



**Doctoral School of
Business Administration**

SUMMARY OF THESIS

of the doctoral dissertation by

Balázs Tibor Felsmann

Corporate performance under institutional constraints

**Strategic adaptation and corporate co-evolution in the Hungarian energy
retail sector**

Supervisor:

Károly Balaton DSc.

professor

Budapest, 2018

Institute of Management
Department of Strategic Management

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1. Research objectives and background

My thesis focuses on the Hungarian energy retail sector, especially on the development of gas and electricity retail business, which offers an excellent research field to analyze **the mutual interactions between industrial and governmental actors**. I attempt to discover the nature of the mutual interactions between sector firms and institutions in the Hungarian energy trading market and look for the recipe of business success over the past and upcoming years of turbulence.

I started to research the topic of the thesis in 2011, four years after the gas and electricity markets had been completely liberalized in Hungary. I thought that my choice of topic would be ideal to reveal the most important milestones of the **transition from the regulated to the competitive market**, the rearrangement between **incumbent companies** and **new market entrants** as well as the similarities and differences between respective business models. At that time, I had not yet foreseen that the development of the sector would not follow the development processes as defined according to “textbook models” at all, as the direct government intervention also appeared through both regulatory and state-ownership engagement very quickly and actively besides the competition dynamised by the new entrants.

Having regard to the extension of the topic, I narrowed down my choice in two areas. On the one hand, my choice focuses on Hungary, so despite the fact that the presence of multinational companies is significant in the sector, I study specifically the **strategies at the level of their local affiliates** rather than at regional and European levels. It is undoubtedly a strong limitation, because many researchers have pointed out (Kolk et al. 2014) that the local strategies of the multinational energy companies more likely appear in the form of regional strategies which increases or decreases the strategic importance of certain regions. However, I believe that the research network available to me, the personal knowledge of local companies and their managers and the qualitative research opportunities resulted from it justify to focus my examination on the local strategies in Hungary.

The other limitation is the **period** covered by my thesis. It is very difficult to define the start and end date of the timeframe covered by the empirical data of the research. As the start date of the complete energy market liberalization is 2007 in the electricity sector and 2008 in the gas sector, it is justified to consider 2009, the first “full year” of the new structure, as a starting date concerning the deeper empirical researches. The results of the Competitiveness Research Centre (CRC) of the Corvinus University of Budapest (Chikán et al., 2014), one of the research studies

which has been used as a reference in the empirical research, also confirmed that 2009 should be the start date of my analysis. Given the fact that the CRC study examined the change of the external and internal factors based on a countrywide sample consisting of 300 companies for the period between 2009 and 2013, it seemed obvious to compare those results with my own industry-focused questionnaire-based findings carried out with using the same methodology.

It was much more difficult to determine the end date of my analysis because the limit of the period which would constitute the frame of my examination is less clear. Finally, I chose 2015 for the quantitative analysis, but I also refer to those main events that characterized the industry in 2016 and 2017. However, I believe that **the new directions have become clear** and it has significantly revealed that different environmental conditions prevailed in the retail and the corporate segments and the strategic path followed by the concerning companies has become well-identified by 2015.

2. Research issues and applied methods

My study combines the viewpoint coming from **industry surveys with a case study approach**, in accordance with the development of the national energy trading sector. My aim is to present both the **industry level reactions** on the changing environmental constraints and the **adaptation mechanisms of the concerning corporates**. The model of *corporate co-evolution* described by Rodrigues and Child (2003) is used as the main theoretical model of my study. The co-evolutionary framework supports this dual research focus via concentrating on mutual interactions on both *meso* (industrial) and *micro* (corporate) levels.

I wish to highlight three factors which have made the analysis of the energy trading sector particularly interesting in researcher's point of view:

- (1) Firstly, the **privatization of the Hungarian energy sector** in the middle of the 1990s radically changed the ownership structure of the industry. By 1995, many energy service providers and power plants had been taken over by foreign owners. In contrast of the privatization for the major proportion of the retail sector, the **state control was maintained in relation to wholesale activities**. MVM, a state-owned company, had a privileged position to distribute power from contracted business with state-owned and private power plants via long term power-purchase agreements. The same tendency prevailed in the natural gas sector. MOL Rt., the former state-owned monopoly, gradually ended its natural gas retail activities after 1991 but kept its exclusive rights as an import and domestic natural gas wholesaler (Vince, 2013).
- (2) Secondly, **Hungary's EU accession in 2004** required major changes in the legal framework. Hungary partially opened its closed electricity and natural gas trading market to medium- and large-scale industrial consumers (the so-called *authorizeds*) in 2003. Following EU legislation, Hungary **broke down all legal barriers for free market trading** from 2008 (in case of natural gas from 2009) and legally opened also the household market segment to the free-market traders. However, the removal of legal obstacles **did not result automatically better condition for the non-incumbent players**.
- (3) Last but not least, the case of the Hungarian energy trading sector also gave a great opportunity to analyse the impacts of the deteriorating macroeconomic conditions caused by **the economic crisis from late 2008** on governmental policies, actions and institutional regime.

Summarizing the most important topics of the doctoral thesis according to the above, the following four issues have a central focus:

- 1) What are the strategic responses adopted by companies with **different ownership structure** (state-owned, domestic private and MNEs) to deal with changes in the institutional environment (financial, organizational)?
- 2) Are there any particular differences between **the adaptation strategy of companies** with different ownership forms, management system and sizes?
- 3) How do the changes of the environmental conditions influence the **performance of the companies** in short and long term?
- 4) Can other particularities be identified which modify the above-mentioned general statements (such as focus between subsectors, production profile, impact on a parent company's corporate strategy)?

2.1. Theoretical background of the research

In the theoretical chapter of my dissertation I review numerous approaches describing the relationship between corporate strategy and institutional system. There are huge number of researchers focused on the corporate-market-institution relations affected by the seminal works of Coase (1937) on the costs of transactions and Williamson (1985) on the boundaries between firms and markets. Institutions influence the opportunities of each actor (individuals, organizations, firms) of the society in various ways, and organizations are looking for the ways to realize the advantages of these effects.

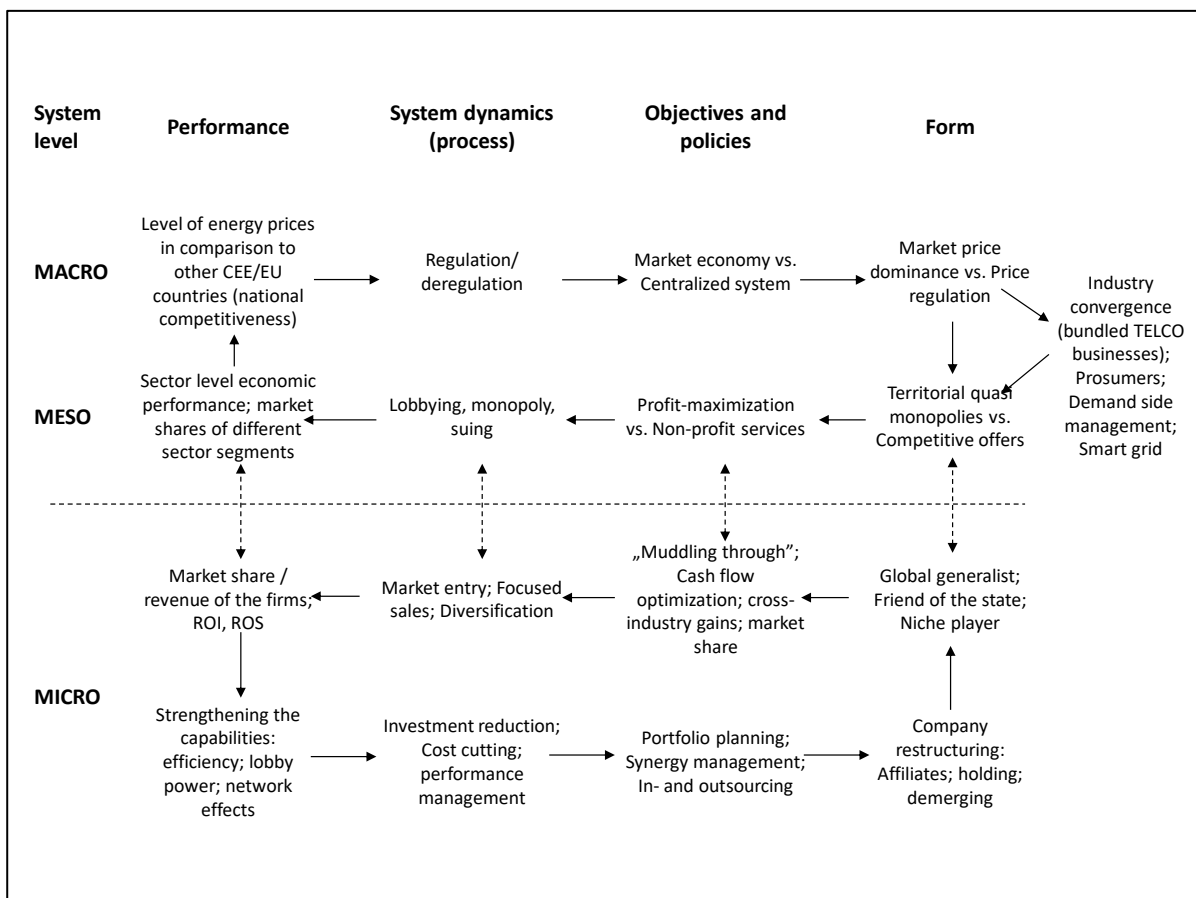
The institutional environment is a part of **a complex system**, including **firms** and organizations on micro level, **industries** (or competitive environment) on meso level and the **social, ecological, political, technological and economic environment** on *macro* level. The major economic and management theories have a different focus on the firms' reaction on the changes in their environment and differently interpret the causality of the interactions between firms, institutions and the further elements of the environment. The main theoretical framework followed in the empiric part of my thesis is the *co-evolutionary approach* offered by various theoretical viewpoints. The **co-evolutionary theory** focuses on the **mutual influence and impact of organizational and environmental factors** on corporate adaptation mechanism. My aim is to demonstrate the usefulness of the co-evolutionary method in a highly institutionalized industrial environment on the basis of the research framework laid down by Child and

Rodrigues concerning this topic (Rodrigues & Child, 2003; Child & Rodrigues 2008; Child, Tse & Rodrigues 2012, 2013).

2.2. Adaptation of the co-evolution theory

By adapting the model of Rodrigues and Child (2003) in connection with my research area, a domestic co-evolution mapping can be revealed relation to the domestic energy trade. Each element of the map has a **natural effect on the other** so **dynamic interactions** and combined changes are more typical than one-way, deterministic cause-and-effect relations.

1 - An institutional co-evolution map for the Hungarian energy trade (Author's compilation based on the theoretical model (2003) of Rodrigues and Child)



I consider it important to emphasize the following macro level elements of the model:

- 1) *Low household electricity and gas prices as the key indicators of the governmental performance: the key indicator of the government success* after 2010, even more from 2012, is to reduce the **domestic energy prices** and reach their lowest level within the region.

- 2) *Impose taxes to ensure macroeconomic balance and to achieve industrial objectives:* the government imposed **industry-specific taxes** on a number of occasions after 2010. The industry-specific taxes improve the short term budget equilibrium and, on the other hand, they are **active influencing means** for the government to achieve its objectives within the industry. The increasing tax burdens contribute to deem the investments less attractive by the private investors of the sector making it easier to decide whether these investments are being redeemed or sold to government-preferred owners.
- 3) *Strengthening of national ownership:* the **strengthening of national ownership is a declared objective** of the energy industry mainly of the gas sector in the strategic document of the government, the National Energy Strategy 2030. In terms of government performance, the change in the ownership composition within the industry is also an important indicator for achieving governmental objectives.

In addition to the above three performance indicators, it is important to highlight some elements which are specific to the institutional environment that may facilitate to achieve the objectives. In this connection, the changes of the **regulatory and control** institutions have outstanding importance on macro-level in terms of system dynamics. In this respect, the **persistence of the system of official prices** and the **centralized institutional system** suggest that priority is given to the **central operation and bureaucratic coordination** by the government to achieve the above mentioned objectives.

Changing to **meso (industrial) level**, the price system has an obvious impact on the market structure. Application of the official price system eliminates the competition between market players, which can lead to the creation of **quasi-monopoles**/regional service providers. With objectives defined on an industrial level (regarding the full population of sector companies), profit expectations from certain operational models may be different. The possibilities of **cross-financing** (for example in the case of vertically integrated industrial players) or **pursuing social objectives** even at the cost of reducing profitability (for example with a non-profit state-owned public utility) have an impact on the expectations of trading companies. The performance of each industrial segment and of the entire energy trading industry is a result of **lobbying on the industrial level** or **legal enforcement**, which has a repeatedly reversing effect on competitiveness at the macro level.

It is not easy to define clear performance indicators for the entire industry as its performance as a whole includes the impact of both internal and external factors. But in terms of the elements

of co-evolutionary interactions some issues can be clearly analyzed within this dimension as well:

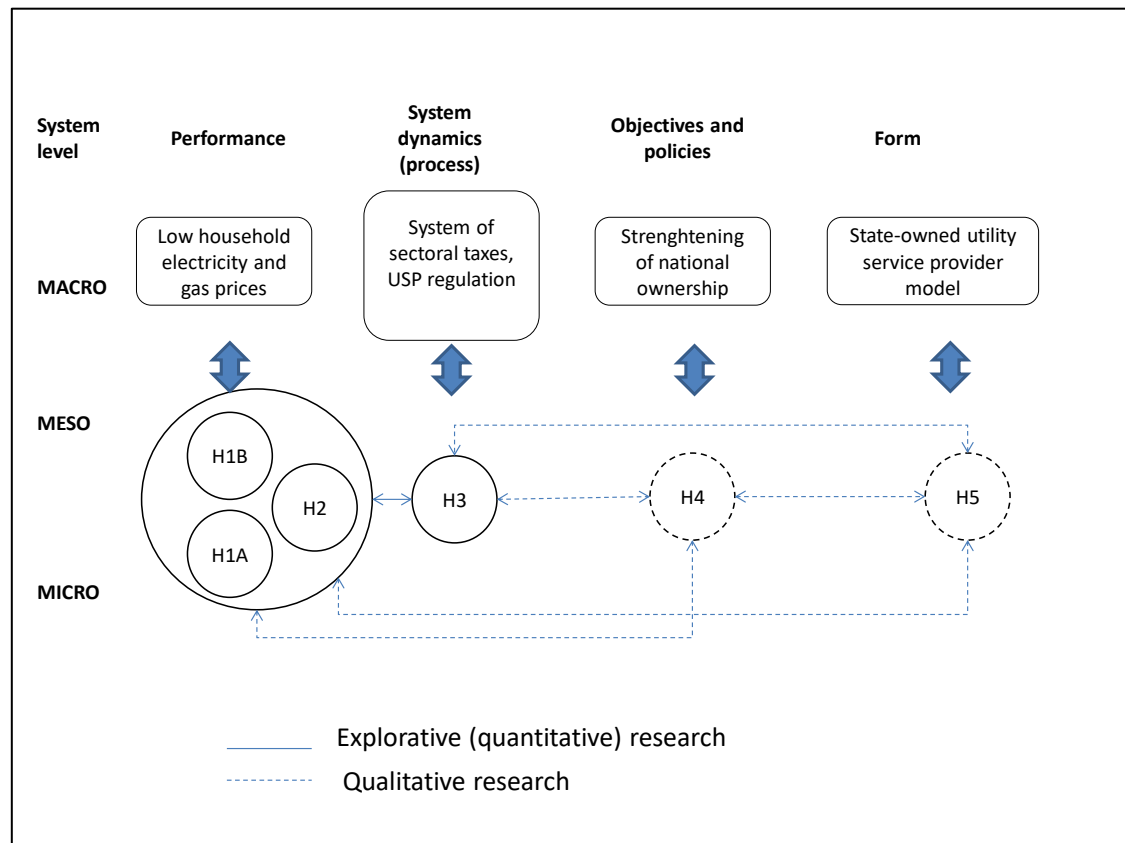
- 1) ***Rearrangement between the market segments:*** The clear objective of the government regarding universal services is the reduction of prices. This objective can reduce the share of universal service across the entire industry both in terms of revenue generation and profitability.
- 2) ***Rearrangement between certain ownership groups:*** Considering the sector as a whole, the impacts of macro-level objectives and structural changes on the strategic decisions of companies with different ownership background can be well analyzed.
- 3) **Profitability and taxation on sectoral level:** although there are significant differences between companies in this regard, the values of profitability and taxation characterizing the whole sector clearly show how and to what extent the whole sector contributed to achieve the macro-level objectives.

Moving on company (micro) level, the dynamic co-evolutionary interactions can be seen regarding **performance**, **processes** and **organizational ways** of operating. The individual company's performance naturally affects industrial performance while it generates changes on organizational level via strengthening institutional learning, developing resources and skills, making efficiency improvements, having lobbying capacity outside the organization and networking. Profitability, which does not reach the level of competitors and/or the own expectations, effects the level of investment and the company's cost management. Companies react to changes in environmental conditions with the better utilization of synergies and **organizational adaptation steps** (for example restructuring or closing loss-making divisions). The clustering of the industry is strengthening, and companies with similar strategies (for example companies focusing on niche markets, generalists, representatives of state interest) give similar responses to challenges of the institutional environment. Strategic objectives associated with **market entry and exit** as well as with **concentration** or **diversification** have an impact on measurable business performance indicators.

2.3. My research model and hypotheses

Although the aim of co-evolutionary research is more to discover the interactions between each subsystem than to search for a causal relation, in 2 I have tried to organize my most important research theses into a single research model.

2 - Outline of my research model



In my research model, I study the relations between the four subsystems - **performance, processes, objectives and policies, and organizational models** - via five hypotheses. I indicate the hypotheses with solid line in the chart, which can be studied primarily via quantitative research (with special regard going to an analysis of companies' financial reports). For the elements marked with dotted lines, I have formulated only preliminary hypotheses for specific phenomena which can reveal only some details about the connections between macro-, meso- and micro-level within a certain dimension. In terms of methodology, I attempted to study these model elements in more detail by conducting questionnaires and deep interviews.

During the formulation of hypotheses studied in the model, it is important to distinguish the industrial strategic groups which could be the subject of analysis. These group constituting criterion are as follows:

- *The company's scope of activity based on customer segments:* does the analyzed company carry out universal services or it is present only in the free-market segment;
- *The company's scope of activity regarding the sub-sectors:* electricity, gas or mixed trading profile;
- *Ownership structure of the company* (it has domestic or foreign ownership or control);

- *The company is incumbent or new market entrant:* the company is a successor of a previous regional integrated state-owned monopoly service provider or it entered into the market after 2003 seizing the opportunities created by liberalization.

We can assess the performance of the companies in various ways in the *Performance* dimension of the model. Concerning the indicators included into the analysis I have attempted to apply those which are **sufficiently representative** in case of a trading company, **not cause problems with their calculation** based on the publicly available data sources, and **not have serious interpretative problems with regard to the usability of the given indicator** regarding the comparability over time among companies. The indicators included in the analysis were selected to show the most important areas of the trading companies' operation, so I basically analyzed **four indicator groups** more deeply: (1) **return on sales indicators**; (2) **efficiency of working capital management**; (3) rate of paid taxes; (4) trend in the level of dividends.

Hypotheses regarding profitability

The first hypothesis concerns the **performance gap** between the companies which also carry out activities in the **universal service** market and the companies operating only in the **free-market**:

H1A: In the period between 2009 and 2011, there was no significant difference in performance regarding the return on sales between traders carrying out only free market activities and the traders participating in universal services as well, however, the profitability of the latter has been lagging significantly behind the former since 2012.

The expectation behind the hypothesis is that the government eroded the profitability of retail service providers as the sales prices have been determined in the area of universal services via **official price fixing** since 2012. Within the frame of the hypothesis I study the development of EBITDA.

In the frame of hypothesis H1B, I study the impacts of **sectoral characteristics** of the companies' commercial activities (i.e. whether they are active in electricity or gas market or both of them) on EBITDA.

H1B: Examining the entire research period, the operating profit of the energy trading companies being active in the electricity market is higher than of companies being active in the gas market or in both segments.

Similarly to the hypothesis H1A, the study is carried out here by quantitative analysis of data originating from the industry sample based on the comparison of EBITDA ratios.

Preliminary assumptions on operational efficiency

As trading is typically not a fixed asset intensive activity, the **operational efficiency** of energy trading companies can be studied in the most informative manner via factors describing **working capital management** (rotation of accounts payable, inventories and accounts receivable). Regarding working capital management, I have formulated the following hypothesis:

H2: In the period of research, companies with foreign ownership performed better than the companies with domestic background in terms of efficiency in working capital management.

The hypothesis reflects some anticipations. On the one hand, it assumes the **know-how transfer** of foreign-controlled companies, based on which they are in a more favorable environment than the domestic competitors in terms of their processes relating to working capital management (management of accounts payable, accounts receivable and inventories). On the other hand, the expectation that the **optimization of cash flow** was the focus of their strategy after 2009, of which one key element, besides restraining of investments, is the improvement of working capital and the exploitation of financial reserves resulting from it.

Assumptions relating to taxation

H3 – The system of sector-specific taxes increased the tax burdens on the entire energy trading from 2009, but no direct competitive disadvantage can be identified for any of the industrial groups against the others.

The hypothesis is based on the assumption that **sector-specific taxes have worsened the overall profitability** for the companies operating in the sector, but **their imposition did not affect the relative competitive positions** between individual market players and the industry groups.

Assumptions relating to the dimensions of model objectives and policies

The relationship between corporate policies and macro-level governmental objectives is analyzed based on the following hypothesis:

H4: The political expectations for the state-controlled energy trading companies in their long-term performance enjoy priority even at the expense of business and management objectives.

This hypothesis can be tested partly with quantitative instruments. However, the deeper understanding of organizational adaptation processes requires the large-scale application of **qualitative research methods**, so during the study of the hypothesis I also relied heavily on **the results of interviews and questionnaires**.

Assumptions relating to organizational adaptation

I formulated a hypothesis to study the two-way relations between the organizational form and other factors regarding the ownership determinations of organizational changes:

H5: The incumbent MNEs can compensate for changes in the regulatory environment with rapid strategic and organizational adaptation. They respond to the challenges of the institutional environment with rapid restructuring of organizational structure.

I study the organizational changes implemented by the companies and their connections with the changes of institutional environment via **qualitative methods**. The expectation behind the hypothesis is that the companies with international background decide much more quickly on the organizational restructuring if the formal structure does not adequately reflect the characteristics of the changing institutional environment.

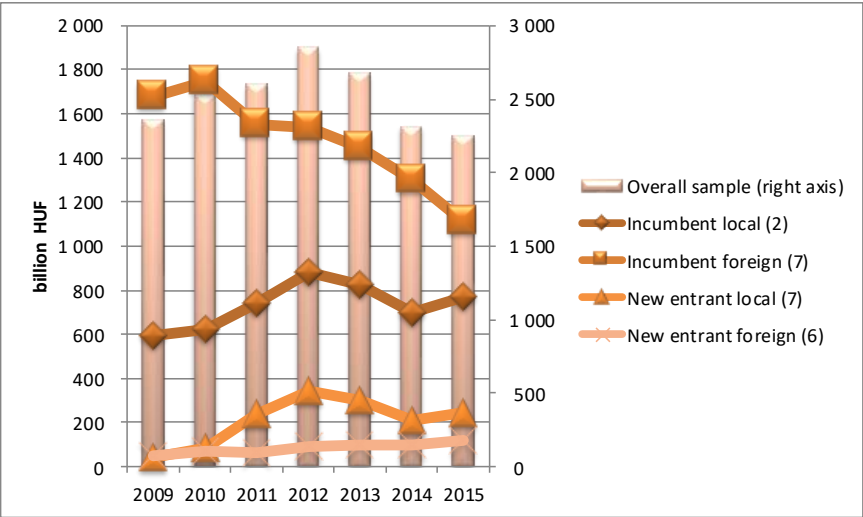
2.4. Applied methods of analysis

Co-evolution research is characterized by a combination of the **inductive and deductive approaches** and the simultaneous application of qualitative and quantitative methods. I also aimed to present this **variability of methods** in my own research. I conducted an analysis primarily based on a quantitative methodology characterized by its exploratory nature (Bettis et al., 2014) in the first phase of the research; while in the second phase, the focus was much rather put on the case study and interpretative approach. Following Christensen and Carlile's (2009) dual model of theorizing in my thesis, I "ended" first my own study at discovering the relations between each element of the research model. In this research phase, discovering cause and effect relations was not my first objective - rather, it is a mapping of relations' intensities among and between phenomena. This **two-phase research model** corresponds well with the theoretical approaches applied in research work on co-evolution, which also combines deductive and inductive approaches (Rodrigues and Child, 2003; Suhomlinova, 2006; Wilson & Hynes 2009; Child et al., 2012; Hannon et al., 2013).

I have applied the collected company specific **information based on the annual reports** of 22 major energy trading companies from 2008 until 2015. The companies can be linked to nine

countries regarding their final owners. Seven out of the 22 companies provided a universal service in 2013: GdF, TIGÁZ, FŐGÁZ in the natural gas sector, ELMŰ, ÉMÁSZ and EDF in the electricity sector, and E.On in both sectors.

3 3 – Trends in turnover of the Hungarian electricity and gas trading companies analyzed in the sample between 2009 and 2015 (author’s own compilation)



Thus, the **questionnaires and interviews** used in the second phase of the research completed the methodology based on primarily quantitative data, industrial research, articles and informal conversations which got input for further qualitative elements. In this research phase I wished to overview the individual characteristics via **structured interviews with the senior managers** of the companies included in the database and, given this, to complete my observations on meso- and micro-level co-evolution.

3. Summary of conclusions

In the thesis, I first studied the strength of the connections between the variables via correlation analysis, then I have conducted the time series analysis of data collected from the financial reports. After that, I have completed the analysis with qualitative methods. First, I compared the results of the CRC research with the results of my own sample of industry sector, and then I presented the main conclusions that could be drawn from structured interviews.

3.1. Hypotheses relating to performance (H1, H2)

I have formulated two hypotheses (H1A and H1B) that can be well analyzed by quantitative methods as well regarding operating profit and its changes achieved by certain clusters. In the frame of hypothesis H1A, I have compared the energy trading companies being active in the free market and/or universal services assuming that the profitability of the latter group has been significantly lagging behind the former one since 2012 due to the utility cost reduction.

Hypothesis H1A is **justified** by **neither** time series **nor** correlation analysis. It seems that the institutional environment which have been changing since 2012 did not lead to unfavourable situation for the companies providing universal services compared to the companies operating only in the free market, moreover, they achieved higher EBITDA in 2015 than the free market energy traders. The finding can be explained by the fact that the **profitability** steadily **declined in the free market segment** due to the strong competition and that the incumbent companies carrying out universal services still take the advantages of the synergies between their various businesses but on a declining trend. This was supported by the answers given by new entrants to the question concerning the intensity of the competition during the interviews.

Hypothesis H1B, which assumed the different profitability of electricity and gas trading companies, **could be successfully justified** for the analyzed period. Having regard to the profit before tax margins, the average profitability on net turnover was 1.8% for the electricity trading companies and -0.9% for the gas and mixed-profile energy trading companies in the analyzed seven-year period. Interviews have also confirmed that there are structural problems in the gas market, which slow down the expansion of the market in the long term as well.

In frame of hypothesis H2, I have studied the efficiency of **working capital management** through the analysis of the rotation time for accounts receivable and the changes of the net working capital needs. In terms of working capital management, the analysis showed that the **foreign-owned incumbent companies performed better than FŐGÁZ** throughout the period

considered, while MVM had achieved similar results comparing to the foreign-controlled competitors in the electricity sector until 2013, but after that time its data started to deteriorate. In my opinion, based on the observations, **hypothesis H2 can be maintained** and the difference between the companies between different ownership background is observable regarding working capital management. One of the most important reasons for this is the different strategy of companies and the attempt of foreign incumbent companies to optimize cash flow, which can also be observed in the decisions made by the operative management.

3.2. Hypothesis in the dimensions of system dynamics and processes (H3)

Concerning the relationship between institutional environment and companies, the topic which can be analyzed the best is the impact of taxation on the operation of companies. The extent of the tax burden on the sector is well illustrated by the fact that the whole sector remained net taxpayer after 2013, although by this time, the profit before taxes of the 22 companies under review had become negative. The fact that taxation occupies a prominent place in the thinking of company directors reflected at the completion of questionnaires, where the average industry-specific rating was 1.5 comparing to the rating of 2.47 of the countrywide sample in a five-point Likert-scale. Nevertheless, I examined in various aspects, **I couldn't reveal an amendment of tax legislation** concerning the taxes imposed on energy trading **that have been selectively targeted the foreign-owned companies**. Thus, I maintain the hypothesis H3, because it is justified that the tax burdens of the sector have been increased considerably due to sector-specific taxes, but this change did not result a direct competitive advantage or disadvantage for any of the clusters under examination.

At the same time, the interviews draw the attention that the effects of the tax system would be worth studying in a complex way for complete groups of companies too, as, in that way, it is likely to be possible to observe changes that affect commercial activity and they can be linked to the changes of taxes imposed on other activities (production, distribution, transmission) of integrated companies. The impacts of them are differently judged by the industrial players. While some of the new entrants consider that **the increased taxation of incumbent companies** (taxes imposed not on commercial activities) **facilitated the development of equal chances for competition** as it reduced the opportunities for cross financing, on the other hand, the companies facing with high tax burdens mentioned that the **reduction of their investments** and the **outsource of some activities abroad** were the negative results of tax increase.

3.3. Hypothesis relating objectives and policies (H4)

In the frame of hypothesis H4, I studied whether the **political expectations** of state-owned companies could override the objectives relating to profitability. The hypothesis is naturally linked to the assessment of the financial indexes of company performance, which I have also analyzed in terms of profitability and capital management. In this respect, the detailed analysis of the period between 2011 and 2013 illustrates that **domestic companies** were placed in **more advantageous position** than their foreign incumbent competitors in 2012, but this **advantage quickly disappeared**. By 2015, except of two incumbent companies, all the analyzed clusters (foreign-controlled and new domestic entrants) could improve their EBITDA ratios.

However, hypothesis H4 may not be really justified by quantitative analyzes, but rather by the interviews that I have conducted with the senior managers of domestic state-owned companies. Both interviewees indicated that although their firms are basically similar to a for-profit company, there may be **overriding objectives** and political expectations that need to be taken into account when making decisions. This was the case, for example, to pass on the costs of the third utility cost reduction to MVM group, as well as the decision according to which FŐGÁZ has been received only a limited authority in relation to find various sources of supply from the gas wholesaler (MFGK) which had been taken into state ownership in the meantime. All in all, the qualitative study has confirmed that the business concerns of state-controlled actors may be overridden by the fulfillment of political expectations.

3.4. Organizational adaptation processes at incumbent MNEs – assessment of hypothesis H5

As it would considerably exceed the possible scope of the thesis to demonstrate the **micro-level adaptation processes** regarding each company analyzed by quantitative methods, I have narrowed down my analysis to the organizational adaptation processes carried out by the earlier **incumbent foreign-controlled companies**. In addition to the scope of a doctoral thesis, one of the reasons for narrowing down the analysis is the fact that the questionnaires and the interviews made it clear that these companies were much more affected by the transformation of the regulatory environment than their competitors entered only into the free market segment after the liberalization. Hypothesis H5 has been formulated for this narrowed scope. According to the hypothesis the energy trading companies under foreign-control respond to the challenges of the institutional environment with more intense organizational structure adaptation than the

companies with domestic background. This hypothesis was also approached primarily with qualitative methods. I could identify three typical adaptation mechanisms with which the companies with multinational background tried to adapt to the changed environment. (1) *Lobbying*, (2) *improvement of financial efficiency* and (3) *rethinking of an earlier defined corporate growth strategy* were these mechanisms.

Adaptation by lobbying

The companies in the energy sector adapted in different ways to the radically changed circumstances. Spiller and Liaou (2006) delineate three ways in which specific business interest groups tried to enforce their own interests over institutional actors. The three possible instruments are: **buying of influence**, **lobbying for influence** and **suing**. While the incumbent MNEs tried to put pressure on the government to have the unfavorable regulations altered whether by threat and start suing or by lobbying in Brussels, in reality, both parties had an interest in maintaining a dialogue.

Some companies with multinational background intended to utilize the intention of the government's direct ownership role, as declared in the National Energy Strategy, and tried to reduce their Hungarian exposure **by selling their shares**. Maintaining negotiations and an announcement of **state acquisition transactions** from time to time was at least as much in the interest of the government as it is the relevant companies'. Via announcing further potential acquisition projects, the government basically followed the strategy of *divide et impera*. In regard to their malfunctioning, loss-making business units, or divisions with uncertain future due to excessive regulation risk, all MNEs wished to conclude the government's next acquisition. Until the government's real acquisition intention could be perceived, the companies refrained from pushing their arguments with the representatives of the government towards litigation.

Adaptation with an improvement in financial efficiency

The other adaptation strategy is to **improve efficiency**, to **maximize cash-flow** and **the maintenance or possible increasing of the dividend rate** from former cumulative retained earnings. After utility cost reduction carried out in 2012 that shocked the incumbent companies, almost every incumbent service provider improved or at least stabilized their retained earnings in 2013, while after the successes of 2012, the dominant companies with domestic management (particularly MVM and FŐGÁZ playing an increasing political role) worsened their return figures.

The improvement in corporate efficiency is theoretically a continuous leadership duty but, in practice, the management's focus does not necessarily reflect it in the well performing years. The government measures, which shocked the companies in 2012, strongly **stimulated the managements** to focus even more intensely on the improvement of organizational efficiency than before.

Adaptation with a rethinking of growth strategy

The third adaptation form is a rethinking of an earlier defined corporate **growth strategy**. In general, the basic orientation of corporate strategy in the sector remain stable, i.e. the generalist (mainly the earlier incumbent) companies continue to follow an **integrated strategy** extended for the whole industry which can be mainly characterized by the **protection of stability and the acquired market positions**.

In 1 1 I have summarized the **strategic adaptation steps** followed by five analyzed MNEs in the period between 2009 and 2015.

1 1 - Adaptation strategies for incumbent energy traders with a multinational background (Author's compilation)

Company	Focus	Organizational model	Organizational changes	Mergers and other transactions	Strategy
E.ON	Electricity and gas	Strategic holding	Universal service in lagally separate unit from january 2014. Declaration of termination the gas universal services April 2015.	Selling of gas-wholesale and storage units to the Hungarian state in 2013. Selling gas USP unit to ENKSZ/FŐGÁZ.	Focus on free market trading and network services. "wait and see" strategy in electricity USP segment, financial optimization.
RWE	Electricity (and gas)	Operative holding (ELMŰ és ÉMÁSZ)	Free-market trading unit legally separated and owned by ELMŰ and ÉMÁSZ	Selling of FŐGÁZ minority stake in 2014 to a state owned bank.Selling of Mátrai Power Plant in 2017.	Similar to E.ON, some structural questionmarks. Selective development of electricity free market segment with concentrating on some innovative activities.
EDF	Electricity	Operative holding	Selling of EDF-DÉMÁSZ holding company to the state owned NKM Zrt in 2017.	Selling of Budapesti Power Plant (BERT) to EPH (2015) As a part of the holding, electricity DSO also sold to NKM (2017)	Leaving the HU market
GDF-SUEZ	Gas (and electricity)	Mixed governing structure (two separate mother)	Selling of free-market electricity (2014) and gas(2015)positions to MET. Declaration of termination the gas universal services April 2015.	Selling of Dunamenti Power Plant to MET (2014)	Leaving the HU market
ENI	Gas	Operative holding	Selling gas USP unit to ENKSZ/FŐGÁZ in 2016.	Selling TIGÁZ Zrt including the gas DSO nad the free marejt trading to MET.	Depletion of assets, leaving the market.

Regardless of the strategic path chosen, the earlier incumbent international companies have responded very intensively and quickly to the changing political environment since 2011. Either

they decided on **withdrawal from the country** (EdF, GDF-SUEZ, ENI), or **restructuring** or **selective developments**(E.On, RWE), a number of organizational restructuring carried out during the past five years justify the assumptions defined in the frame of hypothesis H5.

4. Conclusions

At the end of the summary of thesis, I wish to mention two aspects that draw the attention to the **limits of my analysis**. On the one hand, I have **narrowed down my analysis to the Hungarian strategies** of energy trading companies. Energy trade is an international system, markets are interoperable, most trading companies are present in several markets, and, moreover, the market diversification is an important aspect in reducing trade risks. So the conclusions I have drawn based on the corporate behavior in Hungary are not without the regional or global strategic considerations of the companies. Recognizing the limits resulting from this, I still think that regarding the heterogeneous ownership composition of the Hungarian market players, there is scientific value in analyzing the Hungarian market processes. The different adaptation strategy of the German and French-owned companies that have given completely different organizational and strategic responses to the same environmental challenges.

The second critical aspect is the **definition of the time frame involved in the analysis**. As I also indicated earlier that I consider the closure of the research at the year of 2015 somewhat contingent, as the **reorganization of the ownership structure** (the state and certain domestic and regional private investors' acquisitions and the decreasing ownership of the earlier incumbent multinational companies) **in the sector** has not yet completed. Nevertheless, regarding the change in political direction of 2011-2012, I consider that the period between 2008 and 2015 provides an adequate background to demonstrate the impacts of the changing institutional environment on the development of the sector.

When I decided to write my dissertation on this topic, I did not think that by the time I would have finished it, the sector would develop in a completely different direction than the direction which have been designated by the frames of liberalization. I expected that the **new entrant private companies** would become the main competitors of the incumbent multinational companies, which had acquired two-decade monopoly positions through privatization, that would inspire the incumbent companies for organizational adaptation and improvement of effectiveness through their **aggressive strategy** of gaining market shares and flexibility. However, the environmental challenge did not originate from here but rather from policy

direction. At present, the gas service provider for the entire population of Hungary is the same and similar plans were formulated in connection with electricity as well. The change of political ideology, i.e. the strengthening of state-ownership, virtually excluded 30 % of electricity market and 40 % of gas market from the market processes. In the short term, it posed a very similar challenge to multinational companies following strategies aimed at protecting their own positions, as if the challenge had been originated from the direction of market competition. The strategic responses were also very similar: financial perspective, selective developments, partial or complete withdrawal.

Nevertheless, **the long term effects** may differ significantly in Hungary and in those countries where the new entrant private companies have been cutting an increasing slice of the sector cake. The future of energy trading in Hungary will be fundamentally determined by the fact whether the increasing state-controlled operation will be capable of achieving similar business performance in the long run for energy trading companies of those countries where the share of the private sector dominates. This issue may be responded only from decade-long perspective giving new tasks for the analysts studying the development of the sector.

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