to provide any other modern financial services in its own right, so for those it needs strategic partners in order to make such services available within its network (banking, insurance, home savings and investment services, etc.).

Table 25: The market environment of the main divisions of Magyar Posta Zrt.

Division	Market environment
Letter	After liberalization, there may be new entries in the market (In all countries, the liberalization
mail	process was accompanied by some (but not dramatic) loss of market share and competing on price for large customers.)
	Due to technological development (electronic substitution) and the change of customer demand
	(correspondence habits), letter volumes have been dropping since 2006.
	The proportion of official documents and bills sent by corporate customers is significant.
	Correspondence between residential customers accounts for a small and decreasing proportion
	of letter mail.
	Post offices play a marginal (and still decreasing) role in letter mail traffic. The success of
	letter-related processes primarily depends on the electronic mail centres (incorporation into the
	customer's value chain) and on deliveries (cost and quality). The latter is primarily influenced
	by the depth of processing and flexible system management.
Logis-	Already a completely competitive market, and this market is growing.
tics	The growing market generates ever stronger competition (GLS, DHL, UPS, FedEx, TNT,
	Transoflex, Sprinter).
	The positions of the Post Office are strong (approx. 37% market share), the positioning of the
	MPL brand was a success. Within the portfolio, the ratio of MPL business parcels is around
	75%.
	I.e. business senders (B2B, B2C) contribute 75%, while residential customers contribute 25%. After the developments of the recent period, the Post Office lags behind the others primarily in
	the area of IT support (flexibility, tracking, customer experience).
Finan-	In international comparison, revenue from financial services is significant.
cial	Traditional comparison, revenue from manchar services is significant. Traditional cash transaction services (yellow cash-payable bills, pensions) are in the downward
servi-	arc of their product cycles, they are being eroded by the introduction of modern services. The
ces	network of post offices is being increasingly supported by the financial services offered there.
	There is very strong market competition in the field of modern financial services. As the Post
	Office is not permitted to conduct banking, investment and insurance activities under its own
	name, it needs strategic partners/subsidiaries/allies.
	The customer demographic is getting older, new solutions would be required to reach younger
	generations.
Retail	The revenue is highly concentrated (mobile phone top-up cards, games of chance), but even in
sales	international comparison, the range of products carried is too wide.

Source: My own collection based on annual reports of Magyar Posta Zrt.

In the last decade, Magyar Posta essentially followed a resource-based strategy: it exploited its wide-ranging physical network that provides full national coverage (post offices) and its high level of loyalty capital to move in the following strategic directions (based on the 2015 annual report of Magyar Posta Zrt.):

In order to digitize the letter mail division and the incorporate its services into the letter value chain, by 2015 the Post Office established the IT infrastructure for handling so-called *hybrid and inverse consignments* for both business customers and the government. Newspaper subscriptions were successfully stabilised and increased slightly – electronic solutions played a large part in that, too.

- Digitalization and development of the CEP range of services, primarily in line with the requirements of e-commerce and changing customer requirements: extension of the parcel point network (3000 locations), four options for taking delivery of parcels (post offices, 50 parcel delivery machines, parcel points, delivery to the home), the pilot project of same-day delivery, a tracking service and a mobile app.
- In the financial services area, the company expanded its range of products so as to provide a full range of physical and an ever larger set of digital services to its customer base. In the traditional range of cash transactions (yellow payment orders, pensions) the decrease has not stopped, but the rate of reduction has been reduced in 2015 by introducing new developments, in which the Post Office used digital technology (the iCsekk bill payment service) or hybrid solutions (paying bills using a bank card) to create more modern, digital versions of the basic products.
- In order to utilise network resources better and to take greater advantage of the national presence, the Post also undertook new tasks: *customer service activities* are performed for public utility companies at almost 300 post offices.

Given those initial conditions, the future of the Hungarian USP is influenced by the factors acting on all three of the segments/industries analysed above (letter mail, CEP, financial services). The challenge facing Magyar Posta is that if it intends to maintain its current range of activities, then it would have to protect its market position and take advantage of new opportunities in the contracting letter mail market, increase its competitiveness in the growing CEP market, and create a viable strategy for the financial services market, all at the same time. And it would have to do so while all of those markets can be expected to have increasing competition and more substitutes – while the Post also has to keep providing the universal postal service. Naturally, it is also a strategic option to change its field of competition fundamentally, to give up certain activities, or perhaps even enter completely new markets. But there are few successful examples of the latter happening, and even in those few cases, the changes were underpinned by strong government and regulatory support.

6.5 Qualitative interviews

The primary purpose of the qualitative interviews was to enrich and expand/focus the knowledge I gained from my review of the literature, to validate the preliminary scenariogenerating factors I established during the preceding analysis, and to filter for factors that are specifically relevant to the future of Magyar Posta using a new, independent source of information that embodies multiple viewpoints. I made the assumption that the information I can gain by simply noting the strategic issues that my interview subjects mention and the uncertainties they perceive in relation to them over the next 10 years will be an important addition to my topic.

6.5.1 Interview planning and data collection

During the phase of planning the interviews, the first dilemma I faced was about the openness or specific and detailed nature of the questions I should ask so as to ensure that the questions themselves do not influence the subjects and hence distort their responses. I decided to use *semi-structured interviews* (open-ended, but managed interviews) and let the interview subjects speak completely freely (including digressions) within the framework established by the questions, so as to obtain the richest possible set of information. As I have mentioned, using Kvale's typology, I used the miner metaphor, i.e. my objective was to bring as much information as possible from the depths up to the light of day. I attempted to use a matching interview technique, and my objective was to proceed through the process of the interview, following up the predetermined questions with investigative 'why?' questions to facilitate thinking further. In addition, I attempted to approach the same issues from a variety of directions to get even richer information (I first asked about external influencing factors, then approached the same question from the perspective of the universal postal service provider). In line with the above considerations, I selected five questions (groups of questions) for my interviews:

- 1. The present of the Post Office:
 - a. What comes to mind when you think about the present situation of Magyar Posta?
 - b. What are the most important factors influencing the present of the Post?

- 2. In your opinion, what are the most important **drivers** (**trends**) that may influence the operations of Magyar Posta over the next 10 years?
- 3. In your view, what are **critical factors of uncertainty** that may influence the operations of Magyar Posta over the next ten years?
- 4. What strategic break-out points do you see for the Post?
- 5. What are the greatest **obstacles** preventing the Post from moving in that direction? Do you see a breaking point in the next 10 years?

I tested the first outline of the interview with a subject in an external position but with knowledge of Magyar Posta, and I also tested the above open interview concept (for the trial interview outline, see Appendix 1). During the trial interview, it became clear that the subject was able to answer the interview questions, but he couldn't simply assimilate the conceptual framework I had arrived at after analysing the literature (the duality of drivers and uncertainty factors), so I needed to provide brief explanations with the questions, so in the final interview outline I added brief descriptions to those questions. Also, based on the answers, it seemed that the question about influencing factors acting on the present and the future is redundant, so I removed it from the questions (1.b). On the other hand, the questions approaching the issues from various directions (first from an external viewpoint and then from the perspective of Magyar Posta) proved successful, the change of perspective resulted in new considerations being brought up. (As if the *miner* had tried a different tool to bring the ore sought to the surface.) The final interview outline is provided in Appendix 2.

During the planning and the performance of the research, I paid particular attention to compliance with the methodological and the ethical requirements that are applicable to qualitative interviews (see Table 26). This was particularly important in my special position: as I have mentioned, over 12 years ago I worked for Magyar Posta, and I am currently employed by a company that is partly owned by the Post, and I have previously had working relationships with some of the interview subjects. In order to ensure *researcher autonomy*, I eliminated all persons from the list of potential and suggested subjects with whom I am presently in any kind of working relationship, even if their opinions or positions could have been interesting.

Table 26: The principles of research ethics

Ensuring that the participants in the research suffer <i>no harm</i> .
Respecting the <i>dignity</i> of people participating in the research.
Securing the <i>informed consent</i> of participants.
Protecting the <i>privacy</i> of participants.
Ensuring <i>confidentiality</i> of research data.
Ensuring <i>anonymity</i> of the participants.
Avoiding deception concerning the purpose or the nature of the research.
Declaring conflicts of interest, involvement, financing background of the research.
Honesty and transparency concerning communication of the research.
Avoiding misleading and false research results.

Source: Easterby-Smith et al (2008), p. 134

The interview subjects were invited to participate as follows: *I launched three snowballs*, and, avoiding the people I mentioned above I could not interview to maintain my autonomy, I requested interview subjects one after the other. Starting three threads was an important decision, as it allowed me to ensure that I could ask several subjects about each of the three major diversified areas of activity I had identified during the analysis of the Post's data⁷⁴. I started those threads based on the professional backgrounds of the initial interview subjects and my knowledge of their experiences, in accordance with those three industries (logistics, letter mail, financial services).

I contacted a total of *14 interview subjects*, and I *asked them to participate by telephone*, at which time I already gave them a brief summary of the purpose of the request and the research (transparency), and I also emphasised that the interviews would be anonymous and take approximately 1 hour, and that they were very welcome to say no if they felt that their participation would be problematic in any way.

During the interviews themselves, I applied the following criteria (King-Horrocks, 2010, pp. 42-60):

• As far as the *selection of venue* was concerned, I adapted to the subjects' preferences.

⁷⁴ My fear proved justified, the interview subjects were only willing to talk about the area of their professional specialisation, where they felt that, thanks to their professional backgrounds, they could express expert opinions.

- I *recorded* the interviews *using a dictaphone*, which I later had transcribed⁷⁵. In addition, I also used the technique of *taking frequent notes*, to assist with the subjective evaluation of what I heard during the interviews and to assist me with retaining a distance from the subject.
- Establishing *rapport* during an interview is a very important task. At the beginning of the interview, I always presented the purpose of the research, the planned timing, and I assured the subject that I would handle the data confidentially and anonymously. I also emphasised that I am interested in the subject's opinion (and not facts). I also asked for permission to record (informed consent).
- During the interview though not in a premeditated manner I consciously used the techniques of *probing*, primarily using questions to facilitate elaboration (e.g. "Why do you think that is an important issue?") and clarification (e.g. "What do you mean by that?").
- The *start of the interview* is also an important issue for planning and conducting interviews. According to the literature, it is expedient to start the interview with easier, 'warm-up' questions, so I decided to use two of those. First, I asked subjects about their own professional backgrounds, and then I asked them to say how they saw Magyar Posta in the present. I only started asking more difficult, more specialised questions about the future after that.
- To *conclude the interviews*, I used the recommended, typical closing question: I asked the subject whether they felt that any topic had been left out, if there were anything else that they felt was important to say, and I only stopped recording after the interview was completely finished.⁷⁶.

⁷⁵ There was a technical problem in one of the interviews, where I had to interrupt the recording and a part of the interview was not recorded, while in another case, the background noise resulted only a part of the recording being usable.

⁷⁶ It was an interesting development that one or two interviews had an afterlife: the subjects contacted me to say that something else had occurred to them after the interview that they wanted to share. I believe that is a clear indication that I had managed to establish rapport with the subjects concerned, and that I had managed to raise their interest.

The statistical data of the completed interviews is summarised in Table 27. It shows that the 14 interviews **took a total of 670 minutes**, and resulted in 38 pages (91,169 characters) of transcribed text. While I was making the transcriptions, I had an opportunity to listen to the completed interviews several times, and to review the notes I had taken. During the analysis of the interviews, I primarily relied on the transcripts and my notes.

The table also includes the professional backgrounds of the subjects, which shows that the great majority of the experts had worked in various areas of Magyar Posta (at various times, for various periods), but at the time of the interviews, only one of my subjects was actually employed by the firm (and I do not have a subordinate relationship with that person).

No.	Interview subject, position	Experience (in temporal sequence)	Time	Location	Length	Focus
0	<i>Trial interview:</i> expert on strategy and logistics, company director, managing director	Client Post Client	10/09/2016 10:00	Office	55 minutes	CEP, Letter mail
1	Logistics expert, director, managing director	Post, Competitor, E-business	30/09/2016 11:00	Office	41 minutes	СЕР
2	Expert on logistics and marketing, director	Post Competitor	2016.09.30. 12:00	Office	43 minutes	CEP
3	Strategic management and postal sector export, head of department	Consultant Post	03/10/2016 10:00	Office	65 minutes	Letter mail, CEP, Financial services
4	Business policy and international postal sector expert, deputy CEO	International competitor of the Post	04/10/2016 9:00	Office	56 minutes	Letter mail, CEP, Financial services
5	Postal strategy and IT expert, CEO	Consultant Post IT sector	07/10/2016 17:00	Café	50 minutes	Letter mail, Financial services, CEP
6	Postal systems and logistics expert, deputy CEO	Competitor Post	05/10/2016 12:30	Restaura nt	45 minutes	Letter mail, CEP
7	Postal strategy, finance, consignment traffic expert, director, deputy CEO	Post Government Admin. Competitor	12/10/2016 15:00	Café	60 minutes	Letter mail, CEP, Financial services
8	Banking and financial services expert (deputy CEO, CEO)	Post partner Competitor	13/10/2016 16:00	Café	56 minutes	Financial services
9	Controlling and e-business expert, director	Consultancy Post E-business	14/10/2016 8:15	Café	50 minutes	Letter mail, CEP Financial services,
10	Logistics and CEP market expert, head of department	Post Competitor Pensioner	14/10/2016 10:00	Café	41 minutes	СЕР
11	Strategy and international expert (CEO)	Consultant	17/10/2016 10:00	Office	36 minutes	Letter mail, CEP, Financial services
12	Banking and financial services expert (deputy CEO)	Competitor	17/10/2016 16:00	Office	42 minutes	Financial services
13	International postal expert, director	Post International	18/10/2016	By phone	30 minutes	Letter mail, Financial services, CEP
					670 minutes	

 Table 27: Data of the completed interviews

6.5.2 Analysis of the interviews

Adopting the interpretative paradigm, my fundamental expectation was that during the interviews I would encounter *multiple versions of reality* concerning the present and the past of the Hungarian Post, and this indeed was what happened. That was not surprising (it wouldn't even have been surprising with a more homogeneous group of subjects), as my interview subjects viewed the Hungarian Post and its future from very different backgrounds and experience, through a wide variety of glasses. It was an important experience that every interviewee went beyond the scope of the questions and actually formulated recommendations for the possible strategic reactions and scope of action for Magyar Posta.

During the analysis of the interviews, I had to devote particular attention to managing distortions. It was Kvale ((1996, pp. 183-184) who stated that the researcher of interview material can actually be regarded a *co-author*, and not merely the *collector* of the material. The researcher interprets the material through her on filters, and even in the first instance, she has already influenced the material through her presence, her active attention and her questions. I am fully aware that the interpretation of reality is always subjective, and that it is not possible to eliminate distortions completely, but I used conscious self-reflection to reduce them, at least. During the coding of the interview transcripts, I used colours to identify the factors that were raised in relation to the 5 issues investigated, then I classified the items within the 5 topics. This was no easy task, because the interviewees - as is natural in the case of semi-structured interviews - didn't always answer only the question asked, or precisely the question asked, while they used various locations to refer to the same items as well (e.g. e-retail, e-commerce, web-stores, Internet retail – after coding, I considered those terms equivalent). After completing the first coding, I showed the transcript and the results of my coding to the subject of the trial interview, with the aim of obtaining a "coding audit" to improve the reliability of my results. I asked him to use the same colour codes to mark anything that I may have missed, and also to mark anything in the transcript that he thought I had misclassified. I believe it was an excellent result that I had missed any item during coding completely (I did miss a few repetitions) and that the categorisation of only 6 items was marked as problematic. It involved our assessment, given the context, about the category that the subject's words referred to: was it a break-out point or a driving force, or was it a break-out point or a critical factor of uncertainty?

In what follows, I shall present the results of the processing of that information, and I will illustrate my conclusions using quotes from the transcripts.

6.5.2.1 Evaluation of the present of Hungarian Post

One reason I thought that introductory question was important (beyond providing an easier point of entry) was that I would allow me to record the views the individual subjects had about the Hungarian Post, as a set of initial conditions. Two of the subjects mentioned that they see the Post as a *somewhat obsolete, large, traditional service provider*, which has made significant attempts at becoming more innovative and agile, but so for without spectacular results.

"I see today's Magyar Posta as rather an old-style, old-fashioned company, which is trying to renew and modernise, but somehow that renewal, that becoming more client-centred and agile didn't really achieve a break-through. Which is something I don't find surprising, as this is characteristic of the companies that also provide some type of public service that is financed by the state, so it is not surprising... Sometimes I sense a great distance between what the Post's management are talking about and what I myself experience as a customer. When I go to a post office, I get classic, traditional post office service, which is quite the opposite of what the management talk about in relation to innovation, digitalization and a client-centred approach. Of course, it is no easy task to roll out modernisation in an organisation of that kind. Operations still appear to be essentially paper-based. To some extent, that is natural, it is even hard to modernise only headquarters in an organisation of that size. Although the computers are there, the operations do not support the image of a modern company."

"The Post will definitely contract somewhat, because its traditional markets are in decline already. The Post is attempting some form of modernisation, but they remain superficial."

The traditional past has a positive side, too, as almost all (12) subjects mentioned in some form, and that's the *high level of loyalty capital* accruing to the long and reliable past of the company, which is something that can certainly be built on in the future.

"Research in a number of countries have shown that the level of confidence in the Post is greater than that in banks. Posts are trusted more than banks... Of the entire state quasi-sector, the Post is in a premium position, partly as a result of having a traditional service profile that has been unchanged for over a hundred years, which everyone trusts, so it inspires strong confidence."

"The Post is highly respected, not only in the country but in cities, too. ... The products are felt to under some sort of state guarantee. There's a high level of confidence capital."

In addition, the participants in the research emphasised (4) the strength of the network (which can be an advantage and a disadvantage at the same time). The future vision of the network was mentioned as a critical issue, and also the aspect of the future of the Post that is the most impacted by politics and contradictions.

[&]quot;The role of the network is in itself contradictory: as much as it is an advantage, it is also a disadvantage. The network is going empty, the electronic things are picking up, the physical ones recede, but the postal network is physical. If nobody goes there anymore, it doesn't matter how good the product we offer is, nobody is going to use it."

"It has always been a question: what is the network for? We do need a delivery network, but the input network should have been transformed long ago. Today, physical networks are less and less necessary for banking activities. Today's 40+ generation no longer requires a personal network."

Several of the subjects (4) mentioned the tension inherent in having to provide the universal

service as a statutory obligation while needing to achieve real market performance.

"The Post is not in an easy situation: the universal service obligation in letters and parcels, while it has to keep up with the competitive market and turn a profit, that is the strategic background in which the focal points of the Post need to be find, for which it also has resources, of course, first of all the infrastructure, and the knowhow is also there."

"In terms of cost efficiency, the Post doesn't have much room for manoeuvring – while its pricing increasingly has to be market based, its cost structure is not."

For me, it was important and interesting to see how accurately and how similarly all the experts

interviews saw the challenges facing Magyar Posta as a result of the decline of traditional

services (primarily traditional letters and postal payment slips). Just as it was also interesting

that several of them (5) felt that from the strategic perspective, the Post office is at a critical

point, the organisation appears to be at the boundary: balancing on a line, a thin line from which

it could drop at any moment. I quote a few self-explanatory sentences in illustration:

"The Post is at a strategically sensitive point – letter mail and payment processing are decreasing, while downsizing the operation is not an option (due to legislative obligations), labour market challenges that union pressure for higher wages place on the organisation, burdened with obsolete technology and competency problems in the field of IT. Parcel mail is growing, but nothing else."

"So far, the Post always protected itself with regulations, but this will no longer work. They need a different attitude."

"The role of the state is definitive in both strategic direction, whether it's cost reduction or taking on new activities. In the UPU, they are just marking time, there's no real bombastic idea of a break-out point that could counterbalance the drop in letter mail volumes. E-services are important, but they generate a smaller volume of revenue and it is difficult to make them turn a profit. In an environment with low returns and low inflation, it is also difficult to get results with banking services. The Post, today, is still strong in small transactions with low margin and high operating costs."

"The postal payment slips whose death has been immortalised by many a poet, though they are still definitive in the cash transactions area, will at some point expire. Today, it is simply a transactions business, from which it is difficult to move anywhere, and the reduction in volumes has an aggregate effect. There is no client loyalty or long-term customer relationship behind it that could be built on. They need a customer database on whose basis they can address their customers, today that is an indispensable requirement of operating as a real service provider!"

"I cannot imagine a disruption that would be favourable for the Post, but any change occurring faster than expected can have grave consequences. So far, the Post has been better at defending its positions than at moving to a market model, where they should have been on the offensive, they didn't achieve significant results, no new areas were really acquired, they failed to break into new markets."

I would mention as a positive claim that many of the interview subjects (all the ones who claimed to be CEP experts) noted that in the CEP market, the positioning of the MPL brand had been a success, and saw that in that market – the only one that is actually growing significantly

- the Post has achieved measureable positive development in recent years.

"The logistics business they do well, MPL has become a strong brand, customers like it, its position has improved. *Why is that?* They've introduced tighter technological systems and they have begun to pay attention to customers."

"The technical disadvantages have been eliminated (trackability, PDA, transparency, parcel delivery machines). It offers an additional advantage with its fees, and the image of the Post has become more innovative, as well."

"The message has gone through, MPL is no longer *that* Post. When we saw some customers representing a competitor, they all told us that they use MPL for deliveries, not the Post. The strategy of making MPL the 'elite corps' of the Post has worked, but it needed 10 years."

The things the interview subjects said were also consistent with the notion that managing the political arena is one of the main challenges of the Post, in order to find a solution to the tension between the public service and the market aspect. The subjects all identified the same three main partial markets, or industries, that I have identified on the basis of the literature and the statistical analysis, i.e. the letter mail, the CEP and the financial services markets. In addition, as a present component, they also mentioned retail activities (primarily gambling and newspaper sales) and customer service functions as supplementary activities in today's portfolio.

It is an important finding that the analysis of the subjects' ideas clearly shows that there is no sharp break between present and future, that the future has already begun in the present, and that the majority of the factors that influence the Post's present will remain important in the future. Many of the subjects said that the things experienced in the present will remain important in the future, the trends are clear and they all point in the same direction (globalisation, digitalization, electronic substitution).

6.5.2.2 Drivers

Among the drivers, the interview subjects mentioned factors that impact all the markets in the same way, or impact all the markets but not in the same way, as well as some that only appear to be relevant to individual industries. *Economic growth* – unsurprisingly – appears to be a common driver, if the economy grows, that has a positive impact on all areas of business (even letter mail, only less than previously), if the economy contracts, the situation is reversed.

[&]quot;Economic growth is still a driver. If the economy is doing better, the Post also does better: more letters, more parcels, more savings."

Globalization (4 mentions) was raised in relation to the CEP market. The main notion was that globalization, the open state of the world, has a positive effect on commerce, particularly electronic commerce (15 mentions), which has been the driver behind the growth of the CEP market recently. The participants of the research clearly considered globalization to be a one-way effect.

"I don't think it is possible to stop globalisation. It's like Uber, maybe they can stop it for a few years, but give it time and there will be another one, and it will be there. The customers will force the solution, they will become much more confident. This process cannot be stopped, that's for sure."

"The user will decide, and so globalization will not be turned around."

I must note here that globalisation, economic growth and the development of electronic commerce are clearly not independent of each other (they are partially dependent): globalization impacts economic growth, and both economic growth and increasing globalization have a positive impact on the development of electronic commerce. Opinion was undivided concerning the impact of e-commerce, too.

"In e-commerce, the sky is the limit. New things keep turning up: home delivery of foods is just beginning, and it has tremendous potential."

"The market has been growing radically since 2010, everywhere in the world, largely thanks to e-commerce." "The substitutability of parcel logistics is limited. 3D printing is a fine thing, but over the next 10 years, parcel deliveries will still be required, and e-commerce is going to grow."

"Parcels will remain and grow, only models will change."

"Parcel mail is growing dynamically both in Hungary and around Europe, due to e-commerce. Experts say that this has another 5–10 years, and the Hungarian market lags behind somewhat, so we are expecting growth, indeed, growth in double digits."

I specifically asked, using provocative questions, whether the subjects felt it was imaginable that the trend of globalization could break, get interrupted or slow down. In extreme cases (in case of extreme political and security risks) they felt it was conceivable, but the participants all felt that the probability of that happening was low.

Every single interview subject talked about the potential impact of *changes in customer requirements* in all three markets, with different emphases. I would say it was a common element that the balance of power will clearly shift towards the customer, or the addressee, *their bargaining strength and bargaining position will increase*, and *customer experience* will become a focal point. In addition, the important role of time and information, comfort and reliability were also mentioned repeatedly, along with the changing needs of younger generations (see under network).

"Another very important change in the CEP market will be the increasing confidence and improving selfadvocacy of addressees, as the decision will increasingly shift to them... those that are able to cleverly and emotionally connect with an address will win, because the addressees will decide". *What is the definitive trend within that change?* "Flexibility will be the key, the parcel delivery machines will stop at 15-50%, personal delivery will grow stronger, because everyone will get to the point where the customer says where and when they want to parcel. Couriers will be predictable, down to even half-hour blocks. The other thing that will come in will be community-based, Uber-type solutions... Increasing trust and emotional ties will come into play with addressees, and the sense of security will also be important. ... People are increasingly impatient, same-day delivery will grow in importance."

"Closer connection is the other trend – how to get closer to the addressee, how you can get a customer experience ... Everyone is undertaking to make deliveries in shorter and shorter time windows, this will become a requirement, not necessarily from the customers, but from our clients, certainly, because that's what they will want to communicate to their customers. That will also strengthen transparency... Today, instead of technology, the person is in focus, what that person gets, how that person gets value, focuses are shifting towards people, while there are increasing quantities of technology in the background."

"There is increased demand for speed and reliability, if they are making a delivery within a particular hour, they ring you in advance to say they'll be there in 20 minutes. Along with the logistics of parcel deliveries, the role of information will also gain value, the addressee will want to see and (also) control the process. The changes of customer needs will be one of the drivers in the future... People today place greater value on time and on comfort, they order by telephone and on the Internet... Today's young generations grow up into this, kids even do their homework on laptops, through the Internet."

"The demographic challenge is important for the Post, because the customer base of the Post is getting older, at present it has nothing to offer to young people (neither letters, nor payment slips)."

In the letter mail market and the bills payment market, the effect of *electronic substitution* appeared from two sides. On the one hand, due to the pressure to reduce costs, large customers can be expected to convert to digital solutions as soon as their customers are capable of it, which may cause major losses of volumes for the Post. On the other hand, the needs of addressees are changing, too, and the new generations no longer insist on paper-based communication. One of the subjects, however, did note that the receptivity of recipients is the lowest in the small towns where full digital coverage will not be available without major government support for a long time.

[&]quot;As soon as Internet penetration allows them to do this, and prices also reinforce that effect, the customers will shift towards digital. Authentication and certifiability is questionably electronically today, they can't reach everyone yet. As long as that is the case, paper-based is here to stay. Until government really starts pushing electronic communications, and implements an authentication solution, until everyone has email and access... paper-based letters remain."

[&]quot;In letter mail, there is a serious risk of a downward turn – in the medium term, the image is already very bleak, the shared billing system of public utilities will reduce letter mail by a great deal once it is finished."

[&]quot;Letter mail is decreasing, brutally, both private and institutional letters. The background is partly conscious cost-cutting by the senders. And the large posters are also turning to alternative, digital solutions."

[&]quot;Digitalization is in inverse proportion to the profitability of the network today."

In the area of financial services, payment slips are being threatened by electronic substitutes, transaction services are particularly vulnerable on the technological side, because those mass, low margin products are easy to digitalize.

"In payment slips, electronic substitution is a major risk, a change in customer habits may have a definitive impact."

"Payment slips are low margin scale business, and they lend themselves to digitalization very easily."

"Today's generations from 40+ down no longer require a personal network in the field of financial services, the generation effect is acting against the Post."

The system of interconnections between the drivers (factors acting in the same direction according to the interview subjects) I derived from the interviews are shown in the figure below.

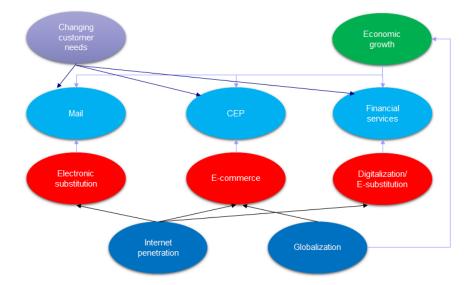


Figure 34: System of interconnections between the drivers

6.5.2.3 Critical factors of uncertainty

In relation to critical factors of uncertainty, I identified the following groups of factors based on a content analysis of the interviews. In the CEP market, one of the most important open questions concerning the business model of the future is whether new models, solutions and techniques that may completely do away with logistics (3D printing, virtualisation) will appear or not. Possibly other solutions may be introduced that will transform market conditions and players (DIY – own solutions as being implemented by Amazon), or whether new communitybased solutions will appear similar to Uber, or revolutionary technological innovations such as self-driving cars and drone deliveries.

- Uber-type deliveries need to be watched: community based, shared or DIY solutions (2 mentions)
- 3D printing may turn logistics completely off, but downloads have a similar effect.
- The big problems will come not only for the Post, but for all logistics firms when the physical forwarding of consignments no longer happens, but that kind of virtualisation (when the "parcel" arrives as information) is limited and expensive as yet.
- New solutions that they won't be able to protect the market against through regulations. The problem will not be caused by existing competitors, but by new models, externalities that rewrite the market, and that will not happen one day to the next.

Many (10) mentioned the uncertainty relating to the role of the state in all its roles (primarily in the letter mail market, but also in payment processing).

- The state plays a definitive and multifaceted role: on the one hand, it is a business partner as a sender (but it is a question how fast the state itself will adopt digitalized solutions), secondly, as the owner, it expects business efficiency as well as the provision of the public service tasks (including political ones). Thirdly, as the regulator, it defines requirements applicable to the USP concerning the fixed network and the standards of deliveries. Through the Postal Act, that 3rd role is definitive. As the regulator, it also affects the size of the letter mail market, and it will also determine whether postal delivery of pensions will continue at all.
- A change in government intentions may bring a breaking point. If the state stops supporting the Post, the loss of revenue will very quickly generate a large loss.
- What politics wants well that's a great question mark. The USO licence of the Post could expire, and renewal is a national political issue.
- Political intentions concerning the reduction of the network and cutting costs: those are big questions.
- Government regulations may cause major problems, but the Post can as yet lobby against such moves. In the short term, that can be used to gain time and protect the market.
- If the state could furnish a solution, it could simply prescribe that all citizens should be electronically accessible. It is a regulatory question, too because it is in everyone's interest. It could change within 10 years.
- The development of e-government so far has not been very fast in converting the Hungarian government's business to electronic channels. That is a positive fact for the Post. Aggressive transition to electronic does not seem to be happening. It is also a regulatory problem today. For a paper-based player, the fact that digitalization has not been fast is good news.
- There will be solutions for identification and authentication those are constraints today, but they can be overcome within 10 years.
- Electronic government/public administration is a great risk, the Post could become the spearhead of the changes along its own concept, say providing registration and authentication services.
- If the government were to make the transition to electronic communication, that will solve the authentication problem, if everybody gets email and access, that can overturn the market.

In addition to the sender and regulatory behaviour of the state, the speed of the electronic substitution of physical letters will also be influenced by market forces, and there is also a negative risk there.

• With letter mail, there is one question: how fast does B2C convert to digital, to electronic.

• Letter DM is a major negative risk, if it shifts to digital channels faster.

There is regulatory risk not only at the national but also at the international level, but there, loosening up and adapting to 21st century requirements could actually increase the options of Magyar Posta (and every USP).

- International regulations ought also to change, as this is an outdated construction.
- The content of universal service must be changed at the European level, but that topic could land on the agenda everywhere, because all countries are having similar problems.

In the letter mail market, another factor of uncertainty relates to changes in the industry competition, the threat of potential new entries.

- The competition has not really broken into the letter mail market, but if it does, the options of the Post will become narrower.
- Today there is an even greater risk that competitors will move to acquire the valuable segment, and the Post will be left saddled with the loss-making segments.
- In a contracting, not particularly attractive market, why would anyone enter to compete with a a not particularly profitable incumbent?
- There is a postal market external aspect, but the Post receives quite a lot of protection from the state so as not to be vulnerable to unfair punches. The question is, how long will the situation remain like that, will the Post have any serious competitors?
- At present there is no competition in letter mail, but there could be, the competition could be built on the base of Citymail.
- The appearance of a serious competitor in the letter mail industry could be a factor causing a breaking point.

Three financial experts among my interviewees all saw major regulatory risk for the future of payment collection at the national and the international level. It seems the postal payment slip is not 'future-proof' in the 10-year term. The changes in the state's (through state-held corporations, as clients ordering cash collection services) attitude to traditional financial transaction services will also be important (e.g. whether the above-mentioned postal delivery of pensions is retained in the medium term).

- There are serious regulatory risks involved in processing cash payments there is an EU directive devoted to reducing cash-based systems.
- As regards electronic substitution, a lot will depend on changes in the legislative background.
- If the post-office payment slips were to be made to disappear with the stroke of a pen to do away with cash transactions, that would be a major blood-letting.
- The market could just dwindle away, letter deliveries are decreasing, and deliveries of pensions is decreasing, particularly if basic current accounts are made compulsory for everyone.

International (EU) regulatory risk can primarily reduce the profitability prospects of the industry in the field of regulation of cross-border parcel traffic. In that field, the developed posts are already lobbying seriously to ensure that the digital common market strategy of the EU for cross-border Internet commerce should be acceptable to the postal sector, and to avoid excessive Union intervention (according to the players in the sector, that is) in market processes.

- Cross-border parcel post traffic ('postal roaming') is under pressure at the European regulatory level to reduce fees.
- There is also a regulatory risk in the EU's possible decision to regulate cross-border parcels more aggressively.

Security risks were raised three times during the interviews, but on two occasions, only in response to a targeted question.

- The risk of terrorism: if politics gets preoccupied with security risks, that could bring the development of ecommerce to a halt.
- The spread of protectionism actually counteracting globalization and commerce is only a theoretical possibility.
- The Post could be a physical back-up system in case of a world cataclysm.

In the area of financial services, the faster or more radical change of new business models (FinTech) may pose a major threat to the Post.

- The FinTech effect may have a radical impact on the entire financial market.
- Question is how paying and banking habits will change over the next 10 years.
- In the payment area, faster change in financial services could cause a major breaking point for the Post.

Based on the above analysis, the critical factors of uncertainty identified in the interviews are shown in the following table.

	Letter mail	CEP	Financial services	
Change of competition in the industry EU regulations	f New, traditional entrant: yes or no Appearance of new models (their impact on the CEP market): CEP vs. new models/ players		Financial services Appearance of new models, players and platforms vs. traditional players in the digital arena Regulation of cash transactions, regulation of	
	vs. new	aggressively regulated or market- based	new models: traditional vs. modern	
National regulations	Regulations in favour of market competition vs. protecting the market digital vs. paper-based	-	Regulations that attack or protect traditional cash transactions	
Speed of e- substitution/ digitalization	Fast vs. slow	-	Fast vs. slow	
Government as customer	Fast vs. slow spread of e- government logic-Fast vs. slow spread of e- government logic			
Government as owner	Uncertainty associated with the owner's expectations and scope of action			
Protectionism	Protectionism vs. stronger globalisation			
Security risk	Increased vs. decreased security/trust			

Table 28: Summary of critical factors of uncertainty

6.5.2.4 Break-out points

The ideas raised in relation to break-out points were distributed on a wide scale, they are listed below. The following three ideas are related to the theme of the Post's corporate strategy:

- The Post will definitely contract, that just has to be accepted.
- Joining a stronger party is a possibility.
- On the other hand, partial privatization would actually be good for Magyar Posta, it would bring in a more business-like approach and reduce dependence on the state. Even if the private share was below 50%.

The most frequently mentioned and most consistent break-out points were formulated in relation to the CEP market. Regional expansion (even if only focuses on a few neighbouring countries) and taking a role in logistics beyond the CEP market were both raised.

- "Cross-border commerce is a tremendous opportunity. If they wish to, the Post can make it happen, but only with stable subcontractors. It can strengthen an already strong brand by adding flexibility. ... but it is no longer possible to ask for twice the money because the consignment crosses a border, those times are over."
- Regional expansion through acquisitions or alliances.

- Home delivery of food is a very new and highly promising direction.
- Home-delivery of food is just beginning to pick up, it also has tremendous potential.
- Hungarian logistics need to expand into the neighbouring countries, that's the real break-out point. The opportunities for growth are limited within the country.
- A clever expansion strategy is required, but with a state ownerships background, that's often not easy: partnerships, acquisitions. Romania or Bulgaria could be break-out points, they are EU countries and not yet fully covered. Even the ex-Yugoslav areas could be possible, if the willingness to take risks changed.
- In parcels, courage is needed. Self-service machines are the direction to take, developing a network of parcel reception points.
- In the CEP market, I would certainly think in terms of an international partnership.
- In parcels, the Post should be able to anticipate events, it is still in a fairly good position to do so. It is not impossible to react to customer requirements there.
- Transportation, logistics will also grow, the question is, can Magyar Posta get in on the action. The expertise is available, the infrastructure is not. It requires a lot of investment.
- The company should be broken up, logistics should have been separated long ago. Magyar Posta could stay the public service provider, with the state financing the unfair extra burdens (partly caused by the state's own decisions), while the business areas should be demerged and then they should contract with the Post there are several international examples of that.
- We need to follow European examples, because, with variable delays, but the same things tend to happen in Hungary as in Europe. The Post has natural international partners – cooperation not between the posts themselves but their subsidiaries would be possible. The organisational independence of MPL could also be achieved based on natural synergies.

In the letter mail segment, the rethinking of partnership strategy, hybrid consignment management, renewal of the DM (direct marketing) area and e-government partnerships were raised as break-out points:

- Letter DM could be interesting there is a shift back from online towards personalised paper-based letters, but that, today, is essentially database management.
- Magyar Posta should become the DM partner of large companies.
- Hybrid is a great opportunity, it will get going within 10 years.
- The Post is already able to provide an authenticated hybrid solution.
- In letter mail, new partnerships could present opportunities.
- There are good international examples of e-authentication.
- In many countries, the post is the partner of electronic government operations.
- The mission of the Post could be the delivery of valuable information, and the trends should be followed (films, music) that could be a break-out point. Hungarian Netflix? Hungarian e-library?

The break-out points in financial services, which have the strongest influence on the future of the physical network, are based on resource-based strategies. If the obligation to maintain the fixed network remains in force, the reduction in traditional services could be counterbalanced by assuming new tasks and roles, but those would have to prove viable in the new, digital world.

The Post could have a competitive advantage as the meeting point of the analogue and digital

worlds.

- In the banking strategy and electronic mail area, partnerships, and a progressive regulatory environment should be sought.
- The network should be considered differently, administrative services should be deployed there, even if in a differentiated manner.
- In the financial market, P2P services could be a new addition.
- It could cooperate well with FinTech companies on financial services, there's a profit to be made there.
- The sale of state-supported products should be strengthened, simplicity is very important there.
- The direct access to customers is a great asset.
- Connecting portfolio items could be used to create an infrastructure holding.
- The Post has a number of customer access points that could be explored and exploited more, as they represent tremendous value.
- I feel that the Post is in a very good place at the juncture of the digital and the analogue worlds, that is something that could be built on.
- There would be opportunities in the financial area, the Post can create a transition between electronic and physical, cash solutions, functioning as an intermediary, perhaps.
- As regards service spaces, it is a question whether it is possible to create banking service spaces, whether there is a good model for that and what are the constraints. There could be no uniform model for that. In relation to the integration of savings cooperatives and post-offices, it is possible that both offices should be closed, or a cheaper solution should be found, this could be utilised for consolidation. The scale will be insufficient even together in many locations. Strong selection and segmentation would be needed, but, naturally, that has political limits and risks.
- The future of the network is a political issue, but the Post could be a great deal more creative. I do not believe that there will be a change towards significant contraction, not even if it were expedient (the railway sidelines were also eliminated, and the alternative solutions are working well). It is more likely that the Post will continue to bear the implicit costs of that. I think the idea to utilise synergies with the savings cooperatives also came from that problem... As to whether that is really the right direction, I don't know. We should just forget that the issue is a sacred cow.
- The network is worth maintaining if it can be filled with content, otherwise it is expensive; an alliance with someone is required (retail units, savings coops, etc.) We need win-win solutions with compensation.

As a further possible break-out point that goes beyond the boundaries of the three main segments, retail was raised:

- E-commerce could be entered in a different way, say with a web shop... (see German Post: all you need.de. It also works as a web-shop integrator).
- There's another possibility, stamps, philately... that's a long-term monopoly position.

6.5.2.5 Obstacles, breaking points

Among the hindering factors, the possible breaking points, all the interview subjects mentioned in some form or context the political environment of Magyar Posta, the frequent changes of management, the lack of stability and a consistent strategy. Some of them also said that the issue is also related to the ownership structure: previous experience suggests that the state is

not a good owner.

"The Post itself can be the greatest obstacle. In the CEP market, the only company able to beat the Post is the Post itself. The technology is there, the trained staff is there, and then the company itself... we could say that the state is not a very good master... a real owner would cut off the inefficient components. Either they place CEP in a subsidiary, or essentially there won't be any logistics, just a narrower, small organisation."

"Lacking a concept that is followed for 5 years certainly doesn't help. A concept and continuity would be required, which is followed irrespective of the actual management, but here that's a Utopia."

"The greatest obstacle is the lack of clear owner's intentions. It will be hard without that."

"It depends on how well the owner understands or does not understand this company, and how interested or how willing someone is to manage it (the party exercising ownership rights changes too frequently, which is tragic). For years now, the argument has been about 10% (*as in the future vision of modern banking services*) at the owner's level, while essential issues remain undiscussed."

"A clear strategy is needed, and it would have to be followed consistently for 10 years!"

"The lack of stable management is a great problem, it has caused many missed opportunities."

"The lack of a real and stable owner is a problem, a strategy accepted for the long-term would be needed, and followed systematically in the same direction."

With the implementation risk of the "correct strategy", the willingness to comply with the demands of advocacy groups could be critical: the extent to which the situation can be explained to them, about why things need to be changed, why it is not workable to do what has been done so far, why the number of people need to be reduced and why people with different competencies are needed."

It was an important addition – perhaps as a result of the special Hungarian situation – that a number of subjects (4) also specifically discussed the labour market risk, in particular the lack of suitable employees. Two people connected this with the issue of automation, i.e. that in the medium term, the returns on investment in changing technologies towards automation may improve precisely due to the labour shortage and the forced increases of salaries (this is a compounded problem for the Post, due to low salary levels, erosion is even higher than at competitors), while it may also represent a forced, but progressive solution to the problem (drones, parcel distribution machines, self-driving cars, etc.).

"The labour market has become regional, too. <u>Retaining employees</u> will be critical. There are great differences in salaries... and we did give them work... working conditions can be more relaxed abroad... particularly relative to the pay... those that came back did so for the social networks, for their friends."

"Good employees are a thing of the past, everyone is having trouble with that, so they are forced to make moves in technological development, because there simply won't be people to do it."

"Well-trained specialists will be sucked up by the market, specialist training, replacement of employees is an increasingly difficult task. The lack of labour can become a major, wide-spread problem. This can support or even force a higher level of automation and streamlining."

"According to our present knowledge, the risks to watch are the operative ones and not competitor attacks."

In closing, let me present two opinions that are at odds with each other. One of them refers back to the most important factor of uncertainty, which is essentially the speed of digitalization and its potential dramatic effect on basic postal services. The other formulated a scenario based on the role of the Post in the political system, in which the Post receives a political protection net. The latter notion calls attention to the significance of the role of the state as a critical factor of uncertainty in the future (too).

"Electronisation, with the government's will behind it, or the drastic reduction of letter mail and payment processing transactions, could be fatal for the Post."

"Too big to fail. The Post will not collapse. The transformation of postal services is a political issue everywhere. It is a great employer, a great political risk, so the state will intervene if there is trouble. The Post will not disappear in a sudden collapse."

Perhaps the realistic minimum target for Magyar Posta would be to prepare for possible future conditions so as to avoid getting into a position in which it is faced with only the following alternatives: state protection net, slow death, or fast collapse (in case of a disruptive change).

Before I turn to the last component of my research, let's review the propositions formulated at the outset. In the second column of the table below I summarised the extent to which the interview results supported my preliminary propositions.

Preliminary proposition	Results based on the research
In the <i>letter mail market</i> , the external, shared environmental macro-factor of uncertainty with the greatest impact is the potential change of <i>the European</i> <i>Union's regulatory environment</i> .	A change is possible, and it carries great risk or great opportunity.
In the letter mail market, the external, differentiating, uncertain environmental macro-factor with the greatest impact is the potential change of <i>the national</i> <i>regulatory environment</i> .	It is a possible change, with great accompanying risk or opportunity, and great uncertainty.
The impact of electronic substitution is one of the most important external, environmental macro-factors of uncertainty.	The impact of digitalization on the individual markets of today's postal industry is a relevant factor with serious attached risk. According to the interview subjects, the direction is clear, it is a driver with a clear direction, 'only' its speed is questionable.
On the demand side, the letter mail market is primarily influenced by <i>changing customer needs</i> in the B2C relation.	This is partially true, yet the changes of customer needs were mentioned as a priority factor and driver in relation to the CEP and the financial services markets, too.
The future of the CEP and logistics market is primarily determined by fundamental issues associated with <i>globalization</i> , in particular the development of <i>electronic commerce</i> .	This was clearly raised by all subjects. Only global security or regulatory breaking points (e.g. protectionism) could turn e-commerce and by implication the parcel mail business off the growth track.
There is a link between the <i>ownership structure</i> of national posts and their economic success. The ownership structure of the national posts influences the <i>objective function of management</i> , but that issue is organisation specific.	Political influences on postal strategies were frequently raised as a problem (particularly in the case of state-held posts), but I didn't get convincing results concerning the link between ownership structure and performance.
The success and the expedient strategy of individual European posts in the individual scenarios is influenced by the initial (current) situation and competitiveness of the posts.	Based on the interviews and the literature, that proposition is acceptable.
In the letter mail market, the survival/success of posts is primarily determined by the extent to which they are able to 'deter' potential new entrants from the market and to keep their customers. That is primarily a function of price levels, quality and brand loyalty (and the national regulatory environment).	Market protection measures can only slow the erosion of letter volumes, but they will not be sufficient to put a stop to detrimental processes in the long term.
It is one of the fundamental conditions for a successful diversification strategy that in the basic activities (the postal sector in the narrow sense) the national post should be competitive, and in addition, in the individual markets, success will be determined in individual competitions (and not particularly on the basis of synergies).	Based on the interviews and the literature, that proposition is confirmed.
The success of an international expansion strategy depends to a great extent on capitalisation and timing.	According to the statistical data, the great integrators started international expansion early, and they made large investments to build global networks. The Hungarian Post has no chance of entering that competition (it is too late, and the capital is also lacking). Regional expansion is only realistic towards a few specific markets.

7. Strategic scenarios for the Hungarian Post

As we have seen, the 3 most important divisions of Magyar Posta Zrt. are letter mail, CEP and financial services (see Figure 33). We have also seen that those three businesses may not be considered a single industry, so forces acting on them should also be analysed separately. In what follows, I will determine the most important factors influencing the individual businesses based on my research results, including drivers (which point in single directions) and critical factors of uncertainty as well. To make the presentation more instructive, I shall visualise the results, but I would like to note here that the actual numerical values are not particularly significant, for the evaluation I used Courtney's typology (2003) (0 = no uncertainty, then uncertainty increases gradually), and I have not validated the numerical values themselves. After the identification of the factors, I will define possible scenarios for the individual segments.

7.1 The letter mail market

Among the factors influencing the letter mail market – even after liberalization, previously it was no surprise, really – the greatest factor of uncertainty is still the development of the regulatory environment. Will the content and scope of the universal service be re-regulated and redefined at the European level in a world in which citizens can be accessed via many other communication channels, in which perhaps everyone will have a mobile phone or smart phone? We have seen that the initiative to narrow the scope of the universal service or to change its content has already been raised by the service providers.

A closely related (though not quite identical) issue is that of potential traditional market entrants – we have seen that so far, liberalization has not had the effect expected, intense competition, though if GDP grows and the contraction of the letter mail market decelerates, it is possible that there will be significant entries in some national markets or market segments. The national posts, with their increasing superfluous capacities for processing letter mail, may also enter each other's markets in the next 10 years.

In addition, there is the less uncertain, but high-impact factor whose extent and speed are questionable: the continuation of the trend of digitalization, whose primary impact is its substitution effect (including, for instance, the acceleration of e-government initiatives).

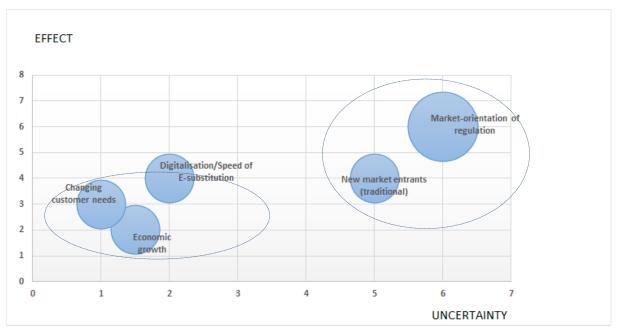


Figure 35: The factors influencing the letter mail market (impact-uncertainty matrix)

Based on the research results (the preliminary list and the results of the interviews), the future of the letter mail market is primarily influenced by the above critical factors of uncertainty. After grouping the interlinked factors, three potential scenarios are outlined (see Figure 36). (In the 4th, theoretical scenario, physical, paper-based correspondence would disappear so quickly/to such an extent that in essence there would be nothing left for regulatory interventions to protect, so I felt that that scenario was inconsistent).

In the first scenario (which I have designated "Shields Up!"), the regulatory environment is protectionist at the national level (within the national framework) and conservative at the international level. In that scenario, the entry of significant competitors in the Hungarian letter mail market has a low probability, so the designated universal service provider will not have to deal with serious competition. At the global level, protectionism may increase, which will have a negative effect on economic growth. In that scenario, the state shows a preference for paper-based communication as the regulator and as a sender, too, and e-government initiatives are slow to progress. At the same time, digitalization is quite slow on the customer side, too.

In the second scenario ("Competition in the Real World"), both the changes of the regulatory environment and economic growth increase the attraction of the market for potential entrants, and in that case, the Post will have to deal with one more more real competitors in the letter mail market. In that scenario, the Post cannot expect positive changes in relation to the development of the regulatory environment, but it is conceivable that that international regulatory environment of universal postal services will adapt to changing customer needs, which may improve the Post's scope of action.

The third scenario ("The Brave New Dotcom World") features the changes in customer needs simply stepping over the regulatory issue and practically eliminating the Post's market in letter mail over the next 10 years. Under that scenario, digitalization and e-substitution accelerate, and e-government initiatives are prioritised.

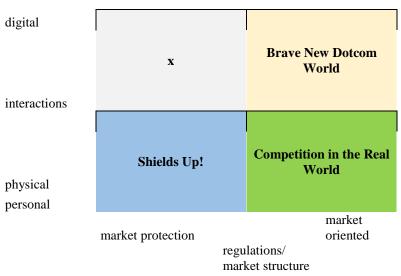


Figure 36: Letter mail market scenarios

	Shields Up!	Competition in the Real World	Brave New Dotcom World
	more likely	more likely	more likely
Economic growth	to be low	to be high	to be high
Regulation (market orientation) (national, EU, global, role of the state) New entries in traditional	market protectionist	market-oriented	market-oriented
market	no	possible	no
Speed of digitalization and	11		C
e-substitution	decelerates	moderate	fast
Change of customer needs in the digital direction	slows down or turns around	combined, hybrid solutions dominate	accelerating (may be taken care of digitally by customers)

The background enabling factor behind the two factors to do with digitalization that are marked in blue - as far as we know so far - is Internet penetration, so that's certainly worth watching as a priority.

The scenarios I outlined are possible future conditions with different success factors attaching to them at the level of organisational strategy. If the "Shields Up!" scenario is realised, critical factors for success may include the formulation and deployment of a strong lobbying strategy (including the initiation of changes concerning the universal service, or the state compensation of the extra burdens attaching to providing the universal service), the implementation of legal market protection measures (e.g. new price strategy) and the continuous reduction of costs in line with dropping volumes. In that world – with a protective net and without competitors – the Post can gain time while operating in a narrower scope, the main question is how much time.

In the second scenario, regulative protection is less pronounced, and traditional letters erode faster, while the Post will be challenged more by competitors, too. That will place greater pressure on the costs of the Post, and it will require more innovative solutions for competing in a competitive market.

In the third scenario ("Brave New Dotcom World"), the Post has to follow a market logic and turn to the digital world intensively, doing everything it can to get linked into the digital flow of information (hybrid solutions, DM data management, authenticated emails, authentication service, forming partnerships, etc.), and in addition, the delivery system has to be dimensioned right, with increased flexibility and reduced costs.

7.2 The CEP market

Based on the research results, among the factors influencing the CEP market, regulatory risk had a much smaller role to play than in the letter mail market. In that industry – as the interview subjects said – the most important critical factor of uncertainty was when, in what form, and with what range of activities would players outside the industry at present that we are currently unaware of would enter the market. Will *new business models* play a major role? That includes solutions that remove the need for logistics as such (3D printing, virtualisation), or those that take over the activities of today's CEP market players (DIY, P2P, sharing/community solutions). The strongest driver in the CEP market is the development of e-commerce, which the interview subjects described as a low-uncertainty but high-impact factor. A critical factor

of uncertainty there is the *development of commerce* in the future, and the underlying issue is how customers of the future will do their shopping. Is it possible that bespoke solutions will become so widespread that large numbers of customers will actually design their unique shoes, bags and clothing on the Internet? Will globalization continue to grow, will Asia (or possibly completely new sender countries) continue to gain ground? Will the trend of the last period continue, which seems to suggest that electronic commerce will keep growing for sure? Based on my research, the CEP market is influenced by the factors shown in the following figure.

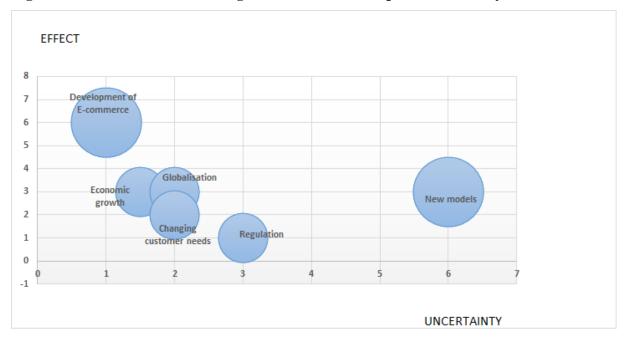


Figure 37: The factors influencing the CEP market (impact-uncertainty matrix)

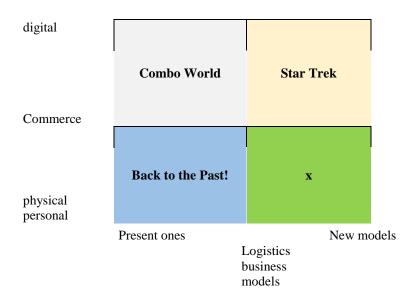
Thus those two factors (*the growth of commerce in the digital vs. the physical/combined direction* and the future being *advantageous/disadvantageous for the appearance of new models*) will be the main factors differentiating between scenarios in the CEP market (see

Figure 38).

As we have seen, the majority of the interview subjects believes that electronic commerce will develop further with high probability, but they can also imagine disruptive forces that can bring that unbroken development to a halt (protectionism gaining ground, increased security risks, loss of confidence, etc.). They can imagine those forces, though they believe that version is unlikely today. Scenario planning does not aim at elaborating the desirable futures, or even only the probable ones. If the development of commerce suffers a downturn for any reason, that will clearly cause a break in the volumes of the CEP market. The appearance of new, digital alternative models can also influence the structure of competition and the size of the CEP market. The main question there is the role that today's traditional CEP players can play in such new models. Each of the new models mentioned may reduce the effective market size for the Post. At the same time, those two factors are clearly not independent, they are more likely to vary together, i.e. there will really only be space for the appearance of new, disruptive models if e-commerce keeps growing.

The other important factor is a significant improvement in the bargaining positions of customers (along with senders, also including addressees!): if today's trends continue unchanged, customers will increasingly expect immediate, fast, flexibly, tailored (extremely individualised) logistics solutions. Comfort and customer experience will be the keys to success. But is it conceivable that customers will show a preference for personal relationships and a trusted brand if it turns out that the need for personal relationships has deeper roots in human nature than we currently think? Is it possible, that we will want standard, reliable, stable mass services, particularly if they are a great deal cheaper? Is it possible that logistics services will become a 'commodity'? Is it possible that customers will keep insisting on having an opportunity to handle the selected products before buying them? Will they search online but shop offline? Is it possible that as a result of misgivings concerning environmental or security risks, meeting demand locally and minimizing transportation costs will become a priority, and electronic commerce will not invade a further segment of offline commerce? If that were the case, then the currently envisaged fast development of electronic commerce would certainly slow down, and today's offline world could stabilise its positions. The future state is depeicted in the "Back to past!"-scenario.

Figure 38: CEP scenarios



	Back to the Past!	Combo World	Star Trek
Economic growth more likely Economic growth to be low Globalization, intensity moderate, possible downturn		more likely to be high growth continues	more likely to be high grows
Or commerce Inductate, possible downtam Digitalization of commerce stops Market share of new models negligible		continues grows faster small significant	
Sophistication of customer requirements	at the present level	increases	in a new dimension, the bargaining position of customers also improves
Do regulations support the free market and innovation?	e free market and supportive of digitalization of innovation or even protectionis		regulations promote competition and innovation

Is it possible that the customers who feel at home in the digital realm wish to combine the advantages of online and offline channels? In that case, it may be sufficient for today's market players to redefine themselves in the digital realm, finding the combination that allows optimal exploitation of the advantages of the offline and the online worlds. In that case, the "Combo World" scenario may come true, which could be quite advantageous for today's CEP market

players. In the "Star Trek" scenario (with the possible exception of teleportation) the world will be virtualised, the weight of e-commerce will keep growing, and in addition to the above solutions, new models will be introduced that we are unaware of today. With the spread of 3D printing technology and the virtualisation of further services, logistics as such may become obsolete. Preparations need to be made for the very quick penetration of sharing and peer-topeer solutions that are able to combine the already existing logistics technologies more flexibly than the posts. In that scenario, the posts may lose a part of the market due to technological solutions and changing customer requirements. In those last two scenarios not only the customer will be 'king' (because they decide what, when, how and where they want), but the employees too, which may increase the necessity of automation and may put pressure on cost levels.

7.3 The market of financial services

The future of financial services over a 10-year term is primarily put at risk by the new models and platforms that move the financial services already known today to different spaces and to different hands. In 10 years time, who will transfer money internationally using the post office, generating a cash payment in the other country, if there will be no need for cash at all, and the sender, the receiver and the trader will all have smartphones? What will be role, in such a world, of today's ever so important financial transaction service providers? Will there still be yellow postal payment slips, when even today, any public utility bill can be paid using a QR code and a mobile phone? Anywhere, any time, with a single click. In this market, these issues are all linked up with digitalization.

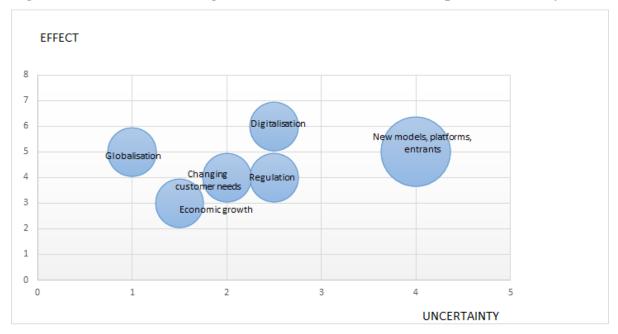
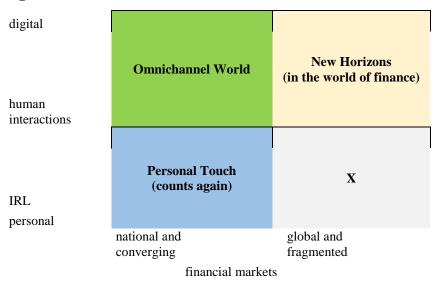


Figure 39: Factors influencing the financial services market (impact–uncertainty)

What direction will the regulatory environment take? Will the competition between financial service providers, currently usually conducted in the national markets, go global? Will that process be facilitated or hindered by the regulatory environment? We already see today that the complex regulatory system offers a sort of protection for the incumbents against new entrants from outside the industry. Will that remain so over the next 10 years? What is the direction that the regulatory environment will take so as to manage the system-level risks associated with financial services providers and any potential further loss of trust? In order to handle the 'too big to fail' problem, can the large, integrated financial institutions be carved up, or can today's universal players stay on the scene, able to protect their positions against the threat of entries from outside the industry? How will the part of European and postal legislation relevant to financial services shape up? In case of conservative regulations, the postal cash payment collection service may remain in place in the medium term, the geographical dimensions of the competitive arenas will remain national, and today's players (even the Post) will find the suitable combination of the offline and the online worlds. One of the questions will have to do with the speed of growth of digitalization and consumer requirements in that field. Will the generational and territorial differences remain in place with regard to acces to the digital world? Depending on the kind of world we will wake up in in 10 years' time in that respect, the scenarios shown in the next figure can be generated. In the case of a slower, possibly decelerating and differentiated digitalization, where the significance of personal contact is maintained, the 'Personal Touch' scenario may be realised. In that scenario, the regulatory environment remains a 20th century one, today's incumbents will be able to maintain their positions. If digitalization is more robust, the latter will only be possible if today's players open towards the digital arena, and use omni-channel solutions to combine the digital and the physical worlds. And they will have to do all that in an environment in which there will be a continuous shift of emphasis towards digital solutions. The third scenario may be the most disruptive for postal financial services, as in that scenario, a "New Horizon" is opened up, in which the Post's present competitive advantage may not be relevant at all, or it will be less relevant. New players, new platforms will take the place of today's incumbents. Customers will turn completely towards the new type of banking. Instead of consolidation, the competitive structure of the industry will shift towards globalized fragmentation, in in such a space, the rules of the game themselves will undergo fundamental changes. The significance of the physical network and local knowledge will be devalued.





	Personal Touch	Omnichannel World	New Horizons
GDP	more likely to be low	more likely to be high	more likely to be high
Digitalizing	decelerating	current trend continues	fast
Direction of regulations	conservative (strong sector- specific regulations), national level competition, with conservative postal regulations, focus on maintaining the network	conservative (strong sector-specific regulations), national level competition, with conservative postal regulations, focus on maintaining the network	global, disintegrative, supportive of innovation, freer
New models, platforms, entries	none, or insignificant, market consolidation is to be expected	insignificant, concentrated in a few areas	they play an important role
Globalization	impact on financial market remains at present levels	impact on financial market remains at present levels	impact on financial markets increases significantly
Change in customer requirements	more conservative, existing trends continue, in the area of finances, the personal touch and trust remain important	the world progresses in a differentiated fashion	fast digitalization in all areas

The three sets of three scenarios, which we generated on the basis of the most important factors influencing the futures of the individual industries, may be relevant for the Hungarian Post, too. On the one hand, the information can assist decision makers by suggesting factors that are worth monitoring continuously. On the other hand, they also draw attention to the areas in which it may be expedient to assume greater risk in order to widen the range of strategic options, so as to allow the Hungarian Post to prepare for each of those possible future conditions. Such actions may include the option to expand regionally in the CEP market, extending the range of activities to utilise the network better, or forming partnerships with innovative companies so as to allow the Post to link up with the digital world successfully. Thirdly, but not least, the results also confirm that Magyar Posta should devote significant resources in the future, too, to monitoring changes in the regulatory environment, and to influence them (within legal bounds). The latter will require expert analysis and a system of arguments. Due to the trend of digitalization, it is an important task to rethink the role of the physical network, there the Post – building on its strong loyalty capital – can open new opportunities for connecting the online and offline worlds.

7.4 **Evaluation of research results**

As we have seen, the scientific criteria applicable to qualitative research differ from those for quantitative research. In the table below, based on Easterby et al (2008) I summarise the applicability of validity, reliability and generalisability for qualitative research.

Table 30:	Validity,	reliability	and	generalisability
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	Constructivist perspective	
Validity	Has the research clearly gained access to the experience of the participants?	
Reliability	Is the manner in which sense was made of the data transparent?	
Generalisability	Are the concepts and constructions created on the basis of the research relevant in	
	other settings?	
Source: Based on Easterby et	al (2008) n 109	

Source: Based on Easterby et al (2008), p. 109

In the course of my research, I endeavoured to apply the above criteria. An assessment of the results shows that in terms of validity and generalisability, I have met the targets I had set for myself. I increased the reliability of my research by using triangulation, using several sources and methods and incorporating control points.

The results will be relevant in other settings, as we have seen, the forces investigated have the same effects on all the universal postal service providers, the differences are in initial conditions, in the extent of the impacts and strategic reactions/actions. From the perspective of generalisability, it is one of the important results of the research that Posts that are diversified to an extent similar to the Hungarian Post cannot avoid analysing the trends of the industries they chose separately (for each division), partly because the factors influencing their futures differ, and partly because even the same factors have different effects on those industries. That recognition is a key issue when, as is clear from the results of the research, the definite reduction of the weight of the letter mail industry will make the very definition of the strategic territory one of the critical strategic decisions.

As a personal reflection, I can add that -having listened to the interviews - I believe I managed the issue of my previous involvement appropriately, and I believe my personal experience made a contribution to my ability to ask understanding, probing questions.

8. Summary

My personal goal was to obtain deeper knowledge about the factors influencing the future of the postal sector by means of this research. The results may be interesting for specialists able to influence the future of the postal sector, and perhaps they will put the challenges they are about to face in a new light. It is my intention to make the end result of my research relevant for political decision-makers, for the corporate executives concerned, for future researchers of the subject as well as being applicable in other environments as well (this last requirement is manifest in the criterion of generalisability (Easterby et al, 2008, 109). Naturally, practical application of the results shall also have its risks. The practical value of the results will depend on whether the parties concerned consider them carefully and apply them. Actually, in many cases, scenarios remain in the drawer. The situation may also arise wherein the results simply confirm things that the participants/parties concerned already know (as Molitor, 2009, 81, points out). Nevertheless, I think the possible scenarios I have established, and the theoretical framework behind them, has provided a new approach that has theoretical and practical novelty value.

In the recent period (after the 9/11 terrorist attacks and the financial crisis) the method of scenario planning is becoming increasingly popular and frequent in many areas (military strategies, country strategies, corporate strategies, etc.). If we consider that many of today's teenagers (tomorrow's decision-makers) grew up on a staple diet of interactive, multiplayer (military and corporate) computer games, it is also conceivable that for the decision-makers of the future, thinking in terms of scenarios will be second nature. In addition, data collection techniques may also be transformed by the opportunities granted by information technology. In ten years, it may be possible to repeat this study, to look back at the past and to use experience as feedback using different techniques.

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10. Appendices

Appendix 1: Draft interview (trial interview)

- 1. The Post's present
 - a. What comes to mind if you think of the situation of Magyar Posta today?
 - b. What are the factors with the greatest impact on the Post's present?
- 2. In your opinion, what are the **drivers (trends)**, that may influence the operation of Magyar Posts over the next 10 years?
- 3. What do you think are the **critical factors of uncertainty** (**trends**) that will influence the operation of Magyar Posta over the next 10 years?
- 4. What strategic break-out points do you envisage for the Post?
- 5. What are the greatest obstacles to the Post moving in that direction?

Appendix 2: Interview structure (final)

Subject's name: Time of interview: Market focus(es) of the interview:

1) Introduction:

The objective of the research is to discover the possible strategic scenarios facing Magyar Posta. For that putpose, the questions are focused on identifying the drivers and critical factors of uncertainty that will determine the Post's future. The interview is confidential, I shall not use data in any manner that may allow my subjects to be identified. I am interested in your personal opinion. I would like to record the interview, but I will not use the recording for anything other than producing a transcript. Do you consent to that?

- 2) The background of the subject relevant to the postal sector: what relationship do you/did you have with the Post?
- 3) The present of the Post: How do you see the situation of Magyar Posta today (in 2016)? What is your assessment? What are the main markets in which Magyar Posta competes?

FUTURE

- 4) What are the main drivers that you see in the postal sector? What do you think could be the drivers (trends) that will exert an influence in the same direction (and influence the operation of Magyar Posta) in the next 10 years (in general, and in the main markets)?
- 5) In your view, what are the critical factors of uncertainty (trends) that may develop in various directions (and will influence the operation of Magyar Posta) over the next 10 years (in general, and in the main markets)?
- 6) What strategic break-out points do yo see for the Post (in general and in the main markets)?
- 7) What are the main obstacles to the Post moving in that direction? What break points do you see in the next 10 years that, if they occur, would induce major changes?
- 8) Closing is there any other important area we have not mentioned that you would like to discuss?

Appendix 3:	European	countries and	ownership stru	ictures
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Country	Universal	Privatised	Privatised	Privatised	Expected events and events that have already
	Service Provider	part (2006) %	in 2010 %	in 2015 %	occurred
Holland	TNT	90	100	100	90% of the shares were floated in 1994, 1995, 2004 and 2005. The remaining 10% has also been sold, the shares are traded on the Amsterdam Stock Exchange, the state's golden share was eliminated in 2007.
Malta	Malta Post	-	100	100	60% of the shares circulating in the Maltese Stock Exchange are held by RedBox (a subsidiary of Lombard Bank), 40% is owned by private individuals. As of 9 November 2015: 70% of the shares circulating in the Maltese Stock Exchange are held by RedBox (a subsidiary of Lombard Bank), 30% is owned by private individuals.
Germany	Deutsche Post	56	100	79	IPO in 2000. At the end of December 2015, KfW Bankengruppe held 20.9% of the shares. Of the 79.1 % of shares in free circulation, 11.3 % is owned by private individuals, the rest by institutional investors.
Belgium	De Post-La Poste	49	49	49, 99	In September 2005, the government decided to sell 50% -1 shares to CVC and Post Danmark. The majority of the shares is still held by the state. Since September 2010, it has been operating under the name bpost , as of 6 April 2016, 51% of the shares are owned by the state, 49% is traded on the stock exchange.
Denmark	Post Danmark	22	100	-	Post Dankmark is owned by Posten Norden (60%- of Posten Norden is held by the Swedish, 40% by the Danish state).
Austria	Österreich- ische Post	49	49	47.8	The state (ÖIAG) and Goldman Sachs privatised 49% of the Ausrian Post in May 2006 through a public offering. As of January 2016, 52.8 % of the shares is held by ÖBÖB (previously ÖIAG), and of the remainder, 16.9% are held by Austrian parties.
Great Britain	Royal Mail	0	>0	62	Public company. As of October 2010, privatisation is officially on the agenda, but the Post Office will remain in state ownership. 99% of the shares were transferred to the 150,000 employees in the UK. As of 15 October 2013, it is traded on the stock exchange. It operates in the UK and in Europe through the units UKPIL and GLS.
Greece	Hellenic Post	0	10	10	90% is state owned, 10% is held by EFG Eurobank Egasias S. A. (Eurobank).

Country	Universal Service Provider	Privatised part (2006) %	Privatised in 2010 %	Privatised in 2015 %	Expected events and events that have already occurred	
Italy	Poste Italiane	0	0	100	Remains 100% publicly owned in 2010. The financial service provider and postal services are likely to be separated. As of 20 October 2016, 29.7 % is owned by the Ministry of Economics and Finance, 13.3 % is owned by small investors, 22% by institutional investors and 35% by Cassa Depositi e Prestiti	
Czech	Ceska Posta	0	0	0	No known plans for privatisation, the post has been a public company since 1993.	
Norway	Posten Norge	0	0	0	No privatisation plans.	
Spain	Correos	0	0	0	No privatisation plans.	
Sweden	Posten AB	0	0	-	State-held. In a fully liberalised market, the competitors contribute to the maintenance of the USO. However, in 2009, the Danish and the Swedish Posts merged in a company called PostNorden, voters are shared 50/50, but the state of Sweden owns 60%.	
Switzerland	Die Post	0	0	0	No privatisation plans.	
USA	United States Postal Service	0	0	0	The federal government owns 100%, but it operates and manages its finances independently.	
Portugal	CTT	0	0	100	The whole of the Portuguese Post is traded on the stock exchange.	
France	La Poste	0	0	0	In March 2010, La Poste became a share corporation. The Post Bank was established in 2006, with its majority owned by La Poste. In 2016, the French government holds 73.7 %, while Caisses des dépots has a 26.3 % share. La Poste is also the owner of the cmopany Groupe La Poste, which consists of a bank (La Banque postale), an insurance company, a logistics company (Geopost) and a mobile phone provider (La Poste Mobile).	
Finland	Posti	0	0	0	No privatisation plans.	
Poland	Poczka Polska	0	0	0	The post has been a public company since 1991, there are no privatisation plans. Its two large subsidiaries are the Polish Post Bank and Mutual Insurance.	
Romania	Posta Romana	0	0	0	No privatisation plans.	
Slovakia	Slovenska Posta	0	0	0	The post has been a publicly owned share corporation since 2004, there are no privatisation plans.	
Hungary	Magyar Posta	0	0	0	There are no privatisation plans, according to the legislation adopted in 2007, 75% + 1 of the shares of Magyar Posta Zrt. shall remain state-owned. In 2014, the Post also became the owner of the SZHISZ (the organisation responsible for the integration of savings cooperatives).	

Source: BCG (2006), IPC (2010a) updated based on data I collected

Customer segment	Price sensitivity	Vulnerability	Customer requirements
Premium customers	Mail costs are significant cost factor and there is strong pressure to reduce it, therefore this is the most price-sensitive segment.	This is the most vulnerable segment, also representing the greatest risk (due to high concentration).	 They require tailored and sector-sepcific services. They require solutions that go beyond the traditional letter mail value chain (address quality improvement, production of consignments, confirmation of delivery, off-line personalised marketing, etc.). In order to reduce costs: "co-mailing", presorting, consolidation, electronic substitution, reduction of frequency of mails, acceptance of less frequent deliveries. In the case of multinationals, global one-stop-shopping is also a requirement.
Corporate customers	Mail costs are a perceptible cost item, but the segment is less price-sensitive.	Medium-level and differentiated vulnerability, this segment could be interesting both for global and for niche providers.	• A heterogeneous market with diverse requirements which is increasingly demanding tailored solutions at the national or regional level.
SoHo and retail customers	Mail costs are a negligible item within the basket of commodities.	While vulnerability is low for standard postal services, the threat of using alternative solutions (e-mail, telephone, delivery in person) is high, while the segment is vulnerable in the area of higher added-value (express and courier) services	 Demand for comfortable solutions that allow avoidance of queueing at post offices. In the case of premium services, complete reliability and guarantees are the norm.

Appendix 4: Analysis of	f customer segments
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Appenxix 5: Examples of changing customer requirements

Gary Flood (Master Card)	The personalisation of mail is the most important thing, and data play a key role in that. In the case of DM consignments, appropriate segmentation generated 10-20% increases of revenue: we target the right customers with the right offers at the right time. The task is the optimalisation of multi-channel customer communication (mail, telephone, e-mail, web). On the side of costs, efficiency can be increased by improving the officiency of reply latters, while cleaning up addresses will reduce the
	efficiency of reply letters, while cleaning up addresses will reduce the ratio of undeliverable mail (which will reduce losses).
Andy Coleman (EBay)	The company performs 1 million transactions per day in the USA, which generate forwarding/logistics tasks. EBay learned from its own experience that the processes that follow the on-line transaction (distribution/forwarding) are very important. In order to reach potential customers, they combine the power of offline (mail) and online marketing.
Barry Meinerth	Delivering 1 billion magazines a year generates postal costs of \$ 640
(Time Inc.)	 million, so optimising the letter mail value chain and the associated flow of information are both important tasks. The entire mailiung process is viewed as an integrated process, and careful analysis is used to establish what tasks Time performs in-house. Cost reduction solutions: in the interest of achieving mailing discounts, the printers consolidate the monthly magazines (magazine-pools), while weekly magazines are presorted, and the printers use co-mailing solutions. In the interest of improving quality and efficiency, they gradually improve the quality of addresses and employ an independent auditor to
	monitor delivery performance.
	Client requirements (based on market research): reliability is more important than speed (it is more important for the magazine to arrive on the day it is expected every time).
Source: Interviews with se	nior executives on the Pitney Bowes website, 25 March 2007

Source: Interviews with senior executives on the Pitney Bowes website, 25 March 2007 (http://downloads.pitneybowes.com.edgesuite.net/anon.pitneybowes/mailstream/server_version/executiveViewHb8.html)

Appendix 6: Definitions of concepts

1. *recorded service:* a premium postal service that constitutes a supplementary service, in which a non-recorded postal item is converted to a recorded item, for whose faulty delivery the postal service provider is liable to pay standard compensation;

2. *permanent postal service location:* a postal service location whose average opening hours exceed two hours per working day;

3. *throughput time:* the period of time from the acceptance of a postal item under the postal service agreement at the point of acceptance to its delivery or attempted delivery;

4. *address:* a clearly identifiable location where a postal item is to be delivered;

5. *addressee:* the party to whom the sender is sending the postal item;

6. *individual contract:* a written framework agreement individually negotiated or elaborated in cooperation with the sender or the addressee;

7. *priority:* the service category within the range of universal postal services that has the shortest throughput time; 8. *value-declared service:* a premium postal service that constitutes a supplementary service, in which the postal service provider has a compensation liability for the contractual performance of the service associated with a recorded item up to the amount declared at the time of posting by the sender as the value of the postal item.

9. *express postal service*: a time-guaranteed service under which the postal service provider undertakes to deliver the postal item no later than the first working day after the day of posting within Hungary, or the third working day from the day of posting to the member states of the European Union, and the fifth working day from the day of posting in other international relations, and which is always accompanied by at least one of the supplementary services listed in subsections a)-f:

a) trackable handling;

b) payment on delivery;

c) receipt certified mail;

d) value-declared mail;

e) delivery to the addressee's own hand only;

f) accepting the item at the sender's place of residence, temporary residence, seat, business premises or branch office;

10. sender: the person concluding the postal service agreement with the postal service provider in its own name;

11. processing: the activity that prepares the postal items accepted and collected for transportation and delivery;

12. *user:* any person who uses or may use postal services or services associated with postal services, or who is an addressee of a postal item;

13. *acceptance:* the activity which results in the postal item being entered into the network of the postal service provider at the acceptance location of the postal service provider that concludes the postal service agreement, or at some other location as the parties may agree;

14. *acceptance location:* a post box or other equipment for the undamaged and secure reception of postal items placed by the postal service provider for the acceptance of postal items, as well as rooms or places designated for that purpose;

15. *courier post:* a time-guaranteed postal service to be delivered within 24 hours of the acceptance of the item in which the postal service provider undertakes to ensure that the person accepting the postal item will continuously maintain supervision of the postal item until attempted delivery, so that the sender may at any time during that period issue instructions so as to change the addressee or the delivery address of the item, and to take appropriate action in case of unsuccessful delivery in person;

15a. economic entity: an economic entity as defined in the Act on civil procedure;

16. *collection:* the transportation of postal items to the place of processing after acceptance at acceptance locations or network acceptance at service provider access points;

17. *network acceptance:* an activity – conducted between postal service providers – during which the postal item is transferred from the network of the postal service provider that concluded the postal service agreement to the network of another postal service provider under a network access contract;

18. *official document:* a recorded postal item sent or delivered by state or municipal bodies or other bodies or persons designated in legislation on paper, electronic data media or through an electronic communications network, whose sending or delivery (or attempted delivery) and the times of those events have corresponding legal consequences stipulated in legislation, or are used as the basis for calculating a deadline stipulated in legislation, as well as all documents that are designated official documents by legislation;

19. *time-guaranteed service:* an undertaking by the postal service provider to deliver a postal item within a certain period of time or at a certain time;

20. *delivery:* an activity conducted by the postal service provider during which the postal item is transferred from the network or the personal supervision of the postal service provider to the party authorised to receive the item or to a letterbox, or other equipment suitable for the delivery of postal items;

21. *delivery location:* a room or location designated by the postal service provider for users for taking delivery of postal items, or equipment installed by the postal service provider for the delivery of postal items;

22. *recorded postal item:* a postal item whose acceptance the postal service provider certifies in writing or in some other provable manner, and also obtains certification of delivery from the party authorised to receive the item by having them sign a document for that purpose, or other technology capable of recording signatures or identifying the receiver;

23. *per item tariff:* a list of prices stipulated in the postal service provider's general terms of contract, or attached to it, which contains the per item fees applicable to individual postal items or each of several postal items posted together, irrespective of the number of items;

24. *letter mail item:* a postal item which contains unique or personal messages, data or information in a written form, or recorded on a physical medium;

25. *international EMS service:* an international postal service that the universal postal service provider is providing in accordance with the regulations stipulated in the item of legislation promulgating the Universal Postal Convention;

26. *trackable handling:* a technology used by the postal service provider that attaches unique identifiers to postal items, allowing information to be provided in response to an Internet query or in a text message forwarded and documented using an electronic communications network at least about the place and date of acceptance of the item, the date of delivery, the basis for the authorisation to receive the item, or in the case of an unsuccessful attempted delivery, the further handling of the item;

27. *postage stamp:* a stamp issued by the universal service provider for the payment of the postal fees of postal items, indicating its nominal value, which also has the word "Magyarország" or a foreign language equivalent printed on it;

28. *Postal Clearing Centre:* an organisation performing the processing of the financial transfer services conducted by the universal postal service provider, including settlement with financial service providers and financial settlement through payment systems, which does not constitute an operator of payment systems as defined in Act no. CCXXXV of 2013 on certain payment service providers;

29. parcel mail: a recorded postal item containing goods or objects with or without commercial value;

30. *postal article of value:* postage stamps, reply mail coupons issued under the Universal Postal Convention, and other printed matter and other objects put into circulation by the postal service provider, whose prices also include the price of the corresponding postal service;

31. *postal network:* the totality of the resources used as a system to facilitate provision of the postal service;

32. *postal consolidator:* a sender who concludes the postal service agreement generally for postal items related to the economic or other activities of a number of its customers, in its own name, with the postal service provider;

33. *postal contractor:* an economic entity used under a service concession contract or any other contract to facilitate the performance of such activities for the acceptance, collection, processing, transportation and delivery collectively or any of those activities individually, within a specific administrative area;

34. *postal intermediary:* an economic entity that performs activities for one or more clients under which it undertakes:

a) to post the postal items of its client, shown on the items as the sender, so that the fee for the service is paid by the client indicated on the items as 'sender', or

b) takes delivery from the postal service provider of postal items received in the P.O. box of its economic entity client, indicated on the items as the addressee, under an authorisation received from its client, and delivers them to its client;

35. *postal item:* an item up to the weight of 40 kg whose outside, packaging or accompanying list features at least an address, or an item that is defined as a postal item by legislation; such postal items may include letters, official documents, items containing writing for the blind, postal parcels, and items containing books, catalogues or printed matter, as well as all consignments whose sending via the postal service is not prohibited by the government decree issued pursuant to the present Act;

36. *postal service provider:* the economic entity providing the postal service;

37. *postal service location:* an acceptance or delivery location that provides access to postal services at a specific geographic location and at specific times, not including post boxes installed by the postal service provider and other equipment for the undamaged and secure acceptance or delivery of postal items;

38. *transportation:* the activity of transporting postal items between the processing, service access and delivery locations;

39. *service access point:* a location designated by the receiving postal service provider for the network acceptance of postal items;

39a. *close links:* the concept defined in Regulation (EU) No. 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 548/2012;

40. *receipt-certified service:* a premium postal service constituting a supplementary service – available for recorded items – under which the postal service provider returns to the sender a document certifying the day of delivery and the name and signature of the person that took delivery of the item, or, pursuant to a contract to that effect, a digitized version of it, or makes the data produced using a device suitable for recording signatures available to the sender;

41. *premium service:* an additional service associated with the acceptance, collection, processing, transportation or delivery of postal items undertaken in the postal service agreement that the postal service provider provides as a part of the postal service if specifically instructed by the sender, or as part of a package of postal services;

42. *payment on delivery service:* a premium service available for recorded items under which the postal service provider delivers the postal item upon payment of an amount specified by the sender in cash or using another method of payment, and remits the amount collected from the addressee to the sender using a financial transaction service as defined in Article 6, paragraph (1) of Act no. CCXXXVII of 2013 on credit institutions and financial ventures (hereinafter the CIFVA);

43. *item containing writing for the blind:* a postal item not exceeding 7 kilograms that only contains relief-printed writing, cuts, audio recordings, special papers or magnetic discs and other data media used by the blind and the sight impaired, or equipment or devices used for dealing with the problems caused by the impaired sight of blind or sight impaired persons, whose sender or addressee is a blind or sight impaired person, or an officially recognised institute of the blind.

.....

3. The postal service, and kinds of postal services

Article 3 (1) Postal services are services provided as an economic activity, comprising some or all of the acceptance, collection as required, processing, transportation and delivery of postal items. Postal services may only be provided by economic entities registered in the registry of postal service providers maintained by the National Media and Infocommunications Authority (hereinafter the Authority).

(2) operations conducted with postal items, as defined in paragraph (1) shall constitute postal services even if they are performed incorporated into a complex service that also includes services that are not classified as postal services.

(3) Delivery in Hungary of postal items posted abroad, performed by a subcontractor of the service provider that concluded the agreement shall still constitute a postal service.

Article 4 Non-postal services

a) delivery of items by court bailiffs, delivery agents stipulated in legislation, authorised delivery agent, delivery commissioner, diplomatic or military courier;

b) if any person or organisation delivers items associated with its own economic or other activities itself or has such items delivered by persons in an employment relationship, government service relationship, state service relationship, public service relationship, public employee relationship, justice system employment relationship or other service relationship or membership relationship with itself (not including shareholders) (own delivery);

c) the electronic forwarding of messages not actually produced in physical form (messages, data information) from sending to receipt;

d) acceptance, collection, processing, transportation and delivery of printed matter without packaging or packaged in see-through packaging facilitating identification of the content, through sales or as a subscription service;

e) the activities of postal intermediaries, postal contractors and postal consolidators;

f) home delivery of purchased products from the place of purchase, with the exception of cases under which nonfood items weighing no more than 30 kg purchased under a contract signed by distant parties is delivered, provided such delivery is not performed as own delivery as defined in subsection *b*);

g) transportation, if an economic entity performs it not as a part of a postal service.

Article 5 Postal services can be

a) universal postal services,

b) postal services replacing universal postal services,

c) postal services not replacing universal postal services.

Article 6 (1) The universal postal service is a range of postal services that meet essential user demand, and which are consistent with technical, economic and social conditions, which meet a public need in the general economic interest that the universal postal service provider is obliged to provide throughout the territory of the country at a specific standard of quality, for affordable prices, irrespective of geographical location, for all users.

(2) The following services provided in accordance with the provisions of paragraph (1) and articles 14-17, different from the postal services specified in Article 8, which are associated with postal items shall be considered universal postal services:

a) unrecorded postal items not exceeding two kilograms in weight, other than those specified in subsections b)–d), sent domestically or internationally;

b) postal parcels not exceeding twenty kilograms, sent by domestic or international mail;

c) domestic or international postal items containing writing for the blind;

d) official documents.

(3) Within the scope of the universal postal service, the service provider must also provide as optional premium services to go with the postal items specified in sections a) and c) of paragraph (2) a recorded mail service, and in relation to the postal items specified in sections a)–c) of paragraph (2) a receipt certified service, a declared value service, as well as, in accordance with the provisions of the Universal Postal Public Service Contract specified in Article 19, trackable handling for the types of recorded postal items specified therein. The universal postal service provider can also be obliged to provide other additional services under the Universal Postal Public Service Contract in the public interest.

(4) In the general terms of service associated with the universal postal service, the universal postal service provider may advertise additional services over and above those stipulated in paragraph (3) above.

(5) The limits on the dimensions of the postal items that may be posted or delivered through the universal postal service, and the regulations concerning the data content of the address and its presentation shall be specified in the universal postal service provider's general terms of contract.

Article 7 (1) Postal services associated with any postal item shall constitute postal services replacing the universal postal service if they are not included among the services defined in Article 8, and the postal service provider is not providing them under its obligation to provide the universal postal service.

(2) The universal postal service provides the service as a service replacing the universal postal service if it is providing it

a) in accordance with the conditions advertised for services replacing the universal postal service, with content different from that stipulated in Article 6, paragraph (1) and in articles 14–17, or

b) in accordance with conditions stipulated in legislation, in the Universal Postal Public Service Contract specified in Article 19 or in the general terms of contract that are different from those applicable to the universal postal service, for a unique price.

Article 8 (1) The following postal services, which constitute added value relative to the postal service replacing the universal postal service listed below shall constitute postal services not replacing the universal postal service: a) courier postal service,

b) express postal service,

c) international EMS service,

d) any postal service containing at least one of the special premium services representing significant added value specified in paragraph (3).

(2) In the case of services not replacing the universal postal service, postal items may only be posted as individually identified, recorded items, and they may only be delivered to a person, or using an ID code provided by the person receiving the item at the time of receipt.

(3) The following shall constitute special premium services:

a) trackable handling of postal items,

b) time-guaranteed services,

c) payment on delivery service,

d) a service that facilitates delivery at a time agreed with the addressee after the postal item is accepted,

e) delivery only to the hand of the person indicated as the addressee,

f) any other premium services configured in line with the sender's unique requirements and provided under a specific contract associated with the delivery of postal items that are not included among the premium services

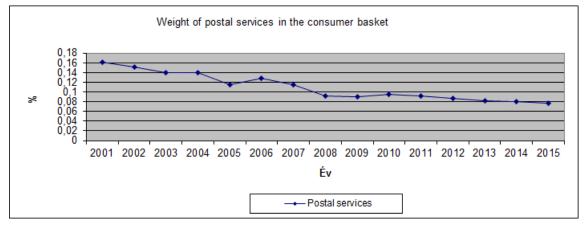
whose provision is obligatory with the universal postal service, and whose use results in the service being rendered no longer being classified as a service replacing the universal postal service from the user's perspective.

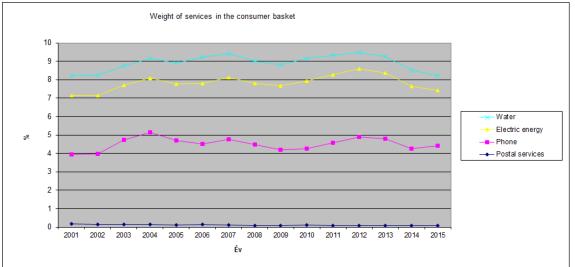
(4) When determining whether the use of a premium service as specified in paragraph (3), section f) results in the service being classified as a service replacing the universal postal service from the user's perspective, the characteristics of the service, in particular added value characteristics, as well as the purpose and pricing shall be considered.

Source: Act no. CLIX of 2012 on postal services, http://net.jogtar.hu/jr/gen/hjegy_doc.cgi?docid=A1200159.TV

	Postal		Electric	
	services	Phone	energy	Water
2001	0,161	3,777	3,21	1,056
2002	0,151	3,832	3,148	1,114
2003	0,14	4,576	2,987	1,046
2004	0,139	4,989	2,967	1,055
2005	0,115	4,595	3,049	1,162
2006	0,128	4,379	3,301	1,417
2007	0,114	4,633	3,358	1,318
2008	0,091	4,398	3,31	1,2
2009	0,09	4,116	3,479	1,114
2010	0,095	4,15	3,675	1,245
2011	0,091	4,4715	3,7	1,06
2012	0,087	4,793	3,725	0,875
2013	0,082	4,722	3,56	0,881
2014	0,08	4,177	3,401	0,859
2015	0,076	4,338	3,002	0,809

Appendix 7: The weight of public services within the consumer basket (2001-2015)

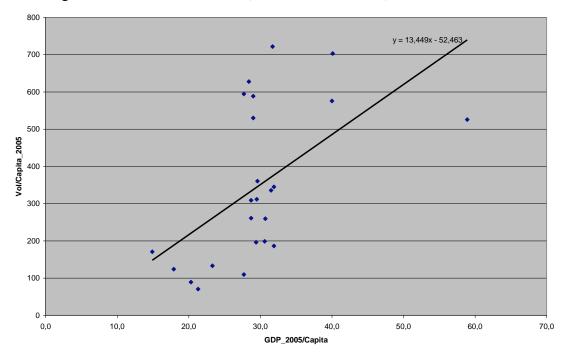




Source: KSH, 2011, Consumer price indices based on the Classification of Individual Consumption According to Purpose (COICOP); <u>http://portal.ksh.hu/pls/ksh/docs/hun/xstadat/xstadat_evkozi/e_qsf004e.html?1534</u>; accessed 15 September 2016

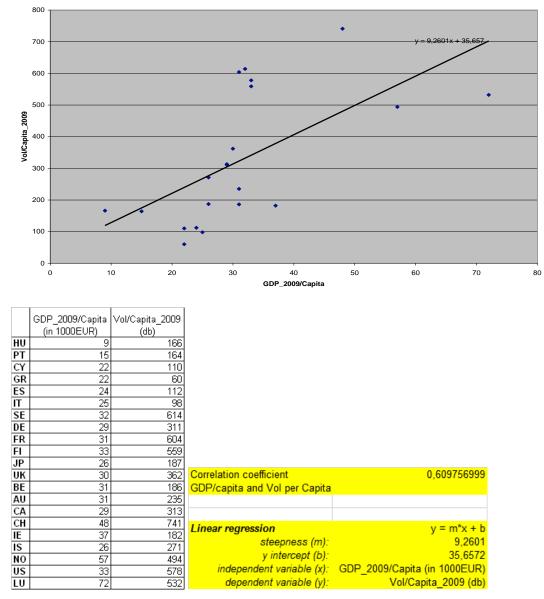
Appendix 8: The link between GDP and the numbers of letters (2005, 2009, 2015)

Investigation of the link between per capita GDP and per capita number of letters using linear regression – based on data from 2005, 2009 and 2015. The reduced slope of the results clearly indicates that over the last decade, the previously positive link between GDP and letter volumes has grown weaker.



Linear regression based on 2005 data (1000 USD and items)

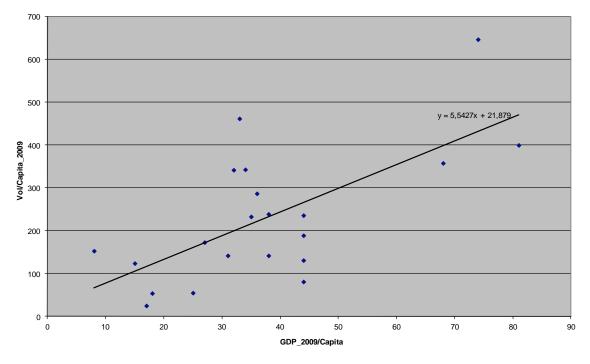
	GDP_2005/Capita			
	(in 1000USD)	Vol/Capita_2005		
HU	14,9	171	Correlation coefficient	0,547923205
PT	17,9	124	GDP/capita and Vol per Capita	
CY	20,3	89		
GR	21,3	70		
ES	23,3	133	Linear regression	y = m*x + b
AT	27,7	595	steepness (m):	13,4494
IT	27,7	110	y intercept (b):	-52,4633
SE	28,4	628	independent variable (x):	GDP_2005/Capita (in 1000USD)
DE	28,7	261	dependent variable (y):	Vol/Capita_2005
FR	28,7	309		
DK	29,0	589		
FI	29,0	530		
JP	29,4	196		
NL	29,5	312		
UK	29,6	360		
BE	30,6	199		
AU	30,7	259		
CA	31,5	336		
СН	31,7	722		
IE	31,9	186		
IS	31,9			
NO	40,0	576		
US	40,1	703		
LU	58,9	526		



Linear regression based on 2009 data (1000 EUR and items)

(The data for Japan, Spain and Great Britain are from 2008) Source of the data: IPC Statistical Database, 15 January 2011 http://www.ipc.be/en/Intelligence/Industry%20Intelligence%20and%20Research/IPC%20Statistical%20Database.aspx⁷⁷;

⁷⁷ Using the UPU database and taking all postal service providers into account we get a more direct link, 73% of the scatter can be explained by GDP/capita data. (in Guslain, Pierre (ed.) (2004), p. 17). At the same time, according to an analysis by the Copenhagen Economics (2010), the previously strong correlation was primarily disrupted by the economic crisis (p. 30).



Linear regression based on 2015 data (1000 EUR and items)

	GDP_2015/Capita (in 1000EUR)	Vol/Capita_2015 (db)		
HU	8	153	Correlation coefficient	0,667199041
PT	15	124	GDP/capita and Vol per Capita	
CY	18	54		
GR	17	25		
Nord	44	236	Linear regression	y = m*x + b
IT	25	55	steepness (m):	5,5427
SE	44	189	y intercept (b):	21,8786
DE	44	81		GDP_2015/Capita (in 1000EUR)
FR	32	342	dependent variable (y):	Vol/Capita_2015 (db)
FI	34	343		
JP	31	142		
UK	38	239		
BE	36	287		
NL	38	142		
CA	35	233		
CH	74	647		
IE	44	131		
IS	27	173		
NO	68	358		
US	33	462		
LU	81	400		

As a point of interest, it is worth looking at the changes in the data of the US and Hungary. In 2015, 462 letters were sent per person in the USA (that number was as high as 703 back in 2005)m while in Hungary, in 2015, the number of letters per capita was 153. In the US, the per capita number of letters had decreased by 35%.

Source of the data: IPC, Statistical database (2016)

Appendix 9: The ten recommendations of IPC for liberalization (2007)

- Investments in the postal industry are neither extremely high, nor predominantly sunk costs. There is no indication for a natural monopoly based on an essential facility. Therefore, the postal industry is no classical network industry.
- 2) The role of postal market regulation is not to create competition, but rather to create a framework that allows for competition. Regulators that today set out to create a high level of competition within a short period of time have failed to understand the postal market correctly.
- The objective of postal market regulation is not to divide up the postal market. The objective is to create an environment in which the market can grow.
- 4) The postal market is neither a self-contained market, nor are there demand-side sources of entry barriers. Competitive interaction exists to a high degree with other industries such as electronic commerce and the logistics industries.
- 5) Postal market liberalisation must be symmetric. Common rules must apply to all operators
 incumbents and competitors in all markets, at least in one region.
- 6) Market conditions have changed significantly in recent years, therefore, the scope and financing of the USO needs scrutiny to prevent market distortion.
- Where postal regulation remains, it must focus on end-to-end services; rule-setting for downstream access is an inadequate approach.
- 8) Big discrepancies between the size and resources of national regulators in different countries are an indication of widespread inefficiencies that must be resolved.
- 9) Regulation must be supervised and must not be an end in itself.
- 10) There is no need for sector-specific regulation in the postal industry. Existing legal instruments, in particular competition law, can deal with any deficiencies that may arise.

Source: IPC (2007), p. 6

	2011	2012	2013	2014	2015
1 Domestic net sales revenue	192 183	191 135	183 820	180 672	180 440
Mail	92 790	95 089	89 650	88 219	87 516
CEP	9 426	10 853	11 960	13 765	15 626
Retail	24 189	18 130	14 843	9 433	9 727
Newspapers	7 153	6 813	5 417	7 609	7 628
Money transfers	46 753	45 585	50 144	50 866	49 177
Financial services	9 209	9 805	10 412	9 199	9 319
Other services	2 663	4 860	1 394	1 581	1 447
2 Export net sales revenue	1 868	1 817	5 352	5 972	8 367
I. Net sales revenue (01+02)	194 051	192 952	189 172	186 644	188 807

Appendix 10: Distribution of the sales revenue of Magyar Posta Zrt. (2011–2015)

Source: Magyar Posta Zrt. annual reports