



**Management and
Business
Administration
Doctoral School**

SUMMARY OF THESES

Anett Pandurics

Strategic scenarios in the postal sector

Supervisor:

Miklós Dobák, CSc
Professor

Budapest, 2016

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1. Literature review and research objectives

1.1 Relevance of the topic

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.

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.

1.1 Theoretical background

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 the potentially most important (key) factors and their impacts on the various possible scenarios. In addition, the research is explicitly focused 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.

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.

1.1.1 Strategic scenarios in the postal sector

Recently, 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.

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

1.1.2 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). In my dissertation I shall understand the term “postal sector” in the title in a wider sense, including, in addition to the scope of the narrow definition, the markets defined by 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.

1.1.3 Summary of economic issues

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) (summary see in the following table).

Table 1: Comparison of the postal sector and traditional network industries

	<i>Traditional network industries (telecommunications, water, gas)</i>	<i>Postal sector (letters)</i>
Natural monopoly	yes	?
Infrastructure	significant equipment-specific network investment required	human resources, transportation equipment, scalable processing capacities
Irreversible capital expenditure (sunk costs)	significant	not significant (mostly buildings and vehicles)
Duplication of infrastructure	not effective economically or ecologically	possible and may be effective
Technology	capital-intensive	labour-intensive
Availability of capacities	continuous	incremental
Entry barriers and costs (using the dynamic approach)	high	low
Monopolistic bottleneck (critical facility)	yes	no
Ratio of fixed costs	high	low (divisible, scalable)
Ratio of personnel expenditure	low	high
Economies of scale	significant	exists, but not significant in all areas (significant in collection and delivery)
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 within the basket of commodities	significant	not significant (and dropping)
Flexibility of demand	low	low among residential customers, high with corporate clients
Requirement of regulatory intervention for establishing and maintaining competition	yes	not necessarily
Requirement of regulatory intervention for provision of USO	yes	probably required for the present USO
Market advantage of the incumbent service provider	large	medium

Source: my own table

The postal service is not a public good that market entities are unable to provide. 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.

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.

2. Research methodology

As a research paradigm that fits the subject of research I chose the *interpretative or constructivist 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 focused 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) 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.

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?

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).

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.

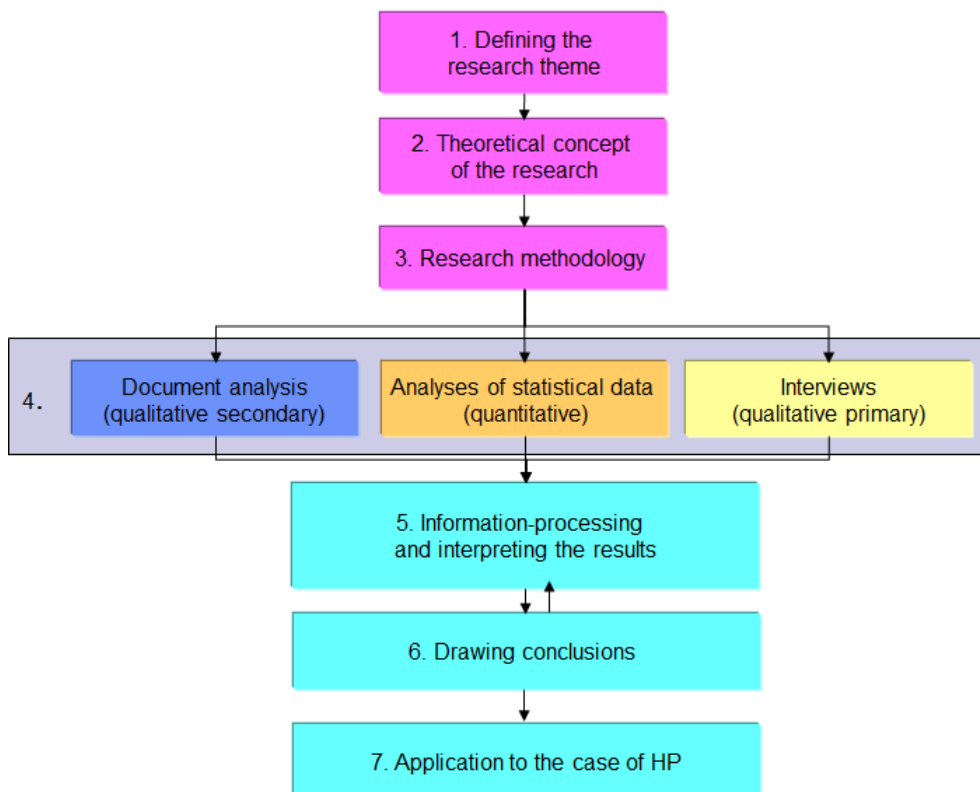
The planned methodology of the qualitative research is a combination of three components:

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

The 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).
- 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.

Figure 1: The process and the logical structure of the research



3. Summary of conclusions and results

3.1 Environmental analysis – challenges in the postal sector

On the base of the document-analysis, I have performed in the structure of PESTEL, I have produced a list that could be considered *the initial, preliminary version of the industry's scenario-creating drivers*.

I have concluded, 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. Universal 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.

Table 2: Changes of structural factors in the three industries

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

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.

3.2 Cluster-analysis – postal strategic groups

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. 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.

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.

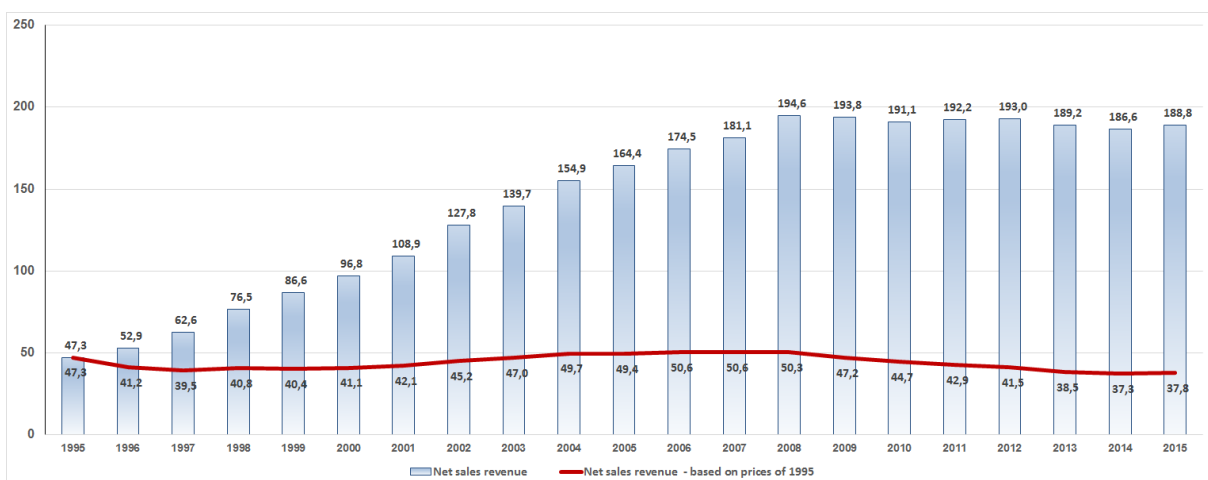
3.3 Status analysis of the Hungarian Post Co.

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 Figure 2) 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.

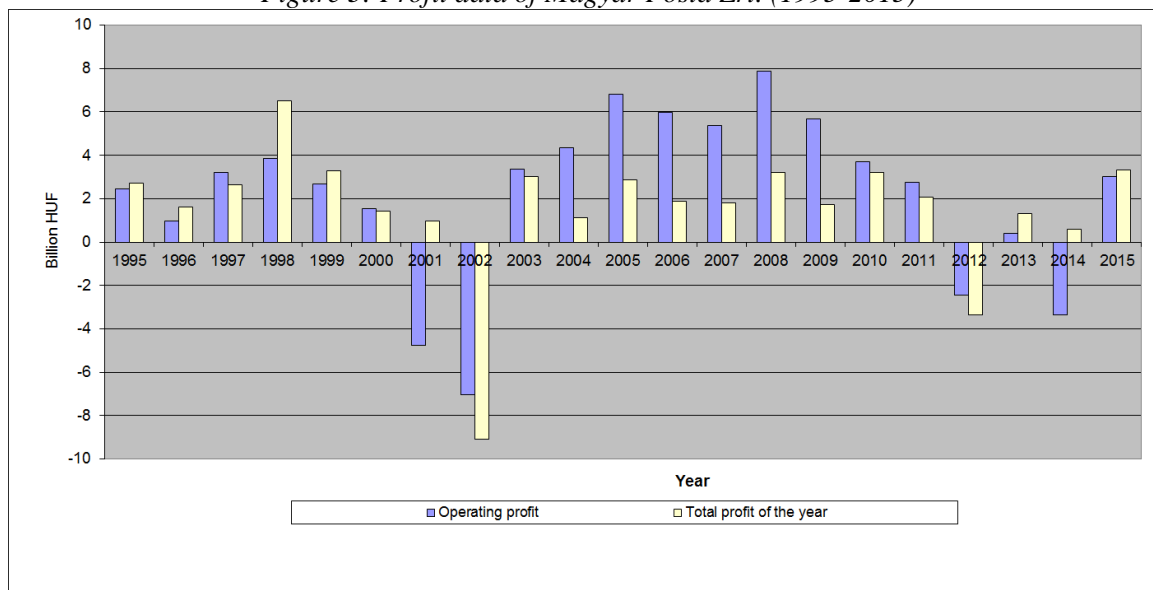
Figure 2: Sales revenue data of Magyar Posta Zrt. (1995-2015)



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). At the level of operating profit, Magyar Posta made a loss in two additional years: along with 2002 and 2012, in 2001 and 2014 as well.

Figure 3: Profit data 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.

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.

3.4 Semi-structured 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 scenario-generating 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 have I selected five questions (groups of questions) for my interviews, who were selected by the snowball-method initiated on three treads:

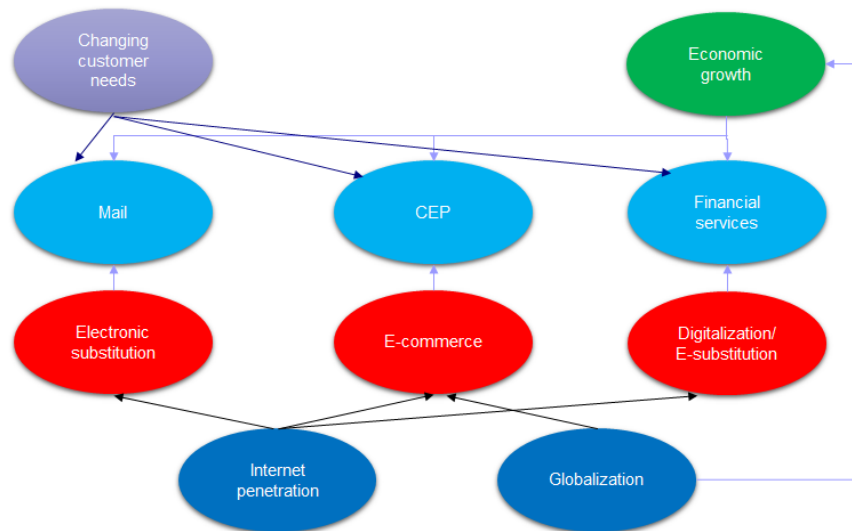
1. The present of the Post Office:
 - a. What comes to mind when you think about the *present situation* of Magyar Posta?
 - b. What are the most important factors influencing the present of the Post?
2. In your opinion, what are the *most important drivers (trends)* that may influence the operations 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?

The 14 interviews lasted 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 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 4: System of interconnections between the drivers



The critical factors of uncertainty identified in the interviews are shown in the following table.

Table 3: Summary of critical factors of uncertainty

	Letter mail	CEP	Financial services
Change of competition in the industry	New, traditional entrant: yes or no	Appearance of new models (their impact on the CEP market): CEP vs. new models/ players	Appearance of new models, players and platforms vs. traditional players in the digital arena
EU regulations	Definition of USO: existing vs. new	Cross-border regulation – aggressively regulated or market-based	Regulation of cash transactions, regulation of 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		

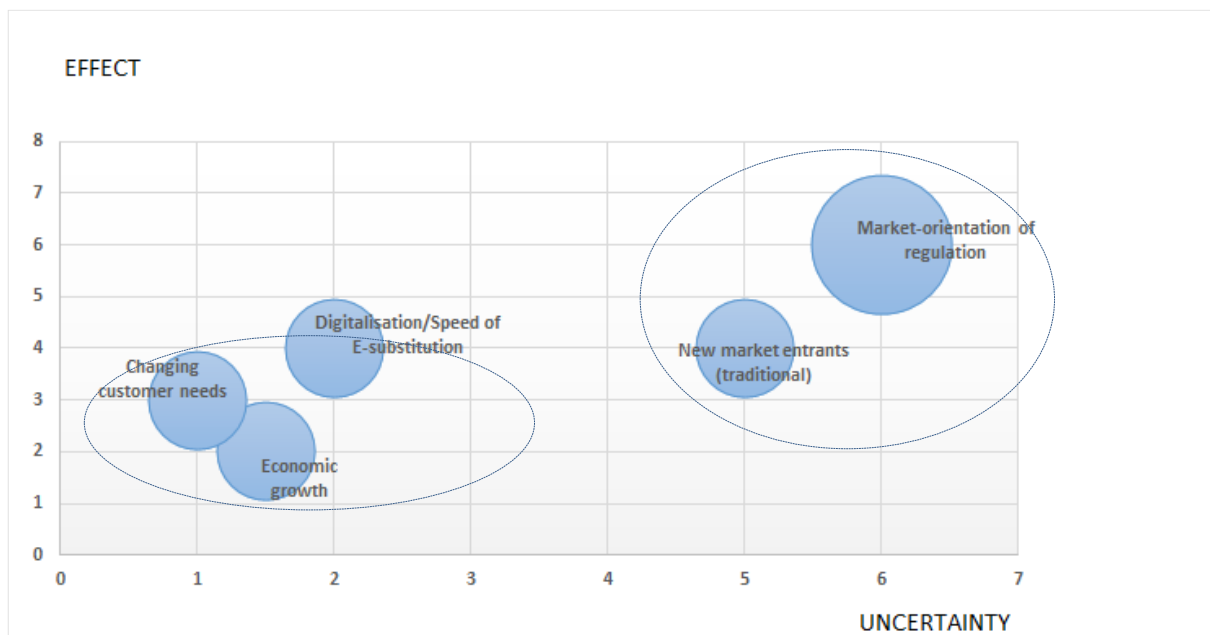
3.5 Strategic scenarios

The 3 most important divisions of Magyar Posta Zrt. are letter mail, CEP and financial services. Based on the Porter-analysis, we have 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 and present the scenario-result, as well.

3.5.1 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. 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 5: 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).

Figure 6: Letter mail market scenarios

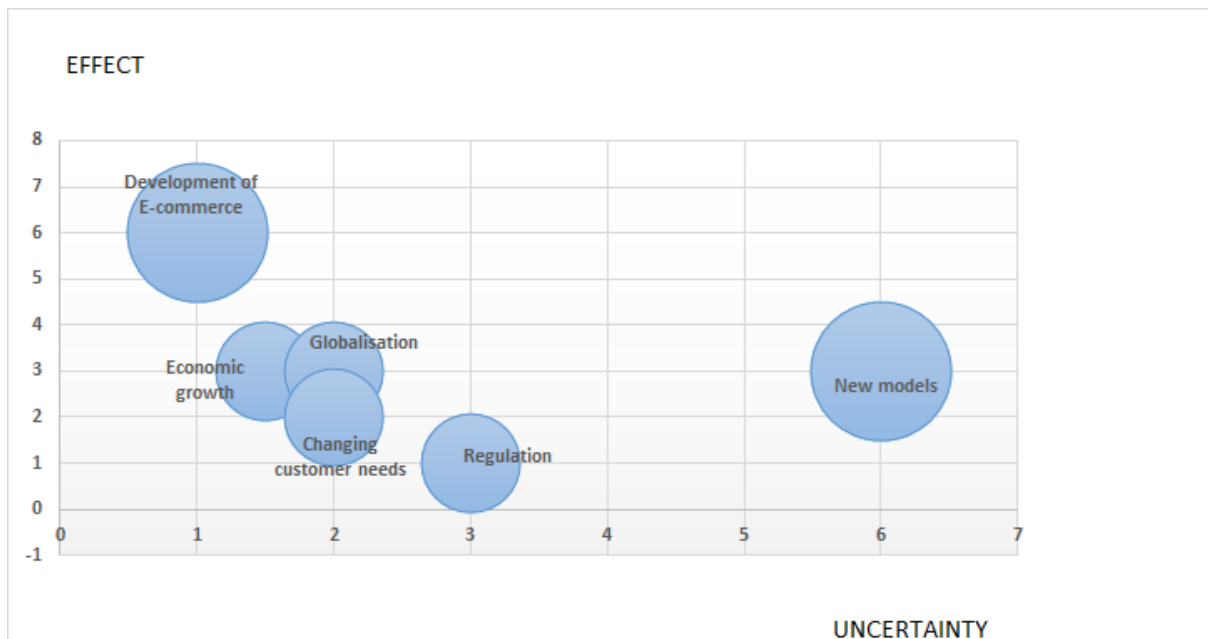
	Shields Up!	Competition in the Real World	Brave New Dotcom World
Economic growth	more likely to be low	more likely to be high	more likely to be high
Regulation (market orientation) (national, EU, global, role of the state)	market protectionist	market-oriented	market-oriented
New entries in traditional market	no	possible	no
Speed of digitalization and 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)

3.5.2 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 7: 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.

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. 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 depicted in the „Back to past”-scenario.

The appearance of new, digital alternative models can also influence the structure of competition and the size of the CEP market. 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.

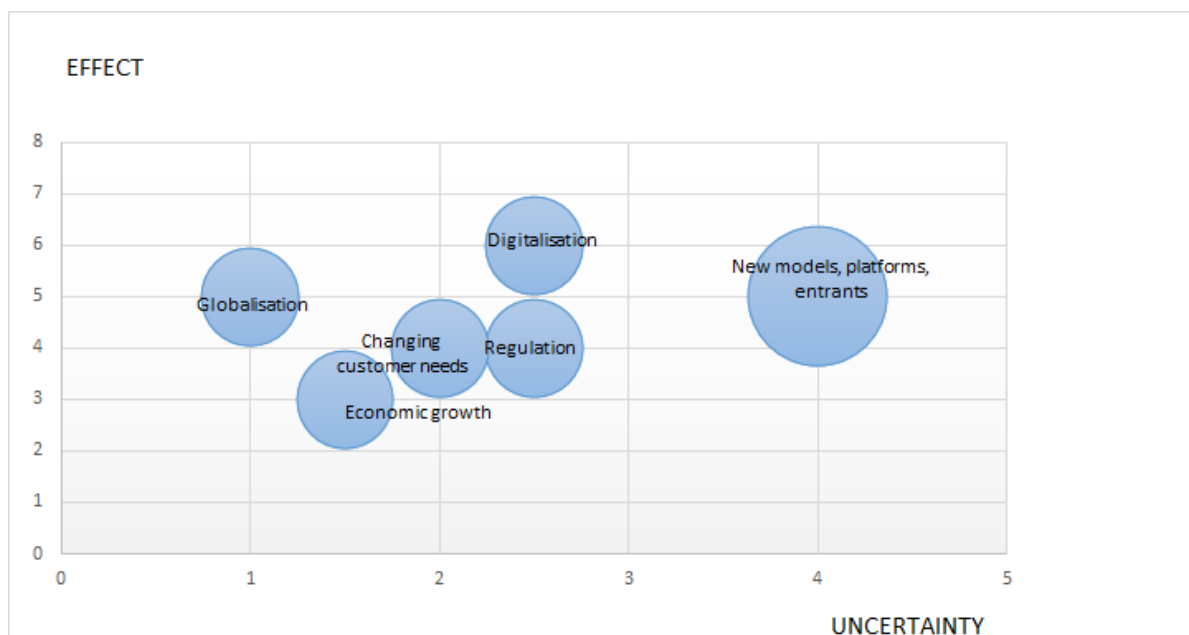
Figure 8: CEP-scenarios

	Back to the Past!	Combo World	Star Trek
Economic growth	more likely to be low	more likely to be high	more likely to be high
Globalization, intensity of commerce	moderate, possible downturn	growth continues	grows
Digitalization of commerce	stops	continues	grows faster
Market share of new models	negligible	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?	conservative regulations, not supportive of digitalization or innovation, or even protectionist	regulations support digitalization (e.g. in data security and consumer protection)	regulations promote competition and innovation

3.5.3 Financial services market

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



What direction will the regulatory environment take? 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 access 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.

Figure10: Financial market scenarios

	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

3.6 Summary and learning

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.

As we have seen, the scientific criteria applicable to qualitative research differ from those for quantitative research. 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.

For any postal universal service provider, one of the most important strategic issue and further applicable research direction could be the methodological development of corporate-level scenarios based on the consistent and plausible combinations of the depicted business unit scenarios.

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. 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.

4. References

2012. évi CLIX. törvény a postai szolgáltatásokról,

http://net.jogtar.hu/jr/gen/hjegy_doc.cgi?docid=A1200159.TV

Armstrong, J. Scott (ed.) (2001): Principles of Forecasting – A Handbook for Researchers and Practitioners, Springer, Science+Business Media, Philadelphia, USA

Babbie, Earl (2001): A társadalomtudományi kutatás gyakorlata, Balassi Kiadó, Budapest

Balaton Károly – Hortoványi Lilla – Incze Emma – Lackó Márk – Szabó Roland Zsolt – Tari Ernő (2010): Stratégiai menedzsment, AULA Kiadó, Budapest

Baker, Simon – Dodgson, John (2002): Market Definition in Postal Services, in: Damien Geradin (ed.): The Liberalization of Postal Services in the European Union, pp. 121-137, Kluwer Law International, Great Britain

Barney, Jay B. (1991): Firm Resources and Sustained Competitive Advantage. Journal of Management 17(1), pp.99-120.

BCG (2010): Projecting U.S. Mail Volumes to 2020, The Boston Consulting Group, March 2, <http://about.usps.com/future>

Bertalanffy, Ludwig von (1972): The History and Status of General Systems Theory, in Trends in General Systems Theory, George J. Klir (ed.), New York, Wiley

Christensen, Clayton M.- Anthony, Scott D.- Roth, Erik A. (2004): Seeing what's next?: Using the theories of innovation to predict industry change, Harvard Business School Press, Boston, Massachusetts

Courtney, Hugh (2001): 20/20 Foresight: crafting strategy in an uncertain world, Boston, McKinsey & Company, MA: Harvard Business School Press

Courtney, Hugh (2003): Decision-driver scenarios for assessing four levels of uncertainty, Strategy & Leadership, Vol. 31., No. 1., pp.14-22.

Crew, A. Michael – Kleindorfer, R. Paul (ed.) (2006): Liberalization of the Postal and Delivery Sector – Advances in Regulatory Economics, Edward Elgar, Cheltenham, UK

Day, S. George – Schoemaker, J.H. Paul (2006): Peripheral Vision – Detecting the Weak Signals That Will Make or Break Your Company, Harvard Business School Press, Boston, MA

D'Aveni, A. Richard (1995): Hypercompetitive Rivalries – Competing in Highly Dynamic Environments, The Free Press, New York

Dawson, Ross (2016): Scenario Planning - The Future of Global Financial Service, <http://rossdawson.com/articles/scenario-planning-financial-services/>; 2016.10.03.

De Geus, Arie. P. (1988): Planning as learning, Harvard Business Review, March-April. pp70-74.

- Denzin, K. Norman – Lincoln, S. Yvonna (eds.) (2000): Handbook of Qualitative Research, Sage Publications, USA
- Easterby-Smith, Mark – Thorpe, Richard – Jackson, R. Paul (2008): Management Research (3rd edition), SAGE Publications, London
- EP (2016): Report on the application of the Postal Services Directive (2016/2010(INI)), Committee on Transport and Tourism, A8-0254/2016. 3.8.2016. RR/1102070EN.doc
- Forrester, W. Jay (1961, 1991): Industrial Dynamics, originally published by MIT Press, Cambridge MA; republished Pegasus Communications, Waltham
- Friedman, Milton (2002): Capitalism and freedom, with the assistance of Rose D. Friedman, The University of Chicago Press, 40th Anniversary ed., Chicago-London
- Geddes, Rick (2004): Postal Reform – Do economists reach a conclusion?, Econ Journal Watch, Volume 1, Number 1, April, pp.61-81.
- Godet, Michel (2006): Creating Futures: Scenario Planning as a Strategic Management Tool, Economica
- Guslain, Pierre (ed.) (2004): The Postal Sector in Developing and Transition Countries – Contribution to a Reform Agenda, The World Bank Group, Global Information and Communication Technologies Department, Policy Division, September
- Hamel, Gary- Prahalad, C.K. (1996): Competing for the Future, Harvard Business Scholl Press, Boston, MA
- IPC (2010b): Strategic Perspectives on the Postal Market 2010, by the International Post Corporations, <http://www.ipc.be>
- IPC (2015): Global Postal Industry Report – A global review of industry performance and trends, November, International Post Corporation, Bruessel, www.ipc.be
- IPC (2016): Statistical Database, https://www.ipc.be/en/toolkit/statisticaldatabase/query_tool, 2016.09.10.
- Jimenez, Luis (2005): Electronic Substitution for Mail: Models and Results, Myth and Reality, Pitney Bowes, March
- Johnson, G. – Scholes, K. (1999): Exploring Corporate Strategy, 5th Edition, Prentice Hall Europe
- Kahn, H. - Weiner A.J. (1967): The Year 2000: A Framework for Speculation over the Next Thirty Year, Macmillan Publishing
- King, Nigel – Horrocks, Christine (2010): Interviews in Qualitative Research, SAGE Publications
- Kvale, Steinar (1996): InterViews: An introduction to qualitative research interviewing, SAGE Publications, USA

- Levy, David (1994): Chaos Theory and Strategy: Theory, Application, and Managerial Implications, Strategic Management Journal, Vol. 15. PP.167-178, Summer
- Lierow, M. - Janssen, S. - D'Inca, J (2014): Disruptive Logistics - The New Frontier for E-Commerce, Oliver Wyman
- Lincoln, Yvonna .S. – Guba, Egon G. (2000): Paradigmatic Controversies, contradictions, and emerging confluences, p. 163-188. in: Denzin, K. Norman – Lincoln, S. Yvonna (eds.): Handbook of Qualitative Research, Sage Publications, USA
- Lindgren, Mats – Bandhold, Hans (2003): Scenario Planning – The link between future and strategy, New York: Palgrave Macmillan
- London Economics (Consulting) (2002): Benefits of Universal Services Provision to Consignia – Final Report to Postwatch, March
- McAfee, R. Preston – Mialon, M. Hugo – Williams, A. Michael (2004): What is a Barrier to Entry?, The American Economic Review, Vol. 94, No.2, May, pp.461-465.
- Meadows, Donella – Randers, Jorgen – Meadows, Dennis (2004): Limits to Growth: The 30th Year Update, Chelsea Green Publishing Co.
- Mintzberg, Henry- Ahlstrand, Bruce- Lampel, Joseph (2005): Strategy bites back – Is is far more and less, then you ever imagined, Pearson Prentice Hall, Upper Saddle River, NJ
- Molitor, T.T. Graham (2009): Scenarios: Worth the Effort?, Journal of Futures Studies, February, 13(3), pp81-92.
- Nader, H. Fouad (2004): Mail Trends, Adrenale Corporation, Background Paper No. 2. December
- Naisbitt, John (2006): Mind Set! – Eleven Ways to Change the Way You See – and Create – the Future, Collins Business
- NERA (2004): Economics of Postal Services – Final Report to the European Commission DG Markt, London, July
- Nováky Erzsébet (szerk.) (2006): Jövőkutatás, Aula Kiadó, Budapest
- O'Brian, Anthony (2005): Post Office Financial Services – Opportunities and Challenges in a Competitive Global Market, Lafferty, VRL Publishing Ltd., March
- Ogilvy, A. James (2002): Creating Better Future: Scenario Planning as a Tool for a Better Tomorrow, Oxford Univesity Press
- Oxera (2007): Funding universal service obligation in the postal sector, England, January
- Panzar, C.J.(1994): The Economics of Mail Delivery in Governing the Postal Service 1 (J. Gregory Sidak ed., AEI Press 1994)

- Pascale, T. Richard (1999): Surfing the Edge of Chaos, Sloan Management Review, pp. 83-94.,
Spring
- Porter, M.E. (2006): Versenystratégia, Akadémiai Kiadó, Budapest
- PostComm (2006): Business Customer Survey (Conducted by NERA Economic Consulting),
London
- Prahalad, C.K. - Hamel, G. (1990): The Core Competence of the Corporation. Harvard Business
Review, May-June, pp. 79-91.
- Ralston, Bill – Wilson, Ian (2006): The Scenario-Planning Handbook: A Practitioner's Guide to
developing and Using Scenarios to Direct Strategy in Today's Uncertain World, Thomson
South-Western
- Ringland, Gill (2006): Scenario Planning – Managing for the Future, England: John Wiley
- Schmalensee, Richard (2004): Sunk Costs and Antitrust Barriers to Entry, The American Economic
Review, Vol. 94, No.2, May, pp.471-475.
- Schwartz, Peter (1996): The Art of the Long View – Path to Strategic Insight for Yourself and Your
Company, New York: Currency Doubleday
- Schwartz, Peter (2011): Learnings from the Long View, Peter Schwartz and GBN Global Business
Network
- Shell (2005): Shell Global Scenarios to 2025: The future business environment: trends, trade-offs
and choices, Shell International Limited
- Schoemaker, Paul J.H. (1991): When and How to Use Scenario Planning: A Heuristic Approach
with Illustration, Journal of Forecasting, Vol. 10, pp.549-564.
- Shoemaker, Paul J.H. (1995): Scenario Planning: A Tool for Strategic Thinking, Sloan Management
Review, 36,2, Winter, pp25- 40.
- Sidak, J. Gregory (1994): The Economics of Mail Delivery: Commentary, in Governing the Postal
Service 14 (J. Gregory Sidak ed., AEI Press 1994)
- Sidak, J. Gregory – Spulber, F. Daniel (1996): Protecting Competition from the Postal Monopoly,
The AEI Press, Publisher for the American Enterprise Institute, Washington, D.C.
- Sund, J. Kristian Dr. – Osborn, Derek (2010): The Future is in the Post – Perspectives on Strategy in
the Postal Industry, Libri Publishing
- Teece, David J. (2009): Dynamic Capabilities & strategic management – Organizing for Innovation
and Growth, Oxford University Press
- Van der Heijden, Kees (2005): Scenarios: The Art of Strategic Conversation, New York: John
Wiley

- Van Notten, Philip (2004): Writing on the Wall: Scenario Development in Times of Discontinuity, Dissertation.com, USA
- Visco Comandini, Vincenzo (1994): The Postal Service in the European Union: public monopoly or competitive market? – A transaction cost approach, *Annals of Public and Cooperative Economics*, 66:1, pp.7-29.
- Wack, Pierre (1995): Scenarios: shooting the rapids, *Harvard Business Review*, November/December
- Wernerfelt, B. (1995): The Resource-Based Theory of the Firm: Ten years after. *Strategic Management Journal* 16, pp. 171-174.
- WIK-Consult (2006): Main Developments in the Postal Sector (2004-2006), Study for the European Commission DG Internal Market, Bad Honnef, May

5. Publication list

Peer reviewed journal articles in Hungarian

- Pandurics Anett- Pusztai József (2006): MPL- Egy új márka születése a logisztikai piacon, *Marketing&Menedzsment*, XL. évfolyam 5-6. szám, pp.94-105.
- Pandurics Anett (2017): Egyszer fenn, egyszer lenn - A magyar kötelező gépjármű felelősség biztosítási piac elemzése, *Vezetéstudomány*, XLVII. évf., 1. szám, pp. 2-17.
- Pandurics Anett – Szalai Péter (2017): A klímaváltozás hatása a biztosítási szektorra, *Hitelintézeti Szemle*, 16. évfolyam, 1. szám, március, pp. 92-118.
- Pandurics Anett- Szalai Péter (2017): A megtakarítások elméleti háttere és alakulása, *Köz-Gazdaság*, elfogadott (van nyilatkozat)
- Pandurics Anett- Szalai Péter (2017): A második és harmadik nyugdíjpillér szerepe a magyar nyugdíjrendszerben, *Pénzügyi Szemle*, elfogadott (van nyilatkozat)
- Pandurics Anett- Pusztai József (2017): Változásmenedzsment egy francia papíripari multinacionális nagyvállalat magyarországi leányvállalatánál, *Marketing&Menedzsment*, benyújtott, lektornak kiadott
- Pandurics Anett – Markó Olga (2015): A felelősségbiztosítások szerepe, jelene és jövője Magyarországon, *Biztosítás és Kockázat*, II. évfolyam 3. szám, pp.78-93.
- Pandurics Anett- Szalai Péter- Tóth Krisztián (2016): A klímaváltozás hatása a lakásbiztosítási piacra, *Biztosítás és Kockázat*, III. évfolyam 4. szám, pp. 38-61.

Other publications in English

- Pandurics Anett (1997): Students in Institutional Leadership and Development
In: Europe of Universities (edited by Jody Jensen) - Institute for Social and European Studies, Discussion Papers No.3. Budapest, Kőszeg-Szombathely, pp.63-70.
- Pandurics Anett (1999): Organizational forms from a supply chain perspectives, Research Perspectives in Purchasing and Supply Chain Management, Selected papers of the Third and Fourth IFPMM Summer Schools held in Salzburg, Austria in 1997 and 1998, IFPMM Publications, Budapest, Volume 2, pp. 93-117. (two lectures in 1997 and 1998, one conference paper in 1999)
- Markó Olga - Pandurics Anett (2015): Role of liability insurance in the enterprise risk management, in: Dunay, Anna (ed.) Proceedings of the 5th International Conference on

Management 2015. Management, leadership and strategy for SMEs' competitiveness. Szent István University Publishing House, Gödöllő. ISBN 978-963-269-492-4, pp. 135-139.,

- Pandurics Anett - Illés Csaba Bálint (2015): Ups and downs: how the five competitive forces of Porter shape strategies in the Hungarian MTPL-market, in: Dunay, Anna (ed.) Proceedings of the 5th International Conference on Management 2015. Management, leadership and strategy for SMEs' competitiveness. Szent István University Publishing House, Gödöllő. ISBN 978-963-269-492-4, pp. 78-84.

Conference lectures/papers in Hungarian

- Pandurics Anett (2013): A „bankadó” hatásának elemzése a biztosítási szektorra, Pro Scientia Aranyérmesek XI. konferenciája, Szeged, 2012. november 8-10., Budapest, ISBN 978-963-88289-2-7, pp.214-219.
- Pandurics Anett (2012): A „bankadó” hatásának elemzése a biztosítási szektorra, Heller-díjas konferencia-kiadvány, Rajk László Szakkollégium, Budapest, december 21, ISBN 978-963-88820-2-8, p21.
- Pandurics Anett (2015): Viselkedési közgazdaságtan a biztosítások területén- Hogyan hozzunk jobb döntéseket?, Pro Scientia Aranyérmesek XII. konferenciája, Eszterházy Károly Főiskola, Eger, Líceum Kiadó, 2014. november 6-8., Budapest, ISBN 978-615-5509-42-1, pp.218-226.
- Pandurics Anett (2007): Stratégiai scenáriók a postai szektorban, Heller-díjas konferencia-kiadvány, Rajk László Szakkollégium, december 17-18., p33.
- Pandurics Anett (2004): A Magyar Posta Rt. stratégiai elképzelései a logisztika és a CEP területén, MLBKT XII. éves kongresszusa, Rajt vagy cél? – Versenyhelyzetben Európában, 2004. november 17-19., Siófok, Előadaskötet, pp.219-226
- Pandurics Anett (2016): Odüsszeusz és az árbóc – a nyugdíjcélú megtakarítások pszichológiája, Pro Scientia Aranyérmesek XIII. konferenciája, Pécs, november 17-19. (leadott absztrakt)

Other not-refereed research papers, reports and articles

- Chikán Attila - András Krisztina – Pandurics Anett (1998): Foreign Direct Investment in Hungary – Country Report on Hungary, PHARE-ACE Programme – Proposal No. P96-6116-R