

ISTANBUL BILGI UNIVERSITY
INSTITUTE OF GRADUATE PROGRAMS
ORGANIZATION STUDIES PHD PROGRAM

PRO-MARKET REFORMS AND FIRM STRATEGIES: THE CASE FOR TURKISH MOTOR
THIRD PARTY LIABILITY INSURANCE

ERCÜMENT ÇEVİKER
116801010

PROF. DR. BEYZA OBA

İSTANBUL
2021

Pro-Market Reforms and Firm Strategies: The Case for Turkish Motor Third Party Liability
Insurance

Pazar Yanlısı Reformlar ve Firma Stratejileri: Türkiye Zorunlu Trafik Sigortası Örneği

Ercüment Çeviker

116801010

Tez Danışmanı	: Prof. Dr. Beyza Oba İstanbul Bilgi Üniversitesi
Jüri Üyeleri	: Doç. Dr. Evren Hoşgör İstanbul Bilgi Üniversitesi
	Doç. Dr. Mehmet Erçek İstanbul Teknik Üniversitesi
	Prof. Dr. Gonca Günay İstanbul Bilgi Üniversitesi
	Prof. Dr. Nisan Selekler Gökşen Boğaziçi Üniversitesi

Tezin Onaylandığı Tarih : 25/06/2021

Toplam Sayfa Sayısı : 302

Anahtar Kelimeler (Türkçe)

1. Örgütsel Değişim
2. Serbest Piyasa Ekonomisi
3. Finansal Deregulasyon
4. İşletme Stratejisi
5. Trafik Sigortası

Anahtar Kelimeler (İngilizce)

1. Organizational Change
2. Free Market Economy
3. Financial Deregulations
4. Business Strategies
5. Traffic Insurance

TABLE OF CONTENTS

TABLE OF CONTENTS	iii
LIST OF TABLES	vii
LIST OF FIGURES	viii
ABBREVIATIONS	x
ABSTRACT	xi
ÖZET	xiii
ACKNOWLEDGEMENT	xv
DEDICATION	xvi
INTRODUCTION	1
CHAPTER I – LITERATURE REVIEW	7
1.1 Background for Pro-Market Reforms	7
1.2 Pro-Market Reforms.....	10
1.3 Counter Arguments	12
1.4 Where are pro-market reforms implemented?	16
1.5 The Impacts of Pro-Market Reforms on Firm Performance	19
1.5.1. Profitability	19
1.5.2. Entrepreneurship.....	22
1.5.3. Markets	24
1.5.4. Innovation	29
1.6. Firm Responses	30
1.6.1. New Entry (Local Firms and FDI).....	30
1.6.2. Price	32
1.6.3. Market Power of Firms	33
1.7. Pro-Market Reforms in Global Insurance Industry	35
CHAPTER II – THEORETICAL BACKGROUND	46
CHAPTER III- TURKISH INSURANCE INDUSTRY	51
3.1 History.....	51
3.2 Industry Structure.....	54
3.2.1. Composition	54
3.2.2. Premium Growth.....	55

3.2.3.	Penetration	57
3.2.4.	Density	57
3.2.5.	Insurance Companies	58
3.2.6.	Motor Vehicles in Turkey	58
3.2.7.	Claims	59
3.3.	Motor Third Party Liability Insurance (MTPL)	60
3.3.1.	MTPL Components	60
3.3.2.	Why MTPL matters in Turkey?	61
3.3.3.	Why Claims Grow? Bodily Injury	63
3.3.4.	Why MTPL compulsory?	64
3.3.5.	Competition and MTPL	65
3.3.6.	Leakage and Uninsured Driving in MTPL	66
3.4.	Major Players in MTPL	67
3.4.1.	Insurance Companies	67
3.4.2.	Agents	68
3.4.3.	Brokers	69
3.4.4.	Experts	71
3.4.5.	Regulations and Supervisory Organizations	72
3.4.5.1.	Insurance Supervisory Board (SDK)	73
3.4.5.2.	General Directorate of Insurance (SGM)	74
3.4.5.3.	Insurance and Private Pension Regulation and Supervision Agency (SDDK)	75
3.4.6.	Other Institutions in Insurance Industry	76
3.4.6.1.	Turkish Insurance Association (TSB)	76
3.4.6.2.	Insurance Information and Monitoring Centre (SBM)	76
3.4.6.3.	Assurance Account (GH)	78
3.4.6.4.	Turkish Motor Insurers' Bureau (TMTB)	79
3.4.6.5.	Insurance Arbitration Commission	81
CHAPTER IV- METHODOLOGY		83
4.1	Research Method	83
4.2	Sample	84
4.3	Data and Data Collection Procedures	85
4.4	Data Analysis	90

CHAPTER V- FINDINGS	95
5.1. New Entry	95
5.1.1. The Growth of Premiums.....	95
5.1.2. The Growth of Insurance Company Numbers	96
5.1.3. The Growth of Average Premiums	98
5.1.4. The Growth of Market Share of MTPL	99
5.1.5. The Growth of FDI	101
5.2. Price.....	110
5.2.1. Real vs Nominal Growth	110
5.2.2. Vehicle Level Responses to Pro-Market Reforms.....	115
5.2.3. Profitability	125
5.2.4. Firm-Level Profitability Responses	132
5.2.4.1. Group-I: No profits, Worse in Regulation	132
5.2.4.2. Group-II: From Deep to Peak	133
5.2.4.3. Group-III: Solid Profit Makers During Reform Period	135
5.2.4.4. Group-IV: Big Loss-makers	136
5.2.4.5. Group-V: Decreasing Loss but No Profit	138
5.2.4.6. Group-VI: Flat-liners	139
5.2.4.7. Group-VII: Broad Fluctuations and Broad Loss.....	140
5.3. Market	143
5.3.1. Highest Producers in Non-Life	143
5.3.2. Highest Producers in MTPL	148
5.3.3. Similarities of Highest Producers in Non-Life and MTPL.....	152
5.3.3. Internal concentration to MTPL by Company Base	153
5.3.4. Firm-Level Concentration Responses.....	156
5.3.4.1. Group-I: Market Leaders	156
5.3.4.2. Group-II: Firms Exceeding 50% concentration.....	158
5.3.4.3. Group-III: Born in Reform Period	159
5.3.4.4. Group-IV: Unresponsive Firms to Pro-Market Reform.....	160
5.3.4.5. Group-V: Oldies clustered around 10%	161
5.3.4.6. Group-VI: Firms with U-Turn	163
5.3.4.7. Group-VII: Firms with Stable or Decreasing Trends	164

5.3.4.8. Group-VIII: Long-Run Equivalence.....	166
5.4. Changes in Product.....	167
5.5. Changes in Processes	172
CHAPTER VI- DISCUSSION.....	176
6.1. New Entry	179
6.2. Price.....	187
6.3. Market	196
6.4. Changes in Product.....	211
6.5. Changes in Processes	213
CONCLUSION	217
REFERENCES.....	222
APPENDIX.....	266
Appendix A Insurance Branches in Turkey	266
Appendix B Composition of Insurance Market	268
Appendix C Premium Growth.....	269
Appendix D Penetration	275
Appendix F Insurance Companies	277
Appendix G Motor Vehicles and Motorization Rate	278
Appendix H Claims	279
Appendix I Leakage	280
Appendix J Insurance Companies and Licenses	281
Appendix K Organization of Ministry of Treasury and Finance	283
Appendix L FDI in Turkish Insurance Industry	284
Appendix M Product Based Changes.....	290
Appendix N Results of the MTPL News Study	292
Appendix O Results of the Interview	295
Appendix P Ethics Board Approval	302

LIST OF TABLES

Table-1 Insurance Companies.....	85
Table-2 List of Interviewees	87
Table-3 Question List	88
Table-4 The Topics of the MTPL News.....	92
Table-5 Compound Annual Growth Rates of Premiums by Periods.....	96
Table-6 Compound Annual Growth Rates of Average Premiums by Periods	99
Table-7 The Number and Capital Structure of Insurance Companies in Non-Life Market	108
Table-8 Development of MTPL Premiums by Vehicle Types	115
Table-9 Compound Annual Growth Rates of MTPL Premiums of Vehicle Types.....	117
Table-10 Development of Number of MTPL Policy by Vehicle Types.....	118
Table-11 Compound Annual Growth Rates of MTPL Policy Numbers.....	120
Table-12 Development of Average MTPL Policy Price by Vehicle Types	122
Table-13 Compound Annual Growth Rates of Average Policy Prices of Vehicle.....	123
Table-14 Profitability of Group Companies	142
Table-15 Highest Premium Producers in Non-Life Insurance Market.....	143
Table-16 Highest Premium Producers in MTPL Insurance Market	148
Table-17 Market Shares of the Groups of Companies.....	167
Table-18 MTPL Product Related Changes in Time	168
Table-19 Type of the Product Based Change	170
Table-20 MTPL Process Related Changes in Time.....	172
Table-21 Type of the Process Based Change	173
Table-22 Defenses of Insurance Companies.....	207

LIST OF FIGURES

Figure-1 The Interview Code Structure	91
Figure-2 Periodization of MTPL Insurance Tariffs	93
Figure-3 Development of Premiums by Periods.....	95
Figure-4 Development of Number of Insurance Companies by Periods	97
Figure-5 Development of Number of Active Insurance Companies by Periods	98
Figure-6 Development of Average Premiums by Periods	98
Figure-7 Share of MTPL in Non-life Premiums by Periods.....	100
Figure-8 The Paid Capitals of Insurance Companies in Turkey.....	101
Figure-9 The Number and Average Capital Amount of Insurance Companies in Turkey	102
Figure-10 Foreign and Local Capital Amounts of Insurance Companies in Turkey.....	103
Figure-11 Capital Structure in Turkish Insurance Industry	104
Figure-12 Capital Structure in Non-Life Lines.....	104
Figure-13 Average FDI Share in Non-Life by Periods.....	105
Figure-14 Sources and Shares of FDI in Non-Life Insurance	107
Figure-15 Number of Non-Life Insurance Companies with Majority Capital Paid by FDI.....	110
Figure-16 Growth of Non-Life Premiums and Inflationary Impact by Periods	111
Figure-17 Comparison of growth of MTPL Premiums and Inflationary Impact by Periods.....	112
Figure-18 Development of Number of MTPL Policies and its Change	113
Figure-19 Development of Average Policy Price and its Growth	114
Figure-20 MTPL Profitability.....	125
Figure-21 MTPL Investment Income and Interest Rate	127
Figure-22 MTPL Technical Profitability	128
Figure-23 MTPL and Non-MTPL Profitability	129
Figure-24 Insurance Profitability in Non-Life.....	130
Figure-25 Insurance Profits divided by Premiums	131
Figure-26 MTPL Profitability by Periods (Company 07, 10, 14 and 28).....	133
Figure-27 MTPL Profitability by Periods (Company 01, 03, 11 and 16).....	134
Figure-28 MTPL Profitability by Periods (Company 02, 17 and 24).....	136
Figure-29 MTPL Profitability by Periods (Company 08, 12, 26 and 27).....	137

Figure-30 MTPL Profitability by Periods (Company 15, 15b and 22).....	138
Figure-31 MTPL Profitability by Periods (Company 13, 20, 25 and 29).....	140
Figure-32 MTPL Profitability by Periods (Company 05).....	141
Figure-33 Development of Concentration Ratios in Non-Life Insurance Market.....	144
Figure-34 Development of MTPL shares of Highest Producers in Non-Life Insurance Market	145
Figure-35 Development of Internal MTPL shares of Highest Producers in Non-Life Market ..	146
Figure-36 Development Min. and Max MTPL shares of Top-3 Producers in Non Life Market	147
Figure-37 Development of Concentration Ratios in MTPL Insurance Market	149
Figure-38 Development of Non-Life shares of Highest Producers in MTPL Insurance Market	150
Figure-39 Development of Internal MTPL shares of Highest Producers in MTPL Market.....	150
Figure-40 Development Min. and Max MTPL shares of Top-3 Producers in MTPL Market ...	151
Figure-41 Development Non-Life Concentration by Top-3&5 MTPL& Non-Life Producers ..	152
Figure-42 Development MTPL Concentration by Top-3&5 MTPL& Non-Life Producers	153
Figure-43 Development MTPL Concentration of MTPL Producing Companies	155
Figure-44 Internal Concentration to MTPL by Periods (Company 02, 03, and 05).....	157
Figure-45 Internal Concentration to MTPL by Periods (Company 14, 17, and 24).....	158
Figure-46 Internal Concentration to MTPL by Periods (Company 09, 21, and 25).....	159
Figure-47 Internal Concentration to MTPL by Periods (Company 07, 16, and 18).....	160
Figure-48 Internal Concentration to MTPL by Periods (Company 10, 28, and 29).....	162
Figure-49 Internal Concentration to MTPL by Periods (Company 04, 19, and 23).....	163
Figure-50 Internal Concentration to MTPL by Periods (Company 12, 15, and 27).....	165
Figure-51 Internal Concentration to MTPL by Periods (Company 01, 11, and 22).....	166
Figure-52 Distribution of the Product Based Change.....	171
Figure-53 Frequency of the Product Based Change by Periods	171
Figure-54 Distribution of the Process Based Change	174
Figure-55 Frequency of the Process Based Change by Periods	174

ABBREVIATIONS

BES	: Bireysel Emeklilik Sistemi
bn	: billion
CAGR	: Compound Annual Growth Rate
CoR	: Combined Ratio
DASK	: Doğal Afet Sigortaları Kurumu
EGM	: Emeklilik Gözetim Merkezi
FDI	: Foreign Direct Investment
GDP	: Gross Domestic Product
GH	: Güvence Hesabı
GWP	: Gross Written Premium
IBNR	: Incurred But Not Reported
IRA	: Independent Regulatory Agencies
MID	: Motor Insurance Directive
mn	: million
MOD	: Motor Own Damage
MTPL	: Motor Third Party Liability
NL	: Non-Life
P&C	: Property & Casualty
SBM	: Sigortacılık Bilgi Merkezi
SDDK	: Sigortacılık Düzenleme ve Denetleme Kurumu
SDK	: Sigortacılık Denetleme Kurulu
SEGEM	: Sigortacılık Eğitim Merkezi
SGM	: Sigortacılık Genel Müdürlüğü
TARSİM	: Tarım Sigortaları Havuzu
TMTB	: Türkiye Motorlu Taşıt Bürosu
TOBB	: Türkiye Odalar ve Borsalar Birliği
TRAMER	: Trafik Sigortası Bilgi Merkezi
TSB	: Türkiye Sigorta Birliği
TSEV	: Türkiye Sigorta Enstitüsü Vakfı
WHO	: World Health Organization

ABSTRACT

Pro-market reforms are the transformation in the norms, which affects the decision-making of the economic actors. The changing regulations and the enforcement of new laws generally attempt to support market interactions. The discussions emerged after the 1980s, and many different concepts were used to denote this movement like structural reforms, institutional change, economic liberalization or Washington Consensus. Whatever term is chosen, the basic argument points to both the objective and the directionality of the changes in institutions. In this context, the pro-market reforms are not only economic liberalization instruments for policy-makers, but also a tool for better functioning of markets.

In this study, the responses of the insurance companies to pro-market reforms were analysed under five areas and the results were contrasted in four periods in the history of Turkish Motor Third Party Liability (MTPL) Insurance Industry in qualitative methods. Generally known as Traffic Insurance, MTPL is a compulsory product where the prices are set by regulatory authorities. My research is based on the journey in the industry, from regulation to pro-market reform with two stages and then reversal to regulation period once again in ten years.

Based on the primary and secondary data, the responses can be summarized as follows. Firstly, more entries were seen in the MTPL market, either by new local companies or by new FDI through mergers and acquisitions. Secondly, contrary to the expectations, MTPL prices have risen and the profitability in the industry improved. Thirdly, the concentration ratio in MTPL has decreased and more firms switched their business focus to produce MTPL as a response to reform. Fourthly, the changes in the MTPL product could be seen even if the product is believed to be homogeneous. Lastly, the new changes in the process have been observed before the implementation of reforms. The results were supported by MTPL statistics, insurance legislation, financial reports of insurance companies, Competency Authority Decisions, news relating to MTPL on the internet and semi-structured interviews held by insurance executives.

My findings indicate that insurance companies reflect isomorphic responses to the reform but not necessarily in the same way. The findings not only contribute to a compulsory line in the insurance

industry but they may also be enhanced to the other regulated or semi-regulated financial industries for future research.

Keywords: Traffic Insurance, Organizational Change, Free Market Economy, Financial Deregulations, Business Strategies

ÖZET

Pazar yanlısı reformlar, ekonomik aktörlerin karar verme mekanizmalarını deęiřtiren norm ve kurallardaki deęiřimlerdir. Regülasyonların deęiřimi ve yeni kanunların yürürlüğe girmesi, genellikle piyasa faaliyetlerini desteklemek içindir. 1980'lerden sonra başlayan tartışmalarda pazar yanlısı reformlar kavramı ile birlikte, yapısal reformlar, kurumsal deęiřim, ekonomik liberalleşme veya Washington İşbirliği gibi farklı isimler de kullanılmıştır. Hangi terim kullanılırsa kullanılsın, esas tartışma kurumların niyetlerini ve deęiřimlerinin yönünü görmeye yöneliktir. Bu kapsamda, pazar yanlısı reformlar sadece ekonomik liberalleşme araçları deęil, aynı zamanda pazarın daha iyi işlemesine yardımcı olacak her türlü aksiyonlardır.

Bu çalışmada, pazar yanlısı reformlara karşı Türkiye'deki Motor Üçüncü Şahıs Sorumluluk Sigortası endüstrisindeki şirketlerin aksiyonları beş ana başlıkta ve 4 farklı dönem ile yapılan kalitatif bir çalışmayla analiz edilmiştir. Genellikle Trafik Sigortası olarak bilinen bu sigorta, fiyatların devletçe belirlendięi zorunlu bir sigortadır. Çalışmam, regülasyon döneminden başlamak üzere, iki aşamalı olarak pazar yanlısı döneme geçiři ve arkasından tekrar regülasyon dönemine dönüşü irdeleyen on yıllık bir süreci baz almaktadır.

Birincil ve ikincil kaynaklardan elde edilen veriler kullanılarak řu sonuçlara ulaşılmıştır. Birinci olarak gerek yeni yerel firmaların kuruluşu gerekse de yabancı sermayenin birleşme ve satın alma yoluyla gelmesi ile trafik sigortasında pazar büyümüştür. İkinci olarak beklentilerin tersine, trafik sigortası fiyatları yükselmiş ve şirketlerin karlılıkları iyileşmiştir. Üçüncü olarak daha fazla firma stratejini trafik sigortası ürününe yönlendirmiş ve pazardaki yoğunlaşma azalmıştır. Dördüncü olarak, trafik sigortası poliçesi basit ve türdeş bir ürün olarak görünmekle birlikte, üründe reform zamanında deęişiklikler oluşmuştur. Son olarak reformların oluşması yeni süreçlerin de ortaya çıkmasına sebebiyet vermiştir. Sonuçlar, trafik sigortası istatistikleri, sigortacılık mevzuatı, sigorta şirketlerinin faaliyet raporları, Rekabet Kurumunun kararları, trafik sigortası hakkında internette yayınlanan haberler ve sigorta yöneticileri ile yarı yapısal görüşmeler ile desteklenmiştir.

Bulduğum sonuçlar sigorta şirketlerinin eş yapılı cevaplar ürettiğini ancak bunların her zaman aynı yönde olmadığını göstermiştir. Çalışmanın sonuçları sadece sigorta sektöründeki zorunlu bir

brana katkı yapmakta kalmayacak, ileride gerekleřtirilebilecek tam veya yarı regüle edilen finansal endüstrilerdeki arařtırmalar için de zemin hazırlayacaktır.

Anahtar Kelimeler: Trafik Sigortası, Örgütsel Deęişim, Serbest Piyasa Ekonomisi, Finansal Deregölasyon, İşletme Stratejisi

ACKNOWLEDGEMENT

I would like to express my most sincere gratitude to my supervisor, *Prof. Dr. Beyza Oba* for her support, encouragement and guidance throughout the preparation of this dissertation. In the class, mail, phone or web, in any platform, she was always so positive and helpful in every stage of my study. With her extensive knowledge, immense experience and admirable storytelling, she broadened my horizons. Her mentoring created a great contribution, not only in my study but also in my life as well. I felt myself on a privileged journey under her guidance.

Doç. Dr. Evren Hoşgör will always have a separate place in my career. With many hats she wears, as a Program Director, Lecturer, Member of the Dissertation Committee and so many, she created an incomparable environment for my research. In every phase in five years period; her endless help, sincere consultancy, everlasting inspiration and distinguished wisdom helped me to understand the arts of discipline. Without her generous time devoted to my demands, enlightening feedbacks and challenging shares, no single word could I have written.

I am also very much honoured to work with *Doç. Dr. Mehmet Erçek*, in my study. With his excellent grasp of the theoretical background with the combination of business life practices, he has presented new aspects in building my thesis. As a great influencer; his encouragement, invaluable suggestions, and always-supportive manner contributed so much to realize my research. I have definitely learnt much while working with him.

My sincere thanks to my company, for providing the academic support to attend PhD program. My executives, peers and my team always supported and tolerated my work during this period. It could be hard to attend classes and do the dissertation tasks without the understanding of my executives. Lastly, I am grateful to my classmates who shared all their help during the courses.

DEDICATION

I would like to dedicate this study to my *sweetheart* Handan, who has always believed in me. Without her love, support, patience and understanding, through the good times and bad, this journey would never have been possible. She has not only dealt with the education of two children but also facilitated a unique comfort zone to the third!

I owe a big thank to my children. My *gentleman* son Bartu and my *love-box* Bade always showed their understanding when dad was “unavailable” most of the time. Though they wanted to chat, they respected my study with great empathy and cheered me up with motivating words. Kids, I am proud of you...

INTRODUCTION

Since the last decade of the 20th century, pro-market reforms have been the favourite tool and comprised an important place in the agenda of the policy-makers and regulators. Though the general trend in the world economies itinerated towards more liberal systems, reform experiences have changed considerably from one country to another, ranging from success stories to economic disasters, from overall reform packages to minor tweaking areas with different speeds from sluggish manoeuvres to rapid accelerations. Whatever the speed or the scope is, in most of the cases reforms focused to enhance market transactions with the implementation of new rules and regulations by limiting the role of the governments in the economies which resulted in a profound transformation in the global economy with new institutions.

Pro-market reforms might be divided into several sub-components depending on the area where implemented such as trade liberalizations, financial liberalizations, fiscal reforms, monetary reforms, privatizations, industry or investor protection, decentralization, policies against corruption, economic prescriptions, employment reforms, legal and property rights protections and so forth. However, it might be misleading to define pro-market reforms just used to sustain liberalized market functioning. More than this, they are considered as the engines of technological improvements with the faster spread of ideas to innovate and the main reason for the capital inflows throughout the world (Sachs et al., 1995). At the same time, the unprecedented formation of new third world multinationals and the growth in the international expansion of the existing firms are the other results of the reforms(UNCTAD, 2007). The successful implementation of a reform also brings a clear consensus that they would generate a global trend for more future implications (IMF, 2004). The transformation of countries from formerly closed or communist countries to capitalistic regimes, the conversion of development strategies from import substitution models to export-led ones and change from dominantly government intervened economies toward free market economies are the macro tendencies coupled with the reforms.

On the other hand, firm-level impacts of pro-market reforms also gained attention in the last two decades. Pro-market reforms; lead to an increase in the competition (Blomstrom, 1986), furnish more opportunities to local firms for international expansion (Leonidou et al., 2007), induce local

firms to generate new capabilities to remain competitive (Eslava et al., 2004). They also contribute to the profitability of the firms in the market (Chari & Banalieva, 2015), lead growth in Foreign Direct Inflows to the market (Cuervo-Cazurra, 2015), rise the exports of the firms (Cuervo-Cazurra & Dau, 2009c) and create a strategic fitness in the internationalization process (Popli et al., 2017).

Are the reforms beneficial for the economy and the firms? Do they always produce efficient results? Sometimes pro-market reforms are condemned by the policy-makers. The evidence state that most of the political leaders tend to blame pro-market reforms for the side effects. Low economic growth or increasing unemployment can be attributed to the evils of capitalism. For example, political leader Nestor Kirchner won the elections in Argentina by fighting against the “*lamentable and disastrous*” of IMF policies (Lora et al., 2004, p.3). Lucio Gutierrez in Ecuador apparently declared in his political campaigns, the neoliberal policies just brought “*disasters to their country*” (Lora et al., 2004, p.4).

The main findings were disappointing for Latin American economic results. Although the main purpose of the pro-market reform was to enhance growth, the results were significantly poor. Although the growth had increased in the 1990s, it was much lower than the averages of the 1960s and 1970s (Lora et al., 2004). A similar result was also obtained in factor productivity that, investing in reforms produced nothing in the ratio of factor productivity.

In some cases, reforms are rejected by the recipients. Lora (2012) concludes that reforms in Latin America, in tax and financial areas were far from reaching the goals. A survey conducted on how the privatization benefits are felt in Latin America showed that in 1998 50% of Latin Americans thought that the privatization would be beneficial for their country. However, in five years, this percentage fell to 25%. Similar opposition was seen when the reform failed to satisfy liberal commitments. In 1998, 77% of the Latin Americans believed that the market economy was beneficial, but in 2003, the supporters of the market economy were only 18% (Panizza & Yanez, 2005). As the economic results cannot be obtained opposed ideas become dominant.

The deteriorating factors are worth to be mentioned. Here the mantra of the World Bank and IMF was “an unconditional run to liberalism” promised high expectations. However, as the Washington Consensus was brought, the dark side of the moon was seen. Not only economic outcomes solely

appreciated, but also institutional and social concepts have changed like corruption, inefficiency and regulation.

The literature also validates the counter-arguments about globalization, especially in pro-market reforms implementations. Pro-market reforms can create benefits when implemented in developing countries both only to the foreign firms, at the expense of domestic companies (Goldsmith & Mander, 2014). The reforms on the machinery and machinery tools do not necessarily increase the production of the firms and therefore do not trigger the productivity as desired (Katrak, 2000). Additionally, the impact of pro-market reform might be quite limited depending on the financial infrastructure of the country. Only if the developed financial infrastructure had been satisfied, it can cause the production costs to decrease, otherwise, a general performance improvement of the firms cannot be sustained (Okoroafo, 1993). In some cases, the advantages of growth of output led by pro-market reform may be illusory. The higher usage of inputs causes the production to increase, however, total factor productivity might be negligible or even negative. Technological progress plays a crucial role in determining the total factor productivity and this might create discrepancy among industries or within the sub-sectors of the industry (Salim, 2003)

Both considering the macro changes in the economy resulted from pro-market reform (either in implementing or ceasing its application) and industry-specific alterations depending on the strategies developed by the actors in the market, this study evaluates the change in the Turkish Motor Third Party Liability Insurance Industry. The question is how the market experienced the change when a pro-market reform was facilitated, and then, how it responded when regulation swings back to its original place, with multi-level and different periodization analysis.

Known as “Traffic Insurance”, Motor Third Party Liability (MTPL) Insurance is a compulsory product enforced by the state in Turkey. In this product, the physical damages of the vehicle are out of concern, on the contrary, the damages of the third parties, either in physical or bodily injury is guaranteed by the state. From this point of view, almost in all countries, MTPL is regulated by governments and their prices are set “*just to cover the losses*” to bring the market to an equilibrium where the insurers and insureds agree to participate in this obligatory product. In Turkey, starting from 2007, MTPL industry has passed through four stages; i) regulation, ii) partly deregulation,

iii) fully deregulation, and v) regulation respectively. Thus in 10 year's period, the industry experienced a journey from regulation to pro-market reform and back to regulation again.

The research question is based on five different analyses both in industry and in firm-level dimensions under four-period. They are the responses of the insurance companies to the pro-market reforms in the forms of new entries, price, market concentration, new products and new processes.

The structure of this dissertation is as follows. The first chapter compiles the literature review about the pro-market. Here the definition of the reforms, their implementation areas are given. The requirements for a successful reform is also stated. The impacts of the reform and the counter-arguments are also summarized. The MTPL related pro-market reforms in different countries are given in the last part of this chapter.

The theoretical background is summarized in the second chapter. This part involves the developments in institutionalism and the kinds of isomorphism discussions.

The third chapter introduces the insurance industry. This chapter starts with the history of insurance in Turkey and the progress of the MTPL industry is briefly summarized. In the second part of this chapter, the development of the insurance industry is analysed. As compared with the developed nations, the share of insurance in Turkish GDP is still small but its expansion attracts attention. The trends are given in premium production, the composition of insurance markets, density in the industry and the penetration rates. Here the comparative statistics and European trends are also contrasted as given in the appendix. Thirdly, the components of MTPL product is introduced. The reasons why countries give importance, why they keep it compulsory is also discussed. The governance types of MTPL in other countries, leakage management and uninsured driving and some milestones in the MTPL regulations are also highlighted. The last part of chapter three discusses the players in the insurance industry. These players are insurance companies, agents, brokers, experts, actuaries, regulators, and specialized institutions. In each part, the short history and the main functions of the organization are briefly described.

In the fourth chapter, research method, data collection and data analysis are defined. In the study primary and secondary source, data were collected. Primary source data was the interviews with

the insurance executives. For the secondary data, the major source was the reports of the Turkish Insurance Association (TSB) available online. Financial reports of the insurance companies, MTPL related news on the internet, investigation reports of Competition Authority and the legal sources of MTPL regulations were the other secondary sources.

Chapter five summarizes the statistical findings gathered from the secondary source data parallel with the research question. The first analysis shows new entries in the industry. It refers to the industry growth in terms of premiums, company numbers, average premiums charged and the market share of MTPL in the total insurance industry. This part also discusses the Foreign Direct Investment (FDI) in the insurance industry. This is evaluated by periods, by companies, by amounts and by shares in the total non-life insurance industry. The second analysis studies the price movements in the industry and profitability. This part also reflects the profitability of the companies in certain patterns. This part also focuses on the financial components namely financial income and technical income. The third analysis focuses on the market structure in four periods. In this vein a comparison of concentration ratios, changing strategies of insurance companies, the number of policy and vehicle level changes in the market are studied. The fourth analysis assesses the change in the product. The product simply refers to the MTPL insurance policy. The final analysis focuses on the change in processes. Processes are transactions determining the rituals of functioning. Both in analysis four and five the sources of the change has been selected from the existence of new rules and regulations, or the updates. They are quantified to measure the responses to reforms in reform and regulation times. Thus, the answers to these five layers are the main task of this study.

In chapter six, the statistical findings explained in chapter five were compared with the literature review and the theory. The other secondary source, the MTPL news, was also exemplified in the related parts to clarify the findings. The quotes from the interviews are also added as the primary source to discuss the details in the deep dive.

The results, limitations, policy recommendations and contributions to the literature were summarized in the conclusion part.

This study is believed to be a gateway to further research, which would analyse the impacts of pro-market reforms in financial and regulated markets and services.

CHAPTER I – LITERATURE REVIEW

1.1 Background for Pro-Market Reforms

After the 1980s, there had been a profound change in the functioning of the global economy. This change stimulated the capital movement around the world together with the technological change and development of globalization. This change also initiated the emergence of pro-market institutions, which affected the transformation of the economy. Pro-market institutions or so-called pro-market reforms are accepted as the rules or any kind of regulation that elaborate market transactions and restricting the role of government in broad sense.

After war period most of the developing countries launched import substitution policies including import controls, overvalued domestic exchange rates and state controls on interest rates. However, the trade deficit that cannot be sustained, inefficient cost allocation and inevitable rent-seeking activities have fostered the developing countries for more open trade opportunities (Krueger, 1996). In the late 1960s and 1970s, export orientation models were favoured by many developing countries as a contrary strategy for trade (Bruton, 1998). At the same time, as the markets develop, more sophisticated consumers would demand high-quality products and forced the firms to produce them instantly (Vernon, 1966). The openness of the trade and the direct reach to the market would favour the firms which would have internalization advantages and this eventually make them multinational (Dunning, 1982). From a different perspective, globalization also brought beneficial effects in social issues including working standards, child labouring, democracy and environmental problems (Bhagwati, 2004). Pro-market reforms also became the main actor of the integration of formerly communist countries to the capitalist world by reducing the role of the state in economic terms. Pro-market reforms contributed to developing countries creating their own companies to compete in global markets, similarly, they facilitated to advanced economies support their earlier expansions internationally.

Since the pro-market reforms include a set of economic policies to a freer market economy, financial institutions like IMF, World Bank, US Treasury and other international economic organizations supported these policies as a development tool. The formulation started with Williamson (1990) who summarized ten principles recommending structural reforms called

Washington Consensus. The first one was the fiscal discipline. The developing economies should avoid high fiscal deficits and relative to their gross domestic products. The second one was the shift in public spending. Countries should invest in education, health and basic infrastructure needs, which in turn, would enable their long-term growth. Thirdly, tax reforms should be implemented to broaden the tax base and adapt to the moderate level of tax rates. The fourth principle was the financial liberalization in interest rates that is interest rates to be determined in the market. Additionally, the rates should cover a mark-up for inflationary adjustment. Flexible exchange rates or floating currencies was the fifth principle. It holds the assumption that the currencies are neither undervalued nor overvalued by the regulatory bodies. The sixth principle was trade liberalization with the removal of quotas and the decrease in import tariff rates. Seventhly, the countries can relax the rules on foreign direct investments. Privatization of state enterprises was the eighth principle. The last two principals were deregulation in commodity markets where competition was endangered and the development of property rights.

The criticisms and the country cases led the economists to re-interpret the Washington consensus. Naim (2000) offered five I's for a more widespread acceptance of reforms namely, International Economic Instability, Investments, Inequality, Institutions and Ideology. When analysed the cases for Latin America, Williamson (2003) addressed that moving to adopt liberal policies in developing countries could not succeed in economic growth. To complement the missing points Williamson (2004) introduced the income distribution through tax cuts and capital account convertibility. Williamson (2005) also sketched the reform agenda by re-stating that Washington Consensus does not necessarily mean synonym for market liberalism; additionally, he only regarded "privatization" principle distinctively in neoliberalism meaning. Rodrik (2006) added new concepts to the consensus like corporate governance, anti-corruption, flexible labour markets, independent central bank and social safety needs. Finally, Williamson (2008) introduced other reform areas to be completed for success namely education, titling programs to provide poverty rights, land reform and microcredits for agriculture business. At the end of the discussions, there existed a kind of consensus that Washington Consensus was inadequate to succeed market fundamentalism (Serra & Stiglitz, 2008). First, the financial institutions had failed to find out the economic problems faced by developing countries like international reserve system, sovereignty defaults and exchange rate fluctuations. Secondly, it becomes clear that no one policy embraces

all the reforms simultaneously. Thirdly, the difference between theory and experience clearly appeared. Countries should give some chance in trusting their own experience and make use of their own judgements when looking for the best policy. Fourthly, for a successful implementation for reform, the state no longer should play a minimal role, but rather a balanced role that can differ from country to country. Fifth, the policies should target empowering of both market and state institutions. Lastly, the success of reforms does not merely economic; at the same time, they should give importance to social responsibility, distribution and environmental policies.

Washington Consensus had inspired many countries to implement structural economic policies. Especially between the mid-1980s and late 1990s many Latin American countries had followed a great deal of pro-market reforms in trade, finance, privatization and labour policies for facilitating the efficiency and reducing the distortion of the state intervention in the markets. However, although meaningful structural reform index measures were carefully maintained, the outbreak of Asian crisis in 1997 and Russian crisis in 1998 reversed the favourable impacts of the reforms and raised a couple of questions against Washington Consensus (Lora, 2012). The reforms, in general, started with liberalizations in trade regimes and most of the countries decreased their import tariffs rates by more than 20% in five years. This movement was followed by financial liberalization and reserve requirements reduced more than 20% in fifteen countries out of nineteen. On the tax side, the results of the reforms were quite deep. Tax rates on corporate profits sharply cut and the maximum rate became 35%. Most of the countries introduced tax incentives across regions and sectors i.e. free zones and export operations. Privatization was one of the major reform areas. The 57% of the total privatization had been in infrastructure area where Bolivia and Chile were the main privatizers in relation to the size of their economies, respectively 51% and 37% to their GDP (Lora, 2012). Labour reforms targeted to manage firing costs and facilitate hiring temporary workers. However, the strict aims like unemployment protection and sickness payments could not be achieved due to the fact that political parties mainly focused on creating employment. Similarly, minimum subsistence wage remained fairly stable after reforms around 200 USD. Most of the countries could increase the social security contribution shares during the reform period. When analysed the whole pro-market reforms implemented in Latin America in the 1985-2009 period, it is seen that the reform indexes clearly indicates that reforms were aligned with Washington Consensus philosophy, however, their results stayed vague and reforms followed by negative

growth rates and more macroeconomic instability. This led to the perception of reform fatigue and Consensus became subject to hesitation and scrutiny.

1.2 Pro-Market Reforms

In the late 1960s, export-oriented policies implemented especially by developing Asian countries resulted in high rates of growth with an enormous export boom in international trade. Although Hong Kong implemented a more laissez-faire approach in reforms, actually Korea and Taiwan performed best within these countries by reducing the role of government (Rodrik, 1996). The reason was that the reforms in these countries coupled with the better-educated labour force, thus in turn leading a boost in private investments (Rodrik, 1995). Perhaps more importantly, the distribution of income in these countries were exceptionally far equal than the other countries in East Asia. This brought three impacts: First, policy-makers were not forced to pay attention to the needs of the powerful groups. Secondly, with the absence of inequality, governments did not spend time on redistribution reforms between groups. Thirdly, policy-makers could focus only on the economic gains rather than political benefits, and this was welcomed by the bureaucrats who supervised the reforms rather than hindering them.

Pro-market reforms implemented in industrial countries in the last three decades mainly shows the increasing role of market forces (IMF, 2004). Price flexibility and increased competition are widely used interchangeably with deregulation. However, it should also be noted that the experience does not verify abandoning the regulations altogether. On the contrary, the goal of the reforms is to adapt the institutional frameworks so that the markets would work properly.

The results of the pro-market reforms in industrial countries indicate that there are noticeable differences in geography, reform area, timing and the scope/severity of the pro-market reforms.

The emergence and the motion of FDIs are the results of strategies of countries to implement pro-market reforms. In other words, FDIs have followed the route where the pro-market reforms were implemented. Today the direction of the FDI flows from rich countries to poor ones (Ramamurti & Singh, 2009) however it was quite different 50 years ago. After the Second World War, most of

the trade was between the advanced economies. At the same time, multinationals in Europe were investing in the US and respectively American companies were entering European market. Starting from the mid-1970s developing countries started to capture 20 per cent of the foreign direct inflows from developed countries. This era was the time for developing countries to cut their import substitution strategies hostility to multinational corporations. Many pro-market reforms coupled with this movement during the 1980s and this created vast opportunities for the investing developed firms. Until the mid-1980s, the source of the foreign direct inflows were developed countries, however starting from mid-1980, developing countries started to implement strategies to both extract and promote foreign direct inflows. Since their share was not significant and they did not receive much academic attention and did not affect the western countries. The last wave of inflows partly started first with Asian tigers with their export promoting strategies and increased by the beginning of the 1990s with the other developing countries. In this wave, the outflow from developing countries to developed countries increased four times between 1970 and 1980. The share of FDI from developing countries was 20 percent in 1990 and reached 35 percent in 2000 (UNCTAD, 2007). *“These investments made headlines in the West because they belonged to the “man-bites-dog” category of news stories: you had firms from poor, underdeveloped countries investing in rich, developed countries, which puzzled many observers, including FDI scholars”* (Ramamurti & Sing, 2009, p.8). Of course, this deviation comes from the technological, capital, labour and tax-related market-reforms implementations of developing countries.

The ability of the countries to receive FDI basically depends on two main developments. The first one is the infrastructure and factor market developments. They are the factor endowments of the countries to produce goods and services. The second factor is the institutional developments that are the effectiveness of exchange already produced goods and services among firms. The infrastructure developments lie on the transformational activities, where institutional developments are mainly the transactional activities (Hoskisson, Wright, Filatotchev & Peng, 2012). From this derivation, the emerging market multinationals are classified into four categories. The traditional emerging economies have limited both institutional and infrastructural developments. Many African countries lie at this level that they have limited capabilities for new FDI. Mid-range emerging economies have either high institutional development or low infrastructural development, or vice versa. For example, former Soviet countries have the

institutional development but lack the market effectiveness. Similarly, some eastern countries like Thailand and Indonesia have the economic capability but lack political stability. If both infrastructural and institutional developments are high then these countries are termed as newly developed economies, like Korea, Brazil, Malaysia and Israel. The study suggests that multinationalization and the FDI inflows in the host country are dependent on the developments of the different levels of institutional and infrastructural market reforms pursued. The countries with greater reforms in infrastructure and market development can increase their FDI inflows.

1.3 Counter Arguments

The reasons why the pro-market reforms can produce unwanted results can be economic, social, political and psychological (Lora & Panizza & Agnoli, 2004). Firstly, economic reasons are the main motivator of the pro-market reforms where productivity and growth are targeted. However, especially Latin American experience proved that economic indicators fail to fulfil the reform targets. Lora & Panizza (2002) estimated that the effects of reforms on growth were only modest and the impacts were only transitory. The study also points that the effectiveness of the reform depends on the institutional environment. Hence when the underdeveloped political system in Latin America creates uncertainty about the economic rules. Rodrigues & Rodrik (2001) criticised the positive relation between international trade and structural reform due to data errors, not solid specifications and problems of methodology. He also distinguished the jump-starting growth and sustaining growth (Rodrik, 2003). The effect of a reform can be economically reflected in the growth in the short run, but it is unclear how the policy combinations supported the growth in the long run. Even more, structural reforms may also cause a decline in incomes (Merlevede, 2003). Thus, economic contribution pro-market reforms may be limited and this unclear performance creates negative results.

Secondly, pro-market reforms may aggravate the income distribution in the economy. Though it is contended that structural reforms tend to increase average income, a distributional consequence is generally needed when the growth benefits only the richest segment even more. Ravallion (2001) shows that in developing countries gains from reform are shared by the poor, however, they are

not equally distributed in the social interest groups. Behrman & Birdsall & Szekely (2007) find that structural reforms in Latin America between 1980-1998 created short term worsening income distribution effects. Structural Adjustment Participatory Review International Network report also asserts that financial liberalization outcomes of the reforms devastating impacts on jobs in small and mid-sized firms (SAPRIN, 2002). Similarly, increased unemployment, job insecurity and the deteriorated working conditions are the possible consequences of the privatization issues. So even the economic contribution is visible, blurred social expectations hold an important role in the negative outcomes.

A more critical view asserts that the benefits of the pro-market reforms in the product and labour markets can be compensated in the long run as job and income losses. The labour market consequences generally take place after the introduction of product market reforms. When the pro-market reforms are initiated in the product markets, they trigger new entries to the market, cause diminishing of additional rents and more competitive firms. The positive relation occurs in the labour market by increasing employment in the long run (Fang & Rogerson, 2011). However, in the short run, the results are ambiguous. When the large incumbent start to re-organize, sizable short-term negative effects can be seen in the labour market (Bassaini, 2015). Additionally, analysing the employment levels of networking industry in the US, Bassaini concludes that, when the reforms are applied during downturns of the economy, the employment losses are greater.

Pro-market reforms might have negative impacts on labour rights. At the first glance, there seems nothing wrong with the side effects of reform on labour rights, because international financial institutions often call for respect for core labour standards and the calls for labour flexibility in recent years does not include increased use of child labour or harshening of bargaining process. However, the research, done in 130 countries with 30-year period, revealed that four out of five distinct reform areas negatively affected the labour rights (Blanton & Pekşen, 2016). The reforms in freer trade, sound monetary policies, diminishing government size in the economy and deregulation in business procedures significantly undermine the labour rights. Although the economic benefits of reforms might exist, the labour rights become more vulnerable to reforms with the less interventionist state. Because the minimal state cannot defend the rights of its citizens in the workforce, especially if they are perceived as contradictory to the existing reforms.

Lastly, it is worth mentioning that, the imperfection in the market and the quality of regulatory action may be a little fuzzy. Pro-market reform is often thought to be the simplest demo of a complex set of processes. The side effects are rarely considered, however, the evils of the deregulation economic costs are more burdensome. In such cases, correct steps of the previously applied wrong reforms create enormous costs, which is even tougher to fight against the problem itself. In this issue, the real problem might not be the market imperfection, but the regulatory imperfection (Joskow, 2010). The biggest mistake that can be done by policymakers is to suppose that every reform attempt is well defined, carefully planned and broadly informed and ready to solve the market imperfections costless whenever needed. Leitzel (2002) pointed out the rule evasion, corruption or enforces, the complexity of rules and implicit tolerance of illegal behaviours of the impacts that are faced while implementing a pro-market reform. The lesson that should be learnt is that reform or regulation policies carry their own costs. The direct costs relating to the scope, timing, scheduling of implementation are more or less apparent however, the indirect costs of such as unexpected changes in consumer, technology, firm, industry-related attributes represents the imperfect regulation.

In this context, similar counter-arguments emerged against Washington Consensus. The first one is the protection of infant industries at home. Some academicians argue that free trade was not the best option for the developing nations because some of the strategic sectors should be protected by subsidies or tariffs. The second one was the Chinese approach. China invested large sums in infrastructure and public sector areas in developing economies. This approach created more job opportunities and new opportunities for long-term growth. This seriously questioned the economic development led by the state. Thirdly, contrary to the privatization principle, in some sectors, the essence of privatization would be lost ignoring the social objectives. Fourthly, it is deeply discussed that low government borrowing is not always the best option. Spending cuts could cause deeper crises and consequently lower employment and even negative growths. (Fisher, 2012)

Why Latin American reforms created discontent, has been the subject of opinion polls (Panizza & Yanez, 2005). Very simple and the most natural explanation of this unhappiness is the disaster in economic activities. In Latin American countries, the difference between the expectations and the actual results were too wide. One of the biggest tendencies of policymakers is to exaggerate the

benefits of reforms. This helps them to sell their expectations but at the expense of overpromising the results, which further increases the expectations. An alternative explanation of this anger might be embedded in the casual relationship (Lora & Panizza, 2003). Latin Americans oppose reforms because they just occurred after the poor economic performance, not before. If this is the case, this time poor indicators are the outcome of the previous crisis, which might have many different root causes. People who oppose reforms because of poor performance should not be the case, on the contrary, because of the previous poor performance reforms are needed to execute. The last interpretation of this opposition is linked with how the capitalistic regime is perceived (Di Tella & MacCulloch, 2009). The capitalistic understanding of countries can be degraded into individuals and people who live in developing countries tend to be less pro-market than the developed countries' residents are.

There is also a consensus in economists that sometimes the kick of a reform is dependent on maximum intolerance point during a crisis. Bresser Pereira argues, "*...when populist leaders in Argentina, Bolivia, Venezuela, Peru and Brazil adopted non-populist policies it was because the crisis in these countries was so deep that even the costs of sticking to populist policies became higher than the costs of adjustment*" (Bresser-Pereira, 1993, as cited in Tommasi, 2003, p.156). Similarly, according to Krueger, economic reforms were undertaken when "*economic conditions deteriorated sufficiently so that there emerged a political imperative for better economic performance*" (Krueger, 1993 as cited in Rodrik, 1996, p.26). Falling into deep in crisis mostly couples with the attritional modal in the country (Alesina & Drazen, 1991). The theory depends on the willingness of people to cooperate in times of crisis. When the social cohesion is lower in the society, there exists a longer delay in implementing the reform. This theory can also be interpreted that when the resources are equally distributed, it is conceived that the burden of the pro-market reforms will also be reflected to all parties. If the resources are not equally distributed before the reform, this time a heuristic concept "political cost/benefit ratio" (PCBR) matters (Rodrik, 1994). It is a simple index that policy-makers venture the political costs of the reform implementation, as contrasted with the benefits. Pro-market reforms generally require a shuffle of income distribution. So if the redistribution creates more political cost than the economic benefit, then it would be difficult for a reform to be implemented.

The short-term effects of a pro-market reform raise two conventional results. The first is pro-market reforms can be achievable as long as they create “winners” or do not destroy their sustainable positions. This point was highlighted by Joan Nelson, “A *key political problem of sustaining support for reform programs is the long delay in reaping visible benefits for much of the population. Quite simply, in most cases, there are not enough early winners to ensure the political sustainability of the program*” (Nelson, in Williamson, 1994 as cited in Rodrik, 1996, p.29). The second one is that when implementing, most reforms make the things worse before curing. According to Pinera “*the results of many worthwhile reforms lie on a J-curve, they tend to make things a good deal worse before they get better*” (Pinera, 1994, in Williamson, 1994 as cited in Rodrik, 1996, p.29)

1.4 Where are pro-market reforms implemented?

In the last couple of years, there is an increasing number of publications analysing the pro-market reforms. In the last twenty years, 130 pro-market related articles published were published in prominent international journals in response to the political and economic climate (Dau et al., 2020). 86 of these articles were related to the single country analysis, 18 of them analysed multi-country examples, 19 had cross-country studies and the rest 7 had no locational focus. These articles were published in 59 different journals. The widespread journal range clearly shows that pro-market studies became the object of a very specialized area of studies. Additionally, these journals showed considerable diversity of science. Their main discipline was diversified from political economy to economics, from sociology to international business without having a clear connection streamed among them. Since the authors are from different origins and the literature in these disciplines are not linked, most of the terminology has not been standardized yet. Pro-market reforms, structural reforms, Washington Consensus, economic reforms, regulatory reforms are the most familiar terms to describe the same phenomenon. Yet, the studies do not focus on any geographical location. The locations under study differ, but the dominance of Asia is clear with 66 different articles. This is followed by Latin America (35), Africa (11) and Europe (10). These articles also demonstrated that firm-level moderators are again not standard: State ownership (28), local & foreign firms (22), public and private (12) are the top contingencies. Finally, the industry

that is analysed in the publications vary. The most frequent studies were the cross-industry publications (79). The 22 of the journals were about manufacturing sectors. The rest were focused on different industries. The study of Dau, Moore and Kostova (2020) demonstrates that the scholars are trying to understand the topic and yet they have not clearly lost their interest. On the other hand, due to high fragmentation in the literature, it can be stated that the pro-market reforms, though a popular concept, seems to be contributed even further.

Why do countries implement pro-market reforms? There might be a variety of reasons: From the economic perspective, they want to decrease their budget deficits, promote strategic sectors, and increase the productivity. This may lead to a shift in public expenditures from stagnant industries to the fields with high economic returns, potential to boom industries or politically sensitive areas. From the social perspective, they improve the income distribution; invest in education, health or infrastructural services. In most cases, freer trade is the hot topic. Liberalization of goods and services produced within a competitive market, higher standards of production is the goal. The re-design of the economically bad performed institutions might be another reason where the state enterprises are restructured or privatized.

Pro-market reforms might be seen in five different areas. The first area is the financial reforms. Financial reforms are implemented to improve underdeveloped or stagnant economies. Similar to goods and services, market-driven interest rates and exchange rates are the essentials of the money markets. The developed financial institutions and their well functioning is seen as a necessary step for development. Financial reforms can also be grouped in three ways. First, one is the level of credits. Here, credit controls, the growth of the bank's credit volume, segmentation of credit markets and the restrictions of credit allocation can be changed. Secondly, financial reforms might be targeting the interest rate. Change in lending and deposit rates of the banks, determination of interest rates, administrative restrictions can be directly determined by the authorities. Thirdly, the limit on the international financial transaction might be the case (Edey & Hviding, 1995)

The second reform area is the labour reforms. Labour reforms firstly target a developing workforce. They intend to decrease unemployment, increase the skill set of workforce and direct it to the targeted industries with the necessary training. Reforms also consider the payment structures by protecting the workers' rights. Structuring the work environment and the

rehabilitation of the working conditions are generally within the scope of labour reforms. Unemployment rates, the growth of the active labour, employment protection ability, benefit levels, unemployment benefits as a ratio to the minimum wage rate, the length of the benefit duration are the concrete indicators of labour reforms (Turrini & Koltay & Pierini, & Goffard & Kiss, 2015).

Thirdly, product market reforms aim to optimize the functioning of the production of goods and services directly. Product market reforms aim at competition in the goods and services markets with the free entry and exit opportunities for the players. These reforms also try to prevent cartels. The establishment of the organizations to enhance exports and increase the quality of the services provided are the main goals. The frequency and the severity of the entry barriers to the market, the share of public ownership in the economy, the composition of the market structure, the magnitude of vertical integration and direct price controls are the clear reform areas in product markets (Nicoletti & Scarpetta, 2003).

The pro-market reforms might also be seen in taxation. Reforms usually try to minimize the distortions of taxes on income, consumption or other variables. Marginal tax rates, the ratio of indirect taxes in tax revenues, the level of labour income tax ratio, and corporate income tax on profits are all the potential areas for reforms (Daveri & Tabetini, 2000).

Lastly, the trade reforms -effective tariff rates and non-tariff barriers- might be a potential area. Trade reforms generally aim to develop the local producers when they open the external market. For that reason, in most cases, trade reforms try to lower the protection of the domestic firms by removing the import restrictions. In order to promote economic growth, trade reforms reduce the import tariffs and taxes. Trade policies try to increase the size of the market and encourage foreign and domestic investment. (Berg & Krueger, 2005).

1.5 The Impacts of Pro-Market Reforms on Firm Performance

1.5.1. Profitability

Pro-market reforms also contribute to the profitability from the transactional cost perspective. Reforms develop the capabilities of firms to monitor labour, capital and product markets. This in turn decreases the managerial faults and agency cost. In a survey done in Latin American companies, firms in countries where significant pro-market reforms are executed, tend to have higher profitability. When the pro-market reforms are increased 1%, the profitability of the firms increases by 2,33% (Cuervo-Cazurra & Dau, 2009a). In Colombia, the trade and financial reforms implemented in the 1990s turned the low productive firms into highly productive ones (Eslava et al, 2004). In a similar way, the completion of pro-market reforms in Australia increased the GDP by 2,5% (Mataeus, 2009).

On the other hand, pro-market reforms have different impacts on private and state owned companies (Dau, 2013). Firstly, private firms are more sensitive to the institutional changes; rapid and more responsive. This adaptation is also valid for threats and opportunities. On the other hand, state firms act more slowly that stems from prolonged protection of state companies from the competition (Shleifer & Vishny, 1993). At the same time, state companies may retain bureaucratic and inefficient behaviour, thus any pro-market reform forces them to change which leads to corruption and political abuse (Laffont & Tirole, 1991). Furthermore, since international expansion as the reforms brought about, requires multi-dimensional monitoring, state firms are in a weak position to take this opportunity and in many cases, goals are in conflict with each other (Boycko & Shleifer & Vishny, 1996). State firms in this respect might be facing threats or pressures from third parties to cooperate or align in accordance with their prosperity, which is in turn, not consistent with their own profitability. They are more vulnerable to the interest of political leaders.

When the literature has grown with the several studies supporting the profitability increase in firms after the pro-market reforms, some questions also emerged. Most of the reforms implemented in India, China, Russian and many Latin American and East European countries revealed that the transaction takes time and when the states step away from the markets, the role of monitoring the

functioning of markets does not sufficiently develop. These large uncertainties bring negative impacts on firm profitability at the expense of transition benefits. Banalieva & Chari (2015) propose a U-shape relationship between reforms and profitability by testing 18,000 firms in India. After the initiation of reforms, transaction costs are still high and effective gains are unlikely to be captured due to the missing forces of market institutions. Even if they were instantly set up, the well-functioning of them cannot be maintained due to incomplete background, legal framework or inadequate monitoring. After the partial and initial stage of reform introduction, new entries to the market, further reform steps, providing new opportunities for monitoring enhances the productivity and creates increasing returns. Thus, a U shaped path is emerged with declining profitability initially and leading to higher returns as greater part of the reforms are completed. The study also points out that for the foreign firms and big business groups the U shape is flatter; both the decline in profitability in the initial stage and the increase in the mature stage is less steep compared to private individual firms. The reason is that foreign firms have wider networks to decrease uncertainties of reforms and business groups can dominate the reform process to minimize their transaction costs in the initial stages. In other words, firms, which are more dependent on external markets, would be more strictly exposed to the initial decline. The same is also true for the increasing part of profits. When the markets get better, more responsive firms –individual firms– will have greater increases in profitability, so the U curve for them becomes steeper.

The impact of pro-market reform also relates the geographic space. The economic geography where the firm operates and the learning experience that they gather help the companies to benefit from the reforms (Dau, 2013). By analysing over 500 Latin American companies in twenty years period, he sketches that pro-market reforms increase the firm profitability in four steps. First, the benefits of the reform are greater for exporting firms, or for the firms, which operates internationally. Here multinationality is the source of knowledge base advantages. When compared to the firms that are producing only domestic markets, multinational companies capture competition competencies created by reforms faster than domestic ones. Secondly, if the international companies have delivered their operations to the advanced economies, rather than the developing ones, the learning impact would be higher because of the reform. Here the geography matters because when host country is more advanced, the companies confront more tight deadlines and agility. Thirdly, timing matters. Firms, which have already enlarged their operations to abroad,

can have a greater benefit than the newcomers have. In this case, firms can develop an anticipatory learning strategy because they have just established abroad subsidiaries before the pro-market reforms begin. The fourth one is the combination of the second and third steps. The duration spent in host countries also gives additional benefits. Because these firms have already established formal and informal networking. Therefore, when the pro-market reforms are initiated, they can easily use their already established networks quicker than the new firms, which recently switched their activities to international operations.

Cuervo-Cazurra (2015) treats pro-market reforms as a co-evolutionary process. First, the pro-market reforms implemented in developing countries lead the local firms to transform to multinationals, and then activities of new multinationals feed the facilities in home, by deepening the reform base. This positive iterative process increases their effectiveness.

The initial start is the implementation of pro-market reforms, which can contribute in three ways. First, the deregulation in the market increases the ability to upgrade their capabilities at international levels. Secondly, competitiveness needs to be sustained like product innovation where home countries suffer (Awate & Larsen & Mudambi, 2012). Thirdly, if the pro-market reforms decrease the constraints of outward foreign direct investments, companies can find a way to invest in several forms. Firstly, they make transfer their operations for safer rules, strong institutional protection and a better legal framework for contracting (Witt & Lewin, 2007). Secondly, the movement might be due to the higher privacy laws. Thirdly, the companies prefer to hide their original roots to have a better origin image abroad (Barnard, 2013). Finally, traditional tax escape leads the firms to exploit the financial offshore centres.

When the initial stage is completed, the outcomes of multinationals began to affect the reform structure of the country. This flow again takes part in three ways. First, when companies come across sophisticated customers, tight deadlines, superior channels and reliable relationships with governments in international markets, they do behave in the same manner at home. These are the learning impacts which increases the value chain reforms at home (Yang & Mudambi & Meyer, 2008). Secondly, spillovers learnt from competitors abroad, employee mobility, training supplied from joint ventures develop the existing conditions of industry reforms. Better practices with the international suppliers developed distributional channels help to establish in-house efficiency for

industry reforms (Kotabe & Martin & Demoto, 2003). Lastly, lobbying activities push government officials to take action for additional reforms.

Cuervo-Cazurra (2015) concludes that co-evolutionary process benefits from reforms are not the same for all companies. Similar to Dau (2012), he points out that private firms react more positively to reforms because they can more easily internalize their operations. State firms are also trapped in investing abroad because their operations can be interpreted as cheating at the expense of national values (Stevens & Lipsey, 1992). Another expected behaviour is, the firms, which cannot cope with the increased competition, complain about the pro-market reforms and demand for protection. As a result of this, government officials who have closer ties with the lobbying firms, constraint the state owned companies for reforms (Grossman & Helpman, 1994). In this respect, leaders of the state firms, instead of having the advantages of pro-market reform in capturing expanded opportunity, try to have more rooms for autonomy in administration, higher budget and favourable positioning on the political side (Chari & Gupta, 2008).

1.5.2. Entrepreneurship

Pro-market reforms also have impacts on entrepreneurship levels. In the literature with the narrow definition, entrepreneurship is the creation of new businesses. This definition includes a combined activity of individuals who seeks to generate economic activities. However, this definition can also be defined as formal and informal (Klapper, Amit, Guillen, 2009). Formal entrepreneurship refers to open up a new business from the legal point of view. Informal entrepreneurship has again the same meaning –the creation of new business- but this time not legally controlled and regulated. By using this separation, the pro-market reforms can also be divided into two major categories. The first component is the economic liberation that is the decreasing the size of the state in the economy. The second component is the governance level, that is the implementing and forming the rules to facilitate the efficient functioning of the market. Based on this methodology, the reforms have two different impacts on entrepreneurship (Cuervo-Cazurra & Dau, 2014). Firstly, the economic liberation has a positive impact on both formal and informal entrepreneurship. Secondly, national governance activities have a positive impact on formal entrepreneurship but a

negative impact on informal entrepreneurship. Because whenever there is the lack of monitoring and the absence of a compliance regime in the market, firms might find ways to survive in the informal economy. The study also claims that the negative effect of governance reforms on informal entrepreneurship offsets the positive impacts on the formal entrepreneurship side. Because the profitability of the informal entrepreneurs stems from the fact that, they find alternative ways to work, however, whenever the introduction of new rules or enforcement pressures, the profitability of these firms quickly diminishes.

The relation between the ownership of the company and the impact of the reform has also been questioned in the Indian corporate sector (Chakrabarti & Ray, 2016). By using the panel data between 1989-2014, the profitability and efficiency of business groups, multinational subsidiaries, domestic standalone firms and state owned enterprises were compared. Contrary to the expectation, state owned enterprises had been the biggest beneficiary of the reforms. The performance of business groups, on the other hand, did not improve as the reforms increase. Possible two scenarios may cause the poor performance of business groups. They may either be unable to adapt to environmental changes or they may fail to mimic the markets. Multinational subsidiaries have the best efficiency metrics. The reason that why the pro-market reforms help multinational subsidiaries more than the standalone domestic firms is the strategic positioning and dominant position of multinational subsidiaries in the emerging markets.

Pro-market reforms also generate new opportunities for the firm exports. The impact is maximum for the subsidiaries of the foreign firms. Firstly, economic liberalization help the subsidiary within the network give greater opportunity. Secondly, the reduction in transaction costs due to deregulations changes the comparative advantage of the subsidiary relative to other countries.

Thirdly, subsidiaries can better increase their exports than the domestic firms can, because they use their existing network to facilitate the new entries. Domestic private firms are the second beneficiaries in increasing the exports. Because private firms need to individually make transformations to improve their competitiveness. During the pre-reform period, private firms generally enjoy the import substitution, which does not force them to be competitive in the market. Surprisingly, pro-market reforms do not induce exports for state companies, on the contrary, they might create negative impacts. Since the political interest is important in state companies, the

expected penetration in exports is questionable. Furthermore, the increased competition may destroy the state firms when they can succeed in the critical improvement. Thirdly, the managers of the state firms may be directed to serve internal markets before the international expansion. (Cuervo-Cazurra & Dau, 2009c)

On the other hand, privatisation changes the relative benefit of the pro-market reform. When privatization is done, this means that some of the state-owned companies turned out to be private companies. In this case, the benefit is maximum for the former domestic state-owned companies because they not only changed their ownership but also increased their profitability relative to the domestic private companies (Cuervo-Cazurra & Dau, 2009b). The same research also points out that when pro-market reforms are implemented, state and domestic private companies can have more benefits than the subsidiaries of foreign firms due to the agency problems. Studying the Mexican manufacturing industries, Blomström (1986) demonstrated that foreign presence and subsidiaries are positively related where the structural reforms are taken place. The study also depicts that foreign entrance has a greater advantage from reforms if they operate in the “modern sector” small number of firms produces the majority of output, with high technology, in capital-intensive industries, producing high quality- goods. On the contrary, the benefits in the “traditional sector” with a great variety of ways of producing the same good, in labour-intensive methods stay as they are. In this context, pro-market reforms attract foreign firms and spillover efficiency could be available only in the competitive industries triggered by foreign firms.

1.5.3. Markets

The dynamics of the reform process can affect the market performance as well. The pace of the reform might be classified in two dimensions and two directions (Banalieva & Cuervo-Cazurra & Sarathy, 2012). First, the policy-makers might intensify the pace of reforms; the government sends credible signals that liberalization will occur faster. In this option, firms more commit to the reforms because their transaction costs will decrease. Secondly, the governments may slow down reforming in the market. This might be for possible reasons (opposition to reforms, weakening of reform results, losing credibility etc.) but the intense reform period slacks and the firm receives

the signals that liberalization will end soon. Thirdly, governments may accelerate the regulatory affairs; they try to control the economy more than usual. Direct intervention to market mechanism increases the transaction costs of firms. Finally, policy-makers slow down their controlling appetite, or they may postpone or cancel some of the further steps of reform packages. In this dynamic environment, intensifying pro-market reforms and/or fading pro-market reversals create a positive impact on firm performance. Similarly, intensifying pro-market reversals and/or fading pro-market reforms create a negative impact on performance. (Banalieva, Cuervo-Cazurra & Sarathy, 2018).

Another differentiating impact of reforms depends on the industry where they operate. If the industry is more globalized, which is reflected as the rapid transfer of efficiency and learning benefits, then the impact of pro-market reform is stronger. However, if the industry is local where there is less pressure for competition, the benefits of the firm coming from reforms could be limited. The domestic and foreign firm separation also produce meaningful results in reform benefits. Foreign firms, with their strong structure, have a higher impact in deepening the pro-market reforms. They perform their social responsibility in environmental issues and other social practices but the domestic firms would spend some time to transform themselves as the reforms bring. By the way, foreign firms had already achieved the new context. For example, the outcome of a reform in labour working conditions requires much effort for domestic firms to transform than the foreign ones (Vachani, Doh & Teegen, 2009). Finally, there might be a distinction in utilizing the reform benefits depending on the development levels of the countries. Companies from developing world (capitalistic but together with a high level of government control) can have greater opportunity to capture reform advantages. However, companies from transitory countries (once communist countries) are still politically influenced and less proactive in multinationalization.

Though most of the literature has a consensus on pro-market reforms are the motivator for the corporate expansion of the firm, this might not be always linear. Analysing the Indian market, Singh, Pattnaik, Gaur & Ketencioğlu (2018) proposed that the results of the reforms follow an inverted U shape with the growth of the companies. When pro-market reform is not utilized enough or not existed, the relationship is strong and positive, but when the pro-market reforms are developed, the relationship with corporate expansion is negative. This means that, when reforms

are not implemented or poorly realized, firms need to find new growth opportunities, exploit their past experience and optimize their existing resources for growth. However, when reforms are realized successfully, firms avoid investing in the existing capabilities because reforms cause a change in the institutional environment and decrease the use of existing templates.

The study also verifies the role of business group affiliation. When the group affiliation is higher, the relationship between pro-market reform and the expansion of the firms are positively related. This means that firms learn much from their group members how to enter a market or execute a strategy (Gaur & Delios, 2006). In incomplete markets, the profitable opportunities hidden in the market are more easily accessed by the business group affiliates and they provide greater growth (Manikandan & Ramachandran, 2015). Additionally, the gains learnt within the groups, can be used for further expansion (Gaur, Kumar & Singh, 2014).

The organizational form may also affect the reform benefits. If the businesses perform as separate individual legal companies, they have separate governance structures, which leads to incentive alignment and resource allocation problems in a multidivisional form. But in the case of the business group affiliation, there are more entities with different diversification levels. In such a case, pro-market reforms provide greater growth opportunities to the multi-entity business groups (Manikandan & Ramachandran, 2015).

As a natural extension of the organizational form, unrelated diversification is another response of firms to the reforms. Because for small firms who lack growth opportunities in emerging economies diversification is a way of realizing corporate growth. In this context, prior unrelated diversification has a negative impact on the relationship between growth and pro-market reforms (Singh et al, 2018). The firms, which invested in unrelated areas when reforms are soft, cannot develop themselves when reforms are put into effect successfully. In other words, increasing the intensity of reforms decreases the value of diversification because the uncertainty about reforms has cleared. The firms, which invested in unrelated areas previously, find it difficult to extract them and re-direct into the areas where the reforms are granted.

Another way of accelerating the competition by pro-market reforms might be through foreign acquisitions. When pro-market reforms make easier the acquisitions, more foreign investment is

allowed which enhance competition. This would lead the other international investors to move their sources to the targeting market, and the domestic rivals of the acquired firm would be the potential targets of new acquisitions, that would increase their market returns. The acquisition of a local firm will also cause business groups to orchestrate their sources in order to give a competitive response to the new entrant (Elango, Dhandpini & Ciachetti, 2018).

Reform responsiveness of the firms is also linked with the learning effects they acquired. Firms may have different choices of entering and network establishment in markets. By selecting their strategies, they gather knowledge. This knowledge helps them to increase their benefits to pro-market reforms. Dau (2018) proposes that both the entry modes of firms and their network configurations are linked with the advantage they get from institutional changes. Firstly, the international entry mode choice might be in two forms, either as a joint venture or as a wholly-owned subsidiary. In this case, the beneficial effects of reforms on firm profitability are higher for firms that have selected joint venture entry modes compared to wholly-owned subsidiary modes. Because this mode serves better a richer and better resource in acquisition, rapid business learning in operations and responding more effectively with the help of greater spillovers. Secondly, network configuration might be in two cases. The firms may, either prefer international acquisition, that is to purchase an existing local company, or they may prefer a greenfield investment, that is to open up brand new business or operation in the targeted market. The firms which preferred a direct international acquisition gain further knowledge and benefit more from reform than those who chose greenfield investments. The main reason is that setting up a new business does not provide a direct means of absorbing the accumulated knowledge of that firm. Furthermore, the learning is less beneficial since the knowledge transfer from the existing employees cannot be acquired.

A similar study about institutional developments and reforms on the alternative mode of entry choice reaches the same consequences focusing on the institutional environment in the home country (Meyer, Estrin, Bhaumik & Peng, 2009). In a weaker institutional environment where there are market imperfections, joint ventures are used to access the resources they need. Because in order to avoid information asymmetries, a local partner may help the new investor. But, if the pro-market reforms are done or the market is sufficiently developed from the liberalization point of view, the importance of joint ventures significantly decreases. Because their advantage is no

more valid since a stronger institutional environment serves the new investors to have easier access to both tangible and intangible resources.

The benefits of the reforms also depend on the synchronization of the firms- that is the timing, rate of adaptation and the duration of the inception period. The firm which can capable of entraining to the reforms in both pace and timing, exploit their ownership advantages better and enhance new capabilities. This can be either by being a first-mover (pace-entrained) or by developing strategic fitness to reforms in the long run. Temporal adaptation of strategic decision-making is also critical to increase the benefit of the reforms. Thus, the response of the firms not only includes “what” and “how” questions, but merely relies on “when” and “at what rate” synchronizations (Popli, Akbar, Kumar & Gaur, 2017).

Pro-market reforms can also be divided into categories into their sizes. For example, the economic reforms implemented in China in 1978 and India in 1991 were the examples of broad-scope pro-market reforms because they created fundamental changes. Similarly, the deregulation of air industry in the US in 1978, price-controlling of drugs in Indian pharmaceutical industry in 1995 did not create substantial changes. Broad scope institutional changes alter the rule of the game for the actors whereas the incremental, discontinuous, or narrow scope reforms just affect few industries or do not cause wide changes in the whole economy (Gubbi, Aulakh & Ray, 2015).

Reforms create a positive relationship with the foreign direct inflows but some of the reforms are more effective than the others. Private business ownership reforms, banking sector reforms, trade liberalizations and legal developments are dominant reforms, increasing the foreign direct investments. However, reforms on domestic prices, financial institutions reform excluding the banking industry and competition policy reforms do not enhance foreign direct inflows (Bevan, Estrin & Meyer, 2004). The reason for insignificant relation with domestic price liberalization and competition policy may bother the foreign investors who would seek to capture the monopoly rents in the home country. Thus, the clashes of interest do not produce strong evidence for further FDIs. Non-bank financial reforms, on the other hand, cannot trigger FDI because, in most of the developing countries, the banking sector occupies the majority party of the financial system. Thus, foreign investors find little importance to invest in transition economies.

1.5.4. Innovation

Pro-market reforms also affect innovation. This has a dual impact since the introduction of the new process creates both winners and losers. If the pro-market reforms block the re-allocation of profits from low to high value-added activities, this can create adverse effects on innovation as well as economic outcomes (Schiantarelli, 2016). On the other hand, innovation is generally protected by patent laws, licenses or similar methods. If monopoly profits of the firms are decreased due to the reform, the firms prefer to stop investing in innovation because it would be more costly to compete with rivals in this case. This also creates vulnerability of the research and development decisions of the firms and they decrease their appetite for innovation (Schiantarelli, 2008). However recent research shows that both newcomers and incumbents may innovate with pro-market reforms. The clue is the gap in profits before and after the reform periods. Competition decreases the profits, but newcomers on the one hand need innovation to retain in the market, and the incumbents foster innovation to defeat the new entry firms. This effect is expected to be seen in neck-to-neck industries where the costs are similar for all the firms (Fiori, et al 2012).

Pro-market reforms can also enhance the responsiveness of the firms in terms of learning. At first, when the change is initiated, firstly firm focus to boost their potential benefits. The source of these benefits is the increased access to knowledge spillovers and absorptive capacity. The learning of an institutional change might be coming from five different sources; namely product diversification, increasing innovation capabilities, informal institutional exposure, internalization of knowledge accumulation and an overall increase in the experience related knowledge (Dau, 2016). The first step focuses the formal institutional knowledge. This step is place related because codified regulations and laws create experimental knowledge on firms when a government implements a reform in a given market. Secondly, there are organizational learnings. Here there are two separate learning of firms. They first develop their external business knowledge; they learn how to cope with the changes local competitors, suppliers and clients. They secondly develop their learning by innovation and initiation capabilities. The third step is space related; that is the accumulation of informal institutional knowledge. This knowledge is gained by the experiential cultural framework, acquired after operating across different markets. Finally, in the fourth step, which is time related, the firms increase their internalization knowledge in two separate ways. First, they have a learning capacity enrichment in time, and they combine all other learning impacts

from the previous steps. Thus, they benefit from a complementary framework of different learning steps towards an institutional change.

1.6. Firm Responses

1.6.1. New Entry (Local Firms and FDI)

The relation between pro-market reforms and multinationality in developing firms has increasing attention in the last years. Multinationality refers to competing and collaborating with international firms. Entering into a market and competition is linked with the official costs like the number of procedures, official time and availability of reaching information. Countries, which pose strict entry barriers in international trade, have higher corruption rates, larger unofficial economies but do not have better quality of goods and services (Djankov, Porta, Silanes & Shleifer, 2002). Pro-market economic reforms have a positive impact on multinationalization but the degree of impact changes depending on the institutional void of the home country of the multinationals (Cuervo-Cazurra & Dau, 2009a). Multinationalization also varies greatly between emerging country firms and developed country firms depending on their different ownership, location and internationalization endowments. In the same manner, there are also internationalization differences within the emerging countries depending on the motivations, processes and performances of companies in different time periods (Gaur & Kumar, 2010).

Multinationalization responses can be seen by the successful implementations of reforms in developing countries by increasing the capabilities of the firms. Sometimes emerging market companies acquire foreign firms from advanced countries to get sophisticated technology, process or capabilities, which they lack in the domestic market (Madhok, Keyhani, 2012). At the same time, this impact was accelerated by voids. The escape responses are formed by many reasons: low growth rate, poor performance, employment rigidities, unqualified human competencies, low technology, restriction on labour laws, lack of protection rights, political instability, non-

transparent judicial systems etc. Most of the multinationals in Russia, China, Brazil and India validate this evolution (Cuervo-Cazurra & Stal, 2011).

The way of escape also differs depending on the nature of the void. (Doh, Rodrigues, Helmhout & Makhija, 2017). If the regulatory framework is weak, institutional borrowing is preferred for having a safeguard contract. If there is no clear investment related information in the market, the aim is a substitution for another country to bridge the gap for better investment decisions. If the institutions in home country suffer from weak governance systems, the response might be signalling by corporate social responsibility to enhance legitimacy.

If the home country is developed one, the institutions are well established and sophisticated enough to minimize their transaction costs. In developing countries, the institutional environment is semi-developed and the multinationals operate at a relatively higher cost. Thirdly, in underdeveloped countries, firms suffer from institutional voids and they face poor governance. This is reflected in their competitiveness in the market. Developed country multinationals enjoy pro-market reforms more than developing and underdeveloped ones. Another impact of pro-market reform occurs in an indirect way. If the domestic market is saturated by the increased competition, local firms seek out export opportunities (Leonidou et al, 2007).

Another impact of international voids is the creation of competencies through more outward foreign investments of domestic firms (Stoian & Mohr, 2016). Since the high level of protectionism, bureaucracy and corruption in home country hinder making business in home country, domestic firms search for ways to invest abroad. When they enter the foreign markets, they may benefit from the spillover impacts. The ownership advantages help them to moderate the impact of home country regulation and protectionism voids. Hence, the impact of regulative voids depends on the level of the domestic firms' ownership advantages. However, this study is only valid for emerging economies and cannot be generalised to developed countries. In the developed countries, the reason for outward investment is not the regulative control or protectionism, but the higher corporate income tax.

In another study within the cross-sectional data of many countries, lowering barriers to entry in product markets causes a U shaped movement in the employment figures (Bassaini & Cingano,

2019). First unemployment emerges but in three years period after the reform, the change is absorbed. The same study also concludes that deregulation in the product markets causes more severe unemployment in large firms.

1.6.2. Price

Pro-market reforms have always been thought to reduce the prices and increase the efficiency through liberal policies. Accelerating the movements of goods and services would bring an increasing volume of transactions, and the efficiency gained would be reflected in the prices. Additionally, the new entries in the market would create a downward pressure on prices due to intense competition. Some studies have revealed that price reductions can be visible in less than one year after the implementation of reform (Boeri, Cahuc & Zylberberg, 2015). Many studies are pointing to the decreases in prices as a response to market reforms. The life insurance market had experienced a price fall around 15% between 1992 and 1997 after the implementation of a new reform; allowing internet to use price comparisons. (Brown & Goolsbee, 2002). A similar trend was seen in the US airline industry. After the implementation of deregulation, more new airline companies entered the market leading the incumbent firms to decrease their domestic and international fares (Goolsbee & Syverson, 2011). In retail industry in France, the deregulation in the opening of new stores, attracted new entries up to 50% and leading the prices to fall and increasing the employment at 7% (Bertrand & Kramarz, 2002). Similar pro-market reforms in retail industry in Canada produced similar results (Skuterud, 2005).

Pro-market reforms may lead the firms to decrease the prices in an indirect way. Studying on the exports of the Belgian firms between 2000-2008, exchange rate reforms decreases the marginal cost of the firms and they can set lower mark-ups (Amiti et al., 2014). Similarly, the study on Hungarian manufacturing importers between 1992-2001 proves that reforms that give opportunities to the production of local inputs have decreased the cost of production of the companies (Halpern et al., 2015). Both studies indicate that pro-market reforms decrease the cost of the firms; hence, their mark-up amounts. These lower prices are reflected to the consumers.

However, pro-market reforms do not necessarily lead to a price fall in the market. For example, structural reforms in EU gas market over 15 years until 2007 in form of privatization did not lower

the oil prices for consumers. Similarly, the reforms like softening the entry conditions showed only negligible effects and in some countries, the prices even tend to increase and the industry preserved its oligopolistic nature (Brau et al., 2010). Similarly, Nagayama (2007) explores that market reforms such as entry of independent producers and establishment of a wholesale spot market in the developing countries in the electric supply industry resulted, contrary to the tendency that, prices in industrial and household lines has risen. By the same token, privatisation attempts lowered the prices in only limited areas. Empirical evidence for the telecom industry is also debatable. Reforms of transferring the ownership change from public to private institutions in telecom industry in EU played very little role in decreasing the prices of international and local calls. (Bacchiocchi et al., 2011).

1.6.3. Market Power of Firms

Studies on the responses of firms relating the market strategies in reform times point to several outcomes. Firstly, competition decreases the profits, but newcomers on the one hand need innovation to retain in the market, and the incumbents foster innovation to defeat the new entry firms. This effect is expected to be seen in neck-to-neck industries where the costs are similar for all the firms (Fiori, et al 2012). Studies on the 500 largest Latin American firms indicated that structural reforms induce competitiveness in the market and improvements.

Secondly, the origins of the companies may matter. The reforms also have a positive impact on the firm exports especially for the foreign-owned firms (Cuervo-Cazurra & Dau, 2009b). A similar result was also obtained from the banking industry in France after the deregulation had been taken place in 1985.

The responses of Chilean firms to structural reforms implemented in the 1990s created hostility at first due to posed serious threats for domestic companies in home market. On the other hand, it increased the internal competition, higher availability of inputs and declining prices in the market which encouraged the other Latin American countries to imitate Chile's reforms (del Sol, 2010). According to Dau, the market internalization is expected outcome in developing countries after

the reforms are initiated, however, private firms have a greater incentive to respond to reform and can survive longer in the market whereas, state companies respond more slowly because they have been sheltered from the hurting competition (Dau, 2012).

Thirdly, competition as a response to reform allows room for better allocation of resources. For example, deregulation in the banking industry resulted that the banks became less willing to bail out poorly performing firms and at the industry level it led to asset and job reallocation in the banking industry therefore an improvement in the allocation had been realized with a significant decline in market concentration (Bertrand et al., 2007). By the same context, longitudinal data over 206 Indian companies in the pharmaceutical industry showed that the institutional changes in the domestic environment in forms of economic liberalization and property reforms, increased the competition in the market, therefore, leading to the necessity for greater access to international technological and financial resources (Chittoor et al., 2009).

Fourthly, in most cases, firms cannot develop strategies with their profits provided by reform. The opportunities provided by the reform as supernormal profits cannot be sustained in the long run. Studying on the data of in emerging economies, pro-market reforms in product and factor markets increase the level of competition, where the competition erodes the profits (Chari & David, 2012). Instead, more rational way, firms learn that the reforms enhance competition in forms of knowledge. Pro-market reforms allow firms to acquire institutional knowledge so that they would capture the benefits of the regulatory changes. In order to keep it up with the changes that the reform brought, resist to increased competition firms need and must acquire internalization of knowledge (Dau, 2018).

Lastly, the number of new entries can be affected by pro-market reforms. According to IMF, based on the 10 regulated industries and in 18 advanced economies, the reforms implemented in the product markets, new entries in the market is promoted and this result is faster in the first two years. This movement is driven by small and retail entrants (Gal & Hijzen, 2016). Diversification and business group affiliation affects the domestic market companies during pro-market reforms. Empirical studies over 20 years and more than 6000 projects, there exists a positive relationship between business group affiliation and corporate expansion during the pro-market reform and a negative relation between corporate growth and diversification (Singh et al., 2018).

1.7. Pro-Market Reforms in Global Insurance Industry

Product market reforms accelerate the movement of goods and news, therefore allowing new entries to the markets. The impacts are seen in a downward trend in prices. The short term outcomes are more visible and once implemented reforms decreases the price and quantities within a year (Boeri & Cahuc & Zylberberg, 2015). The literature also suggests many cases. In the life insurance industry in the US, the life insurance prices had fallen 15% between 1992-1997, when the internet is started to be used for price comparisons (Brown & Goolsbee, 2002). In the US airline industry, when deregulation allows new entries to the market, incumbent firms decreased their fares in order to compete with the newcomers (Goolsbee & Syverson, 2011). Similarly, after the board approval of opening of large new stores in France where commercial zone restrictions exist, increased the new entries from 30% to 50% and increased the retail employment by 7 percent (Bertrand & Kramarz, 2002). In Canada after the deregulation about the opening of stores on Sunday nights, has increased the employment 3% (Skuterud, 2005).

Similar outcomes were also verified by a recent work IMF based on the pro-market reforms on product market in 10 regulated industries and 18 advanced economies for the 1998-2013 period. Product market reforms had positive impacts on capital, employment and output over time and their impacts have increased over time. The study also pointed out that small firms benefited more in network industries. Additionally, the firms in the downstream industries, which make substantial use of intermediate inputs from deregulated industries both home and abroad, had greater benefits from pro-market reforms (Gal & Hijzen, 2016)

After 1994, European Commission tried to harmonize the insurance markets across Europe and pioneered considerable deregulation policies in all countries. These reforms brought two major outcomes. First, the expected competition in the European market was insignificant. Secondly, it was successful from the standardization perspective that European countries started to use the same insurance law, but this transformed the tightly regulated German market to become similar to the lightly regulated UK market. However, the expected growth in cross border trade did not happen. An insurance policy sold in one European country was not purchased by the resident in another country. This brought that single market with single regulation was not possible (Rees & Kessner, 1999).

Sometimes a carefully planned regulation could provide substantial benefits to the citizens (Ungern-Sternberg, 2004). When analysing five property insurance countries in Europe, he claims that state insurance firms perform better than the competitive markets. Because private insurers avoid selling bad risks while the risk selection does not matter for the state monopolies. He also asserts that state monopolies can more easily integrate prevention operations (which is related to public goods like land zoning and firefighting) so they can have lower claim costs.

In the health insurance market, the US economy attempted several pro-market reforms between 1990 and 1995. The reforms aimed to provide affordability in health insurance for workers in small firms and individual markets. The problem in health insurance is that a very small portion of the population accounts for a very large portion of the health expenditures. This creates an adverse selection that those who consume more their health insurance, tend to buy more than the healthier ones. In this case, insurers segment the market to minimize the risks. In order to minimize this impact, many pro-market reforms brought rating restrictions so that insurance costs could be more evenly distributed. However, the state-level reforms in the US health insurance market did not create a significant impact on insurance coverage and insurance rates (Zuckerman & Raijan, 1999). When analysed the impacts of reforms like guaranteed issuing, guaranteed renewing, rating restricting, the results showed an increase in the uninsured rates and a reduction in the private coverage for individual markets. On the small group markets, the reforms could prevent the erosion in insurance coverage but fail to reduce the number of uninsured people in the market.

When Russian state monopoly insurance was abolished in 1999, the market was defined with low penetration, deprived of the measurement tools to assess the size of the market, low capitalization of insurance companies, lack of technical expertise and poor legislative infrastructure. Since the industry promising a substantial growth, a new deregulation package was prepared and put into force in 2004. The reforms brought many achievements: The insurance market possessed a sophisticated legal framework based on largely European practices. Secondly, companies gained experience and specialized in different lines of insurance. Thirdly, the managerial ability of insurance entrepreneurs developed within a competitive market. Fourthly, insurance education gained priority and insurance courses became available at the universities. Fifth, reforms attracted the international players to Russian insurance market. Many multinational insurance companies, brokers entered the market. At the same time, international support for insurance issues boomed,

especially in training. This also makes the industry more open to competition. The introduction of compulsory motor insurance was another attempt. Russia had experienced a similar but unsuccessful implementation during Soviet administration. Until 2004, compulsory motor insurance was not available and Russia was one of the last countries without having such a regime. Although there are still implementation problems i.e. low acceptance, the launch of compulsory motor insurance allows companies to increase their knowledge.

Pro-market reforms contributed positively to the development of the insurance industry but there are still missing steps (OECD, 2005). The financial stability of the Russian insurance companies is still vulnerable to the risks so their financial stability should be strengthened. In addition, the reforms should be made more crystal clear in the capital requirements. A similar definition problem in capital requirement in the banking sector had created a solvency problem for the whole system, for that reason, similar ambiguity should be cleaned. Similarly, greater transparency is still needed in the financial information of insurance companies. For that reason, international rating institutions cannot deliver ratings for the Russian insurers. In parallel to the availability of financial information, the insurance market still lacks international accounting standards. This raises two important issues for the system. First the without having international procedures, there are consolidation problems for reporting issues. Secondly, maybe, more importantly, the potential international investors cannot rely on the financial stability of the published numbers. Pro-market reforms should also be designed to include the “Insurance Protection Fund”. When the insurance companies fail, the rights of the consumers should be kept and guaranteed protection fund. Lastly, the reform guidelines should also cover the reinsurance and investment procedures that will also be demanded by international brokers and insurers.

Financial reforms in recent decades have also increased remarkably. The banking sector, controlling bodies of financial markets, integration of capital markets and the evolution of new technologies give rise to new reforms at national and international levels. Financial reforms contribute to the long-run growth of the economies. However, the effects of financial reforms in the banking industry do not initiate the same effect in developed and developing countries (Delis, 2012). Financial reforms are important to maintain the competitive conditions of the banking industry. Countries with weak institutions, low economic growth and banks with the high market power of banks can benefit from the reforms less than the countries with sophisticated legal

institutions, faster growth and having competitive banking industry. According to Delis, high corruption and less transparency in the financial system in less developed countries create powerful banks and this concentrated structure in the market destroys and delays the benefits of the reforms. He also proves that the financial reforms and the quality of institutions are negatively related to the market power of the banks and the negative effect is greater for the larger banks. The proposal for the developing countries to providing the competition in the banking industry first would bring higher returns from the other financial reforms.

In China, excessive government control was a prominent feature of the economy. Since the 1990s there had been a set of deregulation changes that occurred on the legal side in the financial system. Entry barriers were removed by decreasing the stamp tax. The decrease in taxes stimulated the financial transactions in the stock market. The limit of daily price fluctuations is also increased to reflect the market-determined prices of stocks. Sometimes state interventions occurred like prohibition of illegal trading but these interventions can be regarded as a part of financial reforms. The foundation of Shanghai and Shenzhen stock exchanges were the main steps. Monitoring the financial reforms in Chinese Stock market between 1990-2002 the reforms increased the liquidity of markets (Gao & Kling, 2006). However, the liquidity cannot be maintained in the long run.

China also exercised a transformation of state bureaus in the mid-1990s. The official state administration departments were authorized to follow profit-seeking, risk-taking behaviours. At the same time, they would earn their own income and employ their own staff. This transition was called a new political economy where the state performs an entrepreneurial role in the economy. These reforms helped the economy to reduce the bureaucracy without making government officials unemployed because the government officials turned from implementers to entrepreneurs (Duckett, 2001). However, the impact of this transformation not functioned well due to a couple of reasons. First, there had been a heavy legacy of pre-reform bureaucratic controls. After the nationalizations in 1950, the landowners had been eradicated and a bureaucratic structure had been established which had political influence. Therefore, a change in the state institutions towards market reforms created conflicts with the headquarters, negotiation disputes and bargaining problems. Secondly, the legal system was not adequate that does not keep up with the reforms made. Thirdly, the loss of hereditary government control had been substantially decreased which

could lead to corruption to some extent, in the transformed units. But the biggest contribution of the reforms was the attempt to transform the state bureaucrats into sub-central policy-makers.

In line with the global fashion of the 1990s, Indian governments pursued pro-market reforms in many areas. Increasing foreign capital, simplifying entry barriers to the Indian markets, initiating the adoption of new technologies, regulating and spurring natural monopolies and privatizations are the major reform areas. The main objective of the reforms was to handle the acute economic crisis in 1991. After the implementation of reforms, the economy could achieve slight growth rates. However, the manufacturing industry -the most important growth source of Indian economy remained unchanged in GDP. Capital account reserves also benefited the country especially in 1997 Asian crisis and the impacts of the crisis were much less than the other Asian economies. The reforms could not find solutions to external financial dependency, technological vulnerability, internal debt problems and self-sustained economic growth rates (Kumar & Patibanda, 2009). FDI helped to automobile sector and the market position of Indian car manufacturers grew significantly. On the technology side, Indian software development industry performed prominently in the world economy but value-adding activities of technology, business transformation and innovation capabilities remained limited.

In the development of the Indian economy, Indian Business groups contributed positively for decades. Together with the rapid developments in pro-market reforms, business groups also were influenced by the behavioural and performance of patterns of institutional environment. The reactions of business groups to the reforms attracted attention since the Indian firms were the second largest growing economy after China. When the behaviours of the business groups are analysed between pre-reform and post-reform periods, it is found that common behaviour of pre-reform period was unrelated diversification turned to related diversification after the reforms (Kedia, Mukherjee & Lahiri, 2005). The reason is that business groups wanted to divert their risks when they face strict regulatory frameworks and market deficiencies. Additionally, the lack of matured legal system can cause breaking the business promises because of the weak contract argument. However, within the liberalized and deregulated economy, business groups can find more benefits in corporate focusing because they know much better the conditions.

Similarly, the performance indicators also change before and after the reforms. Here the product relatedness and the institutional relatedness considerably differ. In the pre-reform periods, business groups can have value creation in low product relatedness, which is the extent to offer similar products in the same array. However, the institutional relatedness, which shows the density of network ties with the institutions in the market, is quite high (Peng, Lee & Wang, 2005). Because the groups prefer a way to leverage their relations with the political and social institutions. When the reforms are implemented, value creation performance lies in just the opposite behaviours. Business groups select high product relatedness but low institutional relatedness because they need less embeddedness in institutional frameworks.

Many of the African countries also adopted financial pro-market reforms to increase their financial resources for available productive instruments. Since an efficient financial system is necessary for international private foreign capital inflow, weak and fragile African economies needed to implement financial reforms in many areas (Beck & Maimbo, 2013). In the 1960s, the basic principle of African political leaders was to intervene directly in the financial market with an activist role. In the 1990s, the dominant logic of Washington Consensus warned the leaders to take their hands off the financial markets. However today the role of the state in financial reform is still ambiguous because the expected financial market deepening could not be achieved and without state intervention, it seems it cannot be achievable either. For example, credit lendings in special sectors did not bring successful outcomes in Nigeria and Ghana. Similarly, legislation forcing to open up new bank branches in rural areas to provide the cash mechanism failed in Zambia and Botswana. Except for Kenya, most of the African countries lacks credit bureaus, which organize the sharing of information. Another attempt to establish credit and saving cooperatives in rural areas in Uganda failed for the moral suasion that spurs competition. In Tanzania, loans could not be collected due to not reaching the target group and created a substantial fiscal cost for the banking industry. The empirical evidence suggests that for the development of economic growth in African countries, private investments are necessary. Yet the financial systems in these countries are highly exclusive. The market failures, lower-income groups, costly multinational entry and the uncompetitive internal markets are the main reason for the sensitivity. In this respect without government intervention activating pro-market reforms for financial private investments seems very difficult (Dafe, 2012).

Deregulation fails can also be seen in the energy sector in the US. Lambert (2006) points out that without analysing enough about the working mechanisms of the market, removing the price constraints or eliminating the entry barriers causes to unregulated monopoly. The complex mechanisms of energy markets stem from the bilateral agreements in the wholesale industry and vertical integration obliged by transactional costs. This implies that the policymakers should be aware of the invitation of manipulation: “if the system can be manipulated, it will be manipulated”. Combining the corporate-self regulation, financial controlling as a gate-keeper role, mergers in the electric industry, manipulation in gas price indexes created massive examples of regulation and corporate governance failures. A careful planning strategy should assume the post-reform functioning of the market with a harmonized blend of regulation and competition at the same time.

Different liberalization encounters in different countries, though resulted with different outcomes, a more-or-less cleared scene is available where the path of reform is strongly dependent.

Firstly, a transparent and contended time frame in implementation is a must. Any liberalization process involves many parties to discuss and each on the opposite edges in many cases. Similar to MTPL business, policyholders, state officials and insurance companies try to realize their own targets, but this process requires much time than expected to come to a clear conclusion. Any objection from parties, iterations, tit-for-tat strategies prolongs the reform period.

For example, Italy had experienced a couple of milestones to abandon its statutory tariff. EU declared motor directive in 1988, which harmonizes the MTPL insurance among member countries. This was the initial point. Secondly, Italy waited two years to see the experiences of first movers and started to talk about the liberalization of MTPL hardly in 1990. The third milestone was that 1992 was the deadline for Italy to decide about liberalization to EU; either continue with statutory tariffs or liberalize the system. Fourthly, in 1994 a new law on insurance was put in force, which abolishes the state-administrated tariffs. Finally, in 1995 insurance companies prepared their own tariffs and changed their internal structure for a competitive MTPL industry. The seven years in liberation is a long way to achieve and the story suggest a couple of lessons. First, the pro-market reform in MTPL should be borne by law. Without the written content of regulatory bodies, no real action can be stepped. Secondly, Italian case suggests that at least five years of digestion period should be given priory to talk about every detail in advance. Thirdly, the reform does not

belong to only one party solely. It requires the tenacity of the state, the content of the policyholder and the contribution of the insurer. This triangle can come closer at a point somewhere in middle. Fourthly, insurance companies first prepare themselves for the upcoming change, in actuarial modelling, required staff hiring, MTPL database creating and an effective claim management operation launching. If these efforts cannot be prepared, the reform can produce poor results and disappointments.

The second important issue in launching liberalization in MTPL is the reaction of players. A successful pro-market reform necessitates a carefully planned identification of possible reactions of different parties in various subjects. Of course, it is not an easy task to foresee and plan all the possible scenarios, but the important thing is that every problem could only be stepped by collaboration. Insisting on the static points or being determined not to compromise, is not winning on the table, on the contrary, leading to a deeper crisis, loss of trust and the postpone the future problems.

It is important for state officials to maintain market competitiveness by lowering the prices in the mid-run unless the initials prices of MTPL were too low. This can be only attainable if the vehicle owners easily switch one insurer to another to find the most proper price for them and therefore shortening the time for contract termination in the market. This acceleration in the market increases the transaction between the insurers and buyers and determining the market-clearing price at the end. Insurance companies, on the other hand, are frequently obliged to apply tariffs below the real cost, therefore subsidize MTPL from other non-compulsory lines. In this context, it is not sufficient to denote liberalization “as a panacea” because there exist other side effects like moral hazards and adverse selection.

Moral hazard is a situation where the policyholder has no choice in a competitive world. The prices may be identical at the level where they should be but it may not take into consideration the behaviour of consumers and their demand about the risks to be covered. In this case, policyholders never have any incentive to minimize the risk occurrence. In a liberalize MTPL market, a good risk assessment lead the policyholders to think about their driving and alter their behaviour through incentives, precatory or threatening conditions to contribute to overall risk lowering.

Adverse selection, on the other hand, is the situation when there is asymmetric information between policyholders and insurance companies. In a competitive market, insurance companies need to charge higher prices to those vehicle owners who are probable to claim more in the future. Indeed, there exists a range of vehicle owners according to their risk assessment. The problem occurs when the high-risk drivers are priced at enormous levels. There is no unique solution to overcome this problem and there exist separate ways to handle this issue in EU. For example in Italy, there is no risk selection possibility of the insurance companies. They must produce MTPL for the bad risk customers. Bad risks in the industry are distributed to all active insurance companies. Bearing bad risk among the insurance companies is the same as Italy in Germany. The German insurers must underwrite but they have a kind of partial selection depending on the vehicle type. They can offer a cap for the reimbursement for bad risks or they can narrow the coverage to the bad risk drivers that are below the standard coverage supplied to the rest of the market. In France, Spain and Portugal the scenario is different. In these countries, the insurance companies are not obliged to produce MTPL policies for bad risk customers. Bad risk policyholders are serviced by state owned insurance companies. These publicly driven companies charge higher rates to these customers than the ordinary policy prices. Inevitably, these public companies are financed pro-rata by the insurance industry as a whole at the end. In Ireland, Holland and England, the risk selection possibility of insurance companies is extended. They are not obliged to accept all bad risk customers. Instead in the bad risks are accepted some private niche insurers for a certain period of time. Of course, the price charged to the bad-risk, policies are higher than the market. To put it differently, insurable risks are in the scope of applied tariff structure as a whole but the entire system does not need to bear the bad risk (Chemillier-Gendreau, Gönülal, 2009).

These complexities require the active involvement of the insurance supervisory board, actually crucial when there is no lobbying activities or industry association discussions. The role of the government is more crucial when the insurance companies cannot really calculate their cost or establish their own fair price tariffs. In this context, the supervisory board actively participate in tariff design and prevent the companies to charge too high prices. For example in Italy, the supervisory board appointed an official actuary who was responsible for controlling the appropriateness of the tariffs of MTPL companies. The direct collaboration with the official actuary, the insurers can explain the rationale behind their calculations.

The third important milestone is the trend in MTPL prices during a pro-market reform. The experience of EU MTPL liberalization shows that the prices rise after the liberalization. Because the reason is somewhat political that in the state-governed period, the prices are lower than required in all cases and MTPL is usually subsidized. However, in the long run after realizing the fair value in the market, the prices start to decline. As presented in Table-C17, the average premium in EU decreased from 244 EUR in 2004 to 205 EUR in 2016. Italy, for example, had used statutory based tariffs for long years before the pro-market reform and the MTPL prices were lower than the minimum necessary level. For that reason, some of the insurance companies went to bankruptcy because they no more tolerate the losses between 1994-2002. Until 2002, the results were negative and the insurance companies came to a break-even period after seven years of the liberalization. The rate of change in claim costs and the premium prices were also above the inflation level since 2005. After the results are improved in 2005, both the cost of claims and average premiums started to decline (Gönülal & Chemillier-Gendreau, 2009)

Deregulation helped the smart insurers, at least in Italy and France, to maintain their profitability faster. Companies, which can develop tailor-made calculations for their customers, have enjoyed better financial results. The possible explanation of this was, when they charged the high-risk group of customers with a high rate, they could facilitate lesser claims in future because they affected and warned the high-risk drivers. In turn, after facing a higher charge by their companies, the high-risk group could get a wider incentive to minimize their risk. The rationale runs as follows: When young male drivers are treated as a high-risk group, -as in many countries- they are charged higher MTPL premiums. This process initiates, young-male drivers tend to buy fewer cars (prices may distort them), even they decide to buy they might prefer cheaper vehicles (in order to minimize the insurance cost) or when they buy the car, they need to have at least a minimum coverage MTPL insurance (to avoid from possible losses). All the options lead to minimizing the risk for the high-risk group. When the high-risk group has a lower claim ratio, the average cost of claims automatically falls. On the other way, lowering the premiums below the required rate is quite risky. These insurers face deterioration in their financial results –at least in the long run since MTPL is long-tailed- but more importantly, existing high-risk drivers would do nothing to change their driving. This brings an even higher expected loss to the insurer. Thus after the deregulation, individual-based pricing is a key factor for smart insurers to differentiate themselves. Whenever

they realized it firstly in the market, the first-mover advantage could benefit them more than their rivals.

Finally, liberalization in MTPL does not necessarily trigger the way of selling the policies. For example, the main distribution channel in Italy in 1993, when the pro-market reform was launched, was the agents, which dominate 75% of the MTPL market. When the liberalization has been finalized in 2005, agents increased their market share by around 80%. Liberalization revealed new channels but its impact was low. The appearance of direct sales (telephone, internet) just took a share of 10%. Though direct sales channels can provide lower costs and be more flexible, the effect of pro-market reform depends on the long-term relationship between the agent and the customer. In other countries, where the communication between the agent and the customer is not severe as in Italy, the emergence of the new distribution models are easier. For example in England and Ireland, direct selling companies rapidly gathered market share (Gönülal & Chemillier-Gendreau, 2009)

CHAPTER II – THEORETICAL BACKGROUND

Institutional change provides a helpful framework to understand the impacts of pro-market reforms. In his prominent book, North (1990) asserts that both institutions and the institutional change affect the economic activity and performance both in the short and long run. The uncertainties lied in human interaction is the main reason for the existence of institutions. Institutional matrices are important for economic activity because they lower the uncertainty through interaction. North (1990) asserts that, institutions change widely due to their economic performances. They vary widely, where some produce growth and other produce stagnation due to differences in transaction and production cost differences. Thus, the process of formal rules becomes incremental and creating path dependence. Any attributions avoiding uncertainty and misinformation evolves the institutions to run in more predictive ways and reduces the choice set of decision-makers. *“However, the increasing-returns characteristics of the institutional matrix and the complementary subjective models of the players suggest that although the specific short-run paths are unforeseeable, the overall direction, in the long run, is both more predictable and more difficult to reverse”* (North, 1990, p.110).

When a reform is implemented, it brings a kind of change to the firms either positive or negative. Institutional theory examines the changes when the existing rules have changed, especially with a coercive isomorphism (DiMaggio & Powell, 1983).

The study exerts that organizational change is not the main result of competition among players or the efforts to gain efficiency. Their impacts become less visible in time. On the contrary, the three mechanisms; normative, coercive and mimetic isomorphism lead the institutional convergence. Coercive isomorphism is beyond the expectation of the organizations’ capabilities. Legal and cultural environment, political influences and the changing rules and regulations create pressure for organizations to comply. When the ambiguity and the organizational uncertainty is the dominant issue, organizations develop mimetic behaviours. If the organizations encounter similar problems, and if they do not have enough information or technic how to solve them, they tend to imitate the way of problem-solving methodologies of the comparable organizations. In normative isomorphism, the values of business methodologies and legitimate professional practices create pressure on organizations. The conformity pressure appears because the legitimated business

practices relating to the education and organization' members interest in promoting norms are predominantly accepted by the organizations. As the growth of networks increases, the importance of normative isomorphism becomes more important.

The starting point is important because coercive isomorphism is different from cognitive isomorphism; hence, the firms feel the pressure externally, so they do not produce taken for granted behaviours. This causes different ways of responding by firms, they behave more strategically to coercive changes than they do cognitive ones (Oliver, 1991). From the theoretical perspective, the homogeneous effect of the reforms shifts to either leads firms to interact for the adoption of the reform, or they may create choices by delaying or avoiding. Thus, when the reforms (or the regulations) coming from coercive organizations, firms make heterogeneous responses rather than isomorphic ones (Pfeffer & Salancik, 1978). This point is quite complex from the firms' point of view because the state is seen as an external actor which is consuming resources or imposing rigidities. Therefore, the changes in the state should be managed.

The reform or a change in the regulation, on one hand, changes the demands of firms about resources, and from another side, it alters the existing environment where adaption might be very complicated or sometimes cause risks for the firms (Ritchie & Melynk, 2011). Sometimes, firms even seem to accept the changes, perform a kind of delayed actions so that they want to observe the behaviours of the other firms. When the uncertainty is high, they want to experience the successes or the failures of the first movers (Doshi, Dowel & Toffel, 2013).

The choices of the firms, when the state implements a rule initially bring two main actions. They may, either adopt the rule with coercive pressure or delay their expected action. Even if they seem to decouple compliance to the change in state, the reaction is not instantly and fully. One possible impact lies in the relation between the firm and the state. Here the exposure of the firm to the regulation change is critical. Exposure of the firm can be defined as the difference between the current practices and upcoming practices with the implementation of new reforms. When there is a wide negative discrepancy between the initial and after the reform period, the firms feel insecure for different reasons. They might be fined, be a greater potential target of audits or a likely to face more strict burdens. Hence, the greater exposure of a firm to a change in regulation, they feel more pressure for change. Alternatively, even the level of exposure may destroy the decision-making

process of the firms. They may misalign their sources, complain from the poor response and their existing practices does not intersect with the new reform world (Edelman, 1992).

Low exposure to regulatory changes enables decoupling activities of the firms. They show symbolic visible compliance to the change in regulation. They also want to demonstrate their attention and managerial interest in the regulatory change (Meyer & Rowan, 1977). Decoupling allows firms to maintain their status-quo condition. At the first glance, they seem they comply with the new regulation but in action, they do not intend to fully absorb and implement all the norms that are required (Scott, 2001). Thus, the decoupling of firms can be seen as a kind of transparency from the legal point of view, where the firms do not show a direct opposition. However, from the firm-specific view, the transparency is no longer sustained. It helps the firm to sail in safer waters with the continuation of its operations with minimum change.

Another impact might be the links between the firms and the state. If the firms have access to the information in the state, they may have an advantage as compared to other firms (Pfeffer, 1972). In this case, they might anticipate the shape of the new regulation so they keep their links with the state and allow co-optation. They can also gain direct information about the legal changes in advance. By using this link, they may even be well prepared for the punishment of non-obedient, the level of enforcement of the reform and the clear-cut content of the upcoming regulation (Peng & Heath, 1996). These links also help them with lobbying activities. When they lobby for the regulation, they are positioned to a privileged place among competitors and they keep their critical network so that they can provide exceptional information (Silverstein & Hohler, 2010). However, it should be noted that co-optation is two-sided negotiation. When the key firms can receive critical information from the state, they are accepted to oblige the state instructions apparently.

When we combine these theories, two major responses of the firms can be seen to change in regulation by the state. If the firms are strictly connected to the state, they feel more responsive to coercive pressure, so they behave very quickly and alter their actions according to institutional change. The counter case also assumes that if they are less tied to the state, they may do not face an obligation for change. This might be for a couple of reasons. Sometimes they are not interested in the changes in the external environment and they are less aware of the changes that the state

brought (Galaskiewicz & Wasserman, 1989). In some cases, the firms might be less receptive to the pressure (Westpal & Zajac, 2001).

Therefore, the ties to the state can help to predict the response of compliance of the firms. Of course, the theory is based on the assumption that the state is confident about the implementation of the regulation. The government officials expect that any link with the firms will result in a determination of compliance to the new rule imposed without hesitation. In other words, the state officials do not assume an exploitation of advantage, which they created the firms. However, in practice, the assumption is not satisfied when the new regulation is initiated. First, the government can bring a new regulation, but soon it cannot mandate its maintenance due to doubts about its effectiveness. Then the government can alter the rule and adjust changes according to the adverse feedbacks from the environment. Thus, in this case, the declaration of a new rule does not guarantee that it will be adopted immediately. Since the rule can be changed and there exist the possibility of instability of the new regulation, firms that have close ties to the state do not necessarily respond quickly, instead, they may prefer to wait some time before absolutely complying (Karpoff, Lee & Wendzyk, 1999). Some firms also prefer to establish a personal network for the formation of a coalition with the state. In order to do that a flow of personnel between the state offices and the firms is probable (Peng, 2003). A close connection with the state provides the firm with a more formal interpretation of the change that is brought, which reduce their risk.

On the other hand, the relation between the state and the firm is not static. A coercive adoption by firms to a new regulation is likely to evolve in time. At first, firm-level characteristics are dominant to the adoption of the change and the firms easily adopt the regulation, however, as time passes, the institutionalization of new practices causes mimetic adoptions (Tolbert & Zucker, 1983). Therefore, the firms change their actions by looking at their environments. In other words, they do not adopt changes by the coercive pressures, rather they observe, discover and implement without objectivity. If the firm has great exposure from the regulation change, then early adoption is more crucial and they respond instantly without mimicking the other organizations. When the rest of the firms adapt to the change, then exposure to an institutional change becomes less important, because in this case most of the firms in the market had already complied with the regulation and there is no risk for further delay.

Therefore, when we look from the firm side to a new regulation, at the first glance firms with a close tie with the state, respond slowly; let the other firms comply first. After analysing the risks of adoption, they respond to the adoption with a lag. However, when this new rule is institutionalized, there comes two different movements. First, the tolerance of the state to the non-compliant firms is reduced because there remain only a few firms delaying the adoption of the new rule. In this case, the state finds it easier to implement sanctions to the non-compliers or late-compliers and increase its coercive power to extend the enforcement. Secondly, the value of delaying the adoption gets weaker because there had already been many examples of adoptions and their consequences. In this case, the impact of adoption has been clearly observed and their potential impacts have been accessed within the majority of the firms. This advocates the result that if the institutionalization has been finalized, the effect of state links on the speed of compliance decreases.

When we look from the state side to the adoption of new regulation, the co-optation also changes with the institutionalization process (Sutton & Dobbin, 1996). Since the links with the state require a bi-lateral relation, the government is likely to favour some firms to increase their influence as the firms try to exert influence on the state. For that reason, at the beginning of the new regulation, the state demands some prominent firms to comply quickly. The early adopters of selected firms may enhance the adoption of the regulation on other firms. In some cases, the state also supports adoptions with the state-linked board members on these firms.

The emergence of new actors like state-linked board members of managers shifts the relation to another aspect. The institutional work logic states that both firms, states and other actors may shape the evolution of institutionalization (Lawrence & Suddaby, 2006). This brings us to the point that the role of organizational actors can have salient characteristics in market reforms and regulations have given the socio-political processes. Managers in firms and even the personnel may perceive the changes in pro-market institutions in such a way that, they do influence both the implementation, compliance, adoption and even the reversal actions of the organizations.

CHAPTER III- TURKISH INSURANCE INDUSTRY

3.1 History

Insurance in Turkey has first started in the late 1850s by the establishment of foreign branches of international companies during Ottoman Empire times. The first agencies appeared in İstanbul and İzmir as the affiliation of international companies in order to pursue the insurance rules during import of goods. Afterwards, insurance companies and agencies needed a more professional organization, so 44 companies established a charter called “Teutonia”¹ in 1900 in Beyoğlu, İstanbul that represents “Union of Fire Insurance Companies located in İstanbul”. The organization immediately started to prepare ruling guidelines and initiated the enforcement of “The Provisional Law of Foreign Joint Stock Companies and Corporations whose Capital Stocks are divided Into Shares and Foreign Insurance Companies”². In 1916, the organization turned into a form of insurance association with its 81 members under the name of “Association of Insurance Companies Operating in Turkey”.

After the declaration of the Republic in 1923, the association was abrogated and replaced by a new institution called “Insurers’ Club” in 1924. In 1925, the association changed again and it was named “Central Department of Insurers”³. In 31.07.1927 the first law in insurance was introduced 1149 numbered “The Law on Audit and Supervision of Insurance Companies”. In 1938, some of the articles were amended and put into force. In parallel with these developments, insurance companies were attached to the Ministry of Commerce in 1939. In 1952, the institution has gained a legal entity and changed its name to “Association of Insurance Companies in Turkey” which was certified by the Council of Ministers. The inclusion of the reinsurance companies in the association was realized in 1954 and the name changed to “Association of Insurance and Reinsurance Companies of Turkey”. After five years, the first law in insurance was declared; 22.01.1959 dated and 7397 numbered “Supervision of Insurance Companies”⁴ was put into force. The law had been

¹ The name of the building

² Original name: “Ecnebi Anonim ve Sermayesi Eshama Munkasem Şirketler ile Ecnebi Sigorta Şirketleri Hakkındaki Kanun-u Muvakkat”

³ Original name: “Sigortacılar Daire-i Merkeziyesi”

⁴ Original name: “Sigorta Şirketlerinin Murakabesi hakkındaki Kanun”

in force until 1987. On 11.06.1987, some of the articles were removed of the 7397 numbered law and with the addition of new articles; a new law 3379 numbered “Supervision of Insurance Law”⁵ was replaced. This law provided the issuance of regulations of insurance-related bodies and their activities. Insurance companies were affiliated with the Undersecretariat of Treasury and Foreign Trade and accepted as part of the financial structure.

The importance of this law Insurance Association had gained a public acceptance representing the industry. Another important contribution of the law was that the selection of insurance association members would be realized within the supervision of a judge.

As the number of newly established insurance companies increased over time, it was necessary to make some arrangements in Law No. 7397 with the Decree Laws enacted since 1993, since the insurance demands did not increase at the same rate. At the same time, there had been problems in the collection of premiums via insurance agencies. As of January 1, 1995, in order to solve the problem of collecting insurance premiums, the system of tracking premiums through agency accounts was abolished, and a policy-based tracking system was put into practice.

The final revision came in 2007, 5684 numbered and 14.06.2007 dated Insurance Law compiled all the regulations relating to insurance in one framework and still in use. As of December 2020, there are 66 member companies of the association. The composition is 4 reinsurer companies, 22 life and pension insurance companies, and 40 non-life insurance companies.

The traditional grouping of the insurance industry is based on two major separations. The first category is life insurances. Life insurances either guarantee a risk like death or permanent diseases or provide saving funds for a certain period. Non-life insurance is the second category, also called elementary insurance. Non-life insurances consist of two main categories: Health and Property & Casualty (P&C) lines. In some countries, Health insurance is categorized under the Life segment. In Turkey, each insurance line is called branch and branches are opened, combined or amended according to the supervision of Insurance Secretariat of Treasury. As of 2020, there are 19 main branches and 104 sub-branches in Turkey as shown in Appendix A.

⁵ Original name: “Sigorta Murakabe Kanunu”

The development of MTPL liberalization in Turkey is a typical case for a developing country. In 1953, 6085 numbered Motorway Traffic Law was put into force. This law firstly obliged the owners of the vehicles to acquire insurance for the probable damages they can cause. Motor insurance tariffs were determined by the Council of Ministers and they could be changed by decrees. In 1983, a new law, numbered 2918, was launched and it empowered Insurance Supervision Authority established by the federal government to determine the insurance tariffs. Neither of these two laws gave the insurance companies the authorization of determining their own prices in MTPL insurance.

In 2007, a new amendment was done with the implementation of “Implementation Principles of Motor Vehicles Compulsory Financial Responsibility Tariff”. With that law, a new body, the Undersecretariat of Treasury, was assigned to approve the tariffs, which would be proposed by the insurance companies. This was the first in history that, insurance companies were allowed to prepare their own tariffs. These tariffs should be within the range of limits determined by the Undersecretariat of Treasury. The limits were permitted to increase the tariff by 10% and decrease by 5% within the given range. The insurance companies would declare these prices and once the prices are set, the tariffs would be valid and companies could not change for 3 months.

This period was transitory because it gave the signals of a more liberal tariff determination, but at the same time, it did not lead the insurance companies to settle the price completely in one stage. Shortly after, in 2008, insurance companies were permitted to prepare their own tariffs with their own base. This was also a freer step. The supervisor still had the right to review the pricing of the insurance company and could demand change if it foresees any problem with the financial situation. The supervision authority could also check whether the tariff rate creates a dumping in the market or not. Whenever their proposals are approved by the Undersecretariat of Treasury, they could not change the declared tariffs for 3 months same as in the previous period.

The main factor to move a liberal regime in MTPL was the awareness of supervisory authority that determining the tariffs were different from giving acceptance and these two duties were incompatible in reality. Under the liberal system, the supervisory authority focused on monitoring the market, deciding the developments of insurance companies to establish an effective claim management procedure and verifying whether they had developed a healthier tariff based on

systematic actuarial methodologies. The authority was also denoted to eliminate the companies in insolvency, underreserved, mismanaged or could not implement required market practices.

With the introduction of pro-market reform in MTPL insurance, the role of the supervisor changed over time. At the first phases of liberalization, the supervisory board had focused to spread MTPL production among vehicle owners. The board also find it ethical to sustain the prices not too low for policyholders and not too exorbitant rate for the insurance companies. As the market widened with the new entrants and got mature, the main area of concern turned to the crucial ratios of insurance like capital requirement, sound fiscal sustainability and reliable data availability. The supervisory board continued to monitor the tariffs of the insurance companies and if necessary required corrections on individual basis. At the same time, the supervisory board established TRAMER, a central body of MTPL database, where the communications are made through.

3.2 Industry Structure

In this section, Turkish Insurance industry and the trends in MTPL insurance will be introduced. The composition part shows the relative shares of the insurance lines in Turkish market. Premium growth portrays the development of Non-life, motor and MTPL branches for the last nine years. Penetration shows the share of insurance in the total economy. Density measures how much premiums are produced per capita in the economy. The number of insurance companies shows the competition in the market. The number of motor vehicles represents the growth capacity whereas the frequency of claims shows the potential compensations.

3.2.1. Composition

The insurance market in Turkey mainly consists of non-life insurances; 84% of the total Premium production in Turkey belongs to non-life branches whereas the rest 16% lies in the life insurance market in 2019 as shown in Table B1. When non-life insurances are analysed the highest portion, that is 39% of total non-life industry (or 32% of total insurance industry) belongs to Motor Third Party Insurances (traffic insurance). Land Vehicles (Motor Own Damage) has the second-highest

share with 20% of total non-life. The third and the fourth branches are fire & earthquake and health insurances with 17% and 16% of total non-life respectively.

This shows that the major four branches in the non-life market constitute 92% and motor insurances (Traffic + Motor Own Damage) have more than half of the market share in non-life branches. In other words, motor insurances have nearly half of the total production in Turkey. In this respect, Turkey stands much more Non-Life insurance dominated than European Market as depicted in Figure-B2.

3.2.2. Premium Growth

When the growth in the insurance sector is analysed in Turkey in TableC1, it can be seen that the total premium production grows every year. Except for one year (2014), the insurance premiums increased greater than the inflation level in the last seven years. However, when the trend is analysed by using USD based changes, the total insurance production seems stuck in 12 bn USD around and cannot be passing that threshold.

The pension business is also a part of the insurance industry, however; insurance premiums do not cover pension funds. Because pension funds have saving goals whereas insurance premiums show securing the loss or risk. For that reason, Gross Written Premiums (GWP) do not include pension payments. The development of pension funds is analysed in Figure C2.

World insurance total premium production 5.193 bn USD in 2018 where Europe occupies 31,6%, Asia 32,4%, North America 30,8% and finally remaining 5,2% comes from, Africa, Latin America and the Middle East as shown in TableC3. When we analyse the premium production of European insurance industry, there are very big size differences between countries as given in Figure C4. The share of Turkey in European insurance production is 0,69%. The shares of Turkey are around 1% in the other lines as given in Figure C5, C6 and C7 as of 2019.

When we look at the motor specific development, it can be clearly stated that Turkey is a motor country. It has the 9th in Europe in motor production in 2018 as presented in Figure C11. In the motor segment, the premium of Turkey is 3.912 mn EUR which is quite closer to the European average, 4.486 mn EUR. The highest motor producing countries in Europe are the newest members

of European Union or more correctly former east bloc countries. In Bulgaria and Romania, the share of motor insurances occupies nearly 60% of the entire local insurance market. Turkey, in this perspective, is the highest third motor concentrated country in Europe as presented in Figure C12.

Table C13 points out that Turkey has increased its motor production over the last nine years. The rate of growth in this period is 38% in Turkey whereas European growth is 15%. For that reason, the share of Turkish motor insurance is increasing. When looking internally, the motor share in the P&C segment remained over 50% for Turkey for the last nine years. The same ratio shows that it is decreasing in Europe from 39% in 2010 to 35% in 2018.

Motor insurances cover two separate insurance lines. The first one is the financial loss of vehicle, which is owned in case of accident. This segment is known as Motor Own Damage (MOD) and it is not compulsory. The cover of MOD is subject to a variety of risks like accident, fire, natural disasters, small repair etc. The second type of motor insurance is Motor Third Party Liability (MTPL). This insurance is compulsory for all cars, which is active in traffic. The liability function covers all the third party expenses (who are the victim of the accident) either material expenses or bodily injuries.

Although the share of MTPL is decreasing in Europe as shown in Table C14, the scenario is quite different for Turkey. The main reason is of this increase stems from the growth of ownership, increase in MTPL contracts and the price increase of MTPL policies. The growth of overall motor (314%) is also far higher than Europe (10%). Thus, increasing motor business in Turkey also causes an increasing share in favour of MTPL in nine years period as depicted in Table C15

There are also significant differences in average MTPL premiums (premiums divided by the number of policy) in Europe. The minimum MTPL premiums are in Latvia with 34 EUR and highest in Italy with 348 EUR where European average is 205 EUR in 2016 Turkey is very close to the European average with 207 EUR in Figure C16. The tendency in MTPL premiums is also declining for European market as illustrated in Table C13. However, Turkey represents an opposite trend, starting from 37 EUR in 2005 comes to the highest level in 2016 with an increase of 456% in the same period.

3.2.3. Penetration

Penetration is the share of insurance industry in total Gross Domestic Product. It shows the importance of the industry in the whole economy.

As given in Table D1 the share of insurance in total GDP is around 1,5% for the last years in Turkey. It can be also mentioned that the share of insurance has gradually moved from 1,3% to 1,6% in the same period. Premiums (USD) line in Table C1 and the GDP (USD) line in Table D1 together also represent that when the Turkish economy shrinks, the decrease is also reflected in insurance industry. There is only one exception. In 2019 although Turkish economy experienced a drop in GDP at 2,2%, the premiums increased 7% in the same year. For that reason, the penetration rate has increased by 0,1%.

Penetration in life and non-life sectors are aligned with the big picture. The non-life segment in Turkey has %83 share in total insurance industry, as a natural consequence, the non-life premiums to GDP (1,25%) is higher (Trading Economics, n.d.-b) than the life premiums (0,25%) (Trading Economics, n.d.-c) in 2018. Although Turkey has a steady increase in motor penetration, it is still lower than the European average, which is 0,82% in 2018 as given in Table D4.

3.2.4. Density

Density is calculated by dividing the gross written domestic premium to the population. In another word, it shows the average insurance premium per citizen.

Table E1 points out that the density in Turkey somewhere in 150 USD per head for the last ten years. Similar to the penetration, the density in the non-life segment is five times greater than the life segment. This very sticky density depends not only on premium production itself, it is also affected by the level of population and the change in the exchange rate. The increasing population and the depreciating TRL values do not give any opportunity to increase the density.

By looking at the 2018 density measures in Figure E2, it can be stated that Turkey has the lowest value with 111 EUR average premium yearly. The average of Europe is 2.163 EUR, which is nearly 20 times greater than Turkey.

The density measures in the motor insurance segment are shown in TableE4. Here it worths emphasizing that in the last nine years the density in Europe increased only 29 EUR per head corresponding to an increase of 14% for the mentioned interval. Per head, motor premium in Turkey increased 35 EUR at the same period corresponding to 276% increase. This represents that Turkey continuously increasing its growth in motor lines.

Though Turkey increases its motor production regularly and continues to increase relative motor share in its own economy, it has the smallest per head motor insurance in Europe within 32 countries. The average European motor premium per head is 237 EUR, which is nearly five times greater than Turkish density (48 EUR).

3.2.5. Insurance Companies

In Turkey, the number of insurance companies is around 60 and this number is lower than the European average of 104 as presented in Figure F1. The half of the insurance companies operate in motor lines in Turkey. The increasing production and the number of vehicles caused 10% increase in the number of motor firms in Turkey in the last nine years. In the same period, the number of active motor producing companies has decreased 10% in EU as shown in Table F3.

3.2.6. Motor Vehicles in Turkey

The internal market of Turkey grows faster. When contrasted with stagnant EU average, in the last five years, Turkey (23,9%) performed almost three times more than Europe (8,5%) as shown in Table G1.

Motorization rate shows the ownership of motor vehicles or more correctly, vehicles per 1000 inhabitants. The motorization of Turkey (153) is the lowest value in Europe as given in Table G2. Although motorization in Turkey is less than half of the European average, the increase in the last five years is 2,7 times more than EU.

When we look at the MTPL insurances by vehicle types, cars are the biggest vehicle type in insured policies in Turkey. It constitutes 64% of all MTPL policies and 54% of the premiums produced in 2019. The second major vehicle group is the trucks, which has the 18% of the insured vehicles. The premiums gathered from trucks covers 20% of MTPL premiums. Truck premiums have a higher share when contrasted with the number of policy because the average premium prices are higher in trucks than any other vehicle.(Türkiye Sigorta Birliği, 2019b)

3.2.7. Claims

Frequency of MTPL claims refers to the number of MTPL claims notified divided by the number of insured vehicles. Frequency of claim is an important indication of risk exposure of a policy for that reason directly affects pricing. There are many reasons affecting the frequency like geographical conditions, driving habits, road and traffic-related factors, population and demographic distributions. At the same time legal environment like litigation rules, exceptions, perceptions and the decisions of the courts directly influence the claim frequency.

The average MTPL claim frequency in Turkey is 7,5%. This is the highest frequency when contrasted with Europe (5,1%). In the last ten years, MTPL frequency increases 29% in Turkey whereas it decreases 17% in Europe.

Of course, it should be noted that all the decreasing trends in premiums, average policy cost, claims and claim frequencies reflect one common reality. The slowing down sales, coupled with the stagnation in the industry, increasing controls on MTPL pricing and decreasing claim amounts favour competition and low-profit margins. On the other hand, unexpected judicial decisions, especially in bodily injuries suddenly creates ambiguity and increasing the scope for future claims.

3.3. Motor Third Party Liability Insurance (MTPL)

3.3.1. MTPL Components

World Bank studies suggest that in most countries, MTPL is kept compulsory to protect the public and the majority of non-life premiums consist of MTPL. On the other hand, former centrally planned economies introduced MTPL only few decades ago but it is not understood fully. The protection of majority concept perceived odd because most of the motorist treat them as tax to evade, rather than perceiving as a shelter for their liability.

The main elements of MTPL insurance are summarized in five steps. The first component is the legal structure. The essence of MTPL requires the establishment of a fair price. The price should give the insurer a surviving area. In an industry where inflation and upward trends are seen, costs are handled by the insurers with one-year contracts. Companies can lose good business or gain bad business very quickly with the renewable basis of MTPL contracts. For that reason, in many developing countries, there are price ceilings. States also try to maintain the necessary information for people. Even if a fair price is determined, the consumers need to have information to obtain the price. The other side of the coin also urges consumers to buy the policies, which lead insurance companies to run meaningless competition. As a result of these concerns, regulation can limit the extent of competition, control the entry, determine the price, set the coverage, and change the methodology of calculation.

The second component is a careful establishment of actuarial data. However, in MTPL the price cannot be set by analysing the data. In inverse sequence, when the prices are set the regulator can change the scope which creates uncertainty for the insurer. Long-time claim activity also affects profitability especially in developing countries court decisions and contract resolutions took longer periods. Therefore, an old policy may bring historical claims with its long time duration. Cycles in the economy are also reflected in the MTPL market.

The third component is the necessity of contingency reserving. Guarantee Fund in this perspective is the warranty of insolvent or uninsured guilty drivers for the insurers. In some cases, Guarantee Funds deal with various kinds of business like detecting the stolen cars, insolvency of insurance

companies, lowering the uninsured driving and tracing the drivers. Guarantee Funds are not only confined with narrow coverage in MTPL. Guarantee Funds are non-profit organizations set up by Insurance authorities of governments under the control of supervisory boards of insurance. The regulations also clearly define the responsibilities, job roles, board members and transparent reporting of financial operations of the Guarantee Funds. Guarantee funds became more indispensable in developing countries where the fraudulent activities, increasing leakage and poorly supervised jurisdictions play a crucial role in functioning the market.

Claim management is the hearth of daily operations of MTPL insurance. Data collection, establishment of data sharing mechanisms, and monitoring of claim services guard the benefits of the policyholders. The competition in the MTPL market forces insurance companies to excel in their claim operations. Additionally, the quality of the services is not enough alone it should be an efficiency tool to decrease their operational expenses. Insurance information centres also help to build collaboration between insurance companies and other industry institutions especially in identifying uninsured drivers, simplifying and unifying MTPL practices on standard frameworks, and development of early watching signals to detect and prevent fraud risk.

Finally, reinsurance is the fifth component. The risk transfer can benefit the insurer to protect its capital and make it predictable of claims. In MTPL business, the severity and frequency related risk can be directed to reinsurers and provide an extra instrument to maximize the profitability. Reinsurance option provides capacity related advantages, expertise option for non-experienced areas, stability help to smooth the expectations, financial leverage as an alternative in operations and lastly protection for large amount of claims at once.

3.3.2. Why MTPL matters in Turkey?

MTPL is the biggest line in insurance and plays a crucial role in income generation. Traditionally Turkish insurance market has always been under the impact of the country's turbulent economic and political situation. Life insurances have lured foreign investors due to high demographic attractiveness but high-interest rates put an inevitable barrier for a rapid growth in life and pension businesses. In the non-life part, the catastrophic risk from earthquake events forces insurers to

secure themselves in reinsurance agreements for property & casualty businesses in retail and corporate lines. This drifts the market to motor oriented growth opportunities. On the other hand, motor lines which occupy more than half of the market are further susceptible to the changing regulatory framework. The ongoing underperformance of MTPL has the highest vulnerability to legal and regulatory changes. The unpredictability of the MTPL market historically creates significant disruption together with frequent regulatory change, increasing claim cost due to currency-related claim inflation, pricing caps, limited or no room to recover the losses. In this sense, investment income is the only instrument left to the insurance companies to manage the MTPL risks.

One of the biggest challenges in profitability was realized when a significant judicial decision has widened the scope for bodily injury claim payments in 2015. This decision increased the number of files by including into the scope already settled agreements, which created a rapid boom in the claim payments. Insurers tried to increase their reserves in order to meet the new conditions by strengthening IBNR (incurred but not reported) claims therefore were exposed to lower profitability.

MTPL is a long-tailed insurance product from an actuarial point of view. This means that the claim settlement business is mostly finalized long after the occurrence of the damage. The reason is that the lawsuits coupled with the damage files can be decided in long periods this prolongs the duration between when the damage occurs and when it is due for payment. Thus, when pricing the MTPL, the time value of losses are taken into account and incurred but not reported claims are considered in claim reserving. In long-tailed insurance lines like MTPL, insurance companies may benefit from this retarded cash-out and enjoy high return investment income from the early premium collection and late payment.

Insurance companies try to secure themselves by delaying their compensations. Retarding slowly the settlement process provides the companies cash improvements from financial perspective. In most of the developing countries, slowing the claim payment process usually couples with low statutory premiums. This also creates a cycle that low MTPL premiums weaken the credibility of the insurance industry.

Low premiums in MTPL line also pacify the policy owners. It creates a misleading signal that the premiums are comparatively cheaper and they do not care about their driving habits. This psychological perception is illusive in the long run because unless the individual incentives are not taken, the level of prices inevitably increases in the long run. Consequently, insurance companies subsidize themselves in charging higher prices in other non-compulsory lines to compensate MTPL. This leads to a two-step distortion; first, a fictitious profitability in non-compulsory insurance lines is seen, secondly it discourages the customers from the insurance market as a whole.

The claim settlement process and the long-tailed spirit of MTPL insurance especially matters for the developing countries. Because the claim settlement process in developed countries is much faster than in developing countries. By contrast, in developing countries, only a very negligible portion of the whole claim occurs when the premium contract is sold. This character is also taken into consideration in IBNR calculations.

3.3.3. Why Claims Grow? Bodily Injury

Mainly MTPL insurance covers two kinds of claims: The first one is the property damages resulting from the insured vehicle. The guarantee limits of MTPL insurance is quite low for property damages, but the frequency of these damages is quite high. Secondly, MTPL also guarantees bodily-injured claims, death, permanent disease and other bodily injuries. Here the limits are high, but the frequency is lower than property damages. Finally, property damages are can be more easily calculated and agreed upon when the risk occurs. However, in bodily injuries, the total cost of medical expenses cannot be calculated since the treatment may take months. In this respect, bodily injury claims extend the duration of claims payment.

The number of bodily injuries and material property damages both increasing in MTPL claims in Turkey. However, the inner composition drastically changes. In 2009, the share of bodily injuries was only 10% of MTPL claims.(Türkiye Sigorta Birliği, 2009)However, as the judicial authorities enlarged the scope of MTPL especially in bodily injuries and deaths, the share of bodily claims rose to 32% in 2019(Türkiye Sigorta Birliği, 2019b). The property damages are still the highest in paid claims in Turkey.

The claim frequency in bodily injuries for Turkey shows a drastic change over a decade. In 2005, the frequency was only one-fourth of the European average. In 2015, with the impact of court decisions in favour of the victims, both the frequency and cost started to increase and the bodily injury frequency became double of European average in 2016 as shown in Table H2. With this steady increase in frequency, Turkey has the highest value in Europe. When compared with the second-highest country (0,97%) Italy, Turkey's frequency is 32% greater than Italy. This means that Turkey remains quite alone in bodily injury frequencies than other European countries.

3.3.4. Why MTPL compulsory?

According to the statistics of World Health Organization (WHO, 2018), approximately 1.35 million people die each year as a result of road traffic crashes. Road traffic crashes cost most countries 3% of their gross domestic product. Ninety-three percent of the world's fatalities on the roads occur in low- and middle-income countries, even though these countries have approximately 60% of the world's vehicles. The numbers for the injuries are also worrisome. Every year between 20 and 50 mn people suffer from non-fatal accidents and many of them have permanent disabilities as a result of injuries. Traffic accidents are the number one ranked cause of children and young adult deaths between 5-29 ages. It is also the 8th leading cause of deaths of all ages. The death rates in lower-income countries are three times higher than the high-income countries (Global Status Report on Road Safety, 2018). To underline the problem, WHO uses the term "hidden epidemic" to denote motor accidents.

The primary function of MTPL insurance is to guarantee the damages of the third parties arises from the faults of the insured vehicle. Since the victims cannot be expected to have insurance, these damages should be borne by the insurer as long as the insurance premiums are timely and adequately collected. The existence of the regulatory power maintains that the rates charged by insurance companies should compensate for the losses that have occurred. The objective of the regulatory bodies is to ensure that determined premium should be adequate for the insurer to maintain its supply and be affordable for the insureds to demand at the same time (Henebry & Rejda, 1995).

Tariffs in insurance is an instrument for pricing depending on different criteria. For example in MTPL insurances the premium pricing is dependent on the age of the car, previous accident logs, the geographical place it is driven etc. At a very broad level, all tariffs in insurance lines can be categorized as either compulsory or liberal depending on the interference of the state authority.

The legal authority also puts protection articles to cover the damages. For example in Turkey, Highway Traffic Law numbered 2918 obliges insurance companies to compensate the cost in two years periods when the claim is reported and in ten years period when the claim has occurred.⁶

3.3.5. Competition and MTPL

First of all, it should be noted that being compulsory by the public authorities does not mean the prices are determined by the state in MTPL insurance. Today most countries oblige MTPL insurance but there are varieties of combinations in pricing. On one edge, there might be one seller in the market, or on the other edge, there might be many MTPL insurers in the market. Between these two extreme conditions, there might be several interventionist or semi interventionist structures in the market.

Whatever the level of competition the MTPL market has, pricing is heavily affected by economic and political issues and in most cases, it is perceived as a material expense from both the driver and the vehicle owner point of view. Firstly, MTPL policyholders suffer from inflation, actually higher than the normal inflation, because there are many services engaged in claim processes like spare parts for damages and medical inflation. Thus, MTPL prices tend to increase in real terms in all countries.

Secondly, the cost of MTPL affects the level of business for the commercial vehicles. In this case, the profitability of the owner's business is affected by MTPL pricing. Thirdly, especially in developing countries, the causal link between bad driving and higher MTPL premiums cannot be understood. The prior faults of the driver is an absolute indicator of higher prices for the following years. In the same manner, good driving causes the premiums to be discounted.

⁶ Article 109

Fourthly, the drivers are against higher premiums because emotionally they do not accept bad driving. Therefore, in general, MTPL pricing creates a natural objection.

Of course, risk separation of the insurers is not the only problem of free pricing in MTPL. There are also social cases where competition fails to solve. These cases are not individually meaningful, but when evaluated within the whole society and in the long run, a collective community standard needs to be improved. Additionally, these perils do not seem economic, rather social and political at the first glance. However, it is needed to be underlined that these results will have economic consequences if they are not taken into consideration by the state officials.

These discussions foresee that there is no unique solution. Every country has a different background, tariff structure, MTPL market. Competition in the market may form in different shapes as time passes and necessitates different reforms in each case.

3.3.6. Leakage and Uninsured Driving in MTPL

Leakage in MTPL insurance is the ratio of uninsured cars to the total auto pool. Though compulsory, the average MTPL leakage in Turkey is around 20%. Leakage partly stems from automobiles (10%), but actually occurs from motorbikes (70%) and tractors (50%) respectively. When it is deeply analysed according to the vehicle type, November 2020 results are in line with the averages as shown in Table II. The table also asserts that though automobile type constitutes more than half of the total vehicles in Turkey, the distribution of the leakage points that the motorbike is the most problematic group. The number of motorbikes is one-third of the automobiles in the market, however; their uninsured ratio is 10 times greater than automobiles. This brings the fact that one out of every two uninsured vehicles is a motorcycle.

The leakage ratio differs from region to region and from one vehicle type to another. When the first ten cities which have the greatest number of vehicle in Turkey is analysed as of November 2020, it is deduced that, they constitute the 55%⁷ of the total vehicles in Turkey as depicted in Table I2. This indicates that the remaining 71 cities have 45% of the total existing vehicles in

⁷ Calculated by the total of # of vehicle row in Table-I2 divided by the Total Column of # of vehicle in Table-I1

Turkey. The weighted average leakage ratio of the highest ten-city, which is 18,3%⁸, is a little bit lower than the remaining 71 cities' average, which is 23,5%.⁹ It could be stated that the more the city has the greater number of the vehicle, the lower the rate of leakage.

Many countries apply monetary sanctions against MTPL leakage. In Turkey, a monthly penalty is imposed on owners of uninsured cars. The monetary amount is 0,16% of the premium for each month if the insurance is not renewed. Additionally, there is also legal sanction that owners of uninsured cars lose their right to no claims discount. This causes that they must pay their existing policies at a higher rate.

3.4.Major Players in MTPL

The Turkish insurance market can be categorized into four different structures depending on the functions of the organizations. Insurance companies are the active policy producing organizations run by either state or private enterprises. The second group is the state authorities responsible for the administration and monitoring responsibilities. The third group are the state-led organizations which expertise in a specific area and are responsible for monitoring and designing the insurance line in particular. The fourth group is the occupational associations, which performs a specific task or intermediary function in insurance like agents, brokers, actuaries or experts in specific lines.

3.4.1. Insurance Companies

Insurance companies in Turkey may operate non-life or life segments. According to the 24.08.2007 dated and 26623 numbered Regulation on Establishment and Working Principles of Insurance Companies and Reinsurance Companies, an insurance company can operate either in non-life or in life segments¹⁰. Non-life insurance companies can operate under 18 different branches and 95 sub-branches as long as they have licences separately from the Insurance Secretariat of Treasury.

⁸ Calculated by # of uninsured / # of vehicle in Table-I2

⁹ Calculated by (# of uninsured (Table-I1) - # of uninsured (Table-I2)) / (# of vehicle (Table-I1) - (# of vehicle (Table-I2))

¹⁰ Article-11

As of 2020, there are 39 non-life insurance companies in Turkey. The existing non-life companies and their licenses are given in Table J1.

When the companies are analysed in which insurance lines they operate in non-life segment, only 6 insurance company operate in all branches (18 branches) and 17 insurance company operates in 17 branches. This shows that more than half of the non-life insurance companies operate in 90% of the insurance branches. This is a clear indicator that the companies follow a strategy to generalise in all insurance branches. There are also few insurance companies, which only focus on one or two branches. Their core business is very distinguished from other branches like credit insurance or bond insurance; nevertheless, their numbers are quite a few.

When analysed from the insurance branches point of view, miscellaneous and accident branches are the most licenced ones. 34 companies out of 39 operate in these branches. The minimum players are in the assistance branch (13) where assistance insurance is a very niche type that requires more specialization.

3.4.2. Agents

According to the article 2/m of the 5684-numbered 03.06.2007 dated and 26552-14.06.2007 published “Insurance Law”, an insurance agent is anyone who has the profession to mediate insurance contracts on behalf and account of insurance companies in a certain place or region, based on a contract without a subordinate title such as a commercial agent, commercial agent, sales officer or employee. Agencies have the profession to make them on behalf of insurance companies, who conduct and assist in the execution of the contract and the payment of compensation,

Agencies are indispensable actors of the insurance industry. Due to their importance in the sector, it is extremely important that institutionalization of these professions. Agencies are also crucial in determining their moral values and carrying out the necessary procedures regarding licensing and registration procedures. Because of their important impact in the insurance market, and institutionalization of insurance agents are embedded in the structure of The Union of Chambers and Commodity Exchanges of Turkey (TOBB).

According to the article, 23 of the 5684-numbered Insurance Law, Real people and legal entities can be insurance brokers. Those who want to establish an insurance agency, and maintain it, should apply to Turkey the Union Chambers and Commodity Exchanges must be written on the sheet held by the Association.

For real persons, in order to be an insurance agent, the first rule is that they should be located in Turkey, Secondly, they should have a clear criminal record, even if they were forgiven for a deliberate crime, they should not be sentenced to more than 5 years of imprisonment. Thirdly, they are obliged to fulfil the minimum assets requirement. According to the article 9 of 29221-30.12.2014 published “Regulation relating the updates in Insurance Agents Regulation”, the minimum paid-in capital should be 50.000 TRL and at least 50% of the assets to be declared must consist of investment instruments that can be easily converted into cash, such as cash, deposits or government debt securities. Similarly, for the legal entities, they have to be established either as a joint-stock company or a limited company and their centre should be in Turkey. The capital requirement is 300.000 TRL for their headquarters. If the agencies open branches in addition to their headquarters, they have to increase paid-in capital to 25.000 TRL for each branch. Lastly, for the establishment of an insurance agency for legal entities, it is necessary to employ a General Manager with a seven-year of insurance experience with a 4-year university degree and a Deputy General Manager with five years of insurance experience coupled with a 4-year university degree. All these requirements should be satisfied individually.

For the banks and other institutions, which are established by a special law and authorized to act as an insurance agency, the requirement of registration to Union of Chambers and Commodity Exchanges and obtaining the agency license from the Undersecretariat of Treasury is not necessary.

3.4.3. Brokers

According to the article 2/d of the 5684-numbered and 14.06.2007 dated Insurance Law; “Broker” is defined as the legal or real person who represents his clients who want to have insurance or reinsurance contracts, acting completely impartial and independent in the selection of the companies to be made out of these contracts. Brokers take care of the rights and interests of those

who want to get guarantees, carry out the preparatory work before the conclusion of the contracts and assist in the implementation of contracts or the collection of compensation when necessary.

Insurance brokers, which are different from insurance agents, do not work for a company. They provide consultancy services on behalf of the insured. The insurance broker does not represent the insurance company; it serves on behalf of the insured person and institution. Agencies provide services depending on insurance companies.

Article 21 of the 5684-numbered Insurance Law states the requirements in performing brokerage services. In order to perform the job, brokers should get a certificate from the Undersecretariat of Treasury. The Undersecretariat may assign duties to relevant non-governmental and professional organizations to prepare the license-related transaction operations and make them ready for examination and approval. Procedures and principles regarding brokers' duties and powers are determined by a regulation. The first regulation has been put into effect with the 26913-21.06.2008 published Insurance and Reinsurance Brokers Regulation.

Requirement for being a broker is very similar to the ones for insurance experts. Partners of insurance companies, insurance agents and insurance experts, persons who are in their management and supervision and authorized to sign on their behalf and company employees engaged in professional activities cannot act as a broker. They cannot take part in the legal entity broker's management and supervisory boards and cannot work as authorized signatories. They can neither be a partner to broker firms nor accept any work from them for a fee. These restrictions also apply to the spouses and children of the persons in question. In some cases, due to illegal activities, some people are dismissed from performing broker services in these circumstances those who are prohibited from working as insurance brokers cannot be employed in brokerage-related activities and cannot cooperate with these persons in any way for the execution of the brokerage profession. Relating the personal data, insurance brokers and their employees cannot disclose the information and secrets they have learned from their work without the consent of those concerned. However, it is obligatory to inform the competent authorities of criminal cases.

According to the 2020 November results, 11,5% of the premiums written by the insurance companies are produced through brokers. The highest share of the brokers are in marine liability

(83,1%), environmental pollution liability (79,7%) and credit (72,1%) lines(Türkiye Sigorta Birliđi, 2020a). According to December results, there are 151 active brokers in Turkey (Sigorta ve Reasürans Brokerleri Derneđi, n.d.).

3.4.4. Experts

Article 22 of the 5684-numbered 03.06.2007 dated and 26552-14.06.2007 published “Insurance Law”, defines broadly the concept of insurance experts. They determine the amount, reasons and qualities of losses and damages arising from the realization of the risks subject to insurance. Insurance experts perform the works such as mutual valuation, pre-appraisal and damage surveillance as their usual profession. For the nature of their functions, they can also be called Loss Adjustors. Insurance experts might be either real persons or legal entities. Insurance experts might perform under different insurance lines. For each line, they have to have Insurance Expert Certificate from the Undersecretariat of Treasury first. Then they apply to the Union of Chambers and Commodity Exchanges of Turkey (TOBB) for registration.

Insurance experts as real persons are obliged to perform their operations as a regular profession. Real person insurance experts cannot engage in any other business that is not compatible with the qualification of the profession and cannot engage in an insurance agency and brokering activities. Furthermore, a real person insurance expert cannot open more than one office.

Legal entity insurance experts must operate exclusively in the field of insurance experts. In case of doing business as a legal entity insurance expert, the expert title is assigned to the entity itself, not a specific real person. However, an authorization certificate is issued by the legal entity insurance expert who will follow the work. In the examination report of the legal entity insurance expert, the signature of the real person insurance expert is also included in addition to the company stamp. Real person insurance experts working with and on behalf of legal entity insurance experts cannot accept work independently from legal persons, cannot hold a paid projects or salaried positions, and under no circumstances can work on behalf and account of another legal entity insurance expert.

As of December 2020, there are 613 legal entity insurance experts (Türkiye Odalar ve Borsalar Birliği, n.d.-c) and 1261 real person insurance experts (Türkiye Odalar ve Borsalar Birliği, n.d.-a) according to the TOBB registration numbers.

3.4.5. Regulations and Supervisory Organizations

In the insurance industry, there had been a recent change at the end of 2019 re-shaping the insurance supervisory and regulatory organizations. The presidential decree number 47, which was published on 18/10/2019 dated and 30922 numbered Official Gazette, introduced the establishment Insurance and Private Pension Regulation and Supervision Agency (SDDK)¹¹. The decree is a milestone in the structuration of insurance bodies and the purpose of this Presidential Decree is to regulate the procedures and principles regarding the establishment, organization, duties, powers and responsibilities of the Insurance and Private Pension Regulation and Supervision Agency to carry out the duties regarding the regulation and supervision of the insurance and private pension sectors.

Insurance regulation in Turkey is under the control of the Undersecretariat of Treasury. The undersecretariat is tied to the Ministry of Treasury and Finance. Actually, the Ministry of Treasury and Finance consists of several organizational layers: Ministry Departments (23 departments), Affiliated Institutions (6 departments), Related Institutions (10 departments), Associated Institutions (1 department), and Councils & Boards (4 departments). These departments report to the related undersecretary (3 people) and the minister at the end. The organizational chart, before and after the decree is given in Figure K1 and Figure K2.

Before the decree, there were two insurance governing organizations under Ministry Departments: General Directorate of Insurance (SGM)¹² and Insurance Supervisory Board (SDK)¹³. While publication of legislative arrangements in insurance (Law, Council of Ministers Decree, Regulation, General Conditions, Circular etc.) and remote (off-site) audits were carried out by the General Directorate of Insurance, on-site audits of the organizations in the insurance sector are done by Insurance Supervisory Board. There was a clear distribution of functionalities between

¹¹ SDDK - Sigortacılık Denetleme ve Düzenleme Kurumu

¹² SGM – Sigortacılık Genel Müdürlüğü

¹³ SDK – Sigortacılık Denetleme Kurulu

the two organizations. SDK prepared the results of its inspection in the form of a report and sent it to SGM for action within the scope of the relevant legislation. In this respect, SGM carried out the administrative side and SDK provided the controlling function of the insurance industry on behalf of the state. After the decree, the functions of these two organizations are unified.

3.4.5.1. Insurance Supervisory Board (SDK)

Insurance Supervisory Board was founded according to Article 30 of 12.21.1959 dated 7397 numbered Insurance Supervisory Law. The board became responsible for monitoring the insurance business in Turkey as the first example of the autonomous authority in Turkey with the name of “Insurance Supervisory Board”¹⁴ in 1963 in Istanbul. The regulation on the establishment of the Board was published in the Official Gazette dated September 12, 1962.

Due to the association of private insurance activities with the Ministry of Industry and Trade, the Board carried out its activities in coordination with the mentioned Ministry until 1987. With the implementation of Decree-Law number 303, which entered into force on 21/12/1987, all the insurance activities are transferred to Prime Ministry. As a result of the transfer of duties and authorities related to insurance, the board started to perform its duties in coordination with the Undersecretariat of Treasury and Trade under Prime Ministry.

The law numbered 4059 dated 09/12/1994, divided the Undersecretariat of Treasury and Foreign Trade into two separate undersecretariats, the Undersecretariat of Treasury and the Undersecretariat of Foreign Trade. With this law, Insurance Supervisory Board was included among the central auditing units of the Undersecretariat of Treasury.

¹⁴ Original name: “Sigorta Murakabe Kurulu”

3.4.5.2. General Directorate of Insurance (SGM)

In 1959, the "Insurance Supervision Law" numbered 7397 was adopted. The law stipulates the establishment of an "Insurance Audit Board". However, the task of regulating and supervising insurance companies was given to the Ministry of Industry and Trade. The organizational hierarchy did not change until 1987. In that year, the duties and powers assigned to the Ministry of Industry and Trade concerning insurance services by 7397-numbered law were transferred to the Prime Ministry and subsequently to the Undersecretariat of Treasury and Foreign Trade with the 303 numbered Decree-Law in 18/12/1987.

With this transfer, the insurance department was firstly a branch within the Undersecretariat of Treasury under the Foreign Trade General Directorate of Banks and Foreign Exchange, However, as the increasing workload insurance department became a directorate and continued its duties with three sub-branches until 20/12/1994. The General Directorate of Insurance (SGM) was established on 20/12/1994 dated and 4059 numbered Organization of Undersecretariat of Treasury Law. The duties and powers of the General Directorate of Insurance were regulated by Article 2/e of the above-mentioned law. After that date, the organization performed its activities under one of the three Deputy Undersecretariats of Treasury under the Prime Ministry Undersecretariat of Treasury.

General Directorate of Insurance carried out the duties empowered by 5684 numbered and 03/06/2007 dated Insurance Law. On the other hand, insurance-related articles of 09/07/1956 dated and 6762 numbered Turkish Commercial Code, 18/10/1983 dated and 2918 numbered Highway Traffic Laws, 14/10/1983 dated and 2920 numbered Civil Aviation Law were also the sources of the Directorate's functions. Since the legal procedures were not combined until the 5684 numbered Insurance Law was put into effect, there still exist many sources. For that reason, the insurance-related transactions were the subjects of different laws, which enlarged the responsibilities of the General Directorate of Insurance. Naturally, any kind of updates, cancellations, amendments in these articles or newly added provisional supplements re-defined the scope continuously in time.

3.4.5.3. Insurance and Private Pension Regulation and Supervision Agency (SDDK)

As mentioned earlier, 47 numbered Presidential Decree, was published with 18/10/2019 dated and 30922 numbered Official Gazette. The decree was put into force as soon as it was published. With this decree Insurance and Private Pension Regulation and Supervision Agency (SDDK) with administrative and financial autonomy has been established.

The Institution, which has a public legal personality, has been set up to fulfil the duties given by this Presidential Decree and the relevant legislation and to exercise its powers. The Ministry to which the institution is related is the Ministry of Treasury and Finance.

The decree clearly combines the two insurance authorities, Insurance Supervisory Board (SDK) and General Directorate of Insurance (SGM). The decree closes these two organizations officially and replaces them with Insurance and Private Pension Regulation and Supervision Institution (SDDK). At the same time, it is assumed that SDDK is the natural successor of these two institutions.

The independence of the institution is the crucial character. According to article 3 of the decree, the binding aspect of institution decisions is emphasized. The decisions of the institution cannot be subject to appropriateness control. No organ, authority, authority or person can give orders or instructions in order to influence the decisions of the Institution.

The functions of the institution are a combination of SGM and SDK. Firstly, SDDK is enacted to prepare and implement the legislation on insurance and private pension. Secondly, the institution is empowered to take measures for the development of national insurance and private pension practices, to protect the insured and the participants. Thirdly, the institution took over the responsibilities of SDK, namely carrying out examination, supervision and investigation works regarding individuals and organizations operating in the field of insurance and private pension. Fourthly, the institution was given the responsibility of transparent reporting in insurance lines. In this respect, SDDK prepares consolidated reports on insurance, private pension and other relevant financial markets. By doing that, SDDK examines the players in the market and takes into account the developments occurring at home and in international markets.

3.4.6. Other Institutions in Insurance Industry

3.4.6.1. Turkish Insurance Association (TSB)¹⁵

According to article 24 of the 5684-numbered 03.06.2007 dated and 26552-14.06.2007 published “Insurance Law”, Turkey Insurance, Reinsurance and Pension Companies Association is a professional organization, which has a public nature and legal personality. The association tries to develop insurance in Turkey and prevent unfair competition. All insurance and reinsurance companies working in Turkey must be members of the Association within a month after the completion of their establishment, paying their entrance fee and having insurance licenses. Only the President has the authority to lift the obligation of being a member. The working structure of the association is immediately defined with the 26923-07.01.2008 published “Working Procedures and Principles of Turkish Insurance and Reinsurance Companies Association” Regulation.

TSB cannot operate outside of its establishment purposes. Political parties cannot nominate candidates in the elections of the organs of the TSB. The responsible members who operate outside of their objectives are terminated by court decisions upon the request of the Minister or the public prosecutor and new ones are elected in their place. The working principles of TSB are determined by the regulation prepared by the TSB and approved by the Undersecretariat of Treasury. All activities of TSB, are supervised by the Undersecretariat of Treasury.

As of December 2020, there are 66 member companies of the association. The composition is 4 reinsurer companies, 22 life and pension insurance companies, and 40 non-life insurance companies. (Türkiye Sigorta Birliği, 2020b)

3.4.6.2. Insurance Information and Monitoring Centre (SBM)¹⁶

Insurance Information and Monitoring Centre collects insurance industry data in a single centre. It carries out its activities in order to keep it securely, to provide reliable, meaningful information

¹⁵ TSB – Türkiye Sigorta Birliği

¹⁶ SBM – Sigortacılık Bilgi ve Gözetim Merkezi

and statistics for the sector to make healthy pricing. The mission of the institution is to increase the trust in the insurance system by preventing abuses and to help activate public surveillance and supervision.

The institution was first established by 25318-16.12.2003 published the “Traffic Insurance Information Centre” regulation under the name TRAMER¹⁷. With the regulation, TRAMER was appointed the responsible institution for MTPL arrangements in the insurance industry. TRAMER aimed to collect and update the data related to MTPL insurance in a central database and to update these data on a daily basis in order to ensure unity of implementation. It also targeted to prevent insurance frauds, to increase the trust in the insurance system. TRAMER also needed to identify motor vehicle operators who have not been insured to make healthy pricing and similar purposes.

The executive board of TRAMER consisted of 5 members. The chairman is selected from the General Directorate of Insurance (SBM). The other members participate from Ministry of Interior General Directorate of Security, Turkish Insurance Association, Technical Manager from one of the insurance companies, which is a member of Turkish Insurance Association and finally the manager of TRAMER. The operations of the institution are supervised by the Undersecretariat of Treasury.

Until 2008, TRAMER became responsible for the MTPL information among insurance companies. With 26962-09.08.2008 published new “Insurance Information Centre” regulation, the name of TRAMER converted to “Insurance Information Centre” (SBM). The regulation widened the scope of the institution and TRAMER became a sub-unit in the organization. The additional sub-units are established namely, Life Insurances Information Centre (HAYMER)¹⁸, Health Insurances Information Centre (SAGMER)¹⁹, and Insurance Claims Monitoring Centre (HATMER)²⁰ to maintain the same responsibilities as TRAMER, in their own area. With this regulation, SBM became responsible for coordinating the information activities in the insurance industry.

¹⁷ TRAMER – Trafik Sigortası Bilgi Merkezi

¹⁸ HAYMER – Hayat Sigortası Bilgi Merkezi

¹⁹ SAGMER – Sağlık Sigortası Bilgi Merkezi

²⁰ HATMER – Hasar Takip Merkezi

SBM facilitates claim inquiries, accident report inquiries and objections to accidents reports, statistical data and reporting services and provides an MTPL proposal on its website.

3.4.6.3. Assurance Account (GH)²¹

Assurance Account meets medical treatment expenses of those who suffer bodily injuries (disabilities and death), pays disability indemnities to those who became disabled due to such accidents and provide death benefits to dependents who have been deprived of the deceased's support in case of death.

Article 108 of the 2918-numbered, 13.10.1983 dated and 18195-18.10.1983 published "Highway Traffic Law" introduces the establishment of "Guarantee Fund". Guarantee Fund assures the claims when the Compulsory Motor Third Party (MTPL) insurance is absent, or its limit cannot provide to compensate the full amount of damage.

According to article 14 of the 5684-numbered Insurance Law, Assurance Account can be used in:

- For bodily injuries to the person in case, the insured is not detected,
- For bodily damages caused by those who did not have insurance within the coverage amounts valid at the time the risk occurred,
- The bodily compensation amounts to be paid, as the difference between the compulsory insurance coverage limits and the coverage specified in the insurance policy,
- For material and physical damages that the insurance company is obliged to pay in case of cancellation of its licenses in all branches or bankruptcy due to its weakness in the financial structure,
- In case of an accident involving a stolen or seized vehicle, in cases where the operator is not held responsible under the Highway Traffic Law, for bodily injuries to the person,
- For Green Card Insurance applications for payments to be made by Turkey Bureau of Motor Vehicles for damages occurring within the borders of Turkey.

²¹ GH – Güvence Hesabı

Article 4/3 of the Insurance Law and article 8 of the Assurance Account Regulation determine the revenues of the GH. There exist four different sources of income of GH. Firstly for compulsory insurances the insurance companies pay 1% of the premiums and send them to GH. Secondly, policyholders contribute 2% of their net premiums. Thirdly for the Green Card Insurances, insurance companies pay 0,5% of their production and finally, the policyholder of Green Card Insurances contribute 0,5% of their net premiums.

The management committee of GH consists of six members. Two of the members are selected by Turkish Insurance Association among the General Managers of the non-life insurance companies. The other two members are selected from the General Managers of non-life insurance companies, which hold the licences in compulsory insurances and who have not been represented in the board of Turkish Insurance Association. Lastly, one member is selected by Turkish Insurance Association and one participates from the Undersecretariat of Treasury.

3.4.6.4. Turkish Motor Insurers' Bureau (TMTB)²²

The purpose of the Green Card System, which entered into force in 1953, is to assist motor vehicle users travelling between countries and to protect those who are damaged as a result of accidents caused by the relevant motor vehicle users in the countries they travel. Turkish Motor Insurers' Bureau ensures the functioning of the Green Card System in Turkey. In this context, TMTB is the responsible institution and holds the guarantor liability for damages for Green Card Insurances, which would be compensated by member insurance companies. On the other side, it tries to fix the third party damages in Turkey caused by the foreign plated vehicles on behalf of the Green Card insurer.

Until 2017, MTMB was only responsible for the functioning of the Green Card Insurance System, however with the introduction of 30121-11.07.2017 published "Amendments in the Regulation of Tariff Application Principles in Highway Motor Vehicles Compulsory Financial Liability

²² TMTB – Türkiye Motorlu Taşıtlar Bürosu

Insurance (MTPL)” regulation, MTBT had another organizer responsibility about the operations of “Risky Insureds Pool” (RSH)²³ or shortly “Pool”.

The pool was established to ensure the sustainability of the MTPL Insurance system. The sustainability of the system is possible by ensuring that the insurance premiums meet the guarantees offered for insurance companies and that the premiums can be kept at a payable level for the insured. There is a double-sided obligation in compulsory traffic insurance; Operators are obliged to have this policy and insurance companies with license in the relevant branch are obliged to issue the mentioned insurance policy.

The main goal of RSH is to distribute the claim risk in MTPL to the member insurance companies for the risky policies. Risky policies are the insureds who have been in higher claim levels (bad driving performance for past periods) and the vehicle groups which had a higher frequency of claims. Thus RSH, try to avoid the concentration of claim burden on specific insurance companies and minimize the uninsured groups in the risky areas.

The distribution of premiums and paid claims collected in the pool to the insurance companies is made by TMTB in two stages. First, 50% of the damage and premium are shared equally among the members who are licensed in the traffic branch. Then the remaining 50% is calculated and shared according to the market share of the insurance company in the relevant branch of the last three years. According to article 3 of the appendix of the 30121-11.07.2017 published regulation, this ratio is calculated annually and remains unchanged during the year. Claim operations of the policies covered by the pool are carried out by the insurance companies, which issue the policy.

The reconciliation between the member insurance companies and the Pool is made based on the data received from Insurance Information and Monitoring Centre (SBM). The insurance companies pay their debts in cash to the Pool's account within fifteen days after the account document is sent to them.

The Evaluation Committee in TMTB carries out the task of examining and evaluating the pool transactions quarterly. The Committee is composed of three representatives from Turkish

²³ RSH – Riskli Sigortalılar Havuzu

Insurance Association (TSB), TMTB itself and the Undersecretariat of Treasury. The report, prepared as a result of this evaluation, is sent to the Undersecretariat of Treasury and all transactions regarding the pool are subject to the Undersecretariat's supervision. The Committee, whose administrative processes are carried out by TMTB, may request from TMTB to examine the damage files and processes related to the policies within the scope of the Pool if it deems necessary. TMTB sends the report containing the results of this examination to the Evaluation Committee. The Evaluation Committee submits its report to the Undersecretariat of Treasury. The disputes regarding the business and transactions between the insurance companies and the Pool are resolved by TMTB, with the approval of the Undersecretariat of Treasury.

As of December 2020, TMTB consist of 26 member companies, which all holds license for compulsory motor third-party liability insurance.

3.4.6.5. Insurance Arbitration Commission

In accordance with the 5684-numbered 03.06.2007 dated Insurance Law, in order to solve the disputes arising from insurance contracts between the parties policyholder (who secure benefits from insurance contract), and the insurance companies o (which bears the risk) “Insurance Arbitration Commission” was formed in 2009 within the body of Turkish Insurance Association (TSB).

Having the aim of resolving the disputes in the fastest and most accurate way, the Commission offers a new and practical alternative to the applicants in terms of insurance disputes, allowing them to obtain faster and easier results than the court process. In this context, the resolution of disputes submitted to the Commission will be carried out by independent arbitrators within the time limits specified in the Law, unless the parties have an agreement to the contrary.

According to article 30 of the 5684-numbered Insurance Law, The Insurance Arbitration Commission is composed of five members: one representative from the Undersecretariat of Treasury, two representatives from Turkish Insurance Association, one representative from Consumer Association and lastly one member as an academician in Law, determined by the Undersecretariat of Treasury. Undersecretariat of Treasury representative should work in public for at least 10 years with the minimum Head of Department title. Representatives of Turkish

Insurance Association should have a minimum Deputy General Manager title. The representative of the Consumer Association is offered among the three candidates by the three consumer associations, which have the highest number of members in Turkey and are determined by the Undersecretariat of Treasury.

Insured persons who are in dispute with insurance companies that are members of the Insurance Arbitration Commission can benefit from the arbitration system for risks occurring after the relevant institution becomes a member of the system, even if there is no special provision in the contract subject to the dispute.

As of December 2019, there are 51 members of the Insurance Arbitration Commission. The members are: 46 insurance companies out of 60 active total, 2 inactive insurance companies, and 3 specialized insurance institutions namely; Turkish National Catastrophe Insurance Pool (DASK), Agriculture Insurance Pool (TARSİM) and the Assurance Account (GH). For the 48 member insurance companies, 30 operates in non-life insurance segments and 18 operates in life insurances. There are 220 arbitrators in the commission out of 44 work for appeal arbitrators as of 2019.

CHAPTER IV- METHODOLOGY

4.1 Research Method

The major question studied in this thesis is “*how the firms respond to the pro-market reforms*”. In this explorative study, as stated in the literature review, pro-market reforms are the transformation of the norms, laws and regulations. They influence the decision-making process of agents towards more market supporting behaviours. Although given different names like structural reforms, institutional change or Washington Consensus, in this thesis pro-market reform refers to any kind of movement imposed by the policymakers to pursue greater liberalization in international trade, financial area, employment, taxation, and product markets.

The responses of the insurance companies to the pro-market reforms are analysed with five variables: (i) new entries, (ii) price, (iii) market power, (iv) change in products, and (v) change in processes. The first response is the new entries. New entries represent the enlargement of the MTPL market. Enlargement of the MTPL market may occur in three different forms. The first one is the increase in the premiums generated. If the MTPL premiums grow higher than the inflation rates, this means actual quantity growth rather than price increases, more policies would be created as a response to reform. Enlargement of the MTPL market might also be in form of new players entered the market. If the new insurance companies emerge or get license approval for MTPL policy production from the Undersecretariat of Treasury, the numbers of players in the market would increase. New entry might also be in form of FDI. The foreign capital owners might invest in Turkish Insurance industry and become an active player in the MTPL market.

The second response is the price itself. When the pro-market reform is initiated, the fixed price system imposed by the tariff rates would no longer be valid and insurance companies would be able to determine their MTPL price. Here there might be two important issues. Insurance companies might pursue different pricing strategies depending on the vehicle type in MTPL insurance. Secondly, price is also a component of profitability for insurance companies. For that reason, the price related responses of firms to the pro-market reforms also reflect their profitability before and after reform.

The third one is the MTPL market concentration. Here the comparative market share of insurance companies within the MTPL market highlights the response to a pro-market reform. However, the change in market concentration solely, might not be a good indicator of company responses. The business mix of the company complements and helps to clarify the response. The business mix is the internal concentration to MTPL of the company. This is the basic ratio of MTPL premium production of the company, divided by the total insurance premium production of that company.

The fourth, as a response to reforms, is the change in products. When they are implemented, the product that is traded in or served in the market has experienced a change. MTPL policy is generally known as a homogeneous product; maintain the basic required guarantees under certain conditions. However, reforms may lead the change in coverages, city discounts, vehicle discounts, claim compensations and sanctions or renewal opportunities, which would be the strategical response of the insurance companies.

The fifth response is similar to the product level changes. Pro-market reforms have resulted in changes in the process level. The re-design of claim information processes, the reporting schedules, the update in notifications to both customers and agents, the changing pattern of agency commissions calculations are the new processes in the MTPL insurance. In nature, product-level changes and process level changes are quite similar, the difference is that processes do not re-shape the MTPL policy they only contribute “how they are made”, whereas the product level change refers to “what they are made of”.

4.2 Sample

The unit of analysis in this study is the firm. Firms are the insurance companies in Turkey, which operate, in the MTPL insurance branch as mentioned in Chapter III. They are given in Table-1. The table shows the active MTPL producing firms as of 2018.

Table-1 Insurance Companies

Company	Ownership	Origin	Foundation	Size in terms of Capital	Size in terms of GWP	Size in terms of MTPL GWP
Company-01	Domestic	Private	1960	306,00	3.417,34	1.073,05
Company-02	Foreign	Private	1988	529,15	5.848,91	1.528,12
Company-03	Domestic	Private	1925	500,00	5.701,36	1.384,84
Company-04	Domestic	Private	1936	148,50	542,17	298,16
Company-05	Foreign	Private	1994	1.225,74	3.374,67	1.035,29
Company-06	Domestic	Private	1995	59,27	417,13	198,79
Company-07	Domestic	Private	2014	70,00	1.668,71	1.178,27
Company-08	Domestic	Private	1997	486,77	765,02	109,41
Company-09	Domestic	Private	2016	94,50	999,53	725,44
Company-10	Foreign	Private	2007	60,00	1.522,30	133,59
Company-11	Foreign	Private	1989	302,49	259,80	86,72
Company-12	Foreign	Private	2006	445,43	1.346,93	101,07
Company-13	Foreign	Private	2015	180,37	500,53	41,30
Company-14	Domestic	Public	1958	280,00	1.756,19	971,92
Company-15	Foreign	Private	2006	278,96	1.666,95	418,75
Company-16	Domestic	Private	2011	10,65	326,74	258,55
Company-17	Foreign	Private	2007	350,00	2.645,05	845,70
Company-18	Foreign	Private	2009	84,80	1.304,41	714,23
Company-19	Foreign	Private	2009	44,80	603,31	351,95
Company-20	Foreign	Private	2014	63,00	162,09	75,00
Company-21	Domestic	Private	2017	50,00	980,27	874,51
Company-22	Foreign	Private	1958	163,07	906,19	289,25
Company-23	Domestic	Private	1990	102,65	259,24	159,84
Company-24	Foreign	Private	2010	190,00	2.509,17	1.239,04
Company-25	Foreign	Private	2016	20,55	157,09	126,83
Company-26	Foreign	Private	1988	97,00	599,37	185,86
Company-27	Domestic	Public	1957	270,00	1.907,41	414,27
Company-28	Domestic	Public	2010	50,00	2.196,75	99,00
Company-29	Foreign	Private	2008	168,92	691,60	69,10

Source: Data compiled from TSB and financial reports of companies by Author

- All numbers are mn TRL as of 2018.
- Foundation years are also the actual merger or acquisition years.

4.3 Data and Data Collection Procedures

In the thesis, I have used primary and secondary data sources. In order to analyse how the firms respond to pro-market reforms, I made interviews with insurance executives and these interviews are the primary data sources.

The semi-structured interviews had been conducted with 12 insurance professionals. All the interviewees were in managerial and top management positions with more than 10 years of experience. While selecting the interviewees, I tried to reach different parties of the industry (9 insurance companies, 2 associations and 1 agent). Additionally, I also wanted to reach different companies (5 different companies) which would also reflect the big (2 companies which rank in the Top 5 in MTPL premium production as of 2018) and relatively small (3 companies whose MTPL market shares are less than 5% as of 2018) insurance company opinions in order to contrast if it matters. I also tried to get the occupational or functional area of expertise for that reason I preferred different roles. “Finance” is the role where accounting and reporting area of expertise. “Technical” refers mainly to underwriting (setting the right price, to the right market by considering the costs) business. As the name denotes, “Sale” is the operational activity of selling insurance either directly or indirectly via different intermediaries like banks or agencies. The administrative work of associations is expressed as “Other”.

Due to the COVID-19 measures, no face-to-face interview was handled. All the interviews were realized by phone. As shown in Table-2, 12 interviews with a total of 3,5 hours of recording were conducted. The maximum recording was 41 minutes and the shortest one was 20 minutes and the average interview time was half an hour. (Only one interviewee has sent their answers in written form so that I did not record once again for the sake of time)²⁴

²⁴ Participant-12

Table-2 List of Interviewees

Interviewee	Organization	Role	Position	Duration (Minute)
Participant-1	Turkish Insurance Association	Other	Deputy Undersecretariat	41
Participant-2	Company-1	Technical	Vice President-Motor Lines	38
Participant-3	Company-1	Finance	Vice President-Finance	25
Participant-4	Turkish Insurance Association	Other	Deputy President	32
Participant-5	Agent-1	Sales	General Manager	23
Participant-6	Company-1	Finance	Director_Actuary	34
Participant-7	Company-2	Technical	Manager_Motor Lines	29
Participant-8	Company-3	Finance	Manager_Finance	27
Participant-9	Company-3	Technical	Manager_Motor Lines	27
Participant-10	Company-3	Finance	Manager_Reporting	20
Participant-11	Company-4	Sales	Director_Agency Sales	34
Participant-12	Company-5	Finance	Director_Reporting	-
Total Duration				330

Source: Author

The interviews were semi-structured. There were seven questions during recordings, in most of the interviews, the order was the same. However, there were some exceptions. Since the interviewees were not given the questions before the interview if he jumps to any other issue his speech is not interrupted deliberately. Here my motive was to grasp any other issue between the answers. The questions are given in Table-3.

Table-3 Question List

#	Question
Q1	What were the motives of foreign direct investments in insurance industry in Turkey after 2000s? What were the impacts of the entry of foreign companies?
Q2	How was traffic line effected from this flow in terms of prices, market and processes?
Q3	What were the causes of the developments in the insurance legislation after the second half of 2000s? What were the impacts of this legal development in the traffic line?
Q4	What was the importance of Free Tariff System in traffic insurance?
Q5	Why was it abolished and how did it effect the policy-owners and insurance companies?
Q6	How do you define the rush of many small companies to the market in this period? Why did it happen?
Q7	How do you see the future of the traffic line?

Source: Author

The secondary data sources are composed of five different origins. They are the official insurance statistics of Turkish Insurance Association, insurance legislation, industry reports of the Undersecretariat of Treasury, MTPL related news on the internet, and the investigation reports of the Competition Authority.

Firstly, for the analysis of the pro-market reforms related to price and market, the source was the “Official Statistics” of Turkish Insurance Association database. In the insurance sector, insurance companies upload their financials (balance sheet, income statement and technical results), and insurance-related statistics (like number of policies, number of claims, number of personnel employed) every month-end, to the domain of Insurance Association of Turkey which is a special non-governmental organization established by law. The vision of the organization is to help and give guidelines to its member companies. The statistics gathered from insurance companies are available on the internet from the following link. (<https://tsb.org.tr/tr/istatistikler>). The data since 2006 was used to analyse the changes (premiums written, (in total and in traffic), the share of traffic, number of policies, etc.). Company and product base magnitudes were also used for hypothesis testing whether there exists a change in numbers in times of regulatory changes.

Secondly, the responses to reforms relating to changes in product and processes, data was generated from “Legislation” entries of Turkish Insurance Association. This link is open to the public (<https://tsb.org.tr/tr/mevzuat>). When analysing the number of legislations, 854 legal sources had been found as of November 2019. These documents belong only to MTPL Insurance.

Thirdly, for the responses related to new entry, capital structures of the insurance firms are analysed between 2002 and 2018. In this context, firstly, the annual reports of the Undersecretariat of Treasury were the main sources. Starting from 2002 until 2019, operations related to Insurance and Pension Company Reports are available for the public (<https://www.hmb.gov.tr/sigortacilik-ve-ozel-emeklilik-raporlari>).

Then the change of the capital structures is monitored for each Company, for each year from their Annual reports, which makes a 992 different (company/year) combination, created. Finally, each combination is multiplied by the number of the investors for each combination which makes 3.171 different investor shares was listed for any given company/year fair.

The fourth secondary data origin was the internet news about MTPL insurance. In order to see the reflections on how the reforms were responded I conducted a qualitative study comparing the conditions and responses before and after the pro-market reform. In this study, 200 news were selected by order with a search from the internet. The search contained a 22-year period starting from 01.01.1998 – 24.09.2019. The selection is done without any criteria; just the advertisements are excluded and selected from the newest to the old until reaching the total number 200. The main source of the search was Google and Wayback Machine for the older sites of the economic magazines and journals. The archives of journals are also used. In order to filter the undesired news, some of the news like (i) irrelevant topics though including search keywords, (ii) ads, (iii) informative oriented sites, and (iv) agency/insurance company introductions are excluded during the search.

News are grouped according to date of publication, period, source, type of source, author, referenced person, type of reference, subject, caption, keywords, explanation, category of the news, cause, effect, and responsible.

The fifth source of the secondary data was the reports of the Competition Authority. MTPL Insurance Industry had experienced three investigations and to find out whether the pro-market reforms created anti-trust violation, I have searched the decisions of the Competition Authority. The decisions of the Authority are kept on the internet and are open to the public from the following link (<https://www.rekabet.gov.tr/tr/Kararlar>). The search is available by either decision number or date. The search can also be handled by keywords. A total of 285 pages of three decisions has been used.

4.4 Data Analysis

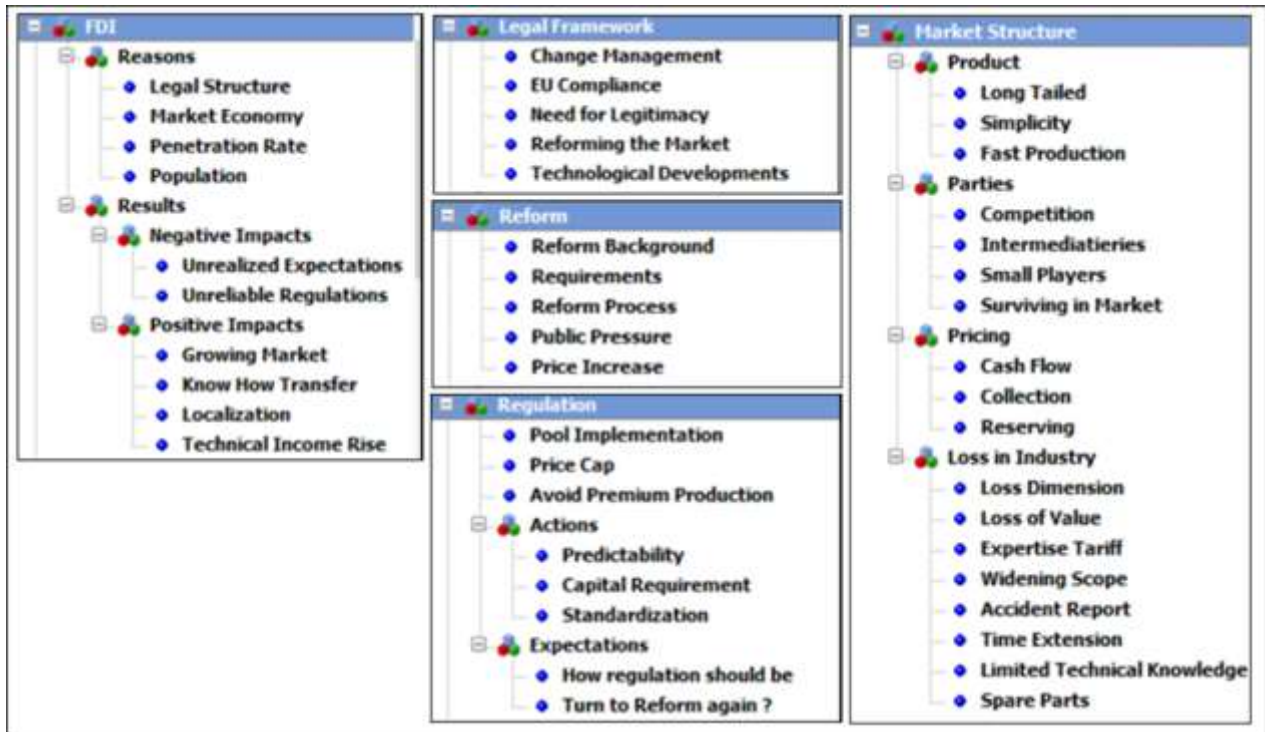
The primary data source was the interviews with the insurance professionals. After completing the interviews online, the recordings were transcribed verbatim. A total of 3,5 hours of interview were transcribed into 78 pages in MS Word. In order to analyse the text, this 78 page had been uploaded to a software analysis tool QDA Miner and by using QDA Miner the text was converted into codes and sub-codes for interpretation.

The questions are designed to verify the earlier results of the studies for that reason in the first two questions; I tried to compare the responses, with Foreign Direct Investment findings. Similarly, the third question corresponds to the study about the legal sources. Actually question four and five target the core of the discussion of market structure, former the pro-market reform and the latter a regulatory reversal in policies implemented. The sixth question can be linked to the studies about profitability in the industry and the market related secondary data. The last question aims to measure the expectations in general.

Since the questions were in a semi-structured pattern, both top-down and bottom-up analysis are used to determine the codes. In the study, the comments are grouped into 5 major code groups, namely Foreign Direct Investments, Legal Framework, Pro-Market Reform, Regulation and Market Structure. Then I tried to group the subcodes of different interviewees. Thus, I used 46 different codes (10 in FDI, 5 in Legal Framework, 5 in Pro-Market Reform, 5 in Regulation and 18 in Market Structure. Since the content in Market structure, I divided it into four different parts,

which is also identical to my previous works. The code groups and the list of codes are depicted in Figure-1.

Figure-1 The Interview Code Structure



Source: Author

For the secondary source data downloaded from TSB internet site relating to (i) new entry, (ii) price and (iii) market power statistics, I have consolidated all the files in one Microsoft Excel format. Thus period based and company based MTPL data would be available for comparison. For the trends, I used the percentage changes and the Compound Annual Growth Rate (CAGR) trends.

Similarly, for the secondary source data downloaded from TSB site relating to change in (iv) product and (v) process, I again compiled all the legislation related changes in one Microsoft Excel file. This table indicated 854 different changes in product and processes approved by the legislation. Here I removed the nominal ones (change in prices or other guarantees) which depend on time frame and reduced the number 142. For these 142 different cases, I used percentage and frequency comparisons in analysing the data.

For the secondary data relating to internet news, I created a matrix table. The topics of the news were grouped as in Table-4. A matrix demonstration is used because 24 of the news were categorized as more than one topic. One of every three news focused on the complaints in MTPL insurance. For the analysis, I used percentage changes and frequencies in comparing periods.

Table-4 The Topics of the MTPL News

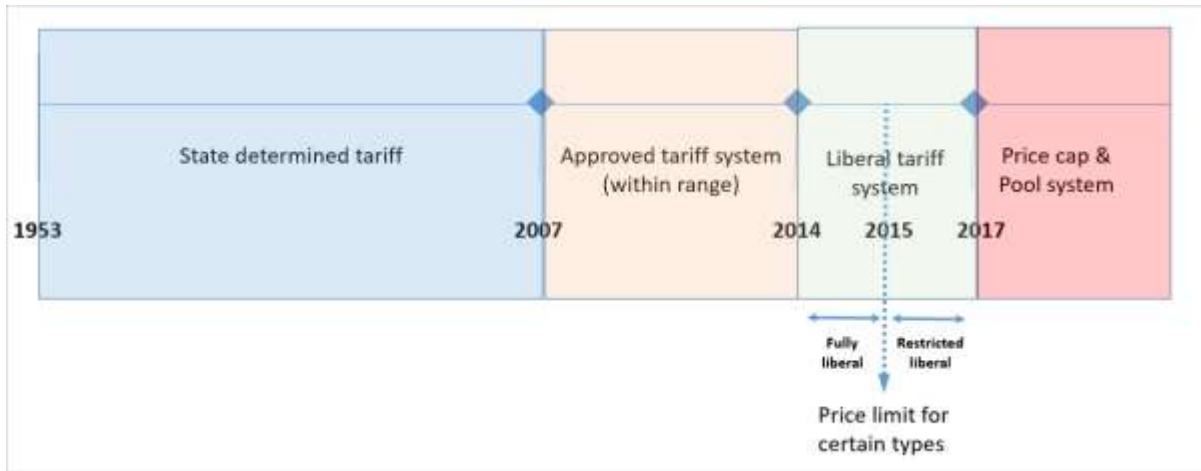
	Complaint	Information	Intervention	Forecast	Demand	Sanction	
Complaint	60		1	4	12		
Information		42					
Intervention	1		31	4			
Forecast	4		4	20	3		
Demand	12			3	13		
Sanction						10	
Total	77	42	36	31	28	10	224
%	34%	19%	16%	14%	13%	4%	100%

Source: Author

Lastly, in my thesis, I evaluated the pro-market responses by comparing the outcomes with the times when there is no reform. For that reason, I used a periodization in the MTPL industry. Thus, the MTPL history in Turkey can be divided into four major parts from the regulatory dimension as shown in Figure-2. In more than sixty years in Turkish MTPL insurance history, the movement starts and ends with regulation. The market reform that started in 2007 took ten years to emerge, mature and dissolve until 2017.

- State determined tariff (1953-2007) – Regulation-
- Approved tariff system (2007-2014) – Partly Deregulation- (Base of pro-market reform)
- Free tariff system (2014-2017) – Fully Deregulation- (Peak of Pro-market reform)
- Price Cap & Pool System (2017 -) – Regulation-

Figure-2 Periodization of MTPL Insurance Tariffs



Source: Author

State Determined Tariff Period is the first and the longest period. The period starts with the introduction of 6085 numbered Motorway Traffic Law on 11/05/1953. According to article 51 of this law, each motor vehicle owner must have a traffic insurance to cover the potential damages in traffic accidents. Then in 1959, 7397 numbered “Insurance Audit Law” underlined the same requirements and in a sense supported the Motor Traffic Law. The law stated that the Council of Ministers had the right to determine the traffic insurance rates. This meant that each insurance company could provide a homogenous price for traffic insurance. In 1985, the right to determine the rates was given from the Council of Ministers to the Insurance Supervisory Authority, which belonged to the Undersecretariat of Treasury in the Ministry of Treasury and Finance.

The approved Tariff Period was the outcome of the new 5684-numbered Insurance Law, which was a milestone. Not surprisingly, one month after the enforcement of the law, the Regulation on Tariff Application Principles in Highways Motor Vehicles Compulsory Liability Insurance (MTPL) became effective with the 26582-14.07.2007 published official gazette. Article 4 of this regulation provided that insurance companies could prepare their own tariff rates within the thresholds of the code permits. The threshold values are 10% above and 5% below the announced tariffs. When the insurance companies set their tariffs within the range, they cannot change them in less than 3 months period. Thus a new period had started. Until that date, the insurance companies could not offer their own prices in traffic insurance. However, the supervisor had the right to review and change the tariff rates of the companies by monitoring their financial strength.

Anyhow, in this period, different prices for a standard traffic policy could be available in the industry.

Approved tariff system had provided a partly flexibility to the insurance companies. In this system, the insurance companies were playing within a margin where the highest difference that could be offered for the same vehicle could vary maximum 15% (above 10% plus below 5%). 28682 numbered 19.06.2013 dated regulation opened rooms for total flexibility in tariff rates. The effective date of the regulation was 01.01.2014 and the Free Tariff Period started. This amendment would bring that each insurance company could pursue its pricing without any limitation or intervention of the state. In technical terms, the prices would be a result of competition, reserving and strategies of the companies.

Flexible tariff period did not survive long and on 27.10.2015, the Undersecretariat of Treasury imposed standard tariffs for truck, bus, minibus and taxis. Regulating the trade vehicles was the first sign for a broader intervention. The fully flexible rate did not last much and the treasury imposed a price cap with a 10.04.2017 dated circular. This cap can only be increased by 1% for each month until the end of the year. The steps other than four could be determined by the increases determined by the rates given by the Undersecretariat as well. The regulation also had two important articles. If the insurance companies do not comply with the given criteria, they would be fined and secondly, the MTPL policies produced before the price cap regulation would not be cancelled and replaced with the new ones. The regulation was not limited to the implementation of Price Cap. Only after three months with the 30121 numbered and 11/07/2017 dated regulation, "Traffic Pool" system was introduced and compensation burden was distributed among insurance companies.

Thus the journey started in 2007 towards a pro-market reform, started in 2007, developed in 2014, came to its peak in 2015. From that year, the pro-market reform period is over and a regulatory period started. With the implementation of price cap and pool system, MTPL insurance came to the beginning point in 10 years.

This periodization would be the basis for my comparisons in analysing the responses.

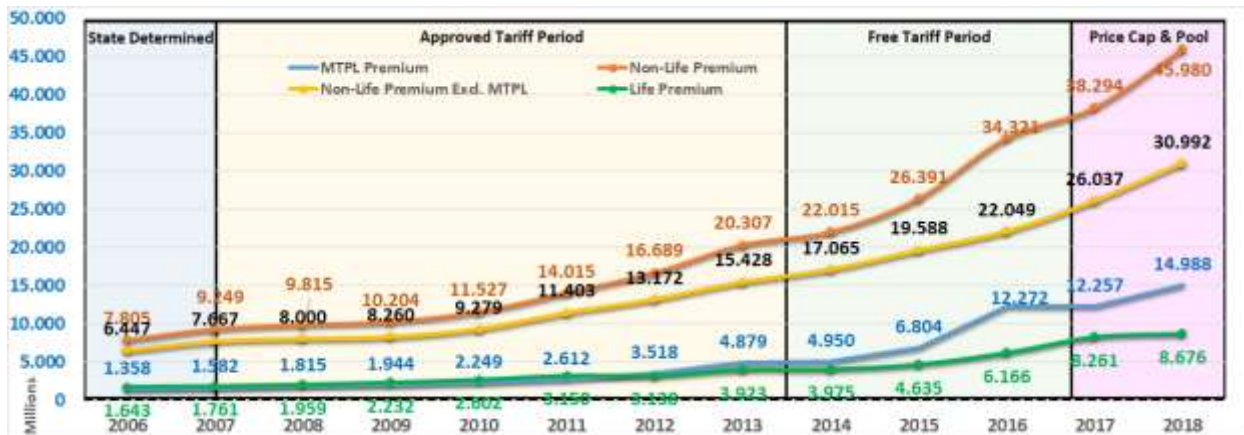
CHAPTER V- FINDINGS

5.1.New Entry

5.1.1. The Growth of Premiums

First of all both non-life insurance and MTPL premiums are increasing over a 12-year time as shown in Figure-3. Though acceleration is quite stable in the Approved Tariff Period, the increase in the Free Tariff Period is steeper. To say it in other words, the rate of change of traffic insurance premiums between 2007 and 2014 is doubled in seven years. However, after the implementation of the liberal tariff system, the premiums increased 1,5 times only in three years. It should also be noted that non-life premiums are increasing in the Free Tariff Period as well but it is not surprising that, as it was mentioned in Chapter III, 39% of the non-life insurance premiums are composed of MTPL.

Figure-3 Development of Premiums by Periods



Source: Author

Contrasting CAGR values of the respective periods exhibit a better understanding of the trend as given in Table-5. The CAGR value of non-life premiums in the Approved Tariff Period is 16% while MTPL premium production value is 22% in the same period. When the pro-market reform is initiated at the beginning of 2014, the CAGR of non-life premiums has risen to 25%, the MTPL CAGR corresponds to 57% in the same period. As expected in the regulated period where the price

ceiling was enforced, both CAGR rates decrease to 20% in non-life and 22% in MTPL. It is interesting that the slowdown in MTPL is slower than non-life even if the regulation is implemented in the MTPL business. This means that when the price cap is enforced in April, the previously produced policies were regarded as still valid and they were not renewed from the regulated price. For that reason, the first quarter of 2017 helped the MTPL values not to decrease further.

Table-5 Compound Annual Growth Rates of Premiums by Periods

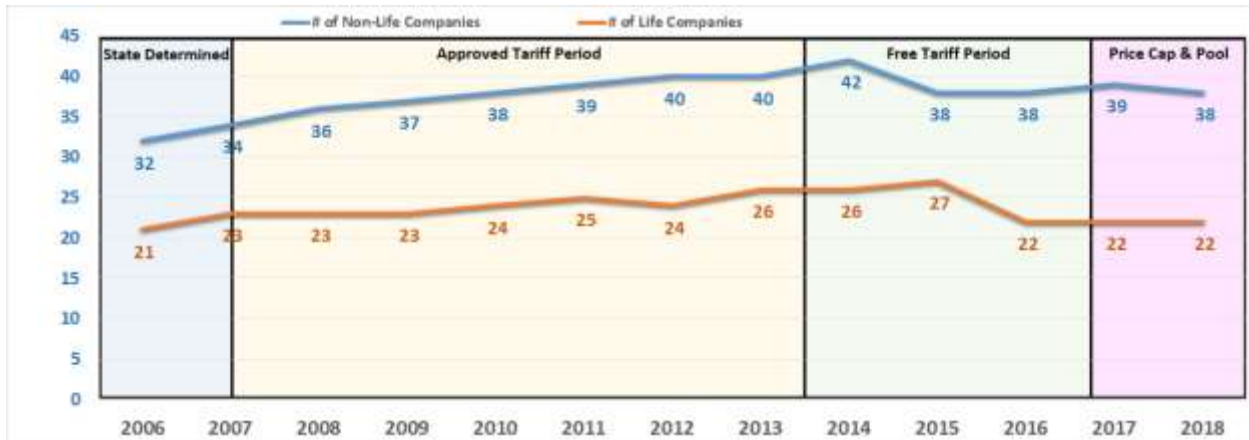
CAGR / Premiums	State Determined	Approved Tariff	Free Tariff	Price Cap & Pool
	Period	Period	Period	Period
MTPL	16%	22%	57%	22%
Non-Life	18%	16%	25%	20%
Non-Life Excluding MTPL	19%	14%	14%	19%
Life	7%	15%	25%	5%

Source: Author

5.1.2. The Growth of Insurance Company Numbers

The increase in the number of companies is a supporting indicator for a more competitive market. When the change is analysed by using periodization as laid in Figure-4, the increase is quite steady until pro-market reform. After that period, with a sudden decrease, the number of insurance companies stay constant. The real reason is not the impact of free tariff implementation. In 2015, the Undersecretariat of Treasury concluded that two of the insolvent companies' licenses were cancelled, and two of the existing firms experienced a merger; that was the real reduction in the Free Tariff Period. On the other hand, the life insurance companies stayed nearly constant during the 12-year period, increasing from 21 in 2006, to 22 in 2018.

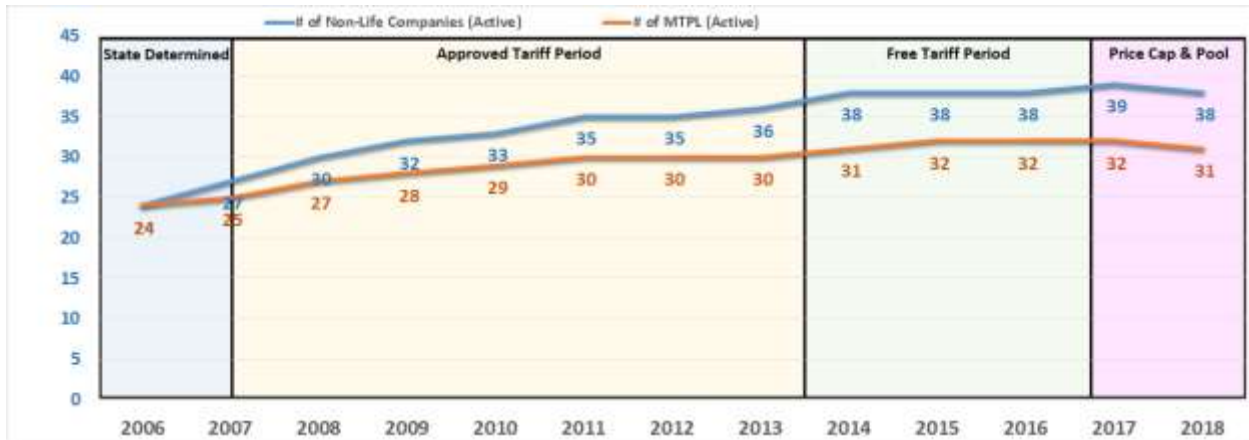
Figure-4 Development of Number of Insurance Companies by Periods



Source: Author

In order to eliminate the impact of inactive insurance firms, Figure-5 concentrates on the active insurance companies, which had not only valid insurance licenses but also issued policies in the given years. Then the decreasing impact in non-life insurance companies in the Free Tariff Period is adjusted. More importantly, the trend in MTPL producing insurance company number exhibits a steady growth in all periods except Price Cap & Pool Period. The change is not significant in consecutive years. The impact of pro-market reform does not add any additional significant change on the level of MTPL selling companies. The trend indicates that, once the reform has taken place, the entrance to the market is not easy due to the strict control. Undersecretariat of Treasury allowed determining their own tariffs of insurance companies but did not let additional licenses for the new companies. The policy is laid on the acquisitions. Since forming a new company is difficult and burdensome, the newcomers preferred to acquire existing ones, that is why there is no significant increase in the number of MTPL producing insurance companies.

Figure-5 Development of Number of Active Insurance Companies by Periods

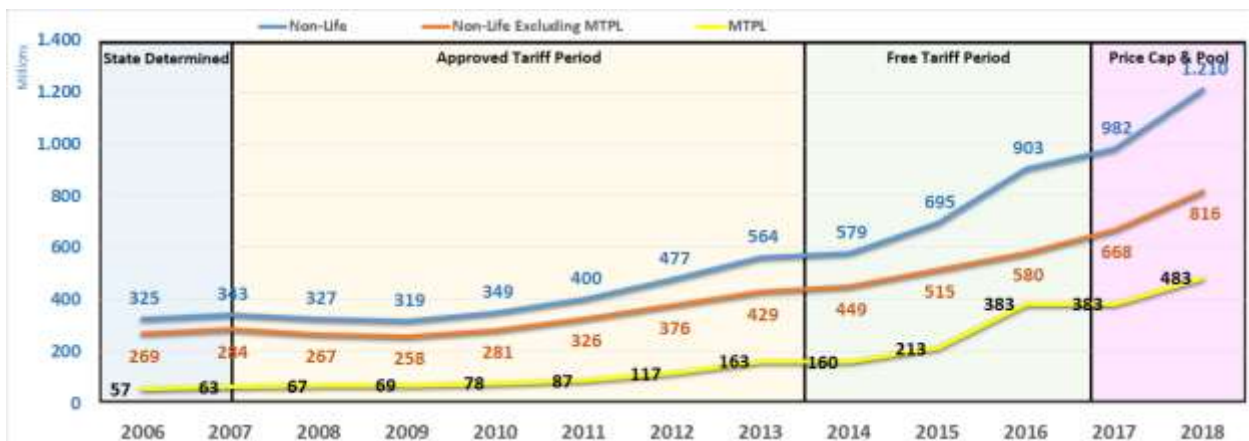


Source: Author

5.1.3. The Growth of Average Premiums

Average premiums are calculated by dividing the total premium production divided by the number of active insurance companies performing in that specific year and in that specific line. The reason why the active number of companies is preferred instead of the entire number of companies is that companies whose licenses are expired or which are in liquidity period or even be prohibited from policy issuing by the regulatory authority for any reason could lead to diversion in numbers. The average premiums are given in Figure-6.

Figure-6 Development of Average Premiums by Periods



Source: Author

Figure-6 reflects that average premiums in non-life insurances without MTPL and in the MTPL are quite steady and parallel to each other in the Approved Tariff Period. After the pro-market implementation after 2014, the parallel movement is disturbed because MTPL change is higher than the non-insurance without MTPL. To give more concrete numbers, between the 2014-2017 years, the average premiums in non-life insurances grow 55% in three years. We know that these numbers also include MTPL as well, so when the MTPL impact is excluded, the growth in three years decreases to 29%. When we focus on the growth of traffic, the change is 141% in the same period.

Similar results are also provided by analysing the CAGR results provided in Table-6. Pro-market reform clearly increases the average production of the individual firm.

Table-6 Compound Annual Growth Rates of Average Premiums by Periods

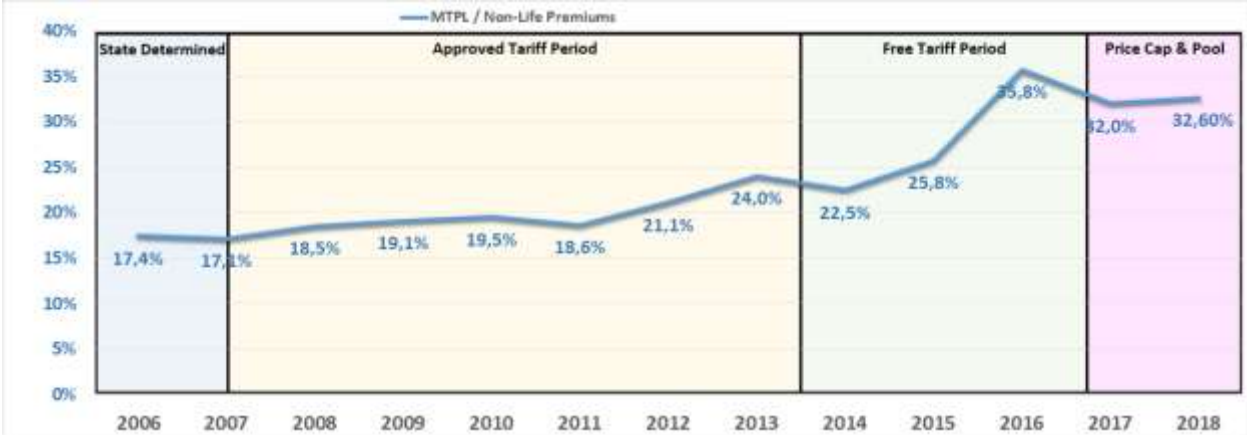
CAGR / Avg. Premiums	State Determined Period	Approved Tariff Period	Free Tariff Period	Price Cap & Pool Period
MTPL	12%	19%	55%	26%
Non-Life	5%	12%	25%	23%
Non-Life Excluding MTPL	6%	10%	14%	22%

Source: Author

5.1.4. The Growth of Market Share of MTPL

Whether a pro-market reform has created an impact, it would be wise to analyse the response of the variation of the comparative size of the specific industry within the whole insurance. In this case, the change can be better understood by looking at the changes of MTPL premiums divided by the non-life insurance premiums as shown in Figure-7.

Figure-7 Share of MTPL in Non-life Premiums by Periods



Source: Author

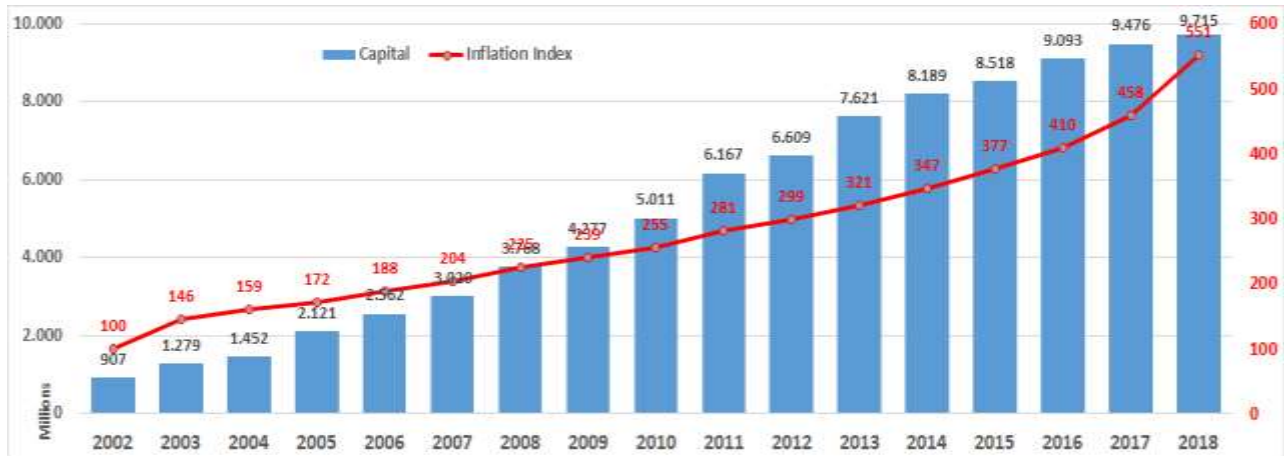
The share of MTPL insurance in total non-life production increased from 17% in 2006 to 22% in 2014 where the deregulation started. It reached its peak at the end of 2016 to 36%. The trend indicates that in 10 years of time from 2007 to 2016, the share of MTPL doubled. This movement represents that as the liberal tariffs are available, more companies focus their interest on traffic production. When the regulation started again, companies diverted their production into other fields and the relative share of MTPL decreased to 32%.

The CAGR ratios are parallel to the argument. In the State Determined period, the change is decreasing -2%. When the companies were permitted to implement their prices within a range, the CAGR increased to 5% in the Approved Tariff Period. When the pro-market reform is introduced, the CAGR boomed to 26% and conversely declined back in two years to 2% in Price Cap & Pool Period. It should be remembered that MTPL insurances were always compulsory in these periods and there was no major change in other insurance branches as already shown in Figure-3. It may be concluded that the share of MTPL in non-life premiums, increases not from the relative decrease in the other insurance branches, but the real boom in MTPL insurance in the Free Tariff Period.

5.1.5. The Growth of FDI

Firstly, as summarized in Figure-8, the total capital of insurance companies in Turkey has approached to 10.000 million TRL as of December 2018. The trend shows that in the last 17 years the increase in the amounts of capital invested in the insurance industry increases parallel with inflation. In this period, the inflation increases by 451% and the capital of insurance companies increase by 971%.²⁵ This gap points out that capital growth was two times higher than the inflation level. This takes to conclude that, more financial expansion had been realized in the Turkish Insurance industry. Conversely, the capitals of the insurance companies developed in real terms, which shows their strength in this manner.

Figure-8 The Paid Capitals of Insurance Companies in Turkey



Sources:

- Paid in Capital numbers were consolidated by the author combining the Insurance Reports prepared by the Ministry of Treasury and Finance (<https://www.hmb.gov.tr/sigortacilik-ve-ozel-emeklilik-raporlari>)
- The inflation index is calculated by using the Central Bank of Republic of Turkey Inflation Calculator (http://www3.tcmb.gov.tr/enflasyoncalc/enflasyon_anayeni.php)

In the early years of the 2000s, we see that the inflation level had been over the growth of the capital of the insurance companies. We see this trend until 2008, and after this point, we conclude that the capital increases had been larger than the inflation rate. The turning point seems 2008 or what has happened in this year? From the previous chapters, we know that the 5684-numbered insurance Law was put into force in June 2007. The declaration of the law is a clear message to

²⁵ Calculated by standart change formula: (2018 value – 2002 value) / 2002 value.

the market of increasing trust. The preparation and the implementation of the law is a big step to settle the legal transparency in the industry. Thirdly, the existence of legal rules and laws encourages the parties who desire to enter the insurance market. Fourthly, in combination with the motivation of the investors, Turkish economic policy was to stimulate the local industries by opening the gates for FDI opportunities after the 1980s. Thus, an increasing money flow also represents a global trust in insurance in this context.

Figure-9 The Number and Average Capital Amount of Insurance Companies in Turkey



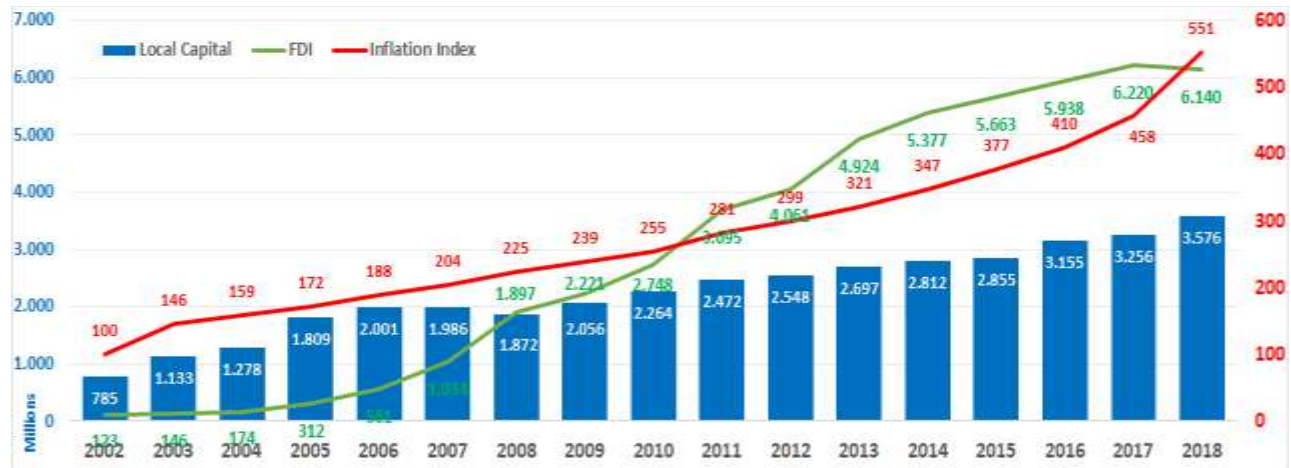
Sources:

- The average amount of capital is calculated by dividing the Paid Capital Amount in Figure-9 to the Number of Insurance Company
- Company numbers are consolidated by the author by using TSB statistics (<https://www.tsb.org.tr/tr/istatistikler>)

Figure-9 highlights few trends. Firstly, the number of companies, in the first year and last year of the analysis is the same, 59. So when looking for the real change in 17 years, the number of insurance companies stayed unchanged. Secondly, the number of insurance companies has changed within a narrow band during the period, (Max 62, min 52). The average deviation takes between the -11% and +3% range. This shows that the number of players is more or less the same. Thirdly, though not given in Figure-9, the composition of the insurance companies in life and Non-Life branches show a regular pattern of change. For example in 2002, there were 23 Life and 36 Non-Life insurance companies. In 2018, at the end of the period, the number of life companies decreased only -2 and came to 23 and the number of Non-Life increased by the same amount, from 36 to 38, causing no real change in total.

This means that the average capital of an insurance company has significantly increased. Since the number of insurance companies is stable in 2002 and 2018, the growth of average capital increase equals 971%, just as the total increase. Thus, we might deduce that the growth of an average insurance company capital rose two times more than the inflation level in Turkey between the 2002-2018 periods.

Figure-10 Foreign and Local Capital Amounts of Insurance Companies in Turkey



Sources:

- Paid in Capital numbers were consolidated by author combining the Insurance Reports prepared by the Ministry of Treasury and Finance (<https://www.hmb.gov.tr/sigortacilik-ve-ozel-emeklilik-raporlari>)
- The inflation index is calculated by using the Central Bank of Republic of Turkey Inflation Calculator (http://www3.tcmb.gov.tr/enflasyoncalc/enflasyon_anayeni.php)

In Figure-10, both domestic capital amount and the foreign capital inflow to Turkish Insurance Industry is portrayed. The inflation index is also added to show the relative trends of capital growth. As we remember that, the inflation level had increased 451%. In the same period domestic capital amount of insurance companies, increased 356% and the foreign capital increased 4908%. This growth is 14 times bigger than the rate of domestic capital accumulation in the insurance industry and 11 times bigger than the inflation level. From the trends in Figure-10, we can distinguish three phases. First, until 2008 inflation level and domestic capital increase is parallel, the FDI is lower but steadily rising, and it reaches the same level as domestic capital in 2008. Between 2008 and 2010, the foreign capital increases faster than both do. After 2010, the speed of the FDI is even higher than the milder inflation levels and low level of domestic capital increases.

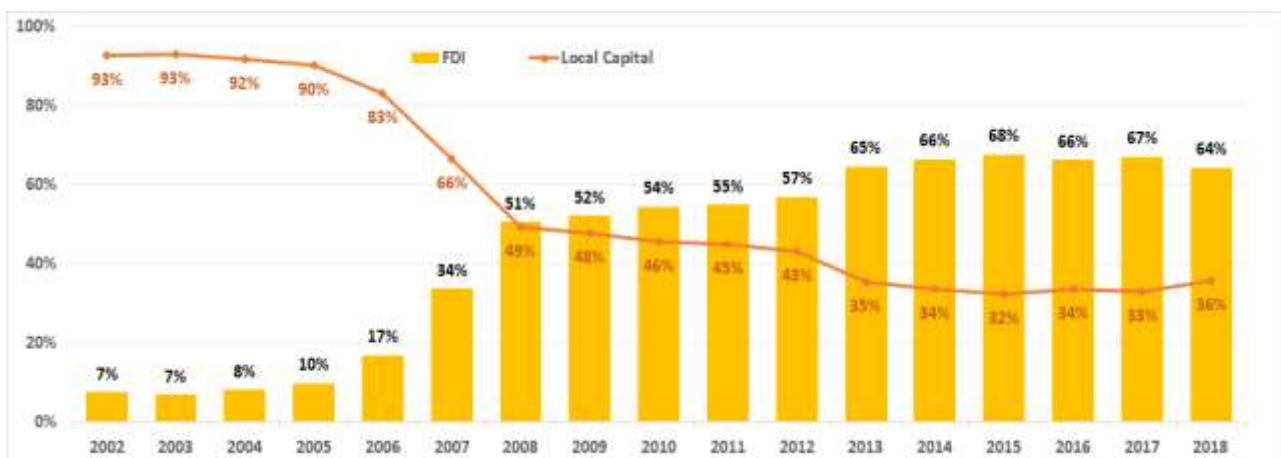
Figure-11 Capital Structure in Turkish Insurance Industry



Source: Author

Figure-11 exhibits the relative shares of the composition of the insurance industry. In 2002, the share of domestic capital was 4 times greater than FDI. Between 2002 and 2005, the local capital comprised nearly 85% of the total capital and in this period, FDI had never exceeded 15%. Between 2005 and 2008, we see a rapid increase in FDI inflows and the shares of local and foreign capital became equal in 2008. In three years period, the share of the foreign investors reached more than 60% of the total capital in 2011. After that date, the share of the foreign capital never decreased below 60%. We can clearly see an internationalization of the insurance industry from a capital formation point of view.

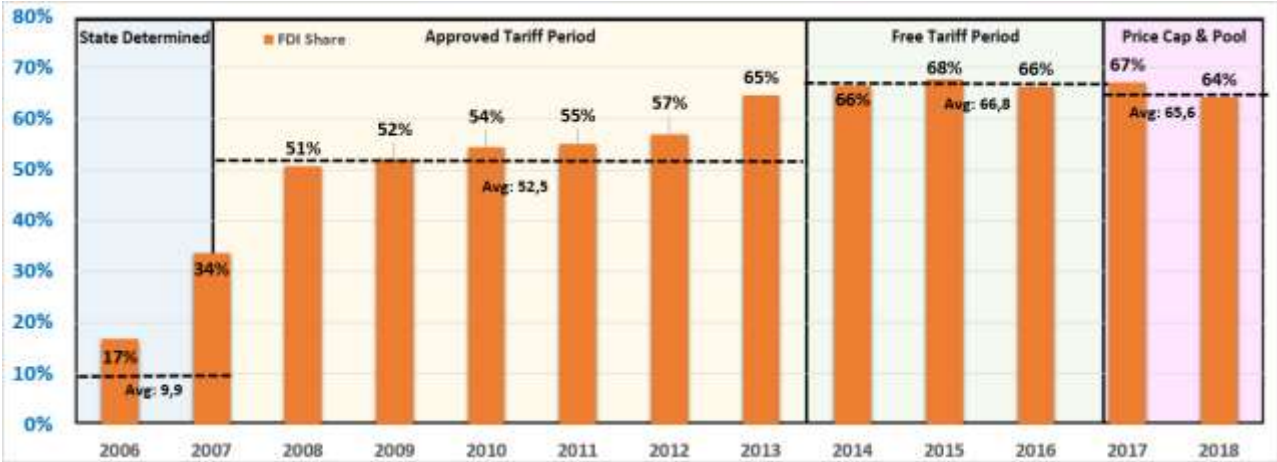
Figure-12 Capital Structure in Non-Life Lines



Source: Author

A similar trend is seen in Non-Life Lines as shown in Figure-12. Since health insurances are reported in Non-Life, the figure includes Property-Casualty Lines plus Health Insurances. Again, the intersection of the local and foreign capital shares equalized in 2008. However, in the None-Life insurances, the share of the foreign investors never exceeded 10% in the 2002-2005 period. The increasing trend continued until 2008 and after that year, the growth stabilized. There are three main reasons for this. Firstly, except for the publicly-owned insurance companies, no big local company is left for acquisition by foreign investors. Secondly, the size of the local firms became smaller to change the trend. Thirdly, we may expect that the little shared domestic firms can be regarded as ineffective to create scale economies through acquisitions. Thus, we can clearly say that after 2013, 2/3 of the capital in None-Life Insurance companies were owned by foreign investors.

Figure-13 Average FDI Share in Non-Life by Periods



Source: Author

In Figure-13, Non-Life FDI shares were located in categorized by periods given in the Data Analysis part. The average FDI capital of Non-Life insurance companies within the terms indicate that there is an increasing trend until the regulation period. The average in State Determined Period is calculated as 9,9% and it comprised the half of the industry in the Approved Tariff period with

52,5% share. The highest average was achieved in the Free Tariff Period with the rate of 66,8% where the pro-market reforms in MTPL provided an opportunity to insurance companies to apply their own prices. Lastly, regulation caused a mild reduction to 65,6% in average FDI share in capital structure. Our classical analysis asserts that given the pro-market reforms or their signal of implementation attracts the FDI in the industry and conversely, the regulation period has a negative impact.

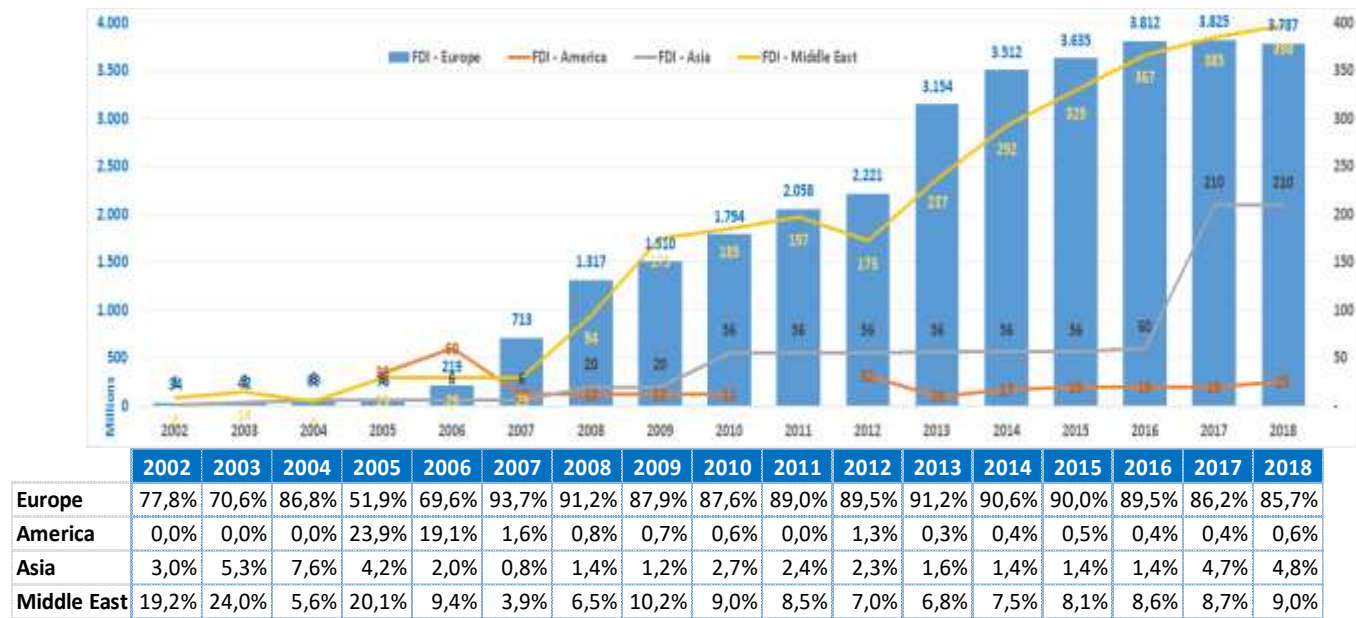
On the other hand, this study has few limitations. Firstly, we focus on the pro-market reforms and regulations impact in MTPL business. Thus, foreign investors do not solely rely on the regulation level in one line alone. They are aware that, compulsory businesses like MTPL, likewise in other countries they operate, carry their own risk: the officials may intervene for the benefit of the public or for the sake of political interests from time to time. In that sense, compulsory products are not the main driver of FDI flow. Perhaps, they may even venture a loss at the expense of low penetration and increased scale economies and operations. Secondly, the periodization is only valid in the MTPL business. No other property/casualty branches are affected. If market reforms or the regulatory framework had contained the whole lines in the insurance industry, the FDI share in the market could have more sensed. Despite these two limitations, it shows us the trend of FDI is increasing and since MTPL comprises one-third of the total premium production as already shown in Table B1, I support that no FDI investment decision directed to Turkey is realized without a close examination of the MTPL market and its regulations.

Now we analyse the sources of the flow and the source countries are categorized according to the geographical continent where they are located. In Figure-14, the terms of America and Asia symbolized the US and Japan respectively because no other country existed. Middle East separation included Israel, Kuwait, United Arab Emirates, Libya and Lebanon.

The biggest FDI source has always been Europe. The share of Europe in 17 years was average 84%. As shown in the upper part of Figure-14, the absolute number of European capital continuously increased. In the below part, we see that the minimum level of share of European capital was in 2005 with the share of %52 because American GE Group has purchased Garanti Sigorta and the share of American capital increased to 24%. After two years, American capital went out by selling Garanti Sigorta to Eureka Group to Holland and this increased the share of

Europe to 94% again, which was the highest share in history. Another shift was in 2008 when the Middle East oriented Dubai Group entered the market. In 2013, the share of European capital increased even further with the acquisition of Yapı Kredi Sigorta, a domestic insurance company, by a German insurer Allianz. In 2017, the share of Asia has more than tripled with the capital increase of Sompo Japan.

Figure-14 Sources and Shares of FDI in Non-Life Insurance



Source: Author

Figure-14 clearly states that whenever called FDI in insurance, the general implicit understanding is the transfer of European capital. If we omit all FDI except Europe, we come across that the amount of European share has been larger than domestic share since 2010. In 2009, EU capital in Turkey was 1.510 mn TRL and the local capital was 1.574 mn TRL. The following year Europe capital increased to 1.794 and the Turkish capital became 1.710 mn TRL. After that year, the European capital invested in Turkey had been much larger than the domestic capital injection. As of 2018 year-end, European capital is 50% greater (3.787 mn TRL) than Turkish capital (2.457 mn TRL). Therefore, it is not wrong to conclude that European capital should be more sensitive to changes in the regulatory side since they invested more than their local peers did in the Non-Life insurance industry.

The trend of the capital amounts and shares of European countries in the non-life insurance industry were given in Table L1 and L2 respectively. Tables L3 and L4 show the company based development.

Lastly, we categorize the number of companies according to the foreign share in capital and search for the development over years. In Table-7, the number of insurance companies operating in the Non-Life market is considered in the upper part. Since we concentrate on the MTPL, we exclude the Life insurances. Then we divided the companies according to the ownership of their capital into five categories. FDI=0% means the insurance company is owned by domestic investors. On the other extreme, FDI=100% means, the insurance company is wholly owned by foreign investors. The below part of Table-7 represents the share of companies in the market.

Table-7 The Number and Capital Structure of Insurance Companies in Non-Life Market

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
FDI = %0	29	27	25	23	19	18	15	15	14	12	12	11	13	11	11	13	15
%0 < FDI < %25	1	1	1	1	1	1									1	1	1
%25 < FDI < %50	2	2	2	2	2	2	1	1	1	2	2	2	2	2	1	1	1
%50 < FDI < %75					1	1	2	1	1	1	1						
%75 < FDI < %100	2	2	1	2	4	6	9	9	8	8	7	10	7	6	7	7	6
FDI = %100	2	2	2	3	4	7	9	11	13	12	13	13	16	17	17	16	15
Total	36	34	31	31	31	35	36	37	37	35	35	36	38	36	37	38	38
FDI = %0	81%	79%	81%	74%	61%	51%	42%	41%	38%	34%	34%	31%	34%	31%	30%	34%	39%
%0 < FDI < %25	3%	3%	3%	3%	3%	3%									3%	3%	3%
%25 < FDI < %50	6%	6%	6%	6%	6%	6%	3%	3%	3%	6%	6%	6%	5%	6%	3%	3%	3%
%50 < FDI < %75					3%	3%	6%	3%	3%	3%	3%						
%75 < FDI < %100	6%	6%	3%	6%	13%	17%	25%	24%	22%	23%	20%	28%	18%	17%	19%	18%	16%
FDI = %100	6%	6%	6%	10%	13%	20%	25%	30%	35%	34%	37%	36%	42%	47%	46%	42%	39%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Source: Author

Firstly, the number of insurance companies operating in the Non-Life market does not change much. Starting from 36 companies in 2002 and resulting in 38 in 2018, the average number of companies was 35 in 17 years. The minimum number (31) and the maximum number (38) represents a fluctuation band within -11% and +9%, which could be assumed as quite stable.

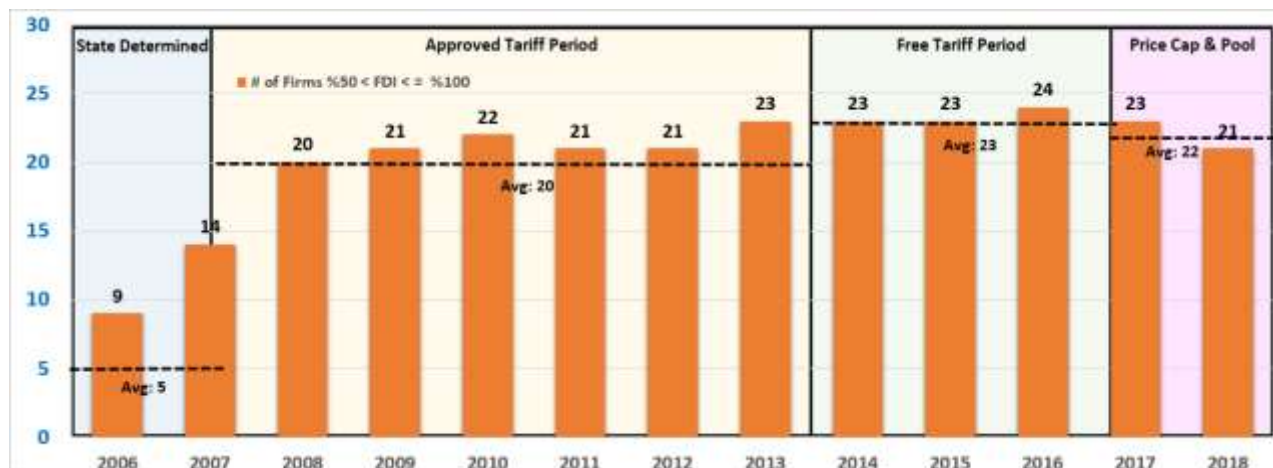
Secondly, we can access that the number of companies with only local capital is decreasing over time and conversely, the number of companies purely invested by foreign investors is increasing. For example in 2002, there were 36 companies and 29 of them (81%) has no foreign share. If we compare this number with 2015 where the total number of companies are still the same –to avoid the base differences-, the number of locally owned insurance companies decreased to 11 (31%). Thirdly, we can make a similar comparison by adding together the shares <50%. For instance, in 2005, 32 companies' capital was dominated mainly by the domestic firms (90%) whereas the same number of the company where the majority of capital owned by the domestic investors decreased to 13 (37%) in 2015.

An important detail is hidden in the FDI=0% line for 2017 and 2018 years in Table-7. We traced that the number of insurance companies in the Non-Life Insurances starts to increase after 2016. This period corresponds to the regulation period where the price ceiling is implemented. Thus, some domestic companies have entered the market despite the regulation of which centrally focused MTPL production. In times of regulation, the interest rates were high enough to attract the potential risk-taker insurance companies in order to make use of the early-collection and late-payment cycle. Thus, our findings are reconciled with the previous outcomes and state that, some domestic new companies (Company-06, Company-25, Company-09, and Company-21) emerged in the Regulation period.

Finally, we can summarize the results by turning to a period contrasting trend in Figure-15. In this figure, the focus is to show the change in the number of insurance companies whose capital is owned with more than 50% share by international investors. The results are gathered by adding the numbers of companies from the upper part of Table-7.²⁶ Of course, the same comparison can be done by using only wholly-owned international investors or companies which have more than for instance 75% of the capital is owned by foreigners. I assumed that, if more than half of the capital of an insurance company is owned by foreign investors, necessary and sufficient conditions could be achieved and it is enough to denote them as international, so there is no need to add additional thresholds. Lastly, the average lines in the periods are made up by the number of companies used in the study.

²⁶The result was obtained by adding (FDI = %100)+ (%75 < FDI < %100) + (%50 < FDI < %75) in Table-7

Figure-15 Number of Non-Life Insurance Companies with Majority Capital Paid by FDI



Source: Author

The trend holds that more FDI is directed to the industry when the pro-market reforms are initiated. In State Determined Period, the number of “international” companies was only 5 and it boomed to 20 in the Approved Tariff Period. The pro-market reform age has the highest number of companies had been experienced with an average of 23. Lastly, turning back to regulation caused a slow decline in the number of “international” insurers in the Non-Life market.

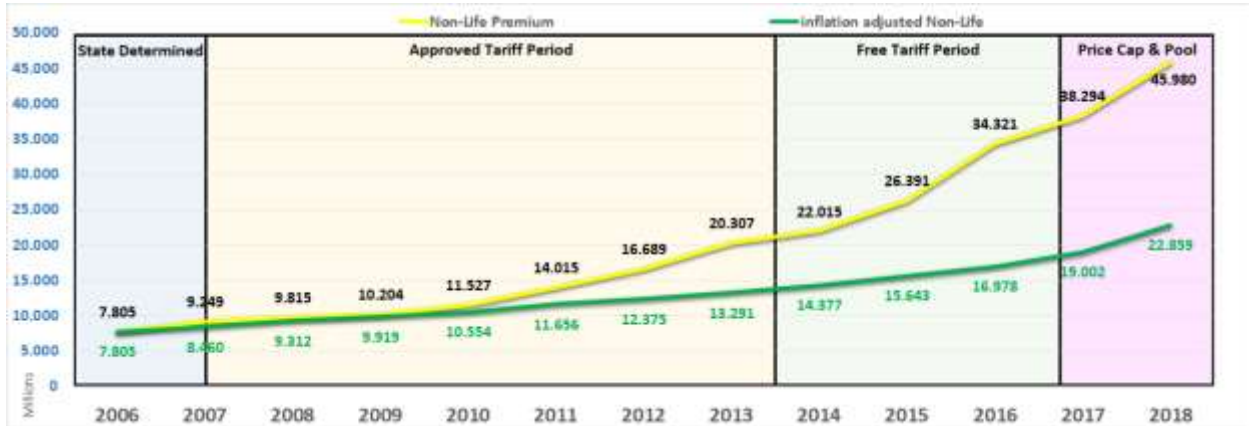
5.2.Price

5.2.1. Real vs Nominal Growth

In the previous session, it was seen that the premiums were increasing over time in both Non-Life and MTPL insurances in Figure-3. The increase was more severe in deregulation times of the Approved Tariff Period and it had reached to peak in the Free Tariff Period when pro-market reform was launched. Now the increase in premiums is contrasted with inflation. Turkey experiences an inflationary impact on prices for that reason the gap would show the real growth of MTPL and Non-Life insurances. For that reason, as the baseline is 2006, the year-end inflation is calculated by using the numbers of the Central Bank of Turkey for each year. By finding the

relative inflationary numbers, when setting the inflationary index 100 for 2006, the end-year index for 2018 was found as 293. The numbers indicate that in 12 years between 2006 and 2018 the inflationary increase affects the prices three times.

Figure-16 Growth of Non-Life Premiums and Inflationary Impact by Periods



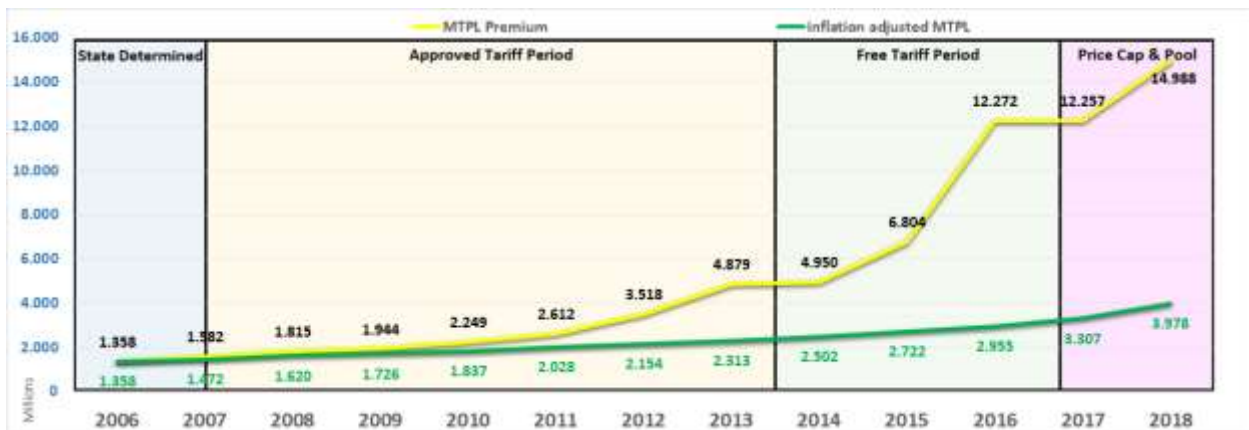
Sources:

- Author
- http://www3.tcmb.gov.tr/enflasyoncalc/enflasyon_hesaplayici.html

Figure-16 shows the gap between the growth of Non-Life premiums and the inflation level. The green line is calculated by multiplying the inflationary index with the initial Non-Life Premium value. For that reason, the inflationary impact of Non-Life starts from 7.805 mn TRL in 2006 where the index is fixed to 100 and reaches 22.859 mn TRL in 2018 and nearly grows three times. When this number is compared with the actual figures, until the mid of Approved Tariff Period, the increases in Non-Life premiums reflects only the inflationary impact. Starting from 2011, the increase in premiums are higher than the inflation and the gap widens even in the regulation time in 2018. More concretely, it is seen that the actual Non-Life premiums increase 5,89 times whereas the inflation increase 2,93 times. This is exactly to say that premiums moved two times faster than the inflation in the analysed period. However, it should be noted that Non-Life Insurance Premiums is the broader indicator because it covers also the MTPL values. For that reason, Figure-17 focuses on the gap between MTPL premium and inflationary increases.

When the same analysis is implemented for the MTPL, a similar pattern as resulted for Non-Life can be seen in Figure-17. Actual MTPL growth and the inflationary index is nearly the same until 2011 and from the second part of the Approved Tariff Period, the prices of MTPL goes up. Especially, the real increase is in 2016, where the pro-market reform has reached its peak. The gap between the MTPL premium growth and the Non-Life insurances grows higher and additionally, the regulation in 2017 stabilizes the premiums in real terms. The increase in Price Cap & Pool Period is assumed normalization of the previous year. Overall, it can be inferred that in the 12-year period the MTPL prices have risen 11,3 times. This makes it 3,7 times bigger than the inflationary impact. Figure-17 clearly shows the premium increase especially in pro-market reform times between 2014 and 2017. However, we need to check whether the increase stems from the prices or quantities.

Figure-17 Comparison of growth of MTPL Premiums and Inflationary Impact by Periods

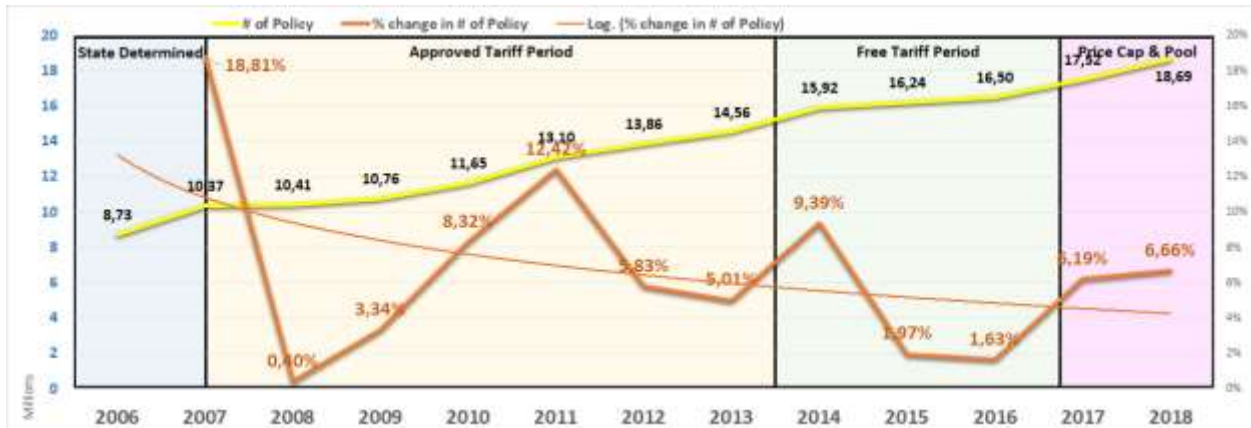


Sources:

- Author
- http://www3.tcmb.gov.tr/enflasyoncalc/enflasyon_hesaplayici.html

Basically, the growth of a product can be measured in two ways, either in prices (as called nominal growth) or in quantities (as referred to real growth) in economic terms. In most cases, the growth covers a combination of these two sources. The real growth in MTPL as calculated by the number of premiums sold was given in Figure-18.

Figure-18 Development of Number of MTPL Policies and its Change



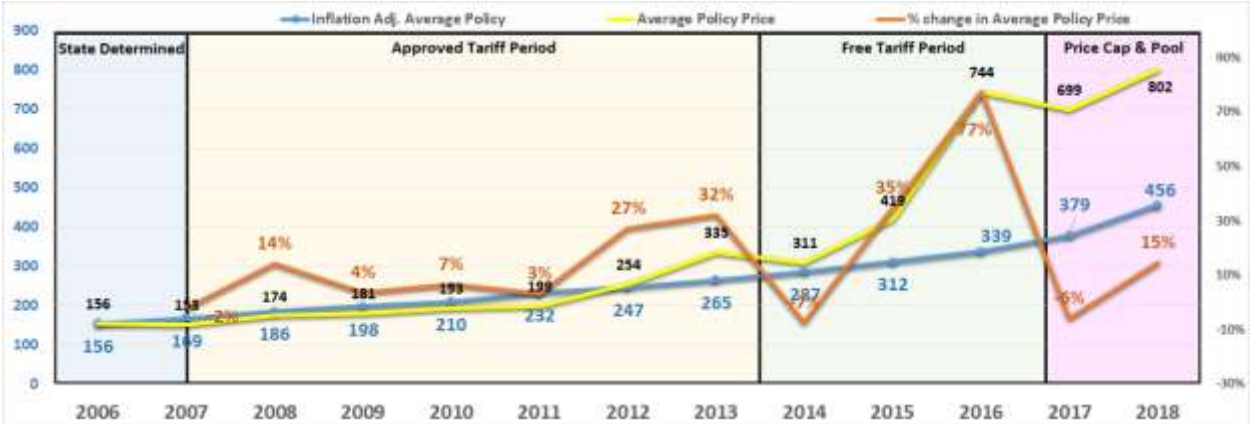
Source: Author

The number of MTPL policies increases over time with a steady growth. The biggest increase is seen in 2007 and the biggest fall in change is seen in 2008, the first year of the Approved Tariff Period. From that year until 2018, the rate of growth of policy numbers changed between 2%-12%. On the other hand, when the log of change is taken it shows a decreasing pattern over years. This indicates that the number of policies increases, but the increase in prices is higher, as shown in Figure-17, is higher than the policy numbers. Policy numbers in 2006, that is 8,73 mn, comes to 18,69 mn in 2018 in 12 years. In other words, the MTPL policy numbers increase 2,1 times. Therefore, we can conclude that, in 12 years of time, MTPL premiums increase 11,3 times as found in the previous section whereas the number of policy increases corresponds to 2,1 times. This means that the MTPL price increase equals $(11,3-2,1) 9,2$ times. As our previous wording the 11,3 times increase in premiums stems from 2,1 times from quantities, and 9,2 times from prices. In talking about the share of the total change, 18% of the change is real and 82% of the change is nominal. We can also conclude that, when the inflation level increases 2,93 times in the same period as found in the previous section, the MTPL price increases more than 3 times of the inflation.

The result of these calculations states that, with the deregulation and pro-market reform in the MTPL insurance markets, the prices of the products are increasing 3 times faster than the inflation and 4,4 times faster than the policy numbers. In this context, we expect a higher price for an average MTPL policy.

Average Policy Price, in this context, is calculated by dividing the MTPL premiums given in Figure-3 to the number of policy in Figure-18 in the respective year. The average Policy Price trend is depicted in Figure-19.

Figure-19 Development of Average Policy Price and its Growth



Source: Author

Figure-19 shows the change in the average policy prices in the MTPL market in the yellow line. The blue line shows the inflationary impact of the average policy price. The Red line shows the rate of change in the real prices. The change in real prices does not deviate more but slightly increases in the Approved Tariff Period from 14% to 32%. When talking about inflation, it can be inferred that until the end of the Approved Tariff Period or even in the first year of the Free Tariff Period, only the inflationary impact drives the prices. Nevertheless, the introduction of pro-market reform causes a sharp increase in MTPL policy prices. Consequently, the change in one year reaches 35% and 77% in the following two years. When regulation is imposed in 2017, the increase in prices immediately freezes. The gap between inflation and MTPL prices get bigger in the Free Tariff Period. Lastly, we can conclude that in the 12-year period, the average MTPL has risen two times more than inflation. Alternatively, even we accept 2014 as the starting point, where inflation equals to average MTPL price, in three years the prices doubles than the increase in inflation.

5.2.2. Vehicle Level Responses to Pro-Market Reforms

Vehicle types are determined by the Undersecretariat of Treasury and insurance companies might pursue different strategies relating to reforms. Since we know from the earlier parts, the probability of claims could be expected higher for the commercial uses, thus companies might trigger a different set of actions depending on their probability of risk.

Figure-18 had shown that the policy numbers were increasing slightly, and Figure-19 had proven that the average policy price was accelerating faster than inflation and MTPL policy numbers. We can finally check out whether this result is applicable to all vehicle types or only valid for certain types.

In order to verify that firstly, the premiums number for each year given is detailed by vehicle types. Vehicle types are based on the definition of Undersecretariat of Treasury mentioned in the related General Terms of MTPL insurance. The trend in the premiums is listed in Table-8.

Table-8 Development of MTPL Premiums by Vehicle Types

Premiums, mn TRL	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Private	666	758	866	973	1.141	1.325	1.728	2.234	2.275	3.323	6.443	6.658	8.052
Taxi	29	31	37	43	45	50	72	97	87	100	184	153	193
Minibus	90	96	105	99	108	116	156	252	212	300	512	475	632
Small Bus	36	42	47	45	56	68	109	174	139	181	289	249	311
Long Bus	43	48	53	47	42	39	62	111	108	120	158	134	174
Small Truck	286	345	401	460	546	634	800	991	1.000	1.368	2.510	2.567	3.080
Long Truck	146	163	181	185	191	214	298	455	458	551	802	755	990
Working Machine	4	4	6	4	5	7	13	22	24	28	37	36	37
Tractor	6	7	11	14	18	25	29	52	79	103	179	155	165
Trailer	1,4	3,8	5,6	0,3	0,4	0,4	0,9	1,2	0,5	0,3	0,4	1,1	0,4
Motorcycle	12	13	23	22	29	39	59	98	115	157	326	305	329
Tanker	4	4	5	5	5	6	10	17	18	23	33	25	25
Tow	25	56	67	43	55	83	169	350	401	499	721	661	900
Special Vehicle	3	2	2	3	4	5	9	19	33	49	77	82	98
Other	5,5	8,4	2,3	1,9	1,9	1,3	2,5	3,1	0,2	0,4	0,8	0,9	1,3

Source: Author

Private cars always have the highest share in all MTPL premiums. Their share ranges in 45% (as in 2013) and 54,3% (as in 2017). By analysing at 2018 shares, top leading vehicles 54% of private

cars is at the top. Small trucks are the second major vehicle type with a share of 20% and long trucks have a share of 7%. Thus, the total change in MTPL premiums is affected with a weight of 81% be determined by these leading vehicle types.

We can also analyse the growth of premiums in the last 12 years. For example, premiums of Private Cars has risen 12 times in this period.²⁷ As we know from Table-8, the overall MTPL premiums increase 11 times and for Private cars, as having half of the total, the increase in Private Cars is very close to this total change. Small trucks premiums increased 11 times as well as the second group in the MTPL market. Only long trucks have a minor increase with 4 times, but it can be explained by the re-grouping definitions. Because in 2006, the long truck share was 11% in total MTPL and fell to 7% in 2018. This decrease can also be the reason for the increases in the shares of Tow. Despite their insignificant shares, motorcycles (27 times) and tractors (26 times) have experienced greater premium increases in the mentioned period.

Now we can show the CAGR of the premiums for each vehicle type by periods as summarized in Table-9. The first line of the MTPL premium change had already been calculated in Table-5 before. MTPL premium growth in respective periods had suggested that when moving from State Determined Period to Approved Tariff Period, the premiums grow higher, and while passing to Free Tariff Period the increase is even higher. In addition, when moving to Price & Cap and Pool Period the premiums are decreasing.

²⁷Calculated by 2018 MTPL Premium of Private Cars divided by its 2006 value

Table-9 Compound Annual Growth Rates of MTPL Premiums of Vehicle Types

CAGR / Premiums	State Determined Period	Approved Tariff Period	Free Tariff Period	Price Cap & Pool Period
MTPL	16%	22%	57%	22%
Private	14%	21%	68%	21%
Taxi	6%	21%	45%	26%
Minibus	7%	19%	56%	33%
Small Bus	17%	30%	44%	25%
Long Bus	11%	16%	21%	30%
Small Truck	21%	20%	58%	20%
Long Truck	12%	20%	32%	31%
Working Machine	4%	28%	23%	4%
Tractor	12%	36%	51%	6%
Trailer	163%	-26%	-10%	-63%
Motorcycle	6%	34%	68%	8%
Tanker	-16%	25%	34%	1%
Tow	128%	39%	34%	36%
Special Vehicle	-42%	59%	54%	19%
Other	53%	7%	94%	55%

Source: Author

The trend for overall MTPL premiums is verified in the table. For example, when the Approved Tariff Period was initiated, 11 vehicle types out of 15 shows a similar pattern, that is premiums increase is faster than in State Determined Period. Only four vehicle types (small trucks, trailer, tow and other) show contrary movement. When pro-market reform was initiated, MTPL premiums have risen further in 12 out of 15 vehicle types. Only working machine, tow and special machine growths were less than Approved Tariff Period. Lastly, when comparing the CAGRs from pro-market reform to regulation period, 13 out of 15 vehicle types decreases (exceptions are long bus and tow this time.) Thus, pro-market reform has initiated a significant increase in all vehicle types.

Now we can analyse the same data in more detail to see which vehicle groups were more affected by the changes in MTPL regulation. We had verified that policy numbers have a declining trend over years and had reached its minimum value when pro-market reform was launched. This impact is illustrated in Table-10.

Table-10 Development of Number of MTPL Policy by Vehicle Types

# of Policy (thn)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Private	5.291	6.272	6.247	6.498	7.019	7.811	8.383	8.658	9.676	9.924	10.262	11.006	11.774
Taxi	63	76	75	77	71	75	72	69	77	75	82	73	84
Minibus	386	329	318	305	315	347	343	654	360	363	370	377	409
Small Bus	105	108	106	105	127	152	166	168	138	134	130	128	139
Long Bus	60	55	54	52	45	46	38	35	33	32	29	28	31
Small Truck	1.333	1.771	1.811	1.929	2.118	2.460	2.546	2.580	2.833	2.887	2.964	3.142	3.331
Long Truck	409	484	452	411	397	437	404	383	389	388	393	379	398
Working Machine	33	38	33	32	36	43	48	49	52	56	62	57	56
Tractor	366	447	460	484	565	616	653	710	996	992	941	989	1.076
Trailer	8,0	16,2	25,5	6,3	6,7	6,5	6,8	5,8	2,9	1,0	0,8	1,2	0,8
Motorcycle	587	644	687	731	799	900	983	1.016	1.113	1.122	997	1.064	1.087
Tanker	13	13	20	12	13	16	17	16	18	19	19	20	19
Tow	54	93	103	97	121	161	178	190	208	213	214	212	230
Special Vehicle	7	8	11	12	15	17	19	21	27	31	35	44	52
Other	11,6	14,2	5,3	4,8	3,4	10,3	4,5	3,8	1,3	2,4	3,3	4,0	4,6

Source: Author

When we look at the composition of the MTPL policies, the highest share belongs to the Private Cars vehicle group. Private Cars has a share of around 60% of total insured vehicles. The second share vehicle group is Small Trucks whose share rose from 15% in 2006 to 18% in 2018. The third group is the motorcycle insurances with a share of 6%.

When looking together with the premiums in Table-8 and the policies in Table-10, the biggest shares of the two vehicle groups are the same (Private Cars and Small Trucks). Nevertheless, the third one in amount is the long trucks, but in quantity is the motorcycles. It is quite understandable that an average policy for a long truck is more expensive than a motorcycle for that reason; long trucks premium is higher than motorcycles.

The important issue here is how much the quantities increased in twelve years. For example, MTPL insurance policies of private cars have risen 2,3 times²⁸, small trucks 2,5 times and motorcycles 1,9 times respectively. When we look the all vehicle types the maximum policy increase was special vehicles (7,3 times) which just comprises 0,3% of total MTPL policies. All other policy

²⁸Calculated by 2018 MTPL Policy Number of Private Cars divided by its 2006 value

numbers for all vehicle types change a maximum of 4 times or less. Table-10, in this context, portrays a clear outcome that the increase in MTPL policy numbers is lower than the premium increases for each vehicle type.

It is interesting to come across decreasing MTPL policy numbers. Since the number of cars is in an increasing trend for each year, decreasing number of policy obviously means that the policyholders give up renewing their existed policies even if the product is compulsory. For example, Taxi MTPL policy numbers experienced this physical decline six times (2008, 2010, 2012, 2013, 2015 and 2017) in the last 12 years. This is a highlighting point that nearly every two years, Taxi MTPL policy numbers fell. This trend implies that taxi owners are reluctant to the obligatory spirit of the MTPL insurance and prefer working without MTPL insurance. We can also stress that even the policy number in 2017, (73 thn) is below than the ten year previous number in 2007 (76 thn).

Minibuses are also worth mentioning. The MTPL policy numbers steadily declined from 2006 to 2009 in consecutive three years. The same decline also happened in 2012, but the maximum fall in policy numbers was in 2014, which corresponds to a real crash of 45% in one year. As similar to Taxi, the MTPL policy number of Minibus in 2017 (377 thn), was lower than its eleven years before value in 2006 (386 thn). Small Buses experienced a similar decline in 2007-2009 (two consecutive years) and 2013-2017 (three consecutive years) periods.

The actual trend in Long Bus is very surprising indeed. The MTPL policy numbers continuously decrease in eleven consecutive years from 2006 to 2017 in physical terms. The trend asserts that Long Bus owners deliberately avoid having MTPL policies. It is also an extreme case that the actual MTPL policy number for Long Truck in 2018 is 18% below in real terms than its eleven year before value in 2007.

For each vehicle group, the declining impact on policy numbers states apparently that the policyholders avoided having MTPL insurances

Now, we can compare the movement of each vehicle type policy in the respected periods. In Figure-18, we had deduced that the growth rate of the increase in MTPL policy numbers was declining and this decline was lower when pro-market reform has introduced in the Free Tariff

Period. Table-11 shows the trend for different vehicle groups in terms of CAGR of the related periods. The first line of the table shows the cumulative CAGR of the MTPL policy number change.

Table-11 Compound Annual Growth Rates of MTPL Policy Numbers

CAGR / Policy	State Determined Period	Approved Tariff Period	Free Tariff Period	Price Cap & Pool Period
MTPL	19%	7%	2%	7%
Private	19%	7%	3%	7%
Taxi	20%	-2%	3%	15%
Minibus	-15%	15%	1%	8%
Small Bus	4%	10%	-3%	8%
Long Bus	-8%	-9%	-7%	10%
Small Truck	33%	7%	2%	6%
Long Truck	18%	-3%	1%	5%
Working Machine	15%	8%	9%	0%
Tractor	22%	9%	-3%	9%
Trailer	103%	-26%	-47%	-35%
Motorcycle	10%	8%	-5%	2%
Tanker	-1%	-5%	4%	-1%
Tow	71%	13%	1%	8%
Special Vehicle	19%	13%	15%	18%
Other	23%	-7%	56%	14%

Source: Author

Table-11 demonstrates that the growth of policy numbers show adverse effects of the premium volume did. When the deregulation started in the Approved Tariff Period, the growth rate declines more than half (from 19% to 7%) and surprisingly when full deregulation started, the growth rate declines more than half again (from 7% to 2%). When the Price Cap & Pool Period started the growth rate of policy numbers start to rise again.

This trend can apparently be seen in most of the vehicle types. Firstly, when comparing the change from State Determined Period to Approved Tariff Period, 13 out of 15 vehicle types, show a similar trend –the growth rate of policy numbers decreases. (Only Minibuses and the Small Bus vehicle types move in the other direction). Secondly when analysing the change from Approved Tariff

Period to Free Tariff Period –that is reaching the maximum impact of pro-market reform- the pattern quite differs. Eight vehicle groups growth rate declines whereas seven of them increase. Since the direction of the largest share in policy numbers –Private Cars, Small Truck and Motorcycles- shows a decreasing pattern in growth rates. Since these three vehicle groups accompany 87% of the total market, the total trend of MTPL CAGR decreases. Thirdly, when comparing the trend of each vehicle type in transition to Price Cap & Pool Period, 12 out of 15 vehicle types has increasing CAGR rates (only Working Machine, Tanker and Other vehicle types shows the counter-movement).

In short, policy numbers of MTPL over periods clearly states that when deregulation starts, the majority of the vehicle types performed a decline in their growths. However, this apparent movement cannot be seen when the level of deregulation has been increased to its peak value in the Free Tariff Period because half of the vehicle types demonstrated increasing CAGR rates whereas the rest performed decreasing ones. Lastly, again the mass reduction in CAGR rates of the MTPL policy number is very clear in the regulation period.

The last analysis would be on the Average Policy Price by vehicle group. Average Policy Price by vehicle group is derived by dividing the premiums generated to the actual policy numbers. The average policy prices are shown in Table-12. Before analysing the details of the average prices, we had seen in Figure-19 that the trend in average policy price in MTPL insurances moved from 156 TRL to 802 TRL in twelve years, resulting 5,4 times increase. Thus the average increase in all vehicle types is 5,4 times. For some of the vehicle groups, this increase is higher than average. For example, motorcycle average policy price increased 14,4 times, for Tows 8,6 times, for Tractors 8,5 times, and for Long Bus 7,9 times. On the other hand increase in some of the vehicle groups are lower than average as in Trailer 3,3 times, Tanker 3,9 times and Special Vehicle 4 times.²⁹ Vehicle groups, experienced either a faster or slower than average growth, has a negligible share in the MTPL market. As we know the market average is mainly driven by Private Cars, which increased 5,4 times in the same period, that is very close to the average.

We had also seen in Figure-19 that the inflation had increased 2,93 times in the same period. If we take inflation as the reference, 14 out of 15 vehicle groups average MTPL policy has increased

²⁹Calculated by 2018 Average Price divided by its 2006 value

faster than the inflation. The only exception is the Other Group, which has a negligible share in the total premium (0,01%).

Table-12 also reveals an interesting case for motorcycle comparative average prices. For example, in 2006, the average MTPL price for Private Vehicles was 126 TRL and the same year the average Motorcycle MTPL insurance was 21 TRL, which is a Motorcycle MTPL insurance is one-sixth of the Private Car policy price. In ten years period, the average price of Private Vehicle Price reached 628 TRL where the Motorcycle policy cost 327 TRL, which results that Private Car MTPL insurance price is only 1,9 times bigger than the motorcycle insurance cost. Then motorcycle policyholders had been in a disadvantageous position because their relative insurance cost was 1/6 of the average Private Car price but it became nearly half in 2016.

Table-12 Development of Average MTPL Policy Price by Vehicle Types

Average Price, TRL	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Private	126	121	139	150	163	170	206	258	235	335	628	605	684
Taxi	465	410	496	556	633	661	994	1.405	1.133	1.347	2.238	2.097	2.290
Minibus	233	293	330	326	343	334	455	386	588	827	1.386	1.262	1.546
Small Bus	346	391	446	429	444	451	657	1.040	1.001	1.349	2.218	1.944	2.240
Long Bus	717	867	983	910	937	851	1.617	3.231	3.269	3.743	5.485	4.783	5.645
Small Truck	214	195	222	238	258	258	314	384	353	474	847	817	925
Long Truck	357	338	401	450	481	490	737	1.190	1.177	1.419	2.039	1.989	2.489
Working Machine	116	105	194	112	136	152	259	455	467	508	598	634	659
Tractor	18	16	24	29	32	40	45	74	79	104	190	157	153
Trailer	180	233	219	49	57	67	129	210	185	313	527	976	564
Motorcycle	21	20	33	30	36	44	60	97	104	140	327	287	303
Tanker	333	283	265	373	377	365	588	1.031	1.018	1.212	1.701	1.276	1.295
Tow	456	609	656	443	455	519	951	1.841	1.928	2.347	3.374	3.116	3.916
Special Vehicle	468	229	168	227	265	286	475	905	1.225	1.598	2.199	1.857	1.877
Other	475	593	429	387	545	127	546	834	167	186	259	211	287

Source: Author

To see the changes by periods, we again use the CAGR ratios of the average MTPL policy prices of vehicle groups. Table-13 exhibits the growth of the vehicle types by periods. Firstly, when focusing on the State Determined Period the inflation is 8%. The industry average in this period has a decreasing trend with -2%. The average policy prices of the vehicle groups show two

different trends. One group of vehicles are below the inflation level, even decreasing with minus signs. 9 Vehicle Groups out of 15 has a decreasing average policy price in this period. The minimum average policy costs are in Special Vehicle (-51%) and Tanker (-15%). The second group of 6 vehicles portrays high CAGR ratios where the highest increases belong to Tows (34%) and Trailers (29%). In sum, we can state the view that in the State Determined Period, the average MTPL cost of the vehicle groups decreases. Although there are few vehicle groups where the increase is higher than the inflation, their impact is significant and State Determined Period may be regarded as beneficial for the policyholder because they gain the gap of 10% between the inflation and average price growths.

Table-13 Compound Annual Growth Rates of Average Policy Prices of Vehicle

CAGR / Average Price	State Determined Period	Approved Tariff Period	Free Tariff Period	Price Cap & Pool Period
INFLATION	8%	7%	9%	20%
MTPL	-2%	14%	55%	15%
Private	-4%	13%	63%	13%
Taxi	-12%	23%	41%	9%
Minibus	26%	3%	54%	23%
Small Bus	13%	18%	49%	15%
Long Bus	21%	27%	30%	18%
Small Truck	-9%	12%	55%	13%
Long Truck	-5%	24%	32%	25%
Working Machine	-9%	19%	13%	4%
Tractor	-11%	25%	55%	-3%
Trailer	29%	-1%	69%	-42%
Motorcycle	-5%	24%	77%	6%
Tanker	-15%	31%	29%	1%
Tow	34%	23%	32%	26%
Special Vehicle	-51%	40%	34%	1%
Other	25%	14%	25%	36%

Source: Author

Secondly, in the Approved Tariff, the average policy price increase is two times higher than the inflation level. 13 vehicle group out of 15 has shown a greater increase than the inflation level. The highest increase can be seen in the Special Vehicle group, but this can be assumed as a

complementary movement in the previous period. Tanker, Long Bus, Long Truck, Tow, Taxi, Motorcycle are other vehicle groups where the average prices are 3 times higher than the inflation. This term implies that when the deregulation partly started after 2007, the average prices of the MTPL policies started to rise.

Thirdly, Free Tariff Period is the extreme term. The inflation level increase is not much different from the previous periods but the average MTPL prices increase by 55%. This means that the average increase in policy prices is 6 times greater than the inflation increase. When analysing the individual growth rates of vehicles, every group, 15 out of 15, experienced a higher price increase. Private Cars, which has the biggest share in the MTPL market, experienced 63% growth in policy prices, which is 7 times higher than the inflation. The highest increase was in the motorcycle group with a 77% of the increase in average price, that is 8 times higher than inflation. This period is very painful for the policyholders in all vehicle groups.

Fourthly, in the Price Cap & Pool Period, the inflation level is high when contrasted with the previous periods. The increase is at least two times more. This shows that the economy experiences relatively higher price increases, however, average prices of MTPL are below the inflation in general. 11 out of 15 vehicle groups experiences milder increases in average prices, which is below the inflation. Then it can be concluded that regulation in the market leads to a decline in prices as compared to inflation where the policyholders are subsidized this time.

Overall, the average MTPL policy price analysis indicates that starting from a very low level, while the insurance market gets more deregulated, the average price increases get bigger. When the pro-market reform reaches its peak before 2017, the increases in policy prices are six times higher than the inflation level, which cause a clear complaint of the policyholders. Even though the market is turned to regulation again with the price cap, and even though the inflation is two times higher than the previous periods, the price level in MTPL decreases. In this case, our result states that average MTPL policy prices increase in deregulation times and decrease in regulation times.

5.2.3. Profitability

Profitability is calculated from the Income Statement. In an income statement of an insurance company, the biggest item on the revenue side is the premiums generated by the sales. On the expense side, the major item is the paid claims. The provision for the potential claims (which are not due but do be paid in future) –also called IBNR (Incurred But Not Reported) is also added as a negative item. The second major cost is the commission costs given to the intermediaries for the sale of the policies. The third item on the cost side is the overhead expenses, which are not variable with the production. They are mostly fixed and independent from the fluctuations in the market like labour cost, accommodation and other administrative costs. Thus, the technical profitability is calculated by the difference between the revenues and the costs or more directly subtracting from premiums to the sum of paid and provision for claims, commissions paid and overhead expenses. If the revenue side is greater than the total of costs, then it can be deduced that the company has a positive technical profit, that means can survive from the core insurance-related business.

Technical profit is not the last and official profit of the company. There might be other expenses and losses which is added to this. These expenses and income are not the core activity related attributes. The biggest item is the Investment expenses and income. Investment income is the surplus created from investing the collections to the interest-related instruments. When the collection is realized after a sale of a policy, the amount is invested to a financial instrument so that the benefit of the interest is an additional fee for the insurer. For that reason, the total profit equals technical profit plus investment income resulted from financial tools.

Figure-20 MTPL Profitability

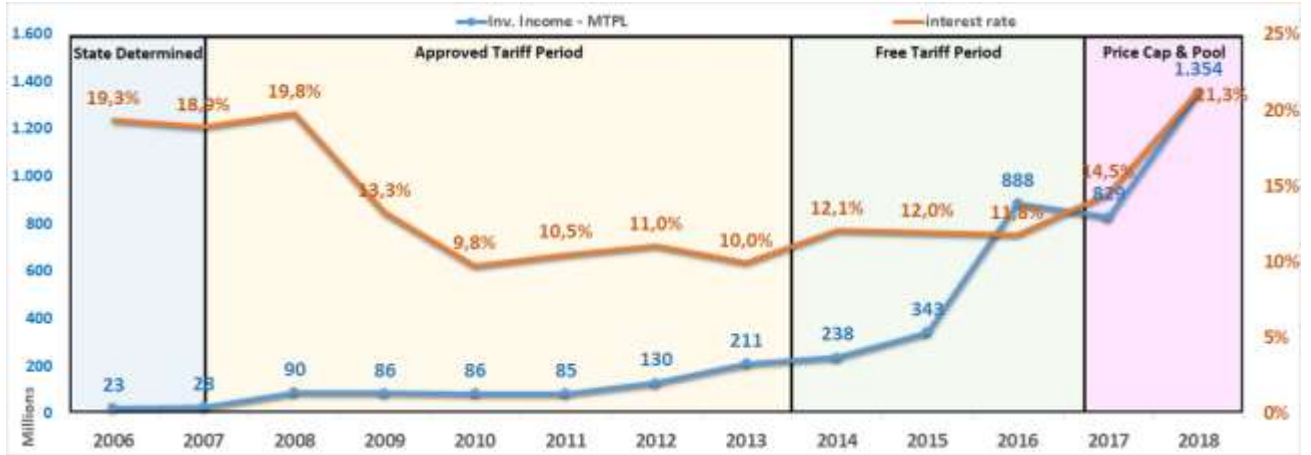


Source: Author

Figure-20 shows the total profitability of MTPL in the industry. Since the curve is below the red coloured axis line, MTPL insurance continuously experience results with loss. Starting from 2006 the profitability in MTPL hits the market. As we know that MPTL insurance is a compulsory product, the companies cannot resist leaving the market. It is also worth noting that as the years pass the gap widens and MTPL become a more and more costly product for an insurance company during the Approved Tariff Period. As we refer to the Approved Tariff Period as an initial period of pro-market reform or a kind of pilot study case before the reform, we can clearly say that MTPL profitability did not get better with the early deregulation. The free Tariff Period is apparently more interesting. In the first two years in 2014 and 2015, the free pricing in MTPL did not help the insurers to cover their losses, on the contrary, the harsh competition with price wars destroyed them incredibly and the loss in the industry 2,4 bn TRL in 2015. This was the minimum point in the history of MTPL. One year later, in the last year of the reform period, profitability suddenly jumped to offset to loss amount. Thus for the first time, MTPL became a break-even point in profitability. When the reform ended, the unfortunate destiny of MTPL started to appear again and the insurance companies faced losses again.

It is important to note that, the total profitability contains the revenues for the early collections of the MTPL policies. Therefore, we need to understand the trend of the investment income of insurance companies relating to the MTPL line over years. In Figure-21 the investment income, generated from the MTPL policies is drawn. It can be seen that the amount of investment income rises slightly during State Determined and Approved Tariff Periods. In the Free Tariff Period, the increase is faster and in 2015, the rate of change is 159%. Of course, there are two main reasons for this. Firstly, as given in Figure-3, the premiums of MTPL had risen through time and the biggest rise was again in 2015, with the growth of 80%. This validates that, when more premium is collected, the potential investment income rises because the portfolio is directed with greater returns. Secondly, if the interest rates of the financial instruments where the policy collections are directed are increasing, higher returns would be available with the same investment amount. The figure also depicts the interest rates of the 1-year bank deposit average over time. For that reason, investment income increases faster when the rates of the interest are high.

Figure-21 MTPL Investment Income and Interest Rate



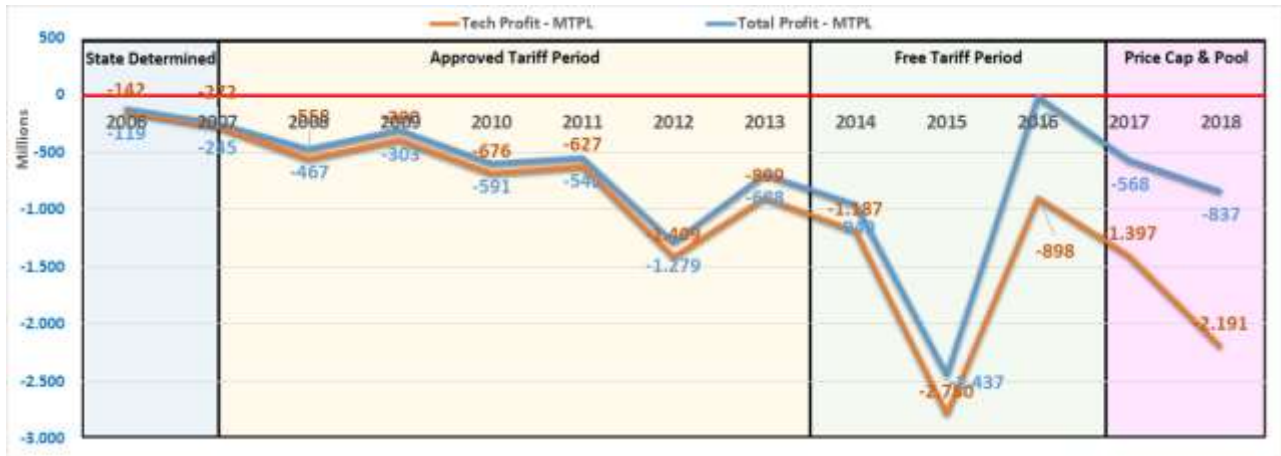
Sources:

- Investment income consolidated by author by using TSB data.
- Interest Rates are the yearly average of monthly values of 1-year time deposits published by the Central Bank. <https://evds2.tcmb.gov.tr/index.php?evds/portlet/ql1gwojhm%2Bw%3D/tr>

As we can deduce from Figure-21, investment income lessens the loss encountered. In Figure-22, the technical profitability of MTPL is highlighted with the orange line³⁰. Until the Free Tariff Period, the impact of investment income is not major and slightly relieves the hit of MTPL loss with a parallel impact with the blue line. However, starting from 2016, which is the highest impact of pro-market reforms that is reflected the whole year, the contributing impact of the investment income gets higher. Because the gap between the total profitability and the technical profitability widens after 2016.

³⁰ Technical Profitability is calculated by subtracting the investment income from the Total Profit.

Figure-22 MTPL Technical Profitability



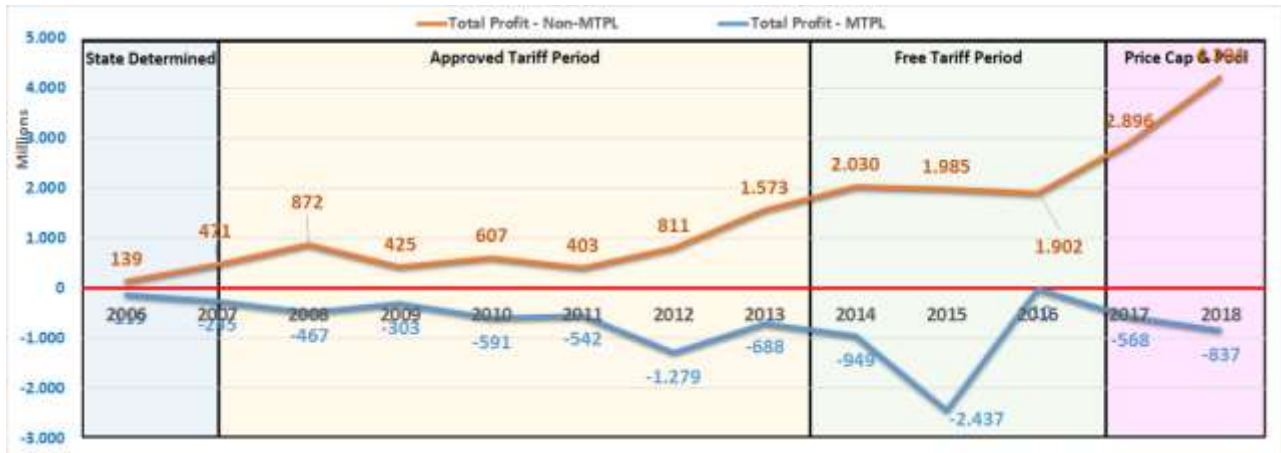
Source: Author

In the Price Cap & Pool Period the profitability again downturns, but the impact of the investment income is the highest in 2018. Decreasing profitability relates to the price ceiling that the insurance companies must obey. However, in this period, insurance companies had the chance to enjoy the increasing trend in the interest rates so that they could get a higher investment income than they did in previous years. Thus, most of the companies in deregulated times still stay in the market even though they had huge losses thanks to the contribution of investment income.

In fact, it can be a good exercise to compare the MTPL profitability with the rest of the insurance industry.³¹ In Figure-23, the profitability development of the MTPL and Non-MTPL insurance lines are given together. In 2006, we witness that profitability; either in MTPL or in other insurance lines does not matter because they were close to zero. When the Approved Tariff Period started a small profitability decrease in MTPL was compensated in the Non-MTPL line in 2008. In 2012, a similar trade-off enforces insurance companies, to compensate for their loss on the Non-MTPL side. When the free competition starts, the profitability sharply falls in 2015, but the companies do not focus on non-MTPL insurances the profitability stays constant. Pro-market reform gave the companies firstly to capture the break-even point in MTPL in 2016. Nevertheless, the introduction of a price ceiling deteriorated their profits but they again compensated on the Non-MTPL side.

³¹ The rest is calculated by subtracting the MTPL profit from the total insurance profit.

Figure-23 MTPL and Non-MTPL Profitability



Source: Author

From Figure-23, we can infer that whenever the profitability on the MTPL side weakens, the insurance companies automatically switch from MTPL to non-MTPL insurances to compensate for their costs. This movement can be seen in the 2008, 2012, 2014, 2017 and 2018 years in the figure with a downward movement in MTPL profitability were offset by upward movement in the Non-Life profitability. It can be a wise solution to focus on other business lines in this perspective, so generally, the big firms which have a relatively more standardized production mix in their premium generation can better survive in the crisis.

Another important inference might be that, insurance companies did much to learn the technical knowledge and underwriting standards in the insurance business. Since the MTPL is always the leading product in insurance in Turkey and secondly since has always been compulsory, the insurance companies, unfortunately, exposed the losses in this line for years. In other words, they learned to survive in the market despite the MTPL. In order to reverse the unprofitability, they deliberately involved in other insurance lines to minimize their risk. The increasing trend of Non-MTPL profitability clears that when the companies are desperate in the MTPL business, they can be more productive in other areas.

When we combine the MTPL profitability and the Non-MTPL profitability, we can have the trend of total Non-Life Insurance Profitability as depicted in Figure-24. Starting from the early State Determined Period in 2006 until the end of the Approved Tariff Period in 2013, it is seen that, as

we had deduced in Figure-23, profitability in Non-Life insurances fluctuated depending on the loss in the MTPL area. So offsetting the loss in the profitability in the other lines figured out a steady range between 500 mn TRL range of loss and profit, up and down fluctuations in the horizontal axis. The introduction of the Free Tariff Period first hit the insurance companies in terms of MTPL due to the price wars in the first years. At this time, while the companies already focused on the MTPL business, they could not achieve much progress on the Non-MTPL side. When the competition is over and the prices are reflected the last user –the policyholder- the increase in prices stimulated the growth in MTPL, so in the Non-Life as well. Perhaps it could be stated that the regulation did not cause to diminish the total profits. After 2017, though companies cannot charge their own prices in MTPL, they realized much profit in general. This tells us that the unprofitable nature of MTPL somehow learned to deal with.

Figure-24 Insurance Profitability in Non-Life

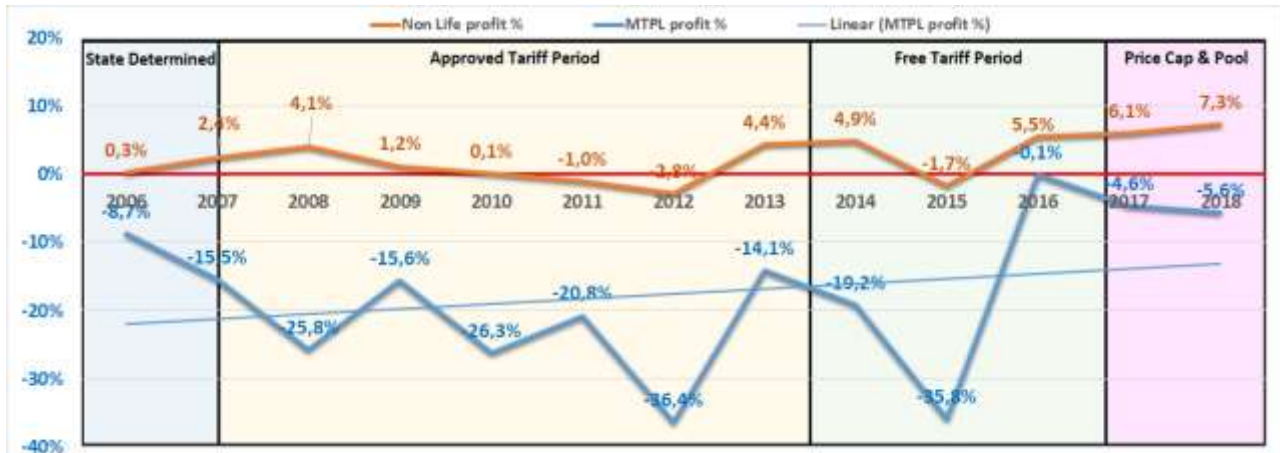


Source: Author

Lastly, we can analyse the profit numbers in terms of premiums generated. Because only concentrating on the absolute numbers, in total profit, either investment income or technical profit may lead to capturing the big picture. For that reason in Figure-25, the total profit generated is divided by the premiums for both MTPL and Non-Life Insurances. To put it differently, profit numbers in each year generated in Figure-23 is divided by the premium numbers as already shown in Figure-3. Hence, it might be useful to see the leverage impact of the premiums in profitability.

Because when the premiums go up, the fixed costs of the companies become more negligible due to the scale impact. In this context, we can assume that, as the premiums increase, the profitability of the companies are expected to increase. Figure-25 asserts this assumption. Both in MTPL and Non-Life insurances, the profit amount in the total premium generated, is increasing over time.

Figure-25 Insurance Profits divided by Premiums



Source: Author

Figure-25 shows that the average ratio of profits to premiums in the Non-Life insurances had been on average 1,2% during the Approved Tariff Period. However, this period is overwhelming for MTPL insurances because the losses constitute the greater portion of the premiums in each year. The average MTPL loss to premiums ratio is -22%. We can understand that 1 TRL of every 3 TRL policy produced in MTPL causes loss in 2012 where this also hits the total profitability of the Non-Life industry. In the Free Tariff Period, the shares of MTPL loss again declines to -35% but then rapidly recovers in 2016. This recovery is reflected in the Non-Life insurances. In this period Non-Life insurances average profit to premium ratio increases to 2,9%. This means the profitability nearly doubles in Non-Life as compared with the average ratio in the Approved Tariff Period. The regulatory period, on the other hand, caused a slight fall in profitability ratio in MTPL but this fall is not reflected this time in the Non-Life lines.

The trend of the profitability of MTPL seem increasing but it should be noted that the impact of the rise in 2016 is the turning point. Because if the pro-market reform had not taken place, it is

believed that, the decreasing trend profitability coming from the Approved Tariff Period would continue. Therefore, the chance of implementing free prices increased the revenues of the insurance companies in 2016 and offset the previous tendencies. We understand that after the regulation period, the profitability slightly decreases. In this context, we can comment that pro-market reform brought the profitability margins to a tolerable level and the regulation in the following years did not divert this ratio too much and managed to stabilize the tendency.

5.2.4. Firm-Level Profitability Responses

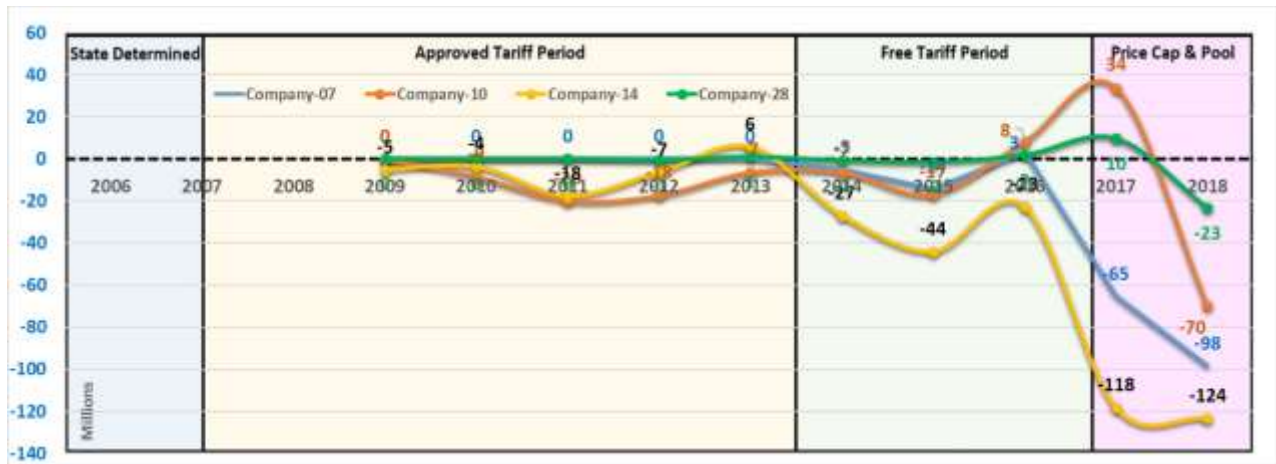
Now we can figure out which companies performed better in MTPL profitability in times of reforms and which companies were severely hurt in times of regulation. The statistics relating to MTPL is only available after 2003, before this date the statistics are given in cumulative as “Motor” including both MTPL and MOD. Company based profitability is only available after 2009. Here I assume profitability is the outcome of the price charged, therefore the responses relating to the profitability of the insurance companies can be grouped into seven categories.

5.2.4.1. Group-I: No profits, Worse in Regulation

The first group consist of two public insurers Company-28 and Company-14, one with local capital Company-07 and the one with a foreign capital Company-10. As of 2018 year-end, this group has the 16% of the market share in traffic. For these firms, MTPL had always been a problem as portrayed in Figure-26. Since Company-07 was established in 2014, in the Approved Tariff Period three companies moved near to break-even in the MTPL profitability. The real change started with the Free Tariff Period. In this period Company-07 participated in the other firms and all four experienced a downward curve in the first two years of the pro-market reform. In the following year, again they all experienced a positive upward movement in profitability. Actually, Company-10 and Company-28 could achieve positive revenue from MTPL in 2017. However, Price Cap hit all four companies enormously and their profitability fell considerably in 2008. Company-14 and Company-07, which incurred this negative downward movement two years prior, end up with the highest loss in 2018 around -100 mn TRL.

As of 2018, the total loss of Group-I companies is -315 mn TRL. Since the total loss in the MTPL market equals 837 mn TRL as given in Figure-22, the Group-I companies shoulder 38% of the total loss. It can be stated that Price Cap & Pool Period made Group-I even worse than ever. If we omit the exceptional profitability of Company-28 and Company-10 in 2017, Group-I has never experienced the profit in MTPL in their history.

Figure-26 MTPL Profitability by Periods (Company 07, 10, 14 and 28)



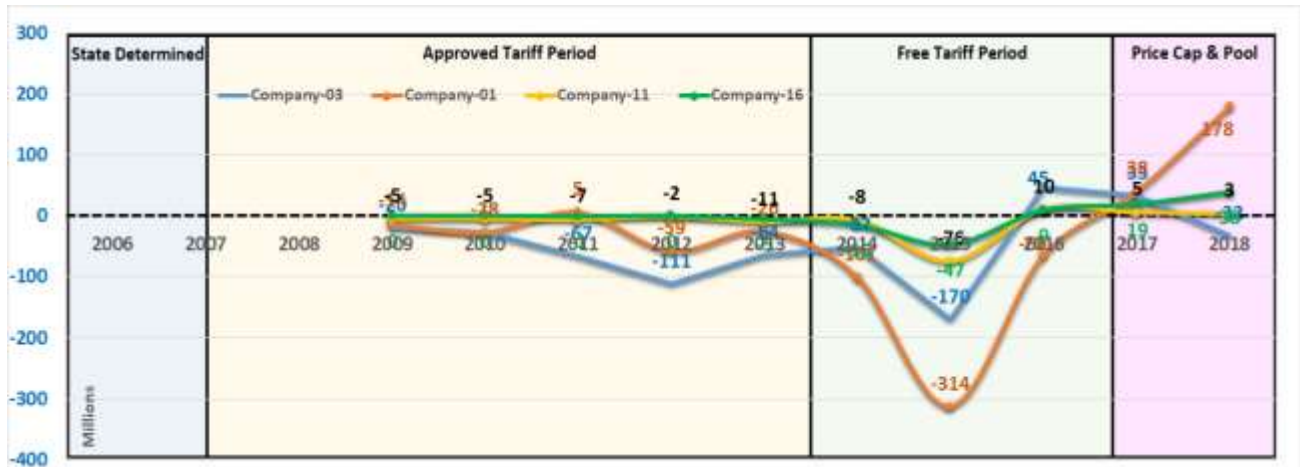
Source: Author

5.2.4.2. Group-II: From Deep to Peak

The second group consist of Company-03, Company-01, Company-11, and Company-16. In this group, only Company-11 is a foreign-owned company. In many ways, Group-II companies perform a similar trend to Group-I as depicted in Figure-27 First similar to Group-I companies, they have MTPL losses in the Approved Tariff Period. Secondly, similar to Company-07 in Group-I, Company-16 this time is the latecomer and inactive until 2011. Thirdly, similar to Group-I companies, Group-II companies suffer from losses especially in the first year of the Free Tariff Period and in 2015, and all four companies suddenly improve their revenues in the upcoming two years. On the other hand, there are also some differences from the Group-I companies. Firstly, their MTPL costs in the Approved Tariff Period is more severe than Group-I. The maximum loss was -111 mn TRL in this period in Group-II companies, and it is five times bigger than when we compare with the highest loss of -20 mn of Group-I companies. Secondly, Group-II companies

showed much worse losses than Group-I in the dark year of 2015. The average loss of Group-II is -151 mn TRL where it was -19 mn TRL for Group-I in the same year. This comparison suggests that Group-II had been in a worse place, and these companies experienced heavier losses than their peers did in Group-I in the Free Tariff Period.

Figure-27 MTPL Profitability by Periods (Company 01, 03, 11 and 16)



Source: Author

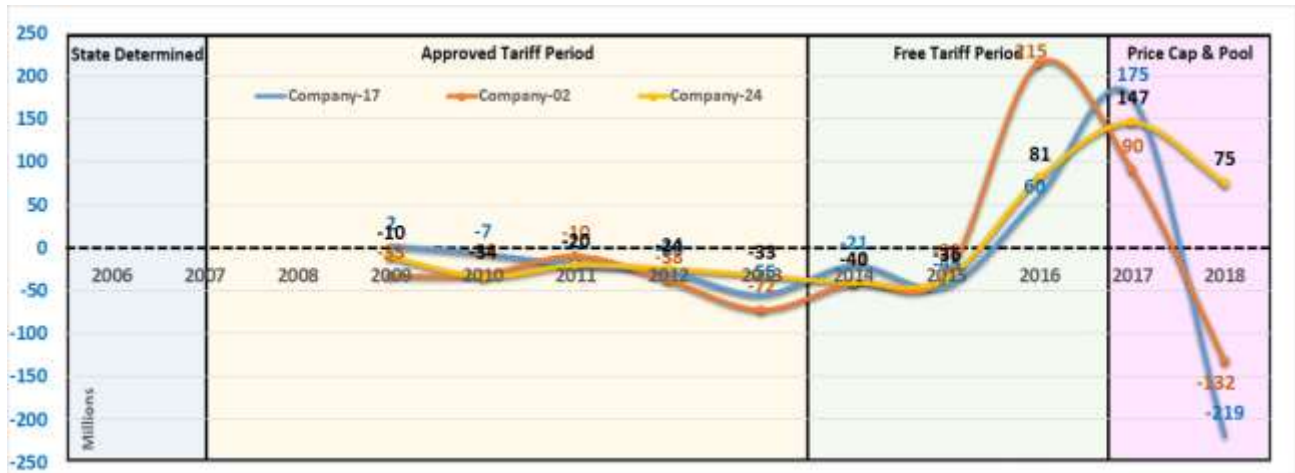
Perhaps the most interesting deviation from Group-I is their loss level in the regulation period. Except for the small loss of Company-03, all three companies have positive MTPL revenues in Price Cap & Pool period. The total profit of Group-II companies as of 2018 is +187 mn TRL. We had stated that Group-I had experienced a loss of -315 mn TRL. This gap points out a huge loss difference between the two groups reaching 500 mn TRL.

Lastly, we can also add that Group-II companies have a market share in MTPL 19% that is quite close to Group-I, but they have much better performance in 2018. Thus, we can support the same trend in the reform period that first increasing loss in the first two years and then reversing it. However, the regulation led Group-II to more profitable outcomes.

5.2.4.3.Group-III: Solid Profit Makers During Reform Period

The third group of companies are foreign-owned insurers. They consist of Company-17, Company-02, and Company-24 and their profitability in MTPL is portrayed in Figure-28. Group-III companies resemble Group-II, especially in the Approved Tariff Period. We again witness that MTPL somehow is a loss-making line. The average loss of these three firms between 2009 and 2013 is -28 mn TRL and this number is very close to the Group-II companies, which has -25 mn TRL. So we can infer that the Approved Tariff Period did not really change the profitability of the firms. What is more, since there are no fluctuations in this period, the losses vary in a very close range in all three groups. Group-III companies actually differ from Group-I and Group-II Companies in the Free Tariff Period. Both Group-I and Group-II companies had experienced a downward shift between 2013-2015 and followed by a sharp increase in the 2015-2017 period. However, this trend is not seen in Group-III companies. These companies continue to maintain their MTPL profitability just similar in the Approved Tariff Period. The second different characteristic of Group-III companies, unlike Group-I and Group II, they provide positive revenues from MTPL business. For example, Company-02 provided 215 mn TRL in 2016 and Company-24 maintained 147 mn TRL and Company-17 realized 175 mn TRL profits in 2017. So we can deduce that the second half of the market reform in MTPL regulation provided a distinguished profitability area to Group-III companies. Lastly, when Price Cap is enforced, we witness that the profitability of all three companies immediately falls in a one-year period. Only Company-24 manages to stabilize positive in 2018, whereas Company-02 and Company-17 dive into the loss zone again, but this time sharper than the previous.

Figure-28 MTPL Profitability by Periods (Company 02, 17 and 24)



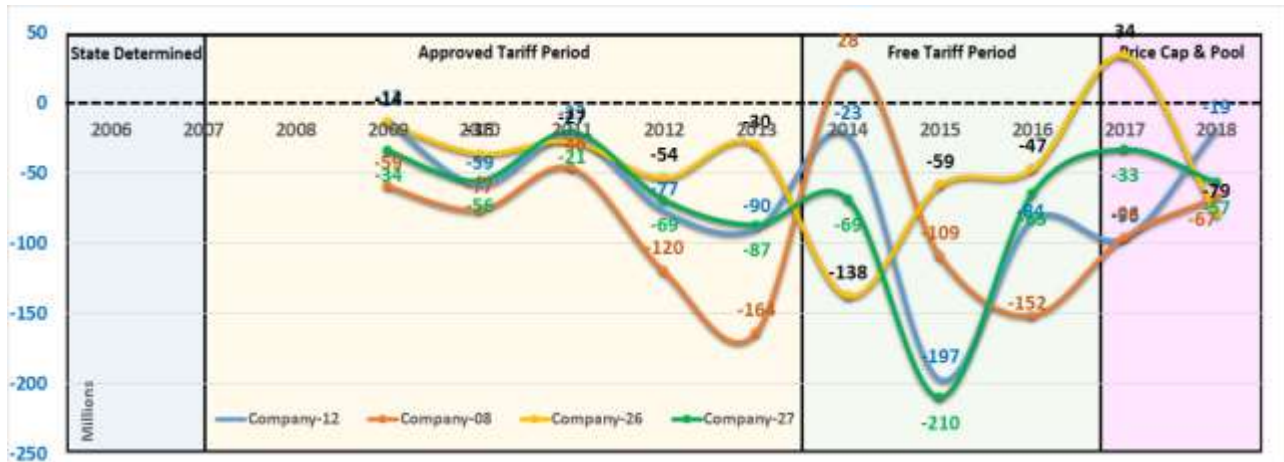
Source: Author

Lastly, we can state that as of 2018, the total MTPL share of these three companies constitutes 24% of the total market share. This indicates that Group-III companies dominate the market in 2018. However, they face a total of -275 mn TRL loss in 2018. If we remember that the total loss from MTPL was -837 mn TRL, one-third of the cost is shouldered by big MTPL producers.

5.2.4.4. Group-IV: Big Loss-makers

Group-IV is a little bit different from the first three groups. Their MTPL profitability is portrayed in Figure-29. In this group, there exists only one public insurer, namely Company-27. The other companies are Company-12, Company-08, and Company-26. The first difference is that all these four companies, unfortunately, suffer from huge losses. Secondly, they do not show standard ranges within narrow thresholds, on the contrary, they exhibit large fluctuations in the loss side. Thirdly, they never realize positive revenue in any of the periods.

Figure-29 MTPL Profitability by Periods (Company 08, 12, 26 and 27)



Source: Author

Group-IV is quite unique in the Approved Tariff Period. These companies experience two deep loss points. The first one is in 2010 (all four experience the same trend) and the second one in 2013 (three of them perform the same trend). It can be also mentioned that the average loss gets bigger as we move from the end of the Approved Tariff Period. The severity of the losses in this period is highly extreme when we compare it with the previous three groups. For example, the total loss in the Approved Tariff Period (between 2009-2013) is -1.156 mn TRL for Group-IV. The same numbers are -82 mn TRL for Group-I, -447 mn TRL for Group-II and -415 mn TRL for Group-III respectively. It is also to admit that, the total loss of Group-IV is higher than the total losses of Group-I, II and III.

Group-IV companies are the fastest ones when the reform period has started in 2014. Three of them performed significant increases and even Company-08 enjoyed at least a positive revenue. Interestingly enough they realize the maximum losses (Company-27 and Company-12) but rapidly recover in the upcoming year. Again in the Free Tariff Period, we see that Group IV companies have realized the highest loss between 2014-2016 with -1,125 mn TRL. These numbers correspond to -127 mn TRL for Group-I, -784 mn TRL for Group-II, and 141 mn TRL for Group-III. In the reform period, we had the same conclusion that the loss of Group-IV is higher than the total of the other three groups.

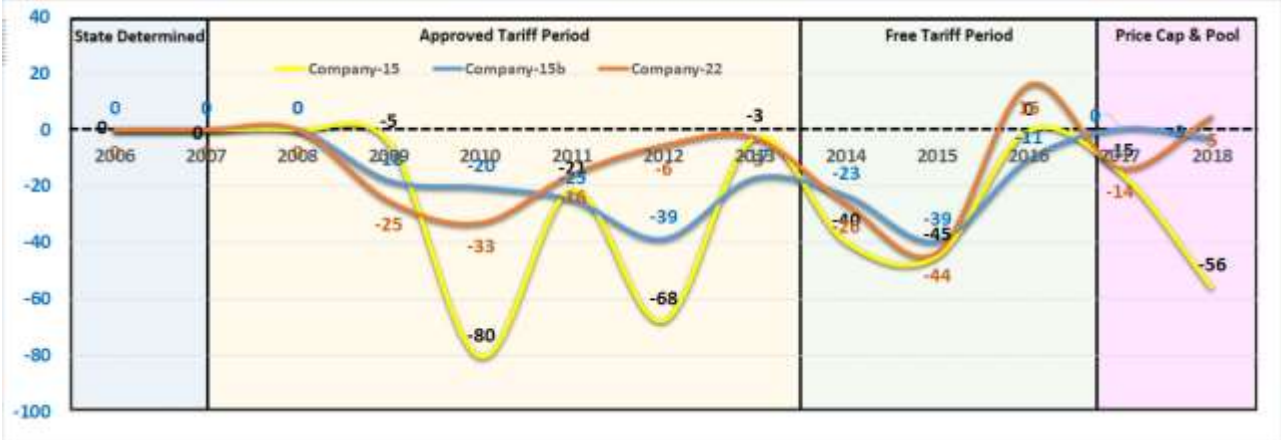
In the regulation period, if we put aside the temporarily positive value of Company-26 in 2017, it can be said that the regulation did not change its continuous loss pattern. Even we can claim that,

by comparing with the Approved Tariff and Free Tariff Periods, regulation favoured these companies because their losses in absolute terms shrink significantly. Lastly, when we analyse as of 2018, the total market share of Group-IV equals only 6% of the MTPL market but they have the burden of -222 mn TRL loss in the MTPL business. Since the total loss in 2018 is -837 mn TRL in the MTPL market, Group-IV carries 22% of the market loss. Thus, on the premium side having a 6% market share, but on the loss side having 22% of the market loss, demonstrates that Group IV companies have a three times bigger loss portion when compared with their size in premiums. Finally, we can conclude that pro-market reform destroys the profitability of Group-IV whereas the regulation period, though negative, has mild effects on MTPL profitability.

5.2.4.5.Group-V: Decreasing Loss but No Profit

Group-V consists of Company-15, Company-15b³² and Company-22. These companies experience loss in MTPL but the level of loss decreases as the years pass. The trend of MTPL profitability of Group-V companies was given in Figure-30.

Figure-30 MTPL Profitability by Periods (Company 15, 15b and 22)



Source: Author

³²Company-15b was merged to Company-15 in 2018, but the real profits were reported as two separate entities. Thus their profits were not combined.

In the Approved Tariff Period, the firms incurred losses, but the amount of loss was declined in 2013 at the end of the period. Company-15 differs in this stage from the other two firms that every year the profitability fluctuates up and down. In the Free Tariff Period, all the firms show a similar movement: in the first two years, their profitability declines to -40 mn TRL level in 2015. After that year, they move together upwards. So the last full year of the reform period, 2016 has been the golden year for Group-V companies, even Company-22 was able to realize a positive revenue. When the regulation started, Company-22 and Company-15b managed to survive in the break-even line, but on the other hand, they never became positive. The profit of Company-15 declined further in the regulation time. So we can state that Group-V always experienced losses in the MTPL market. The profitability increased in general in Approved Tariff and Free Tariff periods with the variations. The regulation brought somehow stability except for Company-15. As of 2018, the MTPL share of these firms is only 5% and the loss that they face is -54 mn TRL. Since the total loss in the market in 2018 is -837 mn TRL, Group-V shoulders 6% of the total loss. In this sense we may say that, the less they participate in MTPL production, the less cost they get. The market share is proportionate to the level of loss for 2018.

5.2.4.6.Group-VI: Flat-liners

Group-VI firms are the new entrants except for Company-29. Company-13 entered the market in 2013 and Company-20 and Company-25 entered one year after. Because they are newly established firms, we cannot figure out their profitability development in the Approved Tariff Period. The developments of Group-VI is given in Figure-31. At the first glance, it can be seen that the loss level of Company-29 had been quite low during the pre-reform period. When the Free Tariff Period started in 2014, as similar to all groups mentioned before, these firms first face losses then recover them after 2015. We should add that the dimension of the loss never exceeded -20 mn TRL. In the regulation period, the profitability of these firms was very close to zero. Thus within these patterns, Group-VI is placed in a unique place, where the loss of firms never exceeded -20 mn TRL and the revenues never exceeded 4 mn TRL. The range had always been so close to the break-even and it might be commented that these new firms can sustain standard MTPL profitability (or more correctly loss) that can be tolerable and a manageable level.

Figure-31 MTPL Profitability by Periods (Company 13, 20, 25 and 29)



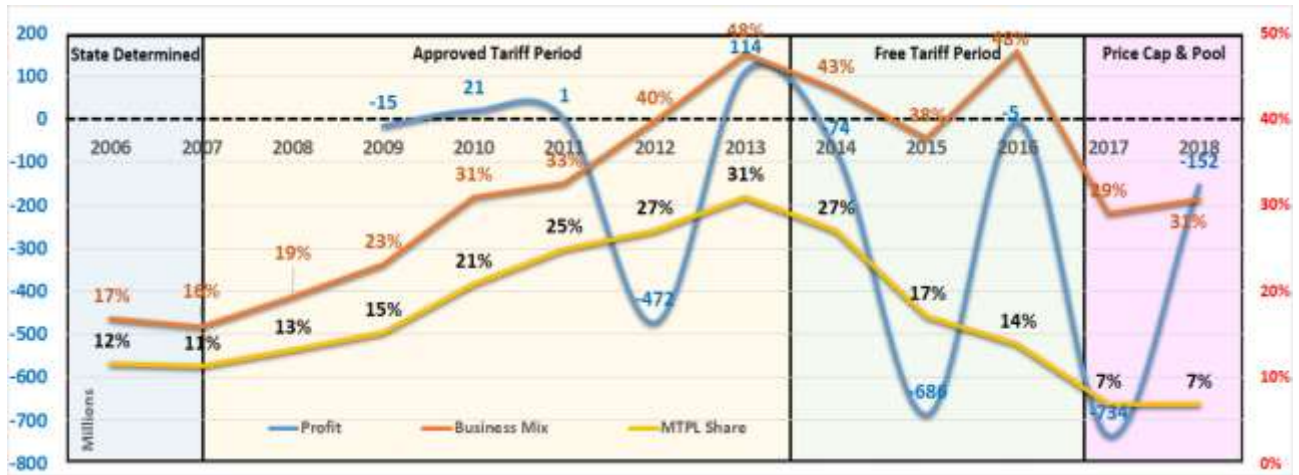
Source: Author

Finally, the MTPL market share of these firms as of 2018 equals only 2% of the market. This market share is the minimum when compared with the previous groups mentioned. Similarly, the amount of loss equals -25 mn TRL. This loss corresponds to 3% of the total MTPL market. This comparison suggests that, as same as the Group-V companies, market share and the profit level is reconciled. For Group-VI, we cannot clearly express the profitability impact of the pro-market reform and the regulation because the firms played and fluctuated in very narrow ranges.

5.2.4.7. Group-VII: Broad Fluctuations and Broad Loss

In this group, we have only one insurance company: Company-05. In Figure-32 the profitability of company-05 is given. To see the big picture and comment transparently, the internal concentration to MTPL is also given in the orange line. Additionally, to see the size in the market, the MTPL share of Company-05 in the market is also added with the yellow line.

Figure-32 MTPL Profitability by Periods (Company 05)



Source: Author

Actually, Company-05 is alone in this group and perform a unique position in the market. The profitability of Company-05 varies much and represents an interesting pattern, in every two years Company-05 experiences very high losses from MTPL then the following year succeeds to maintain break-even level. This pattern seems independent from the periods. In every period, Company-05 showed the break-even profitability but also incurred the highest losses. For example in 2012, the total loss in the market was -1.279 mn TRL and the loss of Company-05 was -472 mn TRL, which was 37% of the total loss. Similarly, in 2015, the loss of Company-05 was 29% of the total MTPL loss, and in 2017 the scenario was dramatic. The total loss in the market was -567 mn TRL and Company-05 suffered from the loss of -734 mn TRL alone. The reason why the loss of market is less than the loss of Company-05 is that some of the firms managed to have positive gains. When we look at the internal concentration to MTPL, and the MTPL share of Company-05, it can be seen that during the Approved Tariff Period, Company-05 continuously invested in MTPL. One of every two policies Company-05 sold in 2013 was MTPL insurance. At the same time, one of every three MTPL policies sold in the market belonged to Company-05. This was a turning point. After this date, Company-05 decreased its concentration in the market. However, the losses continue to hit Company-05 in every two years. Because the company needed to increase its reserves to compensate for the probable losses for the upcoming period. Thus, as we have discussed in analysing the MTPL insurance in the previous section, claims and therefore the losses hit the firms in MTPL with a lag. Company-05 remained the continuous leader in the market and

dominated the production for years, but this enforced Company-05 to be more open for the upcoming compensation demands. Thus, the Company-05 case points out that, MTPL functions as a vicious cycle. Once the firms compensate themselves by selling more, they become more prone to future losses. In this case, the regulatory framework does not have any impact on profitability.

Thus, how the different periodization affects the profitability of the firm depends on the response of the companies. The sixth group of profitability patterns relating to the pro-market framework was summarized in Table-14.

Table-14 Profitability of Group Companies

Group	Companies				2018 Share in		Pattern
					Premium	Loss	
Group-I	Company-07	Company-10	Company-14	Company-28	16%	38%	No Profits, Worse in Regulation
Group-II	Company-01	Company-03	Company-11	Company-16	19%	-22%	From Deep to Peak
Group-III	Company-02	Company-17	Company-24		24%	33%	Solid Profit Makers During Reform
Group-IV	Company-08	Company-12	Company-26	Company-27	6%	22%	Big Loss Makers
Group-V	Company-15a	Company-15b	Company-22		5%	6%	Decreasing Loss but No Profit
Group-VI	Company-13	Company-20	Company-25	Company-29	2%	3%	Flat-Liners
Group-VII	Company-05				7%	18%	Broad Fluctuations & Broad Loss
Total					79%	98%	

Source: Author

As the numbers indicate that except for Group-II, all the groups experienced loss in 2018. Secondly, it is clear that, as the concentration to MTPL, or the market share increases, the losses tend to increase as well. The inverse is also true. Companies should decrease their concentration to MTPL to decrease their losses. This brings us to the idea that insurance companies can avoid MTPL losses by diminishing their concentration or with less production. Nearly all the groups have losses during their history from MTPL. Thirdly, the level of losses increased in the pre-reform period and the highest loss was realized in the second year of the Free Tariff Period. After this date, the profitability increased fast. It is assumed that the regulation ended the profitability period in 2017. Though small companies had acquired market share, both local and foreign insurance companies share the loss. However, the profitability of the publicly owned insurers' profitability decreased.

5.3.Market

How the market responds to the pro-market reform depends on the strategies of the firms relating the concentration ratios in the MTPL market. This study is analysed in three sub-dimensions by grouping the players. Firstly, I will focus on the largest non-life insurers. Secondly, I will analyse the biggest MTPL producers. Finally, I will group the insurance companies according to their internal MTPL concentration developed as a response to pro-market reforms and regulations.

5.3.1. Highest Producers in Non-Life

Table-15 shows the maximum non-life premium generating companies. Without looking at the numbers, Table-15 blows few details. In 13 years, the Top-3 leading insurance companies were the same in 11 years consisting of Company-02, Company-03 and Company-05. In the whole years, Top-3 is shared by different four insurers namely Company-02, Company-03, Company-05 and Company-01. This indicates that there has been a well-established market structure in the non-life insurance market. When analysing the Top-5 producers, Company-02b (merged to Company-02 in 2014), Company-27, Company-17, and Company-24 were the additional ones in the list. Therefore, 8 different company has been listed in the largest non-life insurance companies in the last 13 years, which asserts that Top-5 list is more or less standard as in Top-3 list.

Table-15 Highest Premium Producers in Non-Life Insurance Market

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
1	Co-03	Co-03	Co-05	Co-05	Co-05	Co-05	Co-05	Co-05	Co-02	Co-02	Co-02	Co-02	Co-02
2	Co-05	Co-05	Co-03	Co-03	Co-03	Co-03	Co-03	Co-03	Co-05	Co-03	Co-03	Co-03	Co-03
3	Co-02	Co-02	Co-02	Co-02	Co-02	Co-01	Co-02	Co-02	Co-03	Co-05	Co-05	Co-05	Co-01
4	Co-01	Co-01	Co-01	Co-01	Co-01	Co-02	Co-01	Co-01	Co-01	Co-17	Co-17	Co-17	Co-05
5	Co-02b	Co-27	Co-27	Co-27	Co-02b	Co-02b	Co-02b	Co-17	Co-17	Co-01	Co-24	Co-01	Co-17

Source: Author

- “Co” represents “Company”
- Company-02b merged to Company-02in 2013.

Figure-33 gives the development of the share of Top-3 and Top-5 Non-Life insurance companies in the total Non-Life Market. The trend indicates that the share of Top-3 Non-Life insurance companies was in the range between 32% and 42% for the last 13 years where the maximum

concentration was in Free Tariff Period and the lowest one was in the Price Cap and Pool Period. A similar result can be attained by looking at the Top-5 insurers. Their market share changed around 46% and 57% in the same period. The same results are also valid that the maximum concentration ratio intersects when the pro-market reform is initiated. The table indicates that dominating firms in the insurance industry increased their market share in the pro-market reform period.

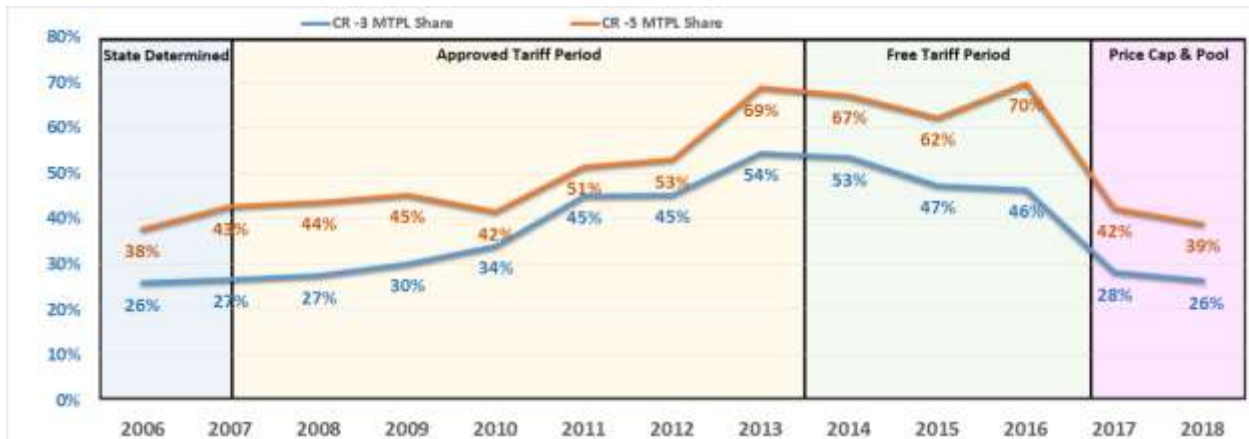
Figure-33 Development of Concentration Ratios in Non-Life Insurance Market



Sources: Author

Since the concentration ratios of the largest non-life insurance companies increase in the Free Tariff Period, it is expected that their MTPL market size might also be growing. In order to control this, the MTPL shares of the leading non-life insurance producers are analysed in Figure-34.

Figure-34 Development of MTPL shares of Highest Producers in Non-Life Insurance Market



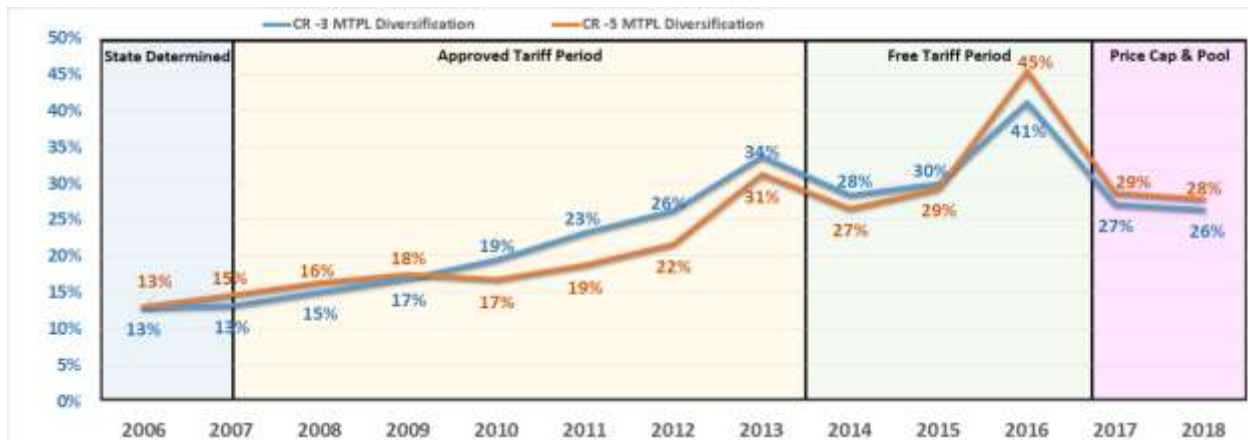
Source: Author

Figure-34 addresses a clear result. Big firms concentrated in MTPL production as the market deregulated. Top-5 insurance companies in non-life have generated the 70% of the total MTPL production in the market in 2016. Once the regulation starts in 2017, it significantly decreases to 42%. This is the expected trend that Price Cap & Pool implementations demotivated the big firms, so they diverted their focus into other insurance lines. However, Top-3 companies do not validate this assumption. The reason why they have falling shares starting from 2013 is they have actually increased their production but the rate of change Top-5 is greater than Top-3, and consequently, the other firms which are not listed in Top-5 concentrated in MTPL market more than any others. Thus, it is not wrong to say that, with the introduction of pro-market reform, more and more small companies are encouraged to produce in MTPL more than ever.

The declining trend of the largest non-life insurance companies in the Free Tariff Period can be better understood by looking at their inner composition into MTPL. It can be expected that, whenever there is a pro-market reform in any line, the companies are eager to involve in those lines at the expense of others. In other words, when MTPL tariffs are given to be freely determined, insurance companies might feel more engaged to produce MTPL and they may shift their resources from non-MTPL lines. This trend should be observable in all companies.

The internal concentration development of the largest non-life insurance companies is given in Figure-35. The internal concentration is calculated by dividing their MTPL share to their total non-life production. This figure, contrary to the previous section, do not show their impact on the whole MTPL market but reveals their own investment decision from one line to another.

Figure-35 Development of Internal MTPL shares of Highest Producers in Non-Life Market

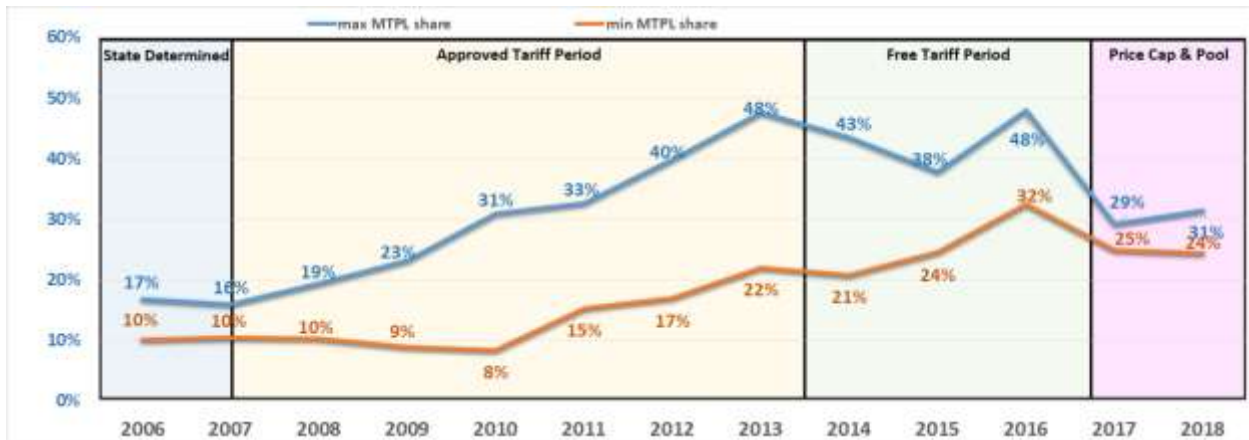


Source: Author

Figure-35 shows that the largest non-life insurance companies invested more in traffic as the reforms were implemented. When the tariff is statly determined, their average share to MTPL were around 14% in 2007. Whenever the insurance companies were given to move within the imposed tariff, they gave more emphasis to MTPL and six-year period, their average share became around 32% in 2013. This means that, in the Approved Tariff Period, the largest non-life insurance companies increased their MTPL share in their own product mix twofold. The real significant increase was realized in 2016 in the Free Tariff Period. When comparing with the early steps in liberalization with 2007, the largest companies tripled their MTPL share to 41% and 45% respectively. Nevertheless, the most significant change was in 2015. Within one year, Top-3 largest insurers increased their MTPL share by 33%. The change in Top-5 companies was even greater with 50% in the same year. After 2017, the regulation brings a quick leave in the MTPL market. They did not completely rush out of the market but stayed in somewhere at the beginning of the Free Tariff Period.

Figure-35 also reveals that the numbers of Top-3 and Top-5 insurance companies are so close to each other. This means that the total of insurance companies MTPL shares implies that companies implement similar concentration rates individually. When analysing for Top-3 and Top-5 in total terms, it is true, but when analysed individually, their internal concentration rates differ considerably in time. This deviation is depicted in Figure-36.

Figure-36 Development Min. and Max MTPL shares of Top-3 Producers in Non Life Market



Source: Author

Figure-36 shows that Non-Life Top-3 insurers respond differently by individually in MTPL concentration over time. Their importance to MTPL in their total product mix varies significantly. The gap tends to increase with the Approved Tariff Period years. This shows that Top-3 non-life insurers have different MTPL composition internally but both rates increases. In the Free Tariff Period, the top three insurers act similar because their internal concentration to MTPL comes closer. The regulation period after 2017, again re-structures the Top-3 as if they have homogeneous structures.

When considering Figure-34 and Figure-35 together, it can be deduced that Top-3 and Top-5 insurers increased their production with the pro-market reforms. However, their production in total was not big enough to affect the market concentration in MTPL, which reveals that more production was carried out by the remaining firms. These changes will be shown in the next part.

5.3.2. Highest Producers in MTPL

In this part, the main concern is not the largest non-life insurance companies, but more focused on MTPL, the largest MTPL policy producing firms. Table-16 points out the biggest MTPL producers in the market.

Table-16 Highest Premium Producers in MTPL Insurance Market

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
1	Co-08	Co-08	Co-05	Co-05	Co-05	Co-05	Co-05	Co-05	Co-02	Co-02	Co-02	Co-02	Co-02
2	Co-05	Co-05	Co-08	Co-03	Co-03	Co-03	Co-03	Co-03	Co-05	Co-03	Co-03	Co-03	Co-03
3	Co-03	Co-03	Co-03	Co-08	Co-27	Co-01	Co-02	Co-02	Co-03	Co-05	Co-05	Co-05	Co-01
4	Co-27	Co-01	Co-01	Co-27	Co-08	Co-27	Co-01	Co-17	Co-01	Co-17	Co-17	Co-17	Co-05
5	Co-01	Co-27	Co-27	Co-01	Co-12	Co-12	Co-17	Co-01	Co-17	Co-01	Co-24	Co-01	Co-17

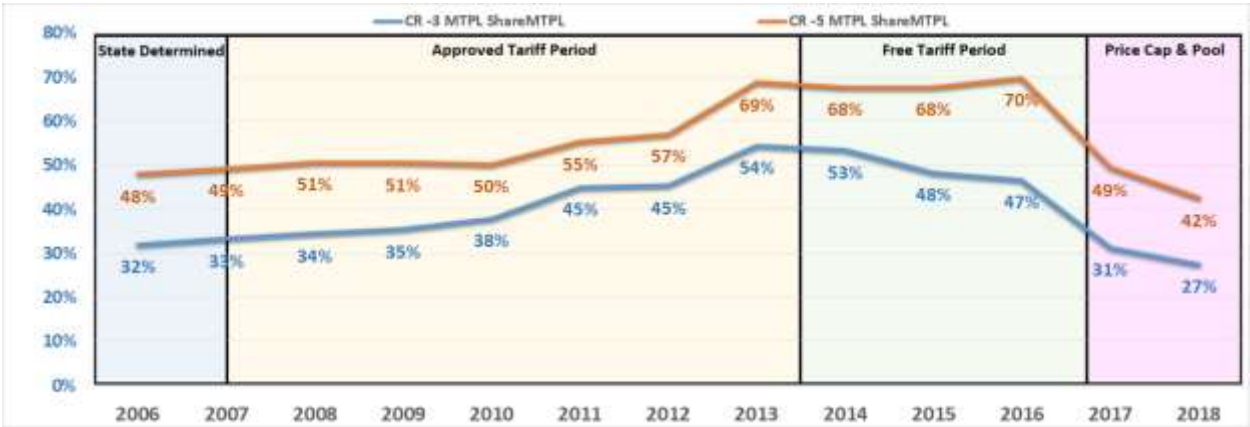
Source: Author

- "Co" represents "Company"

Top-3 producers in MTPL shows more variability than in non-life. In Top-3 companies were Ergo, Company-05, Company-03, between 2006-2009. In the following years, Company-27, Company-01, and Company-02 also took part in the Top-3 MTPL producer list. Company-12, Company-17, Company-24 were able to participate in the Top-5 list as well. In this case in the Top-5 list consisted of 9 different firms were listed in the last 13 years. In Table-15, we had found that there were 8 different firms in the Top-5 non-life insurers. Then we can deduce few outcomes from two analyses. Firstly, both total non-life and MTPL Top-5 company variability are very similar to each other, 8 in non-life as compared with 9 in MTPL. Secondly, out of these 9 firms, 7 of them were in common. Only Company-02b appeared in Top-5 in Non-Life but not in MTPL, conversely, only Company-08 and Company-12 appeared in among Top-5 MTPL list but not in Non-Life. This indicates that as the company increases its share in the MTPL market, it also becomes the largest insurer in non-life simultaneously. It is not surprising when MTPL has a significant share in non-life, any encounter of MTPL producing companies automatically push them in the top non-life rankings. Thirdly, after 2010, both the companies and their rankings in Top-3 companies are perfectly the same as in MTPL and non-life lists. This supports our argument that, when the firms grow in MTPL, they also became the market leader in non-life, since the other line of business is too small when compared to MTPL.

When we look at the concentration ratios of below mentioned companies in Top-3 and Top-5 in Figure-37 Development of Concentration Ratios in MTPL Insurance Market, it can be witnessed that there exist a similar pattern as we had in non-life concentration ratios as shown in Figure-33. The concentration slightly increases over years until pro-market reform in 2014. After this year, Top-5 concentration slightly increases however Top-3 downturns significantly and the parallel movement until 2014 widens in the Free Tariff Period. Figure-37also asserts that market concentration in the MTPL market is higher than the concentration in non-life insurances as shown in Figure-33. Additionally, MTPL concentration increases faster than the non-life concentration in deregulation times.

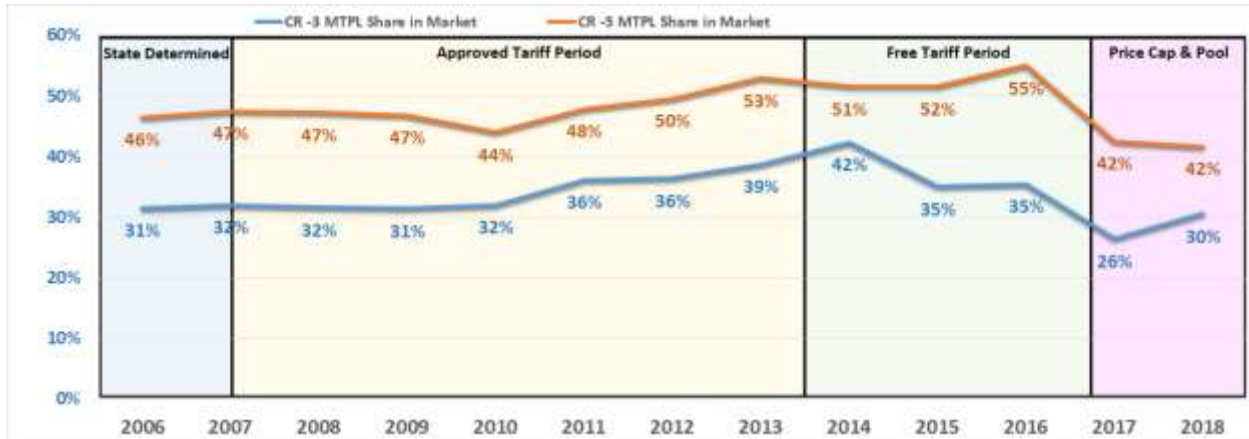
Figure-37 Development of Concentration Ratios in MTPL Insurance Market



Source: Author

We had experienced that in biggest non-life insurance companies were focusing on producing more MTPL in times of deregulation as represented in Figure-34. The same pattern is expected to be seen once again from looking at the biggest MTPL insurance companies. This time, MTPL dominated companies are assumed to produce more as the level of regulation decreases over time. This trend is shown in Figure-38. The figure also supports the result that, leading traffic firms to increase their production in the Free Tariff Period, but the small firms increase their production faster than the market leaders, so the concentration rates increase slightly for Top-5 insurers and decrease for Top-3 insurers.

Figure-38 Development of Non-Life shares of Highest Producers in MTPL Insurance Market



Source: Author

As similar to top non-life insurers, big MTPL producers would prefer greater opportunity in producing additional MTPL, therefore, leading to a steeper increase in deregulation periods. Figure-39 shows the average internal concentration rates of the biggest MTPL producing companies. At the beginning of the Approved Tariff Period, these companies devote 18% of their production to MTPL. At the end of the period in 2013, this ratio reached around 30% and in the Free Tariff Period, the internal concentration further increased to 45%. This result is also reconciled as we found in Figure-34.

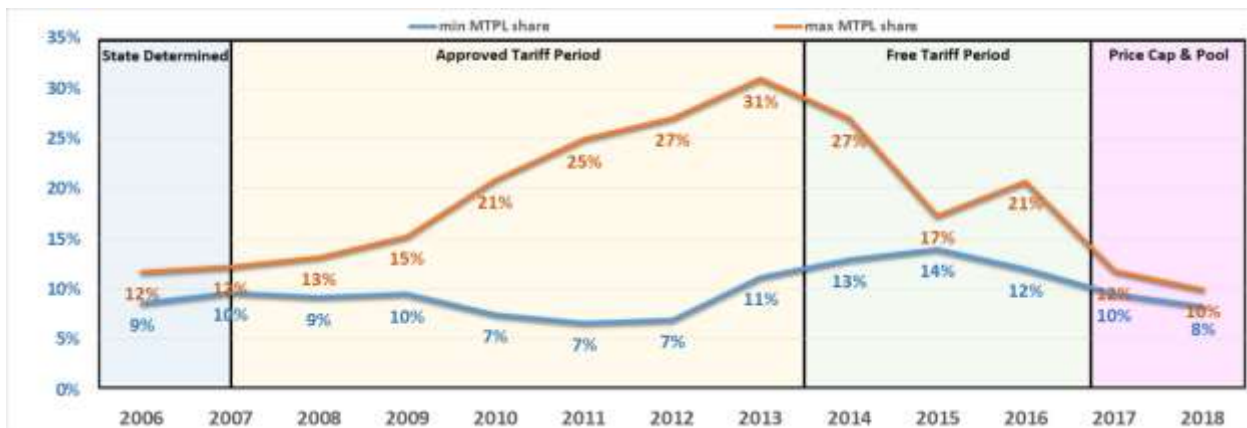
Figure-39 Development of Internal MTPL shares of Highest Producers in MTPL Market



Source: Author

How much of their total production do these firms invest in for MTPL? When looking at the Top-3 MTPL producers, it varies depending on the pro-market reforms in the market as shown in Figure-40. For example in State Determined Period, Top-3 MTPL producing firms chose to divert minimum of 10% and maximum of 12% to MTPL. This means that even the biggest producer in the market, the internal share of MTPL insurance in that companies' total production is not more than 12%. However, when the companies were allowed in 2007 to produce their own pricing within a given range, the gap between the minimum and maximum internal concentration ratio widens. Actually, the concentration related to the minimum range changes sluggishly in time and does not respond to the regulatory regime. Nevertheless, some of the biggest MTPL producers deliberately change their portfolio to a more MTPL oriented composition, as the reforms are more apparent.

Figure-40 Development Min. and Max MTPL shares of Top-3 Producers in MTPL Market



Source: Author

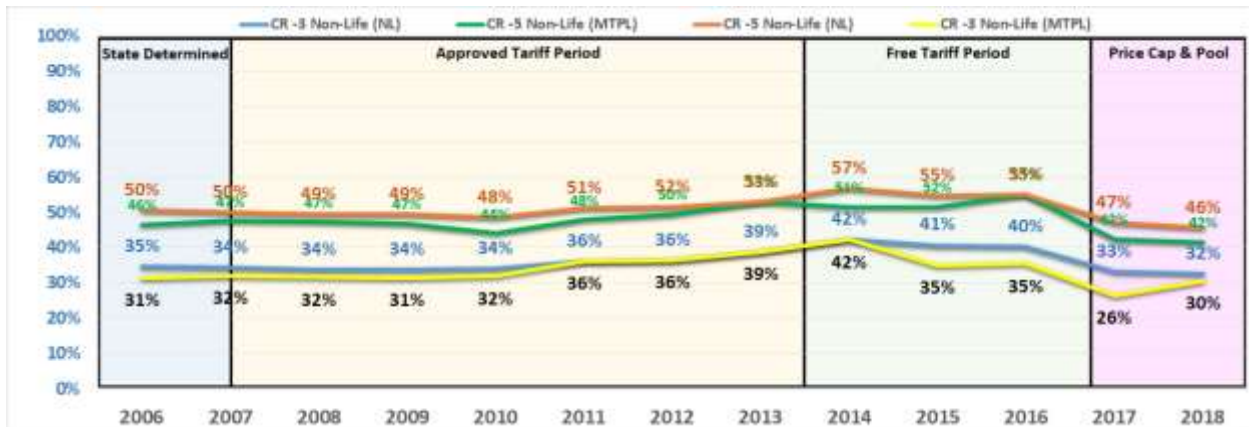
The figure is very similar when we analyse the biggest non-life companies in the market in Figure-36. However, here there are few different trends. First, the gap between the maximum and minimum production share is bigger in big MTPL companies because some of them directly respond to the changes in deregulation. Indeed this is very likely because if more and more percent of MTPL production is chosen in the business mix, it is possible to respond quickly to the changes in reforms. Secondly, maximum internal concentration ratio surprisingly decreases in the Free Tariff Period. The reason is the decrease production of Company-05. For that reason, the trend

seems to decline. Nevertheless, in both cases, the regulation brings the minimum and maximum internal concentration rates similar.

5.3.3. Similarities of Highest Producers in Non-Life and MTPL

Finally, the results can be reconciled by combining the diagrams together. For example, concentration ratios in MTPL and non-life insurances are very close as shown in Figure-41. The reason is that when MTPL is more produced, non-life insurance production also increases. In Figure-41, we see that Top-3 and Top-5 trends intersect as given before in Figure-33 and Figure-38 individually.

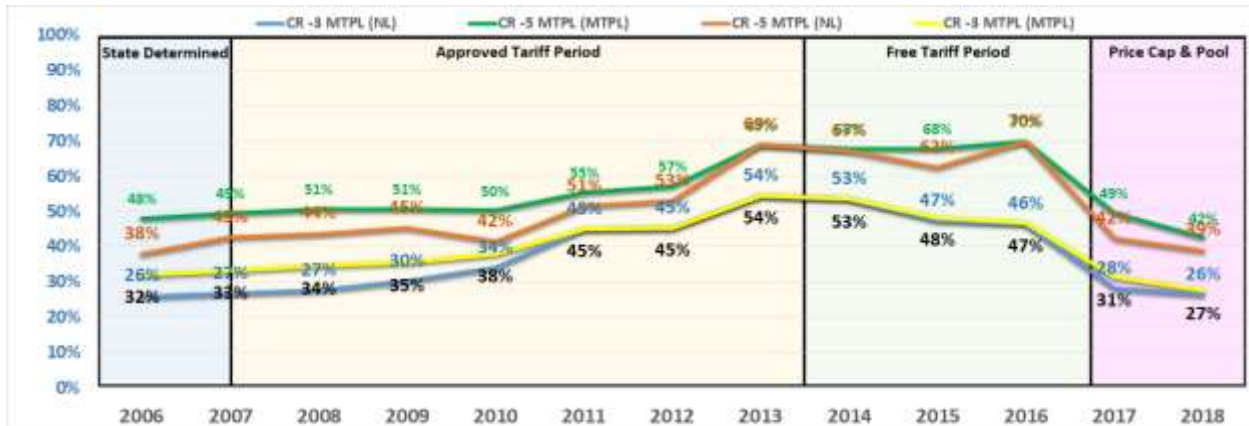
Figure-41 Development Non-Life Concentration by Top-3&5 MTPL& Non-Life Producers



Source: Author

A similar trend is also valid for the concentration in the MTPL market. Both the biggest non-life insurers and MTPL insurers' ratios in the market is so close to each other. This trend is depicted in Figure-42.

Figure-42 Development MTPL Concentration by Top-3&5 MTPL& Non-Life Producers



Source: Author

Figure-42 demonstrates that the movement of big firms in either Non-life or MTPL itself runs parallel as combined from Figure-34 and Figure-37. The trend in Top-3 companies in MTPL and Non-Life nearly move simultaneously until the end of the Approved Tariff Period with a slight increase. After that date, Top-3 concentration gradually falls in both MTPL and non-life. Then it can be concluded that the introduction of pro-market reform decreases the concentration ratio for the Top-3.

The same coincidence is also valid for Top-5 companies in MTPL and Non-Life as well. Here the same slight increases continue until 2016 (the last year before regulation). This indicates that as concentration level increases from Top-3 to Top-5, the impact of pro-market reform as motivating the growth is better understood. Finally, the regulation impact in 2017 has an immediate contracting impact in the overall market in both MTPL and non-life. The regulation decreases the concentration ratios in both Top-3 and Top-5 resulting that only small companies insist to stay in the MTPL market. This took us to the point that leading firms stop their MTPL production when the regulation was enforced, letting their market share to decline, thus giving room for the small players, which did not slow down their MTPL production as compared with the leading ones.

5.3.3. Internal concentration to MTPL by Company Base

In the previous parts, it was seen that the tendency of big firms either in non-life or in MTPL increases in deregulation times. This time the focus is the trend of all companies. First, for each year, for every MTPL producing company, the internal concentration rates to MTPL is calculated

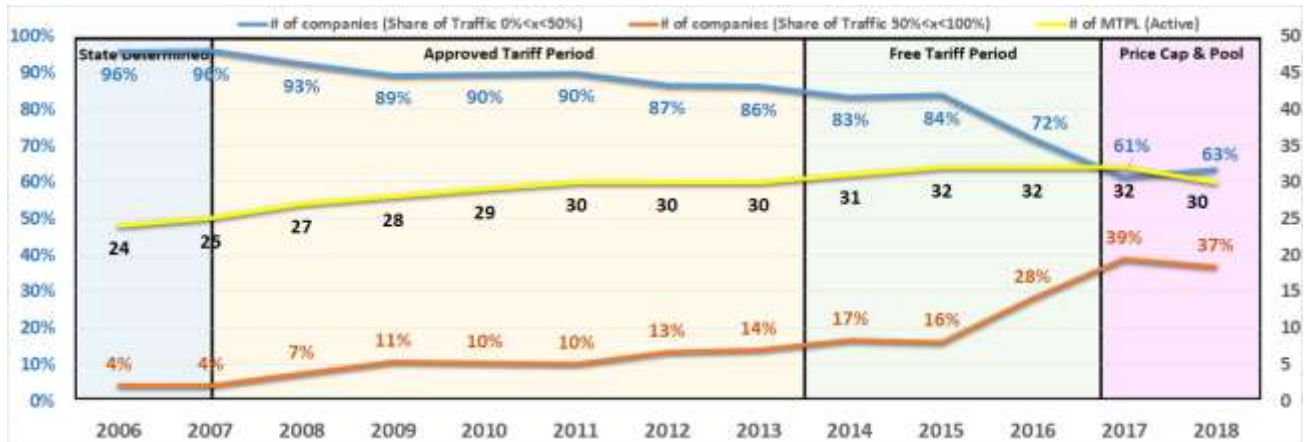
by dividing the MTPL premium of the company to the Non-Life premium. This means that if the firm only produces MTPL and do not produce any other lines, in this case, MTPL production would be equal to total Non-Life production and the internal concentration ratio would be 100%. Secondly, this internal concentration number is grouped into two sets:

- i) where the internal concentration rate is between 0%- 49%
- ii) where the internal concentration rate is between 50%-100%

Of course, these ranges might be formed as minor sets but for setting just two sets would be enough to see the development. Thirdly, we get the count of the insurance companies in each set. For each set, we would have an absolute value of the firms. For set-I there are companies in which the MTPL share in their total premium production varies between >0 , and $<49\%$, and for set-II, the number of companies whose internal concentration to MTPL is equal to or greater than 50%. Lastly, the internal composition of set-I and set-II would be monitored for each year to see the trend.

The result of the study is summarized in Figure-43. The number of MTPL producing companies increases very smoothly. As it was already discussed, there are two main reasons. First is the obligatory reason that licenses are in the control of the Undersecretariat of Treasury and the number of insurance firms does not go up with the new permissions, instead, the acquisitions or takeovers play an important part. Secondly, since the MTPL is a compulsory product, nearly all the non-life insurance companies have MTPL licenses unless the firm is specialized in niche insurance lines like credit insurance industry.

Figure-43 Development MTPL Concentration of MTPL Producing Companies



Source: Author

Figure-43 implies that, though the MTPL producing company numbers do not change significantly over years, the individual decisions of companies to invest to produce more MTPL in their product mix is clearly rises over time. For example, in 2006, where the tariffs are stately regulated and determined there are 24 firms in the MTPL market. 15 of the companies' MTPL internal concentration share is below 25%, 8 of them is between 25%-50%, 1 of the companies is between 50%-75% and none for the range between 75%-100%. Thus when we search for set-1, that is $((15+8)/24)$, corresponds to 96% and for set-II, $(1/24)$ equals 4% for 2006. When we look at the other extreme value after 12 years later, the number of MTPL producing companies is 31 in 2018. Out of 31 insurance firms; 8 firms have an internal concentration rate below 25%, 11 firms lie between 25%-50%, 7 firms has a share between 50%-75% and lastly there are 4 firms whose share is >75%. This distribution makes the set-I $((8+11)/23)$ 63% and the set-II $((7+4)/31)$ 37%.

After the regulation time in 2017, the difference stops. Because Price Cap & Pool Period would definitely lead companies to at least limit their business mix. The continuation of the trend in this perspective is expected to enlarge in the following years.

The results indicate that when the deregulation starts more MTPL producing companies shift their resources to produce more MTPL in their business mix. This is a deliberate attempt that, many of companies follow the same pattern. Interestingly, as of 2018, there are 4 firms of whose business mix is more than %75 in favour of MTPL. This suggests that more than 13% of the companies in

the market solely concentrated on MTPL. By the way, the average internal concentration rate to MTPL of these 4 firms (Company-02c³³, Company-21, Company-25 and Company-16) is 87%. At the same time, the total of their MTPL production corresponds to 9% of the total MTPL market. Thus, it can be inferred that pro-market reforms lead the small firms to devote more to MTPL and to change their business mix. This is aligned with our previous result that, Top-3 and Top-5 MTPL leading firms also increase their share in MTPL but their share in the MTPL market relatively decreases. Therefore, Figure-43 completes the argument that relatively small players became more MTPL centric in their production. It can also be said that pro-market reforms stimulate the small firms to participate in MTPL production more than the market leaders.

5.3.4. Firm-Level Concentration Responses

At this point, the share of MTPL insurances is the main focus. Each insurance company has a different propensity to invest in MTPL; therefore, their concentration on MTPL can be changeable. When companies foresee that the conditions are eligible for MTPL production, they keep increasing their share, as it is expected when the profitability favours them to do so. But if production does not cover the costs or future costs, they may limit producing MTPL and switch their sales efforts to other lines. When the MTPL share of the insurance firm is divided into its own Non-Life insurance total production, some groups of insurance companies and their movements can be categorized under the eight different response patterns.³⁴

5.3.4.1. Group-I: Market Leaders

As already given in Table-16, Company-02, Company-03 and Company-05 had been the highest MTPL producers in the market between 2012 and 2017. At the same time, they were the first 3 companies in Non-Life production between 2005-2010 and 2012-2017 periods as given in Table-15. As of 2018 values, 33% of the Non-Life Insurance market and 26% of the MTPL market was driven by these companies. For that reason in the last twelve years, these dominating firms' focuses on MTPL production are combined together in Figure-44.

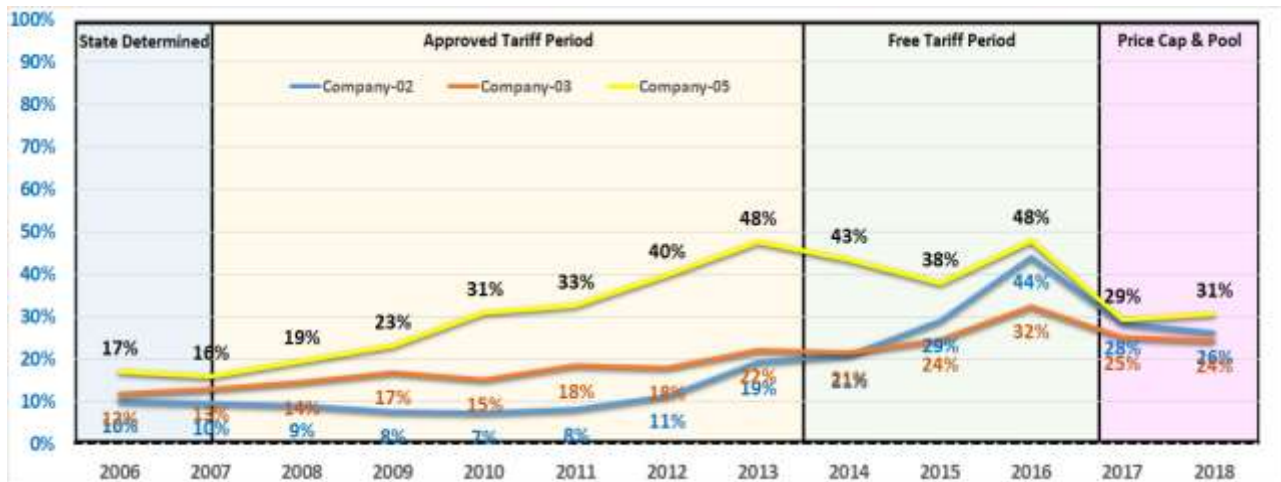
³³ Sold by Company-02 in 2019. For the comparisons until 2019, Company-02c numbers were reconciled in Company-02.

³⁴ In the analysis period, there had been many mergers and acquisitions. For that reason, concentrating to only one firm concentration rate would be misleading when constituting the time series. Thus, the insurance groups are used to provide the alignment and apple-to-apple comparisons.

In general, market leaders show a similar strategy in MTPL penetration. In the State Determined Period, all three companies have the internal concentration to MTPL around 15%. In the Approved Tariff Period again, all three companies increase their internal concentration to MTPL, however, Company-05 performs a little bit higher in every year. Thus, Company-02 and Company-03 come to the concentration rates slightly around 20% whereas Company-05 opens the gap and reaches nearly 50% in 2013. Free Tariff Period stimulates Company-03 and Company-02 rapidly and in two years, their concentration to MTPL turns around a minimum of 32%. Company-05 fluctuates in this period. Where the pro-market reform has reached its peak in 2016, market leaders had their highest concentration on MTPL in their history. However, Price Cap & Pool Period immediately discourage the market leaders to decline their values below 30%.

Thus it the market leaders, behave in the same manner, they have a balanced concentration in regulation times, slightly increase their concentration in deregulation time and reach its maximum at the last stage of pro-market reform. Nevertheless, even at this point none of the companies exceeds 50% in concentration. It can be inferred that dominant leaders in the market do not change their business mix and always distribute their sales efforts in other insurance lines. However, it is clear that all the leaders diminish their concentration to MTPL immediately around 20%.

Figure-44 Internal Concentration to MTPL by Periods (Company 02, 03, and 05)

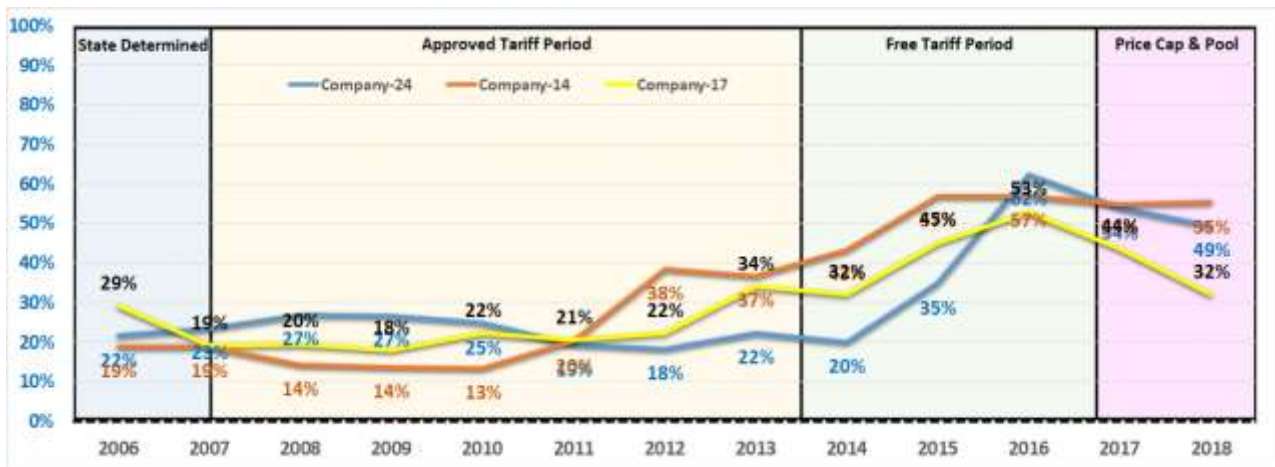


Source: Author

5.3.4.2. Group-II: Firms Exceeding 50% concentration

The second group of companies consist of Company-24, Company-14 and Company-17. These firms are not the leaders in neither MTPL nor the Non-Life insurance industry but between 2015-2017 Company-17 was the third big MTPL producer in the market. As of 2018, their market share in the Non-Life industry was 15% and their market share in MTPL insurances was 20%. Their responses to the change in the MTPL regulation is illustrated in Figure-45.

Figure-45 Internal Concentration to MTPL by Periods (Company 14, 17, and 24)



Source: Author

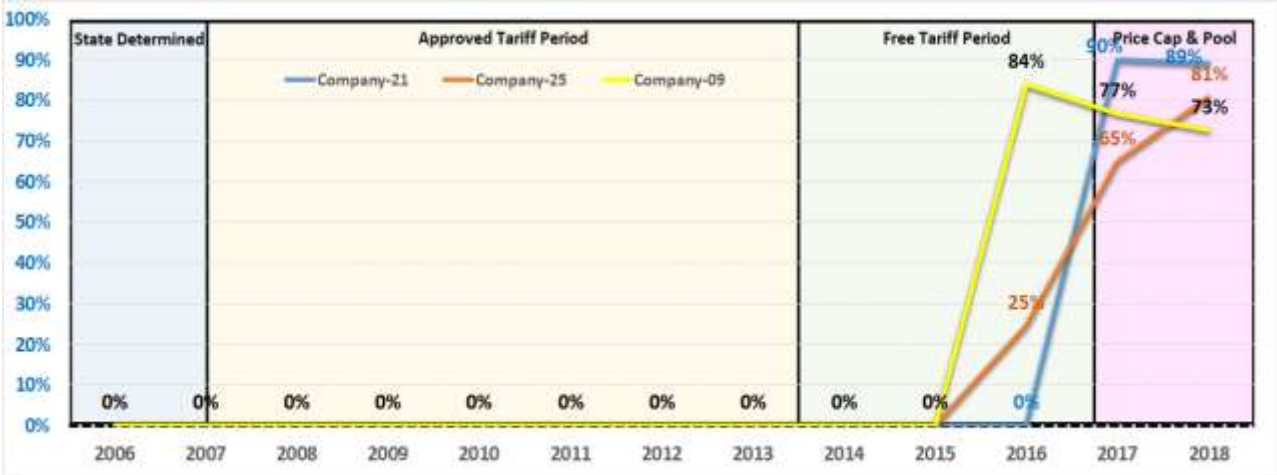
In fact, the trend in Group-II firms are very similar to Group-I or it may be better to say Group-II extends parallel with Group-I but with a higher internal concentration. Firstly, in the initial period where the state governs the prices, three of the companies are compiled very closely around 20%. This is higher than the market leaders. In the Approved Tariff Period, their concentration did not change until 2011 where Company-14 and Company-17 increased their concentration by around 30%, but Company-24 remained unchanged. When the pro-market reform was initiated, we experience a simultaneous focus on MTPL in each firm and similar to Group-I, they reached peak in 2016. In this period, Company-24 rapidly changes its concentration from 20% to 53% in two years. The difference from Group-I is that all three companies prefer to operate with a concentration ratio to MTPL with more than 50%. When Price Cap & Pool System started, similar to market leaders, they instantly reduce their concentration, but their final level in 2018 is around 40%, that is higher than Group-I.

Therefore, we can conclude that the second big group of MTPL producers are more MTPL oriented. They respond more focused to MTPL in times of pro-market reform period. Regulation creates a similar downsizing impact but they end up with a higher concentration at the end than the market leaders

5.3.4.3.Group-III: Born in Reform Period

The third group of companies are quite new in the insurance industry. Company-21, Company-25, and Company-9 have entered the market after 2015. Though they are quite new in the market, as of 2018 they constitute 12% of MTPL premiums in the market. On the other hand, in the Non-Life segment, their total share is 5%. Only these two numbers indicate that these firms seem to establish to produce MTPL rather than operating other insurance lines. Their concentration rates are given in Figure-46.

Figure-46 Internal Concentration to MTPL by Periods (Company 09, 21, and 25)



Source: Author

Figure-46 is quite different for both Group-I and Group-II companies. Firstly, since they are new, we have no historical experience in State Determined and Approved Tariff Periods. However, these new entrants find themselves in the era of pro-market reform. Their immediate response is to increase their concentration as much as they can, and within two years, their concentration reaches 80%. This was the highest concentration within the three groups. Lastly, in Group-I and Group-II companies, we had seen that regulation had brought a U-turn in producing MTPL and

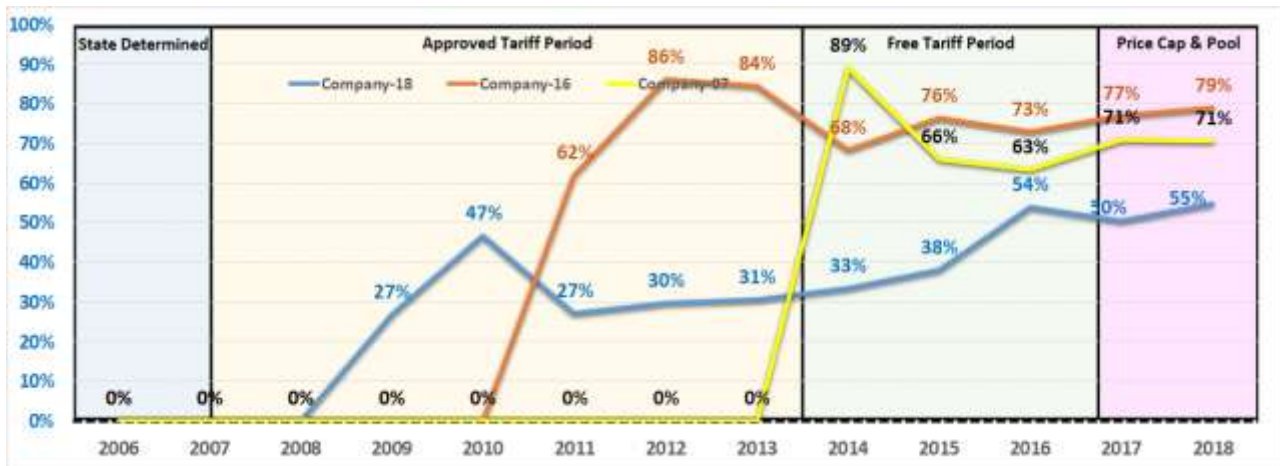
the companies had switched to other insurance lines. However, these new entrants (at least in 2018) protect their average concentration share by around 80%.

There is no much to comment about Group-III but it is assumed that they wanted to favour the period in which they establish. Perhaps, the pro-market reform might motivate these firms to enter the insurance, or more correctly MTPL market. But their response to deregulation, with at least 80% concentration rates take us to believe that they are established to produce MTPL. Their stable concentration in the regulation time also supports this assumption.

5.3.4.4. Group-IV: Unresponsive Firms to Pro-Market Reform

Company-18, Company-07 and Company-16 are grouped as the fourth group. The first common characteristic of these companies, they are –similar to Group-III companies- new companies established in the Approved Tariff Period but did not existed in State Determined time. As of 2018, their total premium share in Non-Life insurances is 7%, and their MTPL share in the market is 14%. From this perspective, their concentration is similar to Group-III companies. These firms are portrayed in Figure-47.

Figure-47 Internal Concentration to MTPL by Periods (Company 07, 16, and 18)



Source: Author

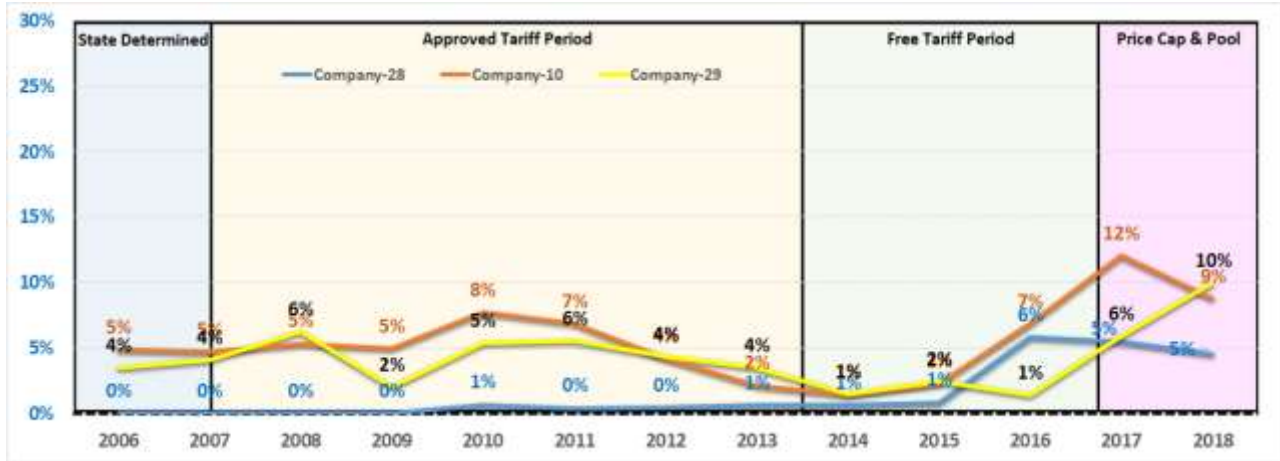
First, it should be noted that Company-18, which was the oldest one, has a relatively lower concentration than Company-07 and Company-16. Secondly, all these three firm exhibits a similar pattern: rapid concentration to MTPL for the first two years, then a mild decline and lastly a stabilization period unresponsive of regulation and deregulation. At the beginning of the pro-market reform in 2014, Company-07 and Company-16 pursue a concentration of around 70% and Company-18 30%. We had seen that pro-market reforms had attracted the attention of insurance firms, and every group had increased their concentration rate in Free Tariff Period, however, it is interesting that Group-IV does not concentrate further in this period. Similarly, we had experienced that Price Cap had brought a discouragement from MTPL and the concentration rates were decreasing. On the contrary, Group-IV companies do not show this pattern. On average their concentration seems to stabilize around 55%-80% band.

Similar to Group-III, these firms seem to establish to produce MTPL, but they do not give regulation related responses to their business mix. They stabilize their concentration and seem to produce MTPL with a standard percent of their total production without considering the change in the regulatory environment.

5.3.4.5.Group-V: Oldies clustered around 10%

Group-V companies are old insurance companies in the market, which has relatively low concentration to MTPL historically. These companies are Company-28, Company-10 and Company-29. The total of the MTPL premium shares of these companies in the market as of 2018 is only 2%, but their share in Non-Life premiums is 10%. These shares suggest a different story than the previous four groups. In the latter four groups, the market share of the companies in the MTPL market was higher than their share in the Non-Life market, stating that these groups were mainly motivated to produce MTPL. However, Group-V avoids higher concentration in MTPL as a general trend as shown in Figure-48.

Figure-48 Internal Concentration to MTPL by Periods (Company 10, 28, and 29)



Source: Author

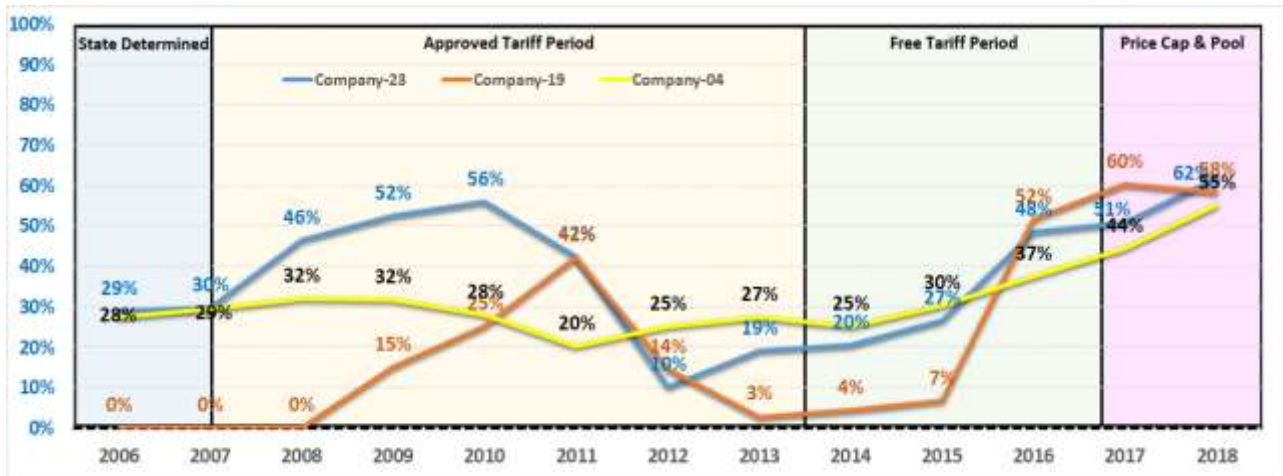
Figure-48 summarizes the fact that the MTPL concentration of these 3 firms in the last 12 years has never exceeded 10% except Company-10 in 2017 only once. In the State Determined Period, both Company-29 and Company-10 had a concentration of around 5%. Company-28 was not a real player in the market until 2009. In fact, before 2006 it was sold to another foreign group. Company-28 started production in 2010 again. It is interesting that despite it was a public insurance company, it was not involved in MTPL production in the Approved Tariff Period. Both Company-10 and Company-29 followed a lesser concentration policy to MTPL starting from 2010. At the beginning of the pro-market reform, the average concentration to MTPL was only 1% in 2014. Deregulation stimulated their business mix but did not lead to a sudden jump. Their concentration rate reached an average of 10%. Another point to be highlighted is that the Price Cap & Pool Period affected Company-10 and Company-28 do decrease their focus to MTPL, but not valid for Company-29. Anyhow, as of 2018 none of these companies exceeds 10% concentration.

In sum, Group-V companies can be defined as traditionally away from focusing on MTPL. Pro-market reforms encouraged them to increase their concentration and deregulation stimulates them to slow down. Nevertheless, in both periods, the impact is quite limited in both ways.

5.3.4.6. Group-VI: Firms with U-Turn

Group-VI firms consist of Company-04, Company-23 and Company-19. The main characteristic of these firms, they perform a path with a U-shaped where their minimum concentration to MTPL intersects in the Approved Tariff Period. As of 2018 year-end, the total Non-Life premium shares of these firms is only 3% and their total market share in MTPL equals 5%. These numbers indicate that Group-VI has the minimum share in Non-Life premium production among previously mentioned groups.

Figure-49 Internal Concentration to MTPL by Periods (Company 04, 19, and 23)



Source: Author

In Figure-49, the trends of the MTPL concentrations of these firms are given. In the State Determined period, Company-23 and Company-04 perfectly have the same concentration to MTPL around 30%. In this period, Company-24 was in the control of the Saving Deposit Insurance Fund (TMSF)³⁵ and it was not active. In the first half of the Approved Tariff Period, Company-23 and Company-19 continuously increase their concentration to MTPL but Company-04 follows a gradual falling policy and it reaches minimum in 2011. In 2012, both Company-23 and Company-19 reduce their focus from 42% to around 12% in 2012. Thus, in turn, Company-04 experiences minimum MTPL concentration in 2011, Company-23 in 2012 and Company-19 in 2013 respectively. Although their market power is limited in MTPL in terms of market share, their

³⁵ TMSF – Tasarruf Mevduatı Sigorta Fonu

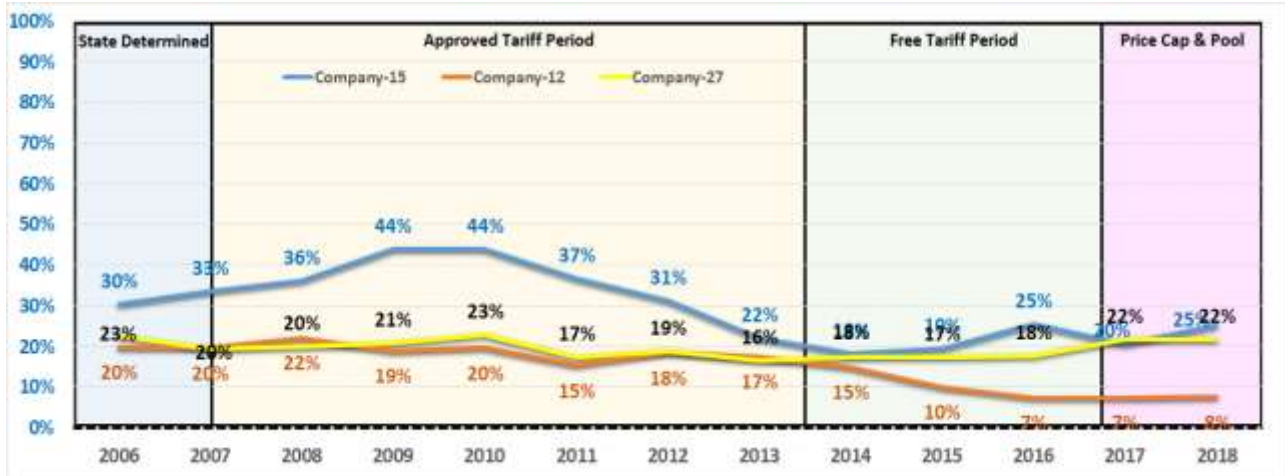
significantly increase their concentration by around 50% at the end of the Free Tariff Period. In the Price Cap Period, again we come across a different response to regulation. Company-04 and Company-23 respond by increasing their concentration to MTPL and Company-19 stabilizes its MTPL concentration. The end in 2018 is very similar to the beginning of 2006 where the concentration rates lay in a very close range. One final highlight about regulation is that Group-VI companies are responsive to the pro-market reform by increasing their concentration, but unresponsive to the regulatory changes. We can lastly add that their MTPL concentration is more than 50%.

Since Group-IV has lower shares in the market both in None-Life and in MTPL insurances, they do not respond harshly to the changes in MTPL. Nevertheless, their U-turn movement occurs just before the pro-market Free Tariff Period.

5.3.4.7.Group-VII: Firms with Stable or Decreasing Trends

Group-VII companies do not show a responsive concentration policy against the regulation change. We had seen that Group-IV firms were unresponsive to the Free Tariff Period. However, they had a sudden jump in the Approved Tariff Period as illustrated in Figure-47. The difference of Group-VII firms is that they never have such a jump or even decline in none of the periods as depicted in Figure-50. They even have a similar and slightly decreasing concentration to MTPL in twelve years. In this group Company-12, Company-27, and Company-15 takes place. It is interesting to notice that both foreign-owned (Company-12, Company-15) and publicly owned (Company-27) show a very close concentration trend. It can also be added that three of them has let very narrow ranges for MTPL penetration. For example, Company-15 had a maximum rate of 44% and a minimum of 18%, Company-12 had 22% maximum and 7% and finally Company-27 with a maximum of 23% and a minimum of 17%. This shows that Group-VII companies are, not only unresponsive to the regulatory changes in either way, but also they have standard MTPL concentration that could be referred to as quite stable.

Figure-50 Internal Concentration to MTPL by Periods (Company 12, 15, and 27)



Source: Author

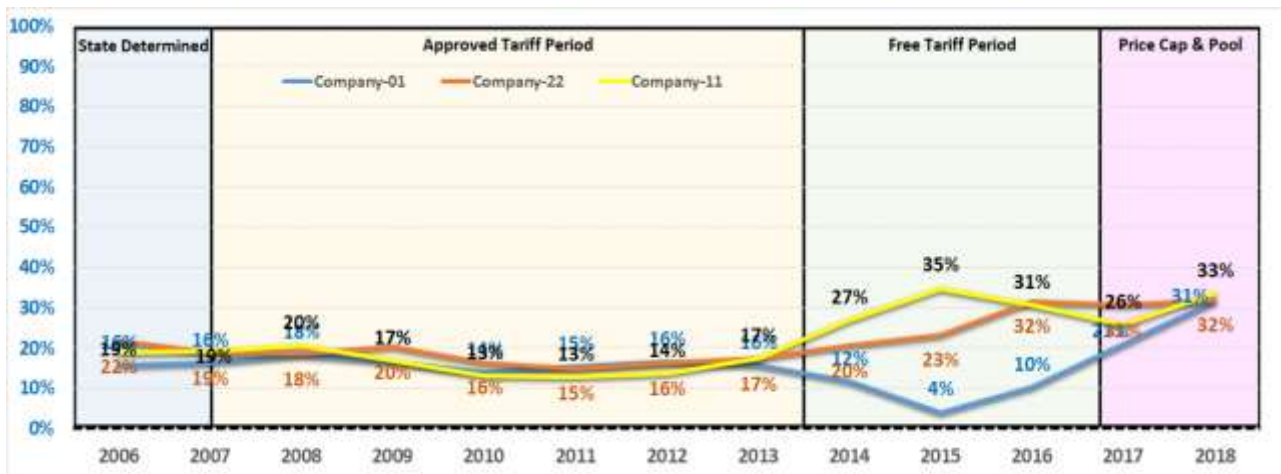
When we compare the market shares of Group-VII, in the Non-Life Insurances the total of the market shares of Company-12, Company-15, and Company-27 constitutes 11% of the total market premiums as of 2018. This number is much closed to Group-V, which had a 10% share in Non-Life. In addition, both Group-V and Group-VII consist of one public and two foreign-owned companies. However, when we compare the MTPL market share, Group-VII companies has 6% which is two times bigger than Group-VI, moreover without any jump in concentration.

Until 2014, Company-27 and Company-12 follow exactly the same concentration to MTPL in State determined and Approved Tariff Periods. In this time, they both show a very stabilized and similar trend. In these periods, Company-15 slightly increases its MTPL appetite until 2010 and in the same period, it prefers to decrease it. The year 2014 can be addressed as a junction that each of the companies meet around 15% at the beginning of the pro-market reform. After this date, Company-15 and Company-27 implement similar concentration rates around 20% and again they do not divert in both Free Tariff and the Price Cap & Pool Periods. Company-12 on the other hand slightly declines to 7% at the end of the Free Tariff period and do not change the composition in the regulation period either. For Group-VII, it can be referred that, the firms have an internal standard business mixed and do not let it change quickly.

5.3.4.8. Group-VIII: Long-Run Equivalence

Group-VIII is the last group where consist of Company-01, Company-22 and Company-11 and their MTPL concentration is depicted in Figure-51. It is not exaggerating that in State Determined Period and Approved Tariff Period, these three companies followed exactly the same concentration ratios to MTPL over the eight years. At the beginning of 2006, their concentration rate to MTPL was around 20% and in eight years period all three firms pursued a similar and very gradual decline and they intersected around 17% in 2013. The equivalence between them seemed dispersed in two years when the pro-market reform has started. Company-22 and Company-11 increased their concentration by around 30% in the Free Tariff Period. Company-01, on the other hand, followed a sudden decrease in two consecutive years. It is quite surprising that, when most of the firms had the highest concentration in 2015, where the pro-market reform had been in the last days, Company-01 preferred its lowest MTPL business mix. But with a two-year lag, it continued to grow in MPTL. When the market faced the Price Cap, Company-01 continued to increase business mix in favour of MTPL, as again not very common in the regulation period. As of 2018, the equivalent firms intersected at 32% of the concentration. The trend states that, except for a four-year period, Group-VIII had pursued similar feedback to MTPL. Though Company-01 responded differently in times of deregulation and regulation periods, Company-01 end up where Company-22 and Company-11 stays.

Figure-51 Internal Concentration to MTPL by Periods (Company 01, 11, and 22)



Source: Author

Equivalence is not only valid in MTPL concentration rates. The total of their shares in Non-Life production is 10% of the total in the market as of 2018. Similarly, their shares in MTPL production are again 10% of the market. In this respect, Group-VIII is the sole group where the Non-Life group share equals the MTPL group share in the market. This equivalence can also be attained by the individual market shares of the firms. (Company-01 with a Non-Life share of 7,4% and MTPL share of 7,2%, Company-22 with a Non-Life share of 2,0% and MTPL share of 1,9% and finally Company-11 with a Non-Life share of 0,6% and MTPL share of 0,6% as of 2018).

To sum, we can identify eight different responses depending on the concentration of the companies to the MTPL production in their total output and their behaviours in reform and regulation periods. The responses are summarized in Table-17

Table-17 Market Shares of the Groups of Companies

Group	Companies			2018 Market Share		Pattern
				Non-Life	MTPL	
Group-I	Company-03	Company-02	Company-05	33%	26%	Market Leaders
Group-II	Company-17	Company-24	Company-14	15%	20%	Min. 50% concentrated Firms
Group-III	Company-09	Company-21	Company-25	5%	12%	Born in Reform Period
Group-IV	Company-07	Company-16	Company-18	7%	14%	Unresponsive to Reform
Group-V	Company-10	Company-29	Company-28	10%	2%	Old firms with 10% concentration
Group-VI	Company-23	Company-19	Company-04	3%	5%	Firms with U-Turn
Group-VII	Company-12	Company-27	Company-15	11%	6%	Stable / Decreasing Trend
Group-VIII	Company-22	Company-01	Company-11	10%	10%	Long-Run Equivalence
Total				94%	95%	

Source: Author

Of course, it might be possible to re-group the companies or add one or more to other groups. Their sum of market shares as of 2018 in Non-Life and MTPL lines also suggests that these groupings point quite different combinations. In addition, the total 24 companies represent 94% of the market in Non-Life and 95% of the MTPL insurances.

5.4. Changes in Product

MTPL is commonly known as a standard product. Once the state treats MTPL insurance as compulsory as in many countries, first of all, it is not expected much change through time. Because

the vast widespread use of MTPL insurance is believed to form a kind of maturity in the product itself. Similarly, the parties involved in the transactions become stable and not expected to vary from case to case. The processes, that how the tasks and routines are realized, up to a certain limit, are thought to be standardized due to several years of implementation.

In order to find out the responses in form of a “change in product”, first I compiled all the sources in form of laws, decrees, cabinet decisions, notifications, tariffs, regulations, general terms, Undersecretariat of Treasury Declarations, circulars and industry announcements and I gathered 854 single legal documents in 66 year time. Secondly, I categorized the ones, which approves a change in the MTPL policy, and I found out 324 Product related development as shown in Table-18

Table-18 MTPL Product Related Changes in Time

Product	#
Taxes	23
Short-Term Premium Amount	21
Short-Term Premium Duration	21
City Discounts	21
No-Damage Discounts	21
Vehicle Discounts	21
Vehicle Type	21
Medical Payment per Person	21
Medical Payment per Accident	21
Compensation per Person	21
Compensation per Death/Injury	21
Compensation per Vehicle	21
Renewals	16
Compensation per Accident	15
Public Vehicles	9
Approved Tariffs	9
Scope	8
Discounts	8
Price Cap	5
Total	324

Source: Author

As shown in Table-18, MTPL product-related changes occurred in 19 different items. The interesting part of the table is that, in 11 items out of a total of 19, the frequency of the MTPL product-related change is equal to 21. Of course, this is not only a basic statistical coincidence. The legal sources, which updates the product, covers these 11 items at the same time. To give an example, before the implementation of new tariffs before the year-end –as in most cases- the limits are announced according to the person, accident, death or vehicle that involves the accident. Thus, every term these numbers are updated regularly by the Undersecretariat of Treasury. A formal example is presented in Table M1.

City Discounts are the other major item that creates a change in the product itself. As mentioned earlier in the MTPL part, MTPL pricing depends on the geographical differences. In this respect, the location of the vehicle matters because the risk of involving an accident increases positively with the level of traffic, number of vehicles, number of inhabitants, time spent on motorways and distance of the motorways within the given geographical area. These conditions assert that big cities might have higher accidents, higher costs thus resulting in higher MTPL premiums to cover the cost of the policy. The density of the traffic for each geographical area –the city in Turkey-is separated. For that reason, this adjustment is frequently seen in the legal sources as regulatory action. A formal example of city discounts, which is a part of the General Terms in MTPL, is exemplified in Figure M2.

Discounts and charges applied to tariffs are the other frequently intervened area. Regulatory arrangements were always based on the reward of the policyholder that caused no accidents and penalizes the ones who had caused accidents. MTPL pricing practice uses seven different steps to categorize the policyholders depending on their risk. Step 4 is the middle level, used for the first entry in the market after policy production. If a policyholder does not cause any accident within a given time, the premiums for the following year is discounted. It means that the risk level decreases. On the opposite side, if the policyholder involves in an accident with causing a compensation, the premiums are increased for the next year. All these rates applied in both directions are determined periodically by the Undersecretariat of Treasury in regulation times. After the declaration of the Pool system, these rates were also regularly renewed by depending on the Pool / Non-Pool Coverage. Therefore, the discounts and charges relating to the steps had been

one of the major issues in product base changes. An example of the changes brought about by the Undersecretariat of Treasury is illustrated in Table M3.

In order to analyse the product based responses, a final update was necessary to be determined depending on the type of the change. The product-based changes are categorized into three classes as reflected in Table-19.

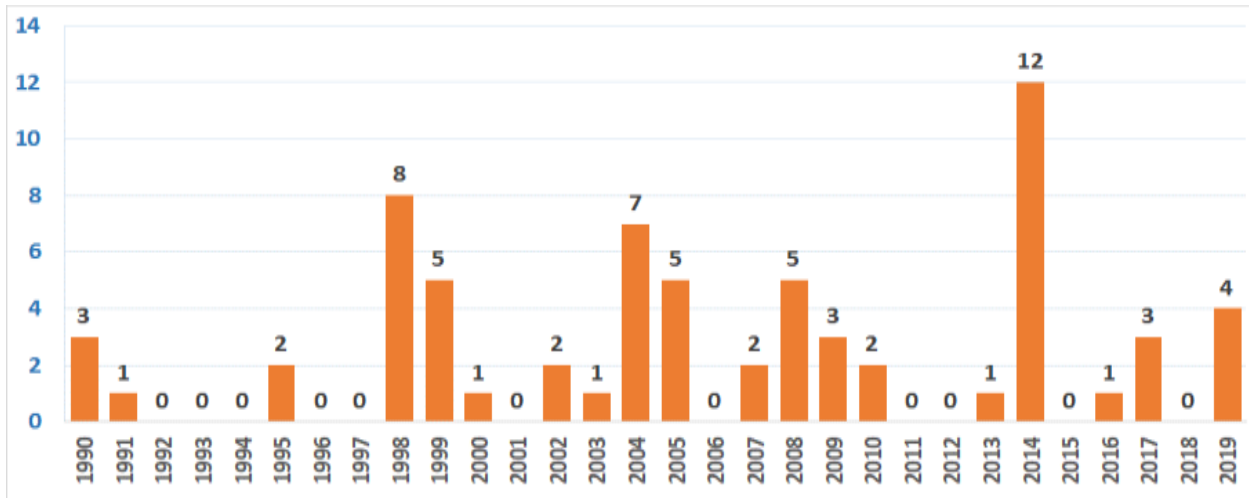
Table-19 Type of the Product Based Change

Group	Product
Change	68
Change - Price	116
Run	140
Total	324

Source: Author

The first one is whether the regulation can cause a real change. For instance, the coverage of MTPL policies may increase either in value or the by widening the scope. In order to differentiate whether the change comes from the update of the numbers changes relating to prices, percentages, minimum tariffs or any absolute numerical updates are grouped into another line as “Change-Price”. The reason is to exclude the inflationary impacts from the real changes. Sometimes, in most cases, a change comes in one area but all other parts remained unchanged. For example, the tariff for few cities in MTPL pricing might change but all the other cities might stay constant. These details are given in the line of “Run” in Table-19. This seems contradictory to the view that MTPL had always been a basic product. In order to avoid this tricky reasoning, we need to focus on the “Change” line of the “Product” column. We know that price-related changes are the only inflationary adjustment done every year. Run line appoints the decisions, which remains stable. For that reason when we consider only the real changes only 21% of the product-related MTPL regulations cause a change in the product, which suits the definition of the MTPL policy.

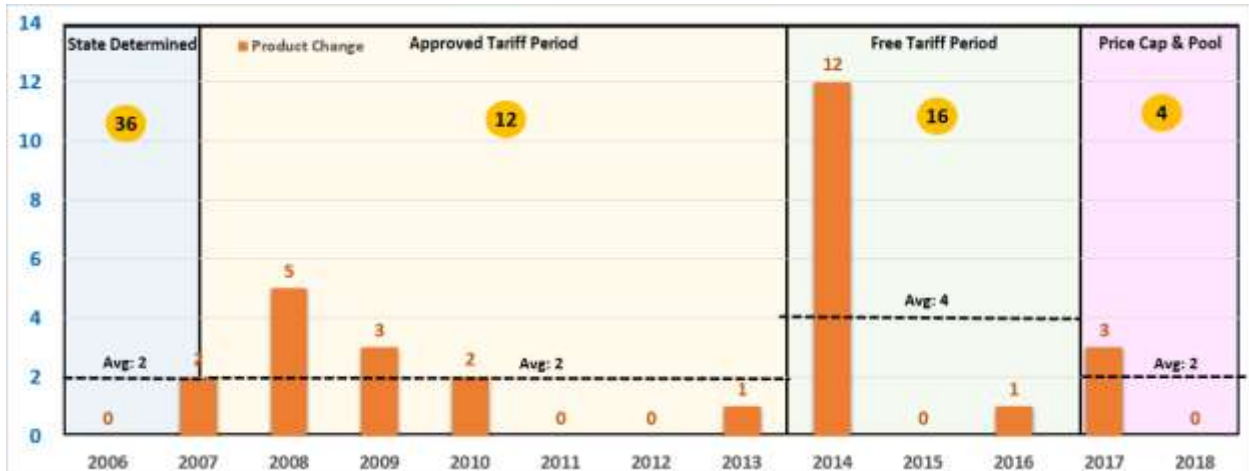
Figure-52 Distribution of the Product Based Change



Source: Author

Figure-52 shows the distribution of “change” related to MTPL product evolution. When we get the frequencies of changes in the observed periods, the result is obtained as in Figure-53.

Figure-53 Frequency of the Product Based Change by Periods



Source: Author

The total of product based changes are the maximum in State Determined period; however, this interval consists of 18 years therefore the average of the product based change is found 2. The figure asserts that the beginning of the pro-market reform brought many changes and the total number of changes in 2012 is the highest value yearly in analysed 30 years. After the introduction of the regulation once again, the average change decreases to the same level again.

5.5. Changes in Processes

Similar to the changes in the MTPL product, this time I will focus on the processes that the insurance companies respond to the pro-market reforms.

Similar to the analysis in 5.4 a total of 854 legal documents was analysed whether they create a new process in MTPL insurances. As shown in Table-20, 92 process-related updates were determined in 12 different items.

Table-20 MTPL Process Related Changes in Time

Process	#
Content/Shape Requirements	15
Notifications	9
Payments	8
Accident Report	8
Legal Requirements	5
Transfers	5
IT Infrastructure	5
Equivalent Spare Part	3
Commissions	14
Experts	11
Payments	5
Agencies	4
Total	92

Source: Author

In the process related issues, the biggest area of MTPL sources is the shape related requirements. They are the informative and must sentences relating to the terms of the policy contract, the size of the fonts of the contract clauses, the production of addendums once the policy expires, the requirements for insurance arbitration, the shape of the forms to be filled for claim notification are the shape requirements that commonly took part in legal sources.

The processes relating to the networks of the insurance companies also matters. The distribution channels, brokers, agents and other processes with their external network require some modifications in the clauses determining the commissions of the intermediaries. The commission

rates are sometimes directly determined by the Undersecretariat of Treasury. Sometimes minimum level was brought either in absolute terms or as a percentage of the premium.

Next, I categorized the process related changes as I did in 5.4. The assumption is that whether the response creates a new process, changes it or removes the existing way of behaviour, they are accepted as “Change”. The routine updates of processes, like changes in the agency commissions are mapped as “Run” and they were not taken into consideration for the analysis. The separation is given in Table-21. It should be noted that price level changes were not the subject this time (as in the policy limits in MTPL product) thus they had no inflationary continuous impact on processes.

Table-21 Type of the Process Based Change

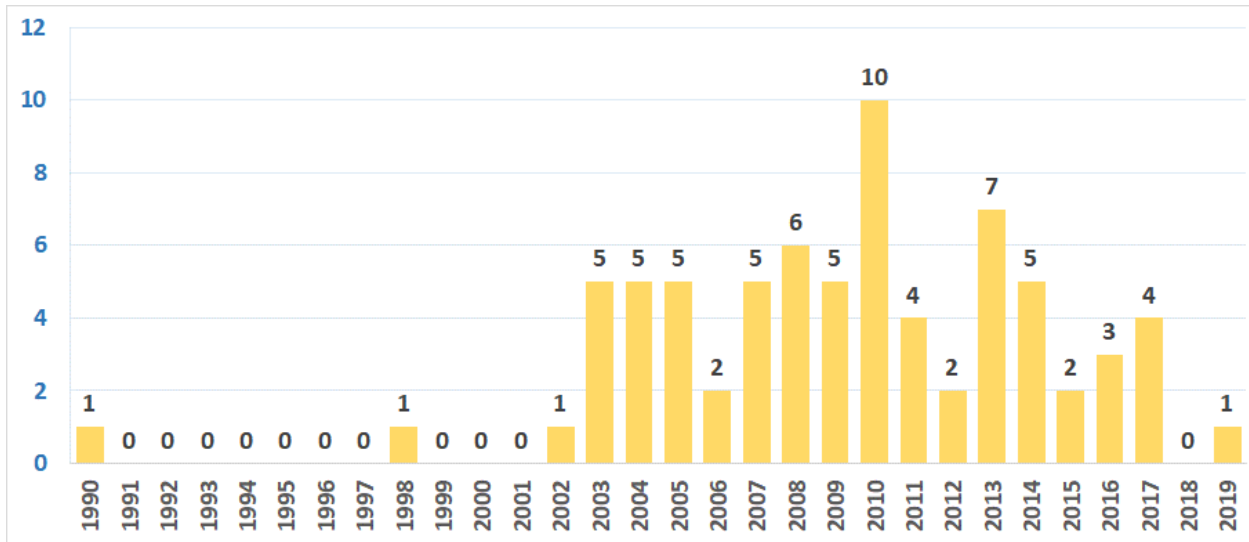
Group	Process
Change	74
Change - Price	0
Run	18
Total	92

Source: Author

It is also interesting to see that, the change-related processes occupy 80% of the total MTPL processes updates.³⁶ This ratio had been found only in 21% in Table-19. This asserts that MTPL related processes have more potential to create change than product-related ones. The total number of process-related changes (74) in Table-21 is also higher than the product based changes (68) in Table-19.

³⁶ Change related processes (74) divided by Total (92) in Table-21

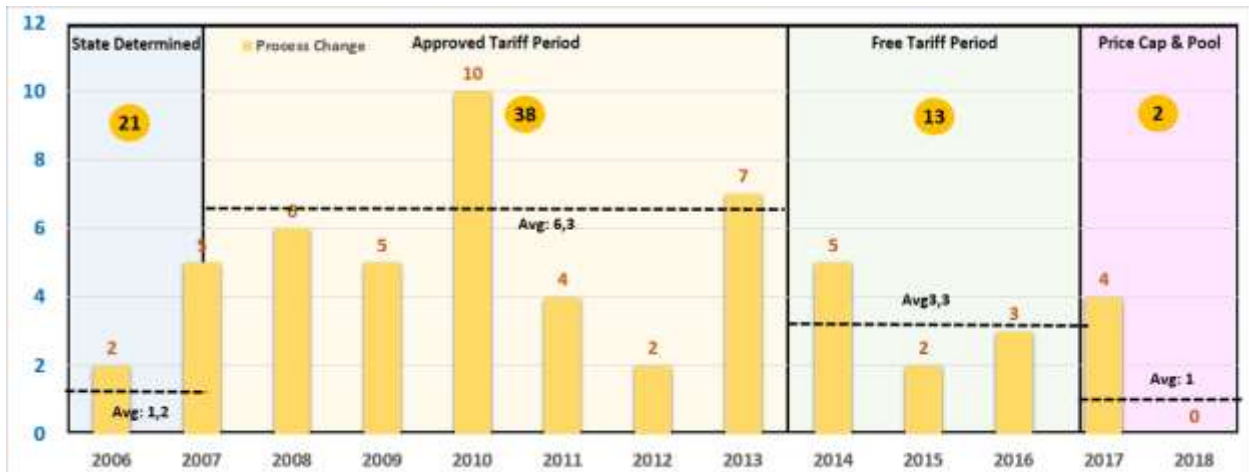
Figure-54 Distribution of the Process Based Change



Source: Author

Figure-54 shows the distribution of “change” related MTPL process evolution. The numbers significantly start after 2003. In Figure-52, we had seen a more random distribution for the product based changes. When we get the frequencies of changes in the observed periods, the result is obtained as in Figure-55.

Figure-55 Frequency of the Process Based Change by Periods



Source: Author

Process-based changes were the most common in the Approved Tariff Period. We had seen that 5684-numbered Insurance Law was put into force in 2007 and immediately after there had been many organizing regulations updating the processes in claim handling, reporting, updates relating the Accident reports, development of the IT infrastructures of insurance companies etc. Thus, we

may conclude that, before the pro-market reform, new processes were more dominant in the MTPL industry. The table also shows that in regulation times; either State Determined or Price Cap, the introduction of new processes is significantly lower.

CHAPTER VI- DISCUSSION

Pro-market reforms have been regarded as the building blocks of the globalisation (Lora & Panizza, 2002). Market-based institutional reforms are positioned at the centre of the liberation and the improvement of the national economy (Rodrik, 1996). Pro-market reforms, though implemented in different ways, generally aim to manifest regulatory changes by the state authorities even if the aim is to remove the market imperfections (Williamson, 1990). Market reforms might be in different forms including financial reforms, fiscal reforms, privatization, decentralization, exchange rate liberalization and property rights protection etc. (IMF, 2004). Many of the studies found that reforms develop the home economies by benefiting the firms, to have effective resource allocation, gaining experience in export markets, increasing know-how level in production and better financial performances (Dau, 2013, Cuervo-Cazurra, 2015, Eslava et al., 2004).

In this study, the responses of the firms to a pro-market reform has been analysed. Motor Third Party Liability (MTPL) Insurance is a compulsory policy for the vehicle owners where the prices are driven by the Undersecretariat of Treasury in Turkey. Between 2014 and 2017, the MTPL industry has experienced a pro-market reform where the insurance companies were allowed to set their policy prices. Thus, the responses of the firms are analysed before the reform, during the reform and after the reform.

Before studying the MTPL responses in Turkey, it should be noted that the MTPL industry is closely monitored in most of the countries. MTPL has been highly recognized as a policy prescription by local governments to increase the safety of the citizens and an instrument to protect the benefits of consumers and insurance companies. For that reason, many of the governments in developed and developing countries have heavily legislated MTPL insurance as a pro-market reform. The type of the pro-market reform and regulation level changes from country to country. South Africa used the MTPL fund collected at the petrol pump. Japan introduced a break-even policy price where the firms negotiate collectively. China has adopted the “no profit, no loss” principle, with a wide coverage of a standard policy which has a fixed rate. In Brazil, state authorities established private institutions to increase MTPL usage. The US introduced a reform from strict price controls to market-determined pricing. Canada tried to re-design the MTPL claim

system by using the jurisdictional system. India, on the other hand, having the highest accidents in the world per vehicle, needed to liberalize the system in order to get rid of the loss bottleneck in the industry.

The insurance market and insurance products in Turkey represent a clear picture that, Turkey can be described as a “Motor” country. The share of the MTPL in the total Turkish Insurance industry (including life insurance) is 32,9% as of December 2019. The other insurance product in the motor business is the Motor Own Damage (MOD), which secures not the third party, but the policy owner’s vehicle itself. Thus, motor insurance products can secure the counter parties or the policyholder in the big picture. MOD is, on the other hand, is not compulsory and its share in Turkey is 16,3% as of December 2019. In this perspective, the highest premiums in Turkey is collected in MTPL and the highest third premiums are in the MOD lines (life insurance market is the second with its share is 0,1% higher than MOD as of December 2019). The scene suggests that everyone TRL premium produced in Turkish insurance industry, one-third of it, belongs to the MTPL, or half of it belongs to motor insurances(Türkiye Sigorta Birliği, 2020a).

Since the magnitude of the MTPL insurance has a nationwide effect, state officials needed to regulate the market. The motive of the governments, as in many countries in the world is twofold. On one hand, in order to protect the third parties from the traffic insurance, MTPL is implemented as compulsory. On the other hand, this burden should be distributed in such a way that the price of the product should clear the market. Once the product is a must for every vehicle owner, the price should be at the lowest level to keep them in the system. Of course, the premiums collected from the policyholders are paid to the victims and these products are offered and sold through insurance companies. Insurance companies firstly consider their total claims in either medical ones, damage related or death compensations when selling MTPL policies. Additionally, their commissions to their agents and administrative and operational expenses should end up in such a way that the break-even point should be tolerable from the economic point of view. There is one final group in who engaged in this framework as the business-related parties, such as coach companies, logistics, in city passenger transportation, taxi services. This group can be extended to automotive producers or importers including the motorbikes and tractor distributors. Since every vehicle they sell, lease or rent is subject to MTPL insurance burden, their potential sales indirectly relate to the magnitude of the insurance cost.

For that reason, in Turkey for long years, MTPL insurance prices are controlled and determined by state officials. In Turkey, the formal responsibility in organizing the insurance industry is the Undersecretariat of Treasury under the Ministry of Treasury and Finance. Thus, the decisions of the Undersecretariat of Treasury are the main tools shaping the MTPL market. Pricing in MTPL is generally called a tariff interchangeably. Actually, the tariff is a more formal definition in insurance terminology stating that the MTPL insurance price of a product can change depending on the geographical location where the vehicle is registered, the type of the vehicle and the claim history of the vehicle owner. The reason is quite simple. The less likely the risk is about the happen, the more likely the price of the MTPL policy would be cheaper. For that reason, tariffs take into account the population, traffic, number of cars, number of accidents of a geographical place to rate their expected losses. For that reason, as a general rule, most of the big metropolitans has a higher risk factor than others when pricing the same type of vehicles. The type of the car also matters; not only for the cars but when the type is determined by commercial uses. The commercially run vehicles such as taxis, buses, minibuses and trucks are in traffic more than their peers and have a higher risk potential for an accident. The third component of a tariff is the steps, which shows the claim log of the vehicle owner. The step identifies the policyholder depending on his past driving. In this respect, pricing is directly linked with how careful is the driver. The vehicle owners who had many offences and crimes in past are priced above than the normal rate since they caused more claim payments for the insurance companies because they increase the cost of the companies. On the other hand, the policyholders with a clean driving history in the previous year are promoted to a higher step where the pricing favours are made even if the vehicle types and the geographical locations are homogeneous. Therefore, the Undersecretariat of Treasury has the sole responsibility in deciding, controlling and changing the tariffs in the MTPL insurance line.

Therefore, the MTPL regime in Turkey is divided into four different periods, as stated in part 4.3. These four periods are; (i) State determined tariff period (1953-2007), (ii) Approved tariff system period (2007-2014), (iii) Free tariff system period (2014-2017) and finally (iv) Price Cap & Pool System (2017 -). The findings of (i) New Entry, (ii) Price, (iii) Market Concentration, (iv) Changes in Product and (v) Changes in Processes given in Chapter-V, are discussed by referring to this periodization.

6.1.New Entry

New Entry is equivalent to the increase in MTPL production, increase in the insurance companies, new firms and entrants, FDI outflow to the insurance industry, and increasing importance of MTPL in the overall Turkish Insurance Market. In other words, the growth of the MTPL industry in Turkey is analysed as the first response.

The literature suggests that the impact of the reforms are directly triggered the growth in the industries where the new deregulations are implemented. There are different industry and companywide studies on this relation:

Vadlamannati, analysing Indian case, asserts that in order to make the insurance industry, a more significant part of the financial development, complete deregulation and an increase in the rate of reforms are the necessary components (Vadlamannati, 2008). It is also suggested that there is a direct positive relationship between the pace and the development of the pro-market reforms implemented with the cumulative high rates of growth in many countries (Falcetti, Lysenko & Sanfey, 2006). By using the World Bank's Doing Business Annual Reports, Haidar (2012) confirms that regulatory reforms used for expansion of the market increase the growth rates of the industry within GDP. In a similar way, the completion of increasing pro-market reforms in Australia increased the GDP by 2,5% (Mataeus, 2009).

Analysing the Indian market, Singh & Pattnaik & Gaur & Ketencioğlu (2018) proposed that the results of the reforms follow an inverted U shape with the growth of the companies. The performance of the firm also relates to the pro-market reversals as well as reforms. Intensifying pro-market reforms increase the performance of the firms, however; fading reforms and intensifying the reversals reduce the firm performance in developing countries (Banalieva, Cuervo-Cazurra & Sarathi, 2018). Empirical analysis on more than 13,000 firms between 1994-2010 period, it was verified that multinational organization form enables superior sensing and seizing the growth opportunities in the context of institutional reforms. The characteristics of reforms are captured by increasing the ability of business groups to capitalize and expand the set of opportunities provided by pro-market reforms (Manikandan & Ramachandran, 2015).

The impact of pro-market reform in China, in the forms of deregulating industrial policy, decentralization of control and liberating the ownership resulted in positive institutional changes in forms of growth of the firms as they have better industrial allocation so they have lower transaction costs, increased managerial capabilities and selective resource allocation (Park et al., 2006). A similar outcome is obtained in the transition countries. 60 studies from 26 countries encountered that although structural reforms –as average- had substantial cost at the beginning; their positive effects offset the costs in the long run. At the same time, pro-market reforms, which focus on external liberalization, proved to be more beneficial on growth both in the short and in long run (Babecky & Havranek, 2014). A quantitative assessment of the potential gains from various structural reforms in the OECD area suggests that the gradual alignment of product market regulations to best practice in a broad range of non-manufacturing sectors could boost aggregate labour productivity. Large continental European countries would have the largest benefits to reap from reforms. The overall potential GDP gain for the average OECD country from undertaking the full range of reforms considered here might come close to 10% at a 10-year horizon, indicating the presence of ample room for structural reforms to offset the permanent GDP losses from the recent crisis (Bouis & Duval, 2011).

The findings relating to the growth of the industry can be supported in many ways and seemed in line with the literature. Firstly, as depicted in Figure-3, MTPL premiums grow higher than any other insurance branch in the last 13 years and this increase is the maximum in times when the pro-market reforms are initiated.

This issue had been raised in the news several times. In 2004, Recai Dalaş, the General Manager of Finans Sigorta, links production to economic stabilization: *“In the past years, demand in automotive has been under a lot of pressure due to the impact of the crisis. Cars were not sold. Last year the impact of the crisis diminished little. The demand, which had been pending for a few years, gained momentum as banks cut interest on vehicle loans. Therefore, the traffic and motor own damage branch stood out in this growth. It grew by an average of 30 percent above its performance in the past years.”* (“Hedefimiz İlk 5’e Girmek,” 2004).

The development of the structural improvements was also regarded in this manner. In 2004, Çetin Alanya, General Manager of Ray Sigorta, had foreseen this issue: *“With the establishment of the*

Traffic Insurance Information Centre (TRAMER) and the use of the effective policy tracking system in all companies, there will be a significant new premium entry in the traffic branch.” (“Kasko Çekti Sağlık İtti!,” 2004)

The penetration rates in MTPL was highlighted by Mathias Maak, an ex-pat chairman of the HDI Sigorta in 2006: *“Penetration in the individual market is very low, there is a really great potential. Here, traffic and automobile insurance will come to the fore”* (“Ana Hedefimiz İlk 5’e Girmek,” 2006).

On the other hand, the growth in production was not always welcomed. In the pro-market period, in 2017, Aydın Ağaoğlu, the Honorary President of Consumer Application Centre accused the insurance companies in a complaining tone: *“The companies collected 23.2 billion TL premiums from compulsory traffic insurance between 2014 and 2016 and paid 12.2 billion TL in compensation during the same period. It was also noteworthy that the sales of the companies last year doubled compared to 2015.”* (“Sigortadan 23 Aldılar 12 Verdiler,” 2017).

Secondly, although the establishment of new insurance companies are strictly controlled and the mergers & acquisitions are regulated, the highest number of insurance companies can be seen in Free Tariff Periods as demonstrated in Figure-5. Additionally, the trend of the active insurance companies in the MTPL line gives a similar result that, in times of pro-market reforms, more firms are eager and available to enter the market.

This issue was also underlined during the interviews. Small Players are seen as the reality of the market. The existence or entrance of small players was commented on 24 times during interviews and this is the second-highest frequency. This code is also used by 75% of the interviewees as well. *“Now, it is very appetizing for small companies that newly entered the industry. Because when we refer to other -especially elementary- branches, it is not possible for a company to grow so fast, to have a market share and to provide cash inflows from any other branch. You need to establish an expert sales network there, create a suitable sales channel, etc. in order to sell the products. But traffic is already selling itself since it is compulsory. All you have to do is set up a sales network in a number of businesses that can sell, and send them into the market. Here is the biggest attraction here: I mean, of course, it would not be right to talk for all of the small*

*companies, but I doubt their approach in the long-term projections. Because if you do not reserve the traffic correctly when you write much for a few years or if you are a little optimistic about what should happen especially in reserving, at least for 3-4 years you can see profitable results, it's for sure. But if you cannot continue production in the same way for different reasons, if you cannot provide that cash flow, the costs will go much more than you expect, but you cannot increase the premiums that much, or if you have to make a reduction in the premium to ensure that cash flow. Then you will go into an impenetrable spiral and, on average, after 4-5 years you can come across a significant loss that you cannot get rid of. Actually, that is the biggest risk here. But I think small companies got into this business with the magic of the incoming money and the charm of growing because it is really difficult to grow in this sector. I work in a large company. There are branches that cannot grow even though various strategies have been tried for years. In other words, although there are serious efforts behind it, there are depths that cannot be reached due to different dynamics, but traffic is not like that. Traffic goes like cheese and bread. This is the biggest reason. But as I said, the pain of this branch comes later.*³⁷

Thirdly, when market reforms are implemented, even if the number of the companies in the market is not taken into consideration, companies change their business mix and became more MTPL oriented in reform times. This means they produce less in other lines and produce more in MTPL.

The orientation to MTPL was also commented in interviews. This discussion also supports the existence of the competition: *“In essence, it is the Traffic sector, which can be paralyzed by the fast fall in investment income and where the competition meets with irrational pricing. Therefore, this is actually the battle of market share in the traffic branch. Considering that a quarter of the total elementary insurance of the sector is the traffic branch, it is extremely important to be able to hold a place for all players, because it is a line that they have to survive in order to capture a certain market share for all players. So they are exposed to a competition where around 30 players are trying to get a role. When all these are combined, traffic insurance is actually the place where the highest irrational competitive environment is formed from the basic insurance perspective.*³⁸

³⁷ Participant-6, Code-34, No-4

³⁸ Participant-2, Code-32, No-1

The nature of the MTPL product itself was also linked to the increasing production during interviews: *“Due to the nature of traffic insurance, they are very common and the product is simple. Any company can easily engage in traffic production. For that reason besides the international players, which have already been founded in Turkey, there are many small players entrance into the market that can be quickly established. In fact, while 8-10 companies are in the game in sophisticated products, there are too many players in traffic and they can enter in a simple product which always deteriorates the competitive environment.”*³⁹

Fourthly, implementations or even the preparations for pro-market regimes attracts the attention of foreign investors. As shown in Figure-10, foreign capital share in Turkish Insurance industry became dominant for the first time in history, this gap even deepened, and the share of foreign capital has reached 66% in the peak time of the reform period. Although the number of insurance companies does not change significantly due to the strict regulations, the frequency in the number of mergers and acquisitions caused more FDI inflow. It should also be noted that the capital share, both domestic and foreign companies has increased faster than the inflation. Of course, the decision of entering a developing market cannot be solely determined by the reforms in the MTPL line. However, the share of motor insurances in Turkey was around 50%, whereas the European average is only 30% as pointed in Table C9. Moreover, when we compare the only MTPL line, MTPL comprises 45% of all motor insurances in Turkey, therefore corresponding to the 13,5%⁴⁰ whereas the same ratio can be found as 34%⁴¹ as of 2016 by using the relative EUR premiums given in Figure C11 and Figure C12. Therefore, it is not wrong to conclude that, even if the MTPL market is regulated, the entrance of the foreign insurance companies validates their motive to produce MTPL

In most of the developing economies, pro-market reforms either directly or indirectly focus foreign investors on the local markets. Market reforms and foreign direct investments are indispensable in this issue and there are varieties of arguments stating the effect of the reforms on the mobility of the foreign investment.

³⁹ Participant-2, Code-34, No-1

⁴⁰ calculated by multiplying the motor share of 30% with the MTPL share 15%

⁴¹ calculated by multiplying the motor share of 50% with the MTPL share 68%

The literature suggests a variety of studies about the FDI responses to reforms. If the pro-market reforms decrease the constraints of outward foreign direct investments, companies can find a way to invest in e.g. make transfer their operations for safer rules, strong institutional protection and a better legal framework for contracting (Witt & Lewin, 2007). Analysis of the foreign direct investment data from Central and Eastern European countries over 15 years indicate that pro-market reforms on trade liberalization, institutional economic reforms play a crucial role in explaining the increasing role of the foreign direct investment flows (Stoian, 2013). In India, the pro-market reforms were started to be implemented in 1991. By analysing the FDI stock between 1987-2000 it was seen that FDI promote economic growth. The impact of FDI differs across industries. Although the link between FDI and output growth is low in the service industry which attracted the bulk of the FDI, the manufacturing sector represents a greater casualty in growth (Chakraborty & Nunnenkamp, 2008). Sometimes only economic reforms might not be sufficient to attract FDI inflows. A study on panel data of 15 Latin American countries demonstrated that controlling the macroeconomic stability and good governance are not always likely to attract FDI unless they are coupled with minimization of expropriation risks and liberalizing the trade reforms, which enhances the foreign investors. (Biglaiser & DeRouen, 2006). The structure of the host country is also important to attract or deter FDI. If the host country imposes legal reforms that require stronger contract enforcement or sanctions against agreements and pursue more efficient trade reforms, the attractiveness of FDI rises. Multinationals are also ready to exploit the poorer condition of the host country whereas they are willing to invest in countries with ease entrance and hard exit regulations. (Contractor et al., 2020). On the contrary, poor institutional quality can be an obstacle for FDI inflows. Countries with limited fiscal scape need to attract FDI for generating more competition. However unless they had implemented pro-market reforms in form of liberating trade and market mechanisms, their FDI stock would be limited. The study covering Arab countries resulted that Arab region has poor business quality as a result of failure to adopt institutional reforms (Aziz, 2018). A robust empirical relationship can also be derived from the data set of structural reform indices implemented in 19 Latin American and 25 transition economies from structural reforms to FDIs. The study also holds that financial sector reforms and privatization have greater effects on FDIs than the trade reforms do (Kinoshita & Campos, 2008). OECD reports also pointed out the importance of enabling institutional reforms in reaping the maximum benefits of FDI. Institutional deficiencies are often masked in boom times but after the

Asian crisis in 2007, many countries started to implement pro-market reforms, institutional policies, legislation and institutional arrangement to attract more FDI (OECD, 2002). Quality of the internal institutional determinant in home country matters on the level and the volatility of FDI inflows. The evidence between the institutional quality and the reform is positive within the panel analysis of 164 countries in a 20-year period. More specifically, one unit change quality improvement in the institutional reforms attracts FDI by a factor of 1,69 (Buchanan et al., 2012). High rates of pro-market reform hamper the local exploitation of foreign expansion knowledge. A firm's international experience with ownership increases has a positive effect on the pace at which the firm implements an ownership increase in a host country, but that this effect is weaker during periods of more rapid pro-market reform in the country (Putzhammer et al., 2020).

The entrance of the FDI in insurance in Turkey coupled with the high population, low penetration in insurance, low motorization rate, leakages in MTPL and immature density rates. These issues were significantly raised by the insurance executives during interviews: *“When we come to the reasons why they come to Turkey, it lies the low penetration in Turkey, especially when compared with other countries. To summarize, the ratio of private pension funds to the country's gross national product is 123% on the OECD average and 2.1% in our country. Again, when we look at the insurance penetration, the penetration rate in Turkey is 1.6%, whereas it is 6.7% in Europe. Similarly, the premium per person is 1.700 EUR in Europe and it is 164 EUR in Turkey.”*⁴²

During the interviews, FDI entrance coupled with the increasing technical knowledge. Know-how transfer of the FDI inflow has significantly overweighed the other codes in the analysis. This topic has been mentioned in 75% of the interviews. *“How was the traffic branch affected? As I mentioned, with the end of the high-interest period, the need for cost estimation and advanced actuarial modelling increased. You know, in the insurance industry, costs arise later, not when you sell. The biggest portion of the cost is the claim cost the personal cost has a small share in the total cost. In such a case, estimating them is very important. Forecasting models have improved with the arrival of foreign investors. The concept of “right pricing for the right case model” was formed and accordingly, improvements were observed in underwriting profits. Other problems would occur later. In the pricing system, the regulation of the public came in parallel, and within*

⁴² Participant-1, Code-3, No-1

the framework of this pricing system, the efficiency of foreign companies in pricing and claim management was clearly observed, especially depending on risk models and underwriting pricing issues”⁴³

The increasing penetration of foreign capital also enabled firms to invest in their technological systems and they became more aware and well organized of the changes in regulations. *“At least an institutionalization has come to the sector. I can say that there had been a lot of progress in order to be able to use technology at work, such as whether the establishment of TRAMER or in the developments on the SBM side. These technological developments were experienced by the industry after 2000. In those years, when policies were issued manually, I started the sector, that is, there were losses in policies without monitoring and the abuses were at an endless point. In other words, there was no certain rule; even a newly purchased vehicle would be discounted without any systematic control. There was no supervisory mechanism to control the system and structure at all. I think it is important for our industry that it has come to a standard. Then our law came out. Before the law, insurance was not seen as a profession.”*⁴⁴

The growth of FDI sometimes created confusion in foreign players when the MTPL regime downturns from reform period to regulation again. The unstable nature of the regulation is the most highlighted code in the FDI part of the interviews. This negative impact corresponds to the maximum word count and the most frequently cited issue in that part. *“In general, foreign companies did not overestimate the environment of uncertainty that they mostly avoided, but with court decisions, various decisions in legal practice, with issues they never anticipated or foresee, they were exposed to extra costs especially during this period. At the same time, they have experienced that the legal framework which they are accustomed in their home countries persist in Turkey in theoretical terms, however, it did not work in practice”*⁴⁵

⁴³ Participant-4, Code-8, No-1

⁴⁴ Participant-11, Code-15, No-1

⁴⁵ Participant-1, Code-6, No-2

6.2.Price

When the MTPL prices are centrally determined, MTPL becomes an unpopular line of insurance among insurance companies. If the prices are set to a level, which is lower than required, there would be losses for insurers and these losses, in turn, hit the Guarantee Funds and even the state funds. On the other hand, setting the price higher also disturb the commercial sector like transportation. Taxi, truck and bus transportation costs will affect the profitability and this would also create tension. It can also influence the automotive industry that, many potential buyers can be adversely affected by the high prices of insurance. When MTPL is centrally priced in a multi-player market, there are two main choices for the insurers. Companies with careful monitoring systems and effective management skills avoid participating in the lines (even in vehicle types) to maintain their profitability. Especially when MTPL is under-priced, the strategic approach would be not producing if possible. On the other hand, the high number of insurers prompt the companies to get market share for that reason they increase their marketing activities to sell more MTPL. However, the companies with poor capital and weaker management can find themselves in a profitability trap and it leads eventually state sourced financial bailout.

The main aim of the pro-market reforms was to create a fall in prices in the goods and services market. This is coupled with the higher outputs, therefore, leading to an increase in productivity. The reductions in the prices might occur with a lapse of time. Boeri et al. (2015) assume that price reductions are realized in less than a year. Market reform such as allowing internet-based price comparisons among companies brought a reduction of 15% in the life insurance market (Brown & Goolsbee, 2002). In another study, Goolsbee & Syverson (2011) concluded that new competitors definitely decreases the ticket prices in the US airline industry. The studies on the retail industries in France (Bertrand & Kramarz, 2002), and in Canada (Skuterud, 2005) demonstrated that firms responded by decreasing the prices when they face competition brought by the reform.

However, in the MTPL insurance industry in Turkey, this expectation cannot be seen in our analysis. As shown in Figure-17, the increase in MTPL prices were equivalent to the inflation level until 2011. From the second part of the Approved Tariff Period, the prices of MTPL went up. Especially, the real increase was in 2016, where the pro-market reform has reached its peak. It was

found that in the 12-year period the MTPL prices have risen 11,3 times whereas the increase in inflation level was 2,93 times. This makes a solid increase 3,7 times higher than the inflationary impact.

This finding is more meaningful with the slow increases in the number of policies sold as given in Figure-18. The increases in policies sold are lower than the inflation level and it was found that in a 12-year period, 11,3 times increase in MTPL premiums stated above stems from 2,1 times from quantities, and 9,2 times from prices. This indicates that insurance companies do not respond by decreasing their MTPL prices to the reforms.

Insurance companies can control the pricing and therefore sustain a better profitability in MOD lines, but the mandatory impact of MTPL give rise to a higher premium volume in production and constitutes two-thirds of the total motor branch. Although the insurance companies rely on their investment income to fund themselves, the changes in the regulatory climate lead firms to strengthen their technical reserves for potential claims while they have no control over pricing.

The complaints from the high MTPL prices have been the major topic in the news. 40% of the news published on the internet concentrates on this issue. The discussion can be traced from the news step by step in the Free Tariff Period.

First, Hürriyet highlights this action in January 2016: *“A citizen applied to Ankara Consumer Court against the extraordinary increases in compulsory traffic insurance. The outcome of the case can affect many drivers”* (“Zorunlu Trafik Sigortası Yargıya Taşındı,” 2016).

Policymakers are patient at first. Deputy Prime Minister Mehmet Şimşek seemed to look for a solution in the news published in Sigorta Medya in February 2016: *“We get to the root of the problem in compulsory traffic insurance. There is no populist approach like “premiums are too high, let's take it down”. We will look at it as a whole”* (“Mehmet Şimşek: Trafik Sigortası Primleri Düşecek,” 2016).

High prices in MTPL then changed its tone in the news. For example, Sigorta Medya, a sector publication, announces the political power and the price stability relation in July 2016: *“The Treasury invited 10 companies with a high market share in traffic insurance to an emergency*

meeting and asked their companies to promise a reduction in traffic insurance prices.” (“Hazine, Şirketlerden Trafik Sigortasında İndirim Sözü İstedi,” 2016).

In August 2016, the news from Mynet, an internet news portal, indicates that the news became even harder and they clearly demand an intervention from the regulatory: *“Insurance companies insist on not reducing prices despite warnings of the economic administration, especially Mehmet Şimşek, Deputy Prime Minister. The Treasury has two sanctions in this context. The first is the ceiling price application and the second is the determination of the tariffs by the Treasury.”* (“Zorunlu Trafik Sigortasında İndirim Oyunu,” 2016).

Finally, we witness that the tension increases to a sanction point. In December 2016, Dünya, the daily economy newspaper, announces the regulatory fine at the latest point: *“The Treasury imposed administrative fines on 27 insurance companies that offered or did not offer excessively high premiums in traffic insurance for violation of the rules”* (“27 Sigorta Şirketine ‘trafik’ Cezası,” 2016).

Similar comments about the high MTPL prices were a part of the interviews. -When the liberal tariff mode is allowed, the price increase of MTPL products is the most apparent outcome according to the interviews. Because all the interviewees have mentioned about this issue and spend many words at the same time. Price increase related codes also became the most frequent topic in the Free Tariff Period: *“...there were certain periods that MTPL prices were not increased as much as inflation, but it came to such a point that, especially in 2015-2016, this situation was no longer sustainable and prices started to increase suddenly. Between the periods starting from in the middle of 2015 until 2016, we did experienced a 20% increase in prices in one month and a 10-15% increase the following month. The sector recovered the pain of the increase in just 1-2 years that it could not compensate enough in 4-5 years. The industry provided this recovery with the influence of price leaders. However, at the point reached, such a picture has emerged that when people look at the insured side, there were insured people whose policy premiums increased by 200-250% in a year”*⁴⁶

⁴⁶ Participant-6, Code-20, No-2

It is also worth mentioning that, in the interviews, many of the insurance executives have stated that the majority of the industry played with fire. In general, they admitted that insurance companies went too far in pricing: *“When talking about this free tariff, of course, companies should not exert exorbitant prices that make the customer suffer or they should be very careful about pricing practices. Some of the necessary upward adjustments in mild rates and low frequencies might be excused. But, in general, I think it is not very correct to spread this to the general because both the innocent ones are melted in the same pot with the vigilant ones.”*⁴⁷

Increasing MTPL prices has been experienced in most of the vehicle groups. In Turkey, private cars comprise half of the MTPL policies sold in all vehicle groups. When the total premiums were divided by the number of MTPL policies, it had been found that the average MTPL policy price had increased 55% in CAGR terms as depicted in Table-13 whereas the inflation was only 9%. The vehicle types showed a similar pattern (Taxi 41%, Minibus 54%, Small Truck 55%, Motorcycle 77% etc.). In this period, the average price of every vehicle type remained far above the inflation rate. (the minimum increase was in the working machine with the rate of 13% -still above inflation level- which has only 0,3% share in the total vehicle groups.

Thus, the rising prices created overall anxiety and concern in automotive-related industries, transportation and in-city travel lines. In the MTPL news, many of the representatives of the automotive-related institutions had taken part and they complained about the harmful consequences created by the high MTPL price charges. Remzi Öztürk, General Coordinator of Motorcycle Industry Association emphasized the crisis in the motorcycle industry: *“Due to the high cost of Compulsory Traffic Insurance, the motorcycle market shrank by 27 percent”* (“Trafik Sigortası Motosikleti Vurdu!,” 2016).

The subject of the complaint may vary depends on the party. For example, Fevzi Apaydın, the Chairman of Turkey Drivers and Vehicle Federation, (TŞOF)⁴⁸ criticises the insurance companies in Dünya, an economic daily newspaper in 2013: *“Even if there is no history of damage, the premiums are increased at least five times when the commercial vehicle phrase is in the license. In the past, pirate transport was used to avoid paying taxes, now this is done to avoid traffic*

⁴⁷ Participant-3, Code-20, No-2

⁴⁸ TŞOF – Türkiye Şoförler ve Otomobilciler Federasyonu

insurance. This is to punish our tradesmen who act in accordance with the law.” (“Zorunlu Trafik Sigortası Esnafı Çileden Çıkardı,” 2013).

Even harder protests came from the taxi associations. Yahya Uğur, the executive of the Istanbul Taxi Drivers Association threatened the companies in the news in Dünya: *“I regret that the insurance companies, who say they are making a loss, have a justifiable reason for the traffic insurance application that we have not witnessed. Every day, 45 thousand people have to pay their insurance policies at exorbitant prices. Unless those who oppress citizens to earn more without making effort, say stop this persecution, we will continue our actions.”*(“Taksiciler Sigorta Zammını Protesto Etti,” 2016).

In the interviews, this issue was also emphasized. Public pressure was the second big area of concern. More than half of the interviewees commented on this code. The growing impact of public pressure caused to end the liberal tariff period in MTPL industry. *“.. Nevertheless, as these excessive price increases or the high premium offers of some companies in order not to provide coverage in the high-risk segment line, like taxis, minibuses or buses, caused a complaint in the public opinion. The public authority first made a legislative change for these complaints. Then it observed the market and estimated what the effects of this legislative change would be. On the other hand, when you make an arrangement - the regulations don't suddenly cut your costs like a knife-edge - they had to be observed a little more. But it could not bear the pressure any longer, and the public authority turned the free tariff into a limited form of implementation by putting a ceiling premium.”*⁴⁹

Interviewees also shared that they strongly felt the public pressure from their own point of view: *“Insurers said: ‘We are such a sector that we are the guarantee of all movable assets and trade in this country when you think like that, we should be at a higher level than the banking sector. However, we were discredited, unfortunately, during this period. I live in Istanbul, and people wrote on the back of taxis: ‘End the insurance robbery’”*⁵⁰

⁴⁹ Participant-1, Code-19, No-3

⁵⁰ Participant-11, Code-19, No-1

Here we need to ask the right question: Why did the insurance companies respond in that way? – instead of competing and letting the price to fall, they charged higher prices even if they knew this could not be sustained in the long run. Or do we need to seek the reason why the competition between the insurance companies did not emerge and why it turned against the vehicle owners? In order to analyse the rationale of the responses, we have to refer to the profitability in the MTPL industry.

Profitability might be regarded as a little fuzzy since there might be other indicators that affect profitability. However, instead of regarding individually, analysing the market as a whole gives a quite clear result. Profitability has been regarded as one of the major interesting points among scholars, which can also be interpreted as a clear indicator of the strength of the reform:

When the pro-market reforms are increased 1%, the profitability of the firms increases by 2,33% (Cuervo-Cazurra & Dau, 2009a). Banalieva & Chari (2015) propose a U-shape relationship between reforms and profitability by testing 18.000 firms in India. Thus, a U shaped path is emerged with declining profitability initially and leading to higher returns as greater part of the reforms are completed. North (1990) asserts that, institutions change widely due to their economic performances. Competition-enhancing liberalization measures have more impact on state-owned firms as compared with domestic and foreign-owned firms (Driffield, Mickiewicz & Temouri, 2013). Market reforms are associated with rising overall productivity that is largely driven by reallocation away from low- and towards high-productivity businesses. (Eslawa, Haltiwanger, Kugler & Kugler, 2004).

When faced with pro-market reforms, emerging market firms, which shape their responses in synchronization with the changes in the external environment, are in the best position to mitigate the erosion of profitability (Popli, Akbar, Kumar & Gaur, 2017). Institutional changes towards more liberalization significantly affect and alter the importance of the firm, groups and industry as a whole. Analysis based on the manufacturing sector indicates that firm-specific capabilities and dynamic efficiencies are valued after the financial reforms (Majumdar & Bhattacharjee, 2014). The speed of the reforms also affects profitability. Synchronized faster reforms (the extent of coordination across the reform rates of implementation) yield mutually reinforcing and complimentary benefits that enhance firm performance in transition economies (Banalieva, 2014).

For the developing countries, the pro-market reforms enhance the profitability of the local firms because the reforms allow the companies to increase their knowledge about the industry and market experience. By acquiring this knowledge, companies can cope with the new market conditions which discourage them priorly before the reform period (Dau, 2011). Examining the institutional reforms and international openness in 16 transition economies in Central and Eastern Europe over 230 thousand observations, it was observed that the institutional reforms benefit the domestic firms. However, the same results cannot be spread to foreign subsidiaries (Kafourous & Aliyev, 2016).

In our analysis relating to the profitability of the insurance companies in the MTPL market, profitability was a major concern. As depicted in Figure-20, insurance companies had incurred increasing losses in the MTPL line and the amount of loss became maximum before the pro-market reform. When the prices are determined by the insurance companies, profitability in 2016 boomed and the industry firstly experienced a break-even situation in its history. Therefore, it can be concluded that charging higher prices help them to cover their losses.

Insurance companies often mention this issue in all the periods. For example, Akbank CEO criticizes the loss in the market: *“In 2006, despite the mandatory tariff in traffic, the industry lost a lot of money. The expected figures of around TRY 80 million, that is, there is a loss of 7%. This is the first time such a thing has happened in traffic in years. Here, we definitely need to make damage management more effective”* (“Yabancı Ortak Değil, Alacak Şirket Arıyoruz,” 2017).

The insurance companies seem to accept this fact as an inevitable fate of MTPL insurances. For example, in 2008, the General Manager of Ergo Murat Balcı highlights the same issue: *“There are such policies that I know I will lose money when I sell them. Nevertheless, because you are a big insurance company, you cannot say that you cannot do some jobs. Today, we have to make traffic insurance legally. I would not take out any traffic insurance if I could. Nevertheless, if we do not sell traffic insurance, we do not have the chance to sell another insurance in Turkey. The work has its own strange balance”* (“İlk Akla Gelen Şirket Olacağız,” 2008)

Insurance companies on the other hand defend their prices by the general cost increase in the industry. In 2013, Sigorta Medya, which is an insurance publication, discusses the explanation of

the rationale in the MTPL price increase: *“If you add up the increases for fuel or LPG annually, how many times does it equal the premiums that you pay for insurance? But the insurers, who are generally approached as “hit it up”, unfortunately, became a scapegoat in all matters in this country.”*(Kantar, 2013).

At the same time, companies tried to rationalize the price increases. Yavuz Ölken, the CEO of Axa, highlighted the reasons for the responses of insurance companies in Cumhuriyet: *“It is important to eliminate the cost increase. We are talking about this issue both within the sector and with the authority. We have not yet achieved standardization in issues such as bodily damage and lack of support. Different decisions are still being made by the courts. We estimate that there will be a move on this issue by the end of this year. There should be a standard in compensation. There is no calculation methodology yet. As the sector, we submitted our offers regarding this to the General Directorate of Insurance. There was no standard in loss of value, either. Compulsory traffic insurance will be a predictable market when such regulations are completed. The distinction between good and bad drivers should also be made better. We should definitely turn to free tariffs.”*(“Büyüme Yok,” 2019).

In the interviews, the reasons of losses were also mentioned. Increasing the coverage of MTPL insurances, extending the warranties for the existing policies, instead of the new ones, obliging fixed-rate expert tariff for insurance companies, blocking the usage of second-hand spare parts in the automotive industry and increasing the cost of bodily injuries had created cost pressures on insurance companies. Interestingly, though they are aware of the reason, they could do nothing in controlling the potential loss threats: *“The loss becomes such a huge position that in 2012 and 2014, this affects not only the branch but even the total balance sheet profitability of the sector. The entire sector declares the balance sheet loss because of traffic insurance, because of a single branch.”*⁵¹

Therefore, it can be concluded that insurance companies charged higher prices to improve their profitability. We can see that when the price level was maximum level in 2016 in Figure-17, the industry could achieve at least the break-even point in Figure-20. Once the determination of pricing

⁵¹ Participant-1, Code-39, No-3

is allowed to insurance companies by the reform, they inevitably tried to offset their previous year losses in a rush. They hurried because pro-market reform had given them a chance of acquiring profitability for the first time in MTPL history.

As already given in Figure-21, insurance companies enjoy the investment income from MTPL policy collection therefore improve their balances. Similarly, we have seen in Figure-20 that as the interest rates increase, companies find to have higher returns. Again, we see from Figure-21 and Figure-22 together, interest rates and investment income has high values in the Free Tariff Period. Thus, companies compensate MTPL in two ways. First, they try to create leverage for future claims, secondly, they try profitable growth in non-MTPL lines in order to survive in MTPL. The nature of the product motivates the companies to stay in the market.

In the same vein, the long-tailed nature of MTPL insurance was emphasized with 12 times in the interviews. This means that, when the policy is sold, the money can - instantly or at most in three months period – be collected but the claims can be quite late. This nature of the product is generally forgotten when the collection has been completed. This outcome brings the difficulty of measuring the exact cost of the product: *“Traffic is a branch where the damages come in the long term. That's why, especially if you don't have some sensitivity on the reserve side, you can actually collect the money as soon as you write the premium. This is an incredibly good opportunity for small players to quickly collect money from the market. These companies are not governed by international discipline, they are not sensitive to calculate and separate the reserves of future damages in the long term, and they aim to use the early cash collection in an opportunistic way in the short term.”*⁵²

Similarly, cash collection in order to create investment income was used by 92% of all the interviewees. *“He (the insurer) receives the money in advance, and pays –let me give a numerical example- on average, he pays 50% of the claim this year, he pays 30% in the second year, the remaining 20% is paid in much longer years or at lower rates. This provides a cash relief and it seems he has made a profit if the reserve is low. If it is misaligned, this profit is not available in the following years. For this reason, one of the insurance companies went to the Guarantee Fund.*

⁵² Participant-2, Code-29, No-1

Companies experiencing such problems are financed from the Guarantee Fund. As you know, 2% of the traffic premiums are paid by the insured to the Guarantee Fund, Similarly, insurance companies invest 1% of their traffic shares into the Guarantee Fund as well. Companies experiencing such problems are transferred to the Guarantee Fund, and the damages of the victims of the insured are covered by this fund. Therefore, it is easy to sell a compulsory insurance from a small company point of view where no marketing effort is required.”⁵³

Lastly, as summarized in Table-14, we had defined some patterned profitability responses by the firms. Group-I firms including public companies like Company-28 and Company-14, and other private ones Company-07 and Company-10 had never attained profit and they had become worse in the Price Cap Period. Group-II firms (Company-03, Company-01, Company-11 and Company-16) improved their losses in the Price Cap Period and even had a profit. Solid profit-makers (Company-02, Company-17 and Company-24) boomed their profitability in the Free Tariff Period. Group-IV companies (Company-12, Company-08, Company-27, and Company-26) always suffered from huge losses. This group holds 6% of the MTPL production but incurs 22% of the loss in 2018. Group-V companies (Company-15, Company-15b and Company-22) differently had little share in premium like in loss. The new entrants consist Group-VI (Company-13, Company-20, Company-25, Company-29) perform a regular trend in cost as of 2018. Finally, Company-05 alone holds 18% of the MTPL loss as Group-VII. The existence of these groups states that companies develop different strategies against reforms. Now we focus on their business mix in MTPL.

6.3. Market

Regulators are very keen on providing the market conditions and its well-functioning. From one side, they need to increase competition by satisfying the liberalization needs; on the other hand, they demand these developments should be self-sustainable within the markets. As we have reviewed in the literature review part there are many studies supporting the fact that the aim of

⁵³ Participant-4, Code-36, No-2

market reforms for a better economic outcome has a positive impact on the competition and the society as a whole:

Whenever there exists competition, the new entrants pushes the price to fall down. In order to defeat the new entrants, incumbent firms develop new strategies and they foster innovation. Fiori et al (2012) find that this impact is more significant in industries where the costs are similar for all firms. Latin American experiences show that firms might gather competitiveness and this impact is higher for the foreign own firms (Cuervo-Cazurra & Dau, 2009b). Bertrand et al. (2017) concluded a similar result in the banking industry in France. High standard technologies and the availability of more financial resources are the possible assets of the firms when structural reforms are done in Indian pharmaceutical industry (Chittoor et al., 2009). Del Sol (2010) points out the advantages of Chilean firms in providing strategic inputs against increased competition brought by reform. Dau (2012) highlights that private firms respond faster to pro-market reforms than the state firms, therefore better take benefit of it. However this benefit cannot be sustained in the long run and an increased level of competition erode profits (Chari & David, 2012). Dau (2018) asserts that firms may gain experience in dealing with regulatory complexities in time. Gal & Hijzen (2016) found that small retail entrants could have more advantage in the first two years of the reform than their rivals. Diversification and group affiliation are the other responses to the market reforms

The response to market reforms and regulations can be best understood by the concentration in the MTPL market. As we have seen in Table-15, the non-life insurance industry is quite stable and in the last 13 years, only 4 companies (Company-02, Company-03, Company-05, and Company-01) has been on the list of Top-3 companies in market share. In the Top-5 list, we can add (Company-27, Company-2b, Company-24, and Company-17). The quite stable market leaders dominated half of the non-life market. How did they acted in MTPL pricing is a little different. As shown in Figure-34, starting from the Approved Tariff Period in 2007, they occupied more and more dominance and their share reached the maximum in the pro-market time. For the Top-5, their share in MTPL came to 70% in 2016 whereas it was only 43% in 2007. Thus, the more the tariff rate is liberalized, the more the leading companies are involved in the MTPL business. A parallel movement can be seen in their business mix. While in 2007, only 13% of the Top-5 non-Life

insurance companies' production is accounted for MTPL, this ratio reached 45% in 2006. Thus, big companies changed their strategy to produce more MTPL in Free-Tariff Periods.

When the trend of highest MTPL producing companies is analysed, as shown in Table-16, we had come across nine different firms (Company-02, Company-01, Company-03, Company-05, Company-27, Company-08, Company-17, Company-24, and company-02b) in the Top-5 for the last 13 years. This trend reveals that the biggest players do not change in time and are quite stable as in the non-life. Secondly, as summarized in Figure-37, these big MTPL companies increased their market share in the MTPL market, as the tariff rates are liberalized.

These two trends for the biggest non-life producers and MTPL producers hold the idea that pro-market reform are welcomed and they are more focused on selling MTPL. Moreover, we can say the opposite movement. When the regime becomes more regulated, they switch to other lines of insurance, therefore, decrease their business mix in MTPL. Hence, the concentration in the MTPL market diminishes.

Apart from these two concentration and business mix trends of the leading firms, when we individually analyse their strategies, we can categorize 8 groups of responses to reforms and regulations as summarized in Table-17. To summarize briefly Group-I companies (Company-02, Company-03, Company-05) have a balanced concentration in regulation times; slightly increase their concentration in deregulation time. Group-II companies (Company-24, Company-14, and Company-17) developed a strategy to increase their concentration in MTPL by more than 50%. Group-III companies (Company-21, Company-25, and Company-09) are the new firms, which entered the market in the reform period, and they immediately responded to reform by booming their MTPL orientation around 80% or above. Group-IV companies (Company-18, Company-07, Company-16), relatively new and small companies did not change their pattern either in reform or regulation periods. Group-V companies (Company-28, Company-10, and Company-29) on the other hand, never exceeded MTPL orientation more than 10% in reform time. Group-VI companies (Company-04, Company-23, and Company-19) experienced firstly decreasing pattern in MTPL orientation until reform time, and with the introduction of reform changed their strategy again to concentrate more on MTPL once again. Group-VII companies (Company-12, Company-27, and Company-15) had stagnant ratios and gradually declined their concentration especially in reform

time. Finally, Group-VIII companies (Company-01, Company-22, Company-11) respond with an MTPL concentration of around 17% at the beginning of the Free Tariff Period and ended around 30% at the end of the reform times.

If the regulator allows the market to settle their own pricing, MTPL insurers will inevitably classify the risks and focus on groups with the cheaper price for the better risk. In other words, with their calculations, smarter companies would target the group of segments (geography, driver, vehicle, business etc.) where they expect lower frequency and/or severity of claims. Conversely, there will be scarcity for those where the risk assessment is high. The insurance companies will avoid participating in that business because they thought that their future claims would exceed their today premium income. High-risk groups of vehicles always constitute a problem for regulator; if let alone the price to market, the insurers would exclude these group; if intervene, any kind of subsidy would be inevitable to compensate this risky group. From every point, the regulator faces a dilemma and it may turn into a political risk as well. There are also negative externalities that, for instance when taxies are regarded as high-risk group and not intended to insure, the federation of taxi owners complain that they cannot obtain MTPL policy. Furthermore, the agents may behave reluctantly because their commissions may be lessened for high-risk groups. In that case, agents and brokers would concentrate on the group where they can higher commissions. By the way, the leakage ratio may be increasing at the same time and more funds from Guarantee Funds is consumed to compensate the policyholders. The melting funds alarm the state and the regulator needs to intervene in the market.

These groups indicate that they might have different strategies and resource endowments; however, they are quite similar when responding to the reform or regulation. After the study of DiMaggio and Powell (1983), many researchers investigated the isomorphic pressures on firms. DiMaggio and Powell (1983) recognized three different sources of explaining the homogeneity of the firms. Coercive isomorphic pressures are originated from the pressures of policymakers. Secondly, mimetic pressures help the companies to benchmark themselves with the successful ones in their own environment. In some cases, this imitation might be to resemble the market leader (Lawrence, 1999). Thirdly, normative pressures like professional working standards and common experiences or even a membership to social institutions create obedience to corporate guidelines.

Dacin (1997) introduces two concepts of why individuals respond rationally: Bureaucratization and rationalization help the organizations for homogeneity.

Referring to the theory, we might say that in MTPL insurances, when the pro-market reforms are implemented, insurance companies perform isomorphic behaviours. For example, leading companies continuously increase their shares in MTPL when the reform was introduced. The new entrants increase their business mix in favour of MTPL in order to have investment income opportunities. At the same time, companies tend to increase their MTPL prices to offset their previous years' losses. We can also witness increasing FDI and increasing capital in insurance. It can also be said that in vehicle-based, the companies maintain similar strategies, like selecting the profitable vehicles to insure and avoiding the ones carrying high risk.

The entrance to the market is also commented in interviews. Thus, new players are willing to enter in two steps. Firstly, they are tempted by investment income: *“You get the premium within a few months, but the cash outflow is very slow, so let's say the damage occurred in the sixth month on average in the one-year policy. On average, the damage payment period is 2.5-3 years. You have a chance to earn a “clean” investment income.”*⁵⁴

Secondly, the MTPL product is basic and homogenous: *“Traffic insurance is actually the easiest product to sell. Therefore, some products need to have some competencies and some capacities, for example, health insurance is a field with very specific competencies. You need to reach a certain scale. Hospital agreements need to be made at a good point so that you can really compete when we come to such big corporate businesses such as fire and they have competencies such as finding reinsurance capacities and being able to follow international markets, but traffic insurance is essentially the product is very clear, the same for everyone. The price is already fluctuating within a certain band. Demand is unavoidably present, as it is a compulsory product. So if you're going to get into an insurance somehow, it's the easiest way to enter.”*⁵⁵

Similar strategies and isomorphic examples are pointed out when talking about the market penetration in the interviews: *“Every company has a strategy. Some actually see the potential long-*

⁵⁴ Participant-6, Code-36, No-2

⁵⁵ Participant-3, Code-30, No-1

term risk in traffic. So maybe they do not want to grow too much or they want to grow too, so whatever the price leader is doing you either do the opposite or follow it to get a little more share from that market. The companies that lead this way here did not raise the prices to gain more market share”⁵⁶

Since the entrance to the market was easy and MTPL had always been a homogeneous product, the competition had always been important in the industry. The complaining issues also vary by parties. Insurance Companies and Economic journals complain about Stately Determined Tariffs. On the other side, the newspapers accused insurance companies because of late payments. For example, Erkan Çelebi, the insurance columnist of Hürriyet highlights that competition forces the firms to pay the claims when they were due: *“Some of the insurance companies, which competed to steal customers from each other last year, are now struggling to even cover their claims. According to the law, these companies, which have to pay the damages within 30 days after the file is completed, already give 3 months to the next day. It is not clear whether they will pay or not after three months.”*(Çelebi, 1999).

Before the pro-market reform, intense competition hit the companies. For that reason in order to survive in the market, companies deliberately risk-taker in MTPL insurance, which makes them more vulnerable in turn. These strategies weaken their solvency. Informative news in this period concentrates on the regulations relating to the losses. Mehmet Aydoğdu, the General Manager of the publicly-owned insurance company Güneş Sigorta demands tighter regulation on financial stability: *“The financial structure of insurance companies must be strengthened. For this, the capital of the company must be at least 20 million dollars. Companies that cannot raise their capital to 20 million dollars should also be eliminated from the sector.”*(Çelebi, 2001).

When the reform triggered the firms to increase their MTPL prices, rational ways of decreasing the policy prices were discussed by insurance professionals. Conditions also necessitated new concepts like “Driver Based Insurance”. Dünya, in February 2017 announces this issue: *“Deputy Prime Minister Şimşek said that a new study was carried out on traffic insurance and that the driver, not the vehicle, would be insured.”*(“Trafik Sigortasında Araç Değil Şoför Sigortalanacak,” 2017). Interestingly, the market seemed that it had already invented its own solution. For example

⁵⁶ Participant-4, Code-34, No-1

in an internet news portal, Abdullah Uzun, the Manager of Insurance Intermediaries and Agency Associations (SAAD)⁵⁷ quotes: *“Traffic insurance victim citizen has found a new method to avoid paying high premiums. Whoever has not had an accident in the family, the vehicle is transferred to that person”*(“Trafik Sigortasında İnandırılmaz Oyun!,” 2017).

Pro-Market reform, which provided the insurance companies to determine their own MTPL tariffs were regarded as evils of the period. High prices were lanced as the single outcome of this term and no other issues remained important. Thus, a bad image in public opinion is believed to prompt the legal authorities. So pro-market reform, with a boomerang effect, has brought its own end.

The insurance companies once again responded in the same way to the Price Cap. Much of the worries highlighted this issue in the interviews. *“It was foreseen for a very temporary period and became permanent. After switching to a model, there is no turning to another model, especially the fixed price should never and ever be. If the fixed price is selected, there will be no return. Furthermore, what lies behind such pricing practices is basically the fact that the commercial sector, that is, the truck and bus minibuses owners, have contact forces with the political authorities, and lobbying activities in this regard are likely to be successful in attempting to suppress prices due to lobbying activities. Therefore, I would like to state once again that the application of fixed prices is extremely risky.”*⁵⁸

First, the impact of the regulation directly affected the prices and this impact can also be seen in the news. An internet portal highlights the trend by making a comparison: *“High rates of decline were achieved with the ceiling price application in Compulsory Traffic Insurance premiums. The ceiling price which started on April 12, provided a 54% reduction in prices compared to the prices of May last year.”*(“Zorunlu Trafik Sigortasında Fiyatlar Düştü,” 2017).

Complaints were still the main news type in this period. The price cap causes insurance companies to mention about their losses in the MTPL business. Yavuz Ölken, the CEO of Axa admits their financial difficulty: *“Today, we continue to lose from traffic insurance. We write 10 lira loss for every 100 lira premium. With the ceiling price application, there is a certain monthly premium*

⁵⁷SAAD – Sigorta Aracıları ve Acenteleri Derneği

⁵⁸ Participant-4, Code-22, No-4

increase, but the prices in traffic insurance need to be a little more normalized and parallel to inflation. I don't call it to raise, I call it normalization”(“Kaskoda Fiyat %20 Artacak,” 2018)

However, once the insurance became cheaper for insurance companies, they did not want to sell the policies to the risky group; otherwise, their costs would even be larger. Thus, the companies immediately shrunk their volumes and this avoidance from MTPL became the major complaint in the news in the regulation period. (53%). 16 out of 30 news containing a complaint accuses insurance companies. Akşam, a daily newspaper, quotes the explanation of Levent Küçük, the General Manager of TÜDER⁵⁹ Consumer Association: *“Insurance companies, whose costs increase after the ceiling price application, do not make compulsory traffic insurance, especially for damaged vehicles, under the reason of 'system failure”*”(“Trafik Sigortasında Şirketlerin Yeni Oyunu,” 2017).

At first, the Undersecretariat of Treasury showed its commitment to implement the sanctions to the companies, which deliberately avoid MTPL production. Sigorta Medya, which generally stands near the insurance companies' side publishes the speech of Deputy Prime Minister: *“Underlining that the target of reducing the traffic insurance premiums to reasonable levels has been reached to a significant extent,”* (“Trafik Havuzu Ile Sigorta Sektörü Rayına Oturdu,” 2017). This might be a signal that State officials and political powers exactly monitor the insurance companies and stand near the side of policyholders in front of the public opinion. For example, the news in Sabah reflects the intent of the state officials: *“Treasury Undersecretary Osman Çelik pointed out the insurance companies that do not bid or issue policies in compulsory traffic insurance, and said "There are fines we have imposed for this. We are sensitive about this”* (“Hazine Müsteşarı’ndan Flaş Trafik Sigortası Açıklaması,” 2017).

Nevertheless, state officials are not in a comfortable position despite the ceiling price. At this point, more criticism was directed to Pool Administration where the distribution of the losses in the system pleases nobody in the system. Arif Hikmet Cesur, Undersecretariat of Treasury Insurance Supervisory Board Manager asks for more collaborative actions: *“I am the father of the pool. I suggested the pool within the tariff limitation. We need to set the system that considers the driver. However, there is no clear recommendation brought to the Undersecretariat. The sector has a*

⁵⁹ TÜDER – Tüketici Derneği

deficiency in this regard. I think the damage in the pool system will not be as much as it is spoken in the industry. We usually talk about problems. However, solutions should also be discussed in this regard.”(“Trafik Sigortasında Havuz Sigorta Şirketleri İçin İlaç Olmadı,” 2017).

Lastly, Turkish MTPL Insurance industry has experienced Competition Authority investigations three times, one in 2013 and two in 2017. In all three cases, the investigations concluded that there was no competition violation. The insurance companies in all investigations are acquitted and no punishment had been given.

The first case (09/05/2013 dated and 13-27/369-171 numbered decision) was applied by Bus Federation, Plastic Manufacturer Federation and the other two complainants. The assertion of the claims focuses on three topics: (i) Insurance companies increase policy prices in MTPL products by acting together and their agencies apply the same prices to the customers, (ii) Refusal of insurance companies to produce premiums with plastic producer companies or to renew their existing policies in agreement with each other, and (iii) Increase in MTPL prices by %250-500 by the insurance companies.

In this case, 15 insurance companies became the defendant. The first and the third items in the claims were related to MTPL business and the second claim was related to property-casualty policies in the plastic manufacture industry. In 2013, we knew that there was no place fully free price determination in MTPL insurance. In that period, Treasury determined upper and lower limits of the policies for each city and car type in Turkey, so that the insurance companies could apply the prices within the margin.

Firstly, The Competition Authority addressed the claims relating to MTPL pricing. The investigation in this scope concluded two major findings: First, after analysing the insurance companies that constitute the top 10 in the sector in terms of market share, no evidence was obtained showing that the insurance companies in question agreed to determine the MTPL prices for motor vehicles together. Secondly, although it is found out that a significant portion of the insurance companies has increased their premiums as of January 2013 in MTPL insurance, no information or document has been reached indicating that this increase is the result of an agreement restricting competition.

Secondly, the Competition Authority researched the claims about the avoidance of insurance companies from policymaking with Plastic Manufacturers and contended that: (i) There exist new insurance contracts given to plastic producers both in 2011 and 2012 years, (ii) There are clear expertise reports that risk assessment score of some plastic producing companies fail to exceed the international thresholds, (iii) There are some cases where the customer does not apply for the renewal of the existing contract, (iv) In some cases the proposed contract by the insurance company is rejected due to pricing and coverage related reasons.

When the two source of evidence are combined, Competition Authority concluded that: (i) Plastic producer companies have never been sacrificed in insurance, (ii) There are clear evidence that there are plenty of renewal contracts if they provide the necessary precautions, and (iii) There are also a substantial amount of brand new insurance contracts with plastic producers. In this respect, it has been concluded that there is no need for an investigation subjected to the existing claims.

The second case (03/07/2017 dated and 17-20/324-144 numbered decision) was started by the ex officio power of the Competition Authority and the defendants were MTPL selling insurance companies. The main subject was avoidance of regulated price. The claims were grouped in five different dimension: (i) With the introduction of the ceiling price, insurance companies agreed between each other, and removed the instalment application for MTPL and switched to cash or single payment, (ii) Some insurance companies refrain from producing policies, by closing or slowing down agency screens, giving a message not to create policy by putting a red light, (iii) It was informed by insurance companies that their systems were under construction, their existing systems were being adapted in order to comply with the ceiling price application, and that their network connection between their agencies and their headquarters was closed and damaged, (iv) The processes of issuing policies have been complicated by adding new conditions such as the photos of the insurance subject vehicle, the driver's license or the license being uploaded to the system, as well as the failure to approve the new policies or prolongation of the approval period, and finally (v) MTPL insurance deliberately became more expensive by requesting additional policies such as personal accident and house insurance.

Competition Authority firstly analysed the collection procedures of the insurance companies. They provided that: (i) There may be collection delays when a single withdrawal is not made with a

credit card, (ii) There is the probability of financial benefits arising as a result of the removal of three instalments by credit card, (iii) Some insurance companies limited the number of instalments in risky policies whereas some other continue three instalments, (iv) Some insurance companies increased the number of instalments till nine together with a fee maturity fee, (v) Some insurance companies deliberately increased the coverage of MTPL policies by adding new guarantees in order to increase its price,

Then Competition Authority analysed the communication network of insurance companies and their relations with agencies. The investigation resulted that: (i) Some insurance companies experience system errors due to the increase in demand, (ii) Some insurance companies demanded additional documents in order to complicate the policy issuing, (iii) Some insurance companies group their clients according to their risk level and informed and directed their agencies to behave accordingly, (iv) Some insurance companies brought daily quota, closed online policy issuing services in case of risky policy producing, even they terminated their contracts. Competition Authority also contented that Turkish Insurance Association monitored companies and applied internal disciplinary means as well as Undersecretariat of Treasury carried out on-site inspections.

When analysed together, Competition Authority decided that there is no joint action of insurance companies to limit policy issuing of their agencies. There are cases in this manner but they are individually organized and subject to the control and the sanctions of the Undersecretariat of Treasury. In this case, it was declared that there is no document or finding that the insurance companies have established an agreement within the scope of Article 4 of Law No. 4054.

The third case (19/07/2017 dated and 17-23/383-166 numbered decision) was just 16 days later than the second anti-competition claim. Similar to the previous case, Competition Authority opened the investigation by using its ex officio power, however in this case the defendants were larger in number. Here there were 33 insurance companies regardless of whether they are inactive, not producing MTPL or newly established.

There were four claims in the investigation. First, a simultaneous price increase of all insurance companies indicates a violation of competition law. Secondly, although the trucks used in the international transportation sector are not included in the risky vehicles group, these vehicles bear

the costs of other vehicles and a high amount of MTPL premium is paid for the vehicles in question.

Thirdly, high amount MTPL premiums caused consumers to avoid having MTPL and likewise, it resulted that local transportation companies operating in international transportation, became unable to compete with vehicles with foreign license plates. Fourthly, there are large differences between the premiums/price offers that for the same vehicle, some companies make compatible offers, whereas some offer very high premiums, or avoid issuing insurance even if required by law.

Competition Authority started the investigation by demanding written defence of the insurance companies. Grouping the responses of companies portrayed that most of the defences show similar patterns as summarized in the matrix table in Table-22. It is interesting to see that 23 out of 33 companies asserted that the market as a whole initiated the price increases rather than directly denying the claim. Similarly, 19 of them noted that there is no market sharing. Both two responses (highest two) represents that the prices increased but they do deny they did not deliberately engage in this business.

Table-22 Defenses of Insurance Companies

	AKC	AK	ALLIANZ	ANADOLU	ANKARA	AXA	BEREKT	DUBAI	EGE	ERGO	EUREKO	GENERALI	GRUPAMA	GULF	GUMUS	HALK	HDI	HUR	LIBERTY	MAPFRE	NEOVA	ORIENT	RAY	SBN	SOMPO	DOGA	KORU	TURKLAND	NISSAN	TSS	UNICO	ZIRAAT	ZURICH	TOTAL			
developments in market caused this increase	x	x	x	x	x	x	x			x	x			x	x	x	x		x	x	x			x	x	x									23		
no avoidance of pricing proposal	x	x	x	x							x	x			x	x					x															14	
no high pricing in international transportation vehicles	x	x	x	x		x				x					x	x							x					x	x	x	x					16	
no market sharing with rivals	x	x			x					x	x	x	x	x	x	x				x								x	x	x	x					19	
not being party to concerted action	x	x	x			x					x					x	x																				14
pricing based on legitimate and commercial issues			x	x					x		x	x	x	x						x														x	x	x	14
different prices as a part of competitive market			x																																		2
no concentration in a spesific form					x									x																							7
should refer other institutions in market before investigation						x																															1
need for additional evidence before investigation							x																														1
we increased the prices first muct before than rivals								x																													1
being just a small player in MTPL market																																					8
evidences are just internal writings, not proof																																					1
already cancelled licences in busines line																																					2
Defense that Authorization Certificate is Duly Prepared																																					2
premium production is higher than the market average																																					1
no investigation required without preliminary research																																					1
dates of papers of evidence belongs to former dates																																					1
subjects are irrelevant and not related with competition																																					1
as a cooperative we have distinct structure																																					2
no private analysis per company																																					3
no decreasing trend in MTPL market																																					1
concentration in a spesific form has its own legal reasons																																					2
TSB can not be a part of an investigation as a association																																					1

Source: Author

Competition Authority realized its analysis in nine different studies. First, mailings between Insurance companies regarding tariffs were investigated. The existence of mailings between competing insurance companies was proven. However, their scope was limited to the public statements of companies regarding the updating of the said Guideline Tariff, nothing related Secondly mailings between Insurance companies regarding Pricing were analysed. It was understood that insurance companies closely monitored the behaviours of their rivals and they collect data about the market through their agencies. For that reason, insurance companies act with their own will and take their action individually, so there is no competitive violation in pricing. Thirdly, investigation on mailings regarding cost increase, the findings showed that; insurance companies develop competitive strategies not only about obtaining the highest market share; they can build it on the number policies according to their profit-loss analysis. When the planned number of policies is reached or the losses are anticipated for the marginal policies, insurance companies avoid taking more risks. In this respect, no evidence was found to support the allegations. Fourthly, average monthly nominal premium levels of 30 insurance companies are collected regardless of any vehicle type. Then these ranges were compared with the average premiums of the same company in the 2014-2016 period when they had full freedom in determining premiums. In this study, it is expected to find whether there exist certain periods for all insurance companies where premium levels are higher than the average level and the variations are lower than the average period variation. In the study, there was no period found that indicates a higher premium level for all companies. Fifth, company based price statistics, contrasting the previous two years movements pointed to significant deviations in prices; however, no period could be assigned that companies moved in the same way, representing a simultaneous and consistent collective action in the market. Sixth, cost-price relations indicated that total treatment expenses in accidents, total claims paid, expert payments, cost of spare-parts and loss of value caused higher input costs in MTPL insurance, thus higher prices are offered to the customer. Seventh, the analysis on collective price increases asserted that there might be some collective increase in some car types, in some companies or even in some periods but none of them clearly indicated a transparent economic evidence of collective and continuous market collusion. Eight, the increase in cost items points that companies can pretend similar patterns in pricing from time to time but they did not follow a clear rule proofing that a simultaneous anti-competitive reaction in prices. Finally, considering the data and graphics about trucks, it was seen that the majority of

the MTPL market consist of policies for automobiles and vans, and there are quite narrow markets for other vehicle types. However, almost every insurance company has issued policies on all vehicle types. In some cases, some of them stand out in some vehicle types but there is no indication of excluding one type of car (or the trucks) in the market. After completing these nine field analyses, Competition Authority has decided that there was no need for an investigation subjected to the existing claims.

The responses to the Competition Authority worth to be underlined. We had seen that Figure-55 indicated that insurance companies develop different strategies against competition investigation. Again we can refer to our theoretical background that isomorphism exists not only in the reform period but also in the regulation period. Similar avoiding tactics from risk businesses, creating complexities and rationalizing their logics in their defence to Competition Authority supports the theory of isomorphism (DiMaggio and Powell, 1983). As Zucker (1983) proposes that organizations conceptualize a common understanding of a meaningful behaviour due to the pressures coming from the external environment. These pressures exert structural characteristics to the organizations (Meyer et al., 1987). Strategic responses to institutional processes may change from ignoring explicit norms and values to assaulting the source of institutional pressure, from mimicking institutional models to negotiating with institutional stakeholders (Oliver, 1991). Thus, responses to reforms and regulations in the MTPL market creates homogeneous practices within insurance companies.

To sum up, three different investigations were carried out by the Competition Authority in the MTPL insurance in Turkey. All of them resulted that the actions are determined to be within the competition rules and no investigation was deemed necessary. Especially 144 and 166 numbered cases, which were realized in 2017, have similar and complementary contents. They are also opened by the ex officio power of the Competition Authority. While the decisions no. 171 and 144 were taken with the solid vote, in case no. 166, the decision was taken by majority vote.

In these three cases, I interpret that the Competition Authority follows the practices set by the Undersecretariat of Treasury. The Undersecretariat of Treasury has a balancing role in the market. With this soft standing in this context, the effects of the regulation in the market are slightly reduced. Mehmet Şimşek, the Deputy Prime Minister confesses the regulation in his interview

after regulation: *“I prefer the system to work through competition. I do not find the ceiling price is correct, but they forced us. I would like to look at this issue with three dimensions. Consider we made the system. Second, the system works normally, pricing should be on that path.”* (“Tavan Fiyat Doğru Değil Ama Mecbur Kaldık,” 2017)

I propose that policymakers tried to stand somewhere in the middle and do not touch the extreme points in the industry. In addition, the Undersecretariat of Treasury deliberately avoided worsening the sector with additional sanctions, which had already been hurt by the regulation. For example, Mehmet Şimşek was quite impartial in his evaluation after regulation: *“We came together with the industry. The industry has suffered seriously from the ceiling price; this is not sustainable. Premiums decreased in real terms last year. We will have to sit down and review the system. It is inevitable that those who crash frequently will pay higher premiums. How can we further increase predictability? We work in several dimensions. The regulations will be very clear. Nobody works in an industry where they lose money. As treasury, we need to balance sustainability with reasonable premiums. Studies in that direction will continue”* (“Şimşek: Trafik Sigortasında Yeni Model İçin Çalışıyoruz,” 2018).

On the other hand, state officials also try to overweigh the impacts of the price ceiling and open their doors to the insurance companies. Only one year after the implementation of the price ceiling, Mehmet Şimşek, the Deputy Prime Minister, announces a mid-way prescription to decrease the tension: *“In traffic insurance, the industry suffered serious losses from the ceiling price, this is not sustainable; we will have to review it. We have several dimensional works for reasonable premium”* (“Bakan’dan Flaş Trafik Sigortası Açıklaması!,” 2018). Finally, it was proven to the public that the complaints in the market were also evaluated in the eyes of political authorities.

Last but not the least, in the third Competition Authority investigation (19/07/2017 dated and 17-23/383-166 numbered decision); the final decision was given, not in consensus but with the majority. It can be interpreted as an implied warning given to the market. It means that similar and extreme practices were not be tolerated anymore and in case of their repetition, a harsher form of retaliation would be quite likely.

6.4.Changes in Product

Reforms are triggers of institutional change. When they are implemented, a set of changes in the environment simultaneously affect each other. Products that are traded or served in the market may change in this respect. The literature emphasizes the impact of reforms in various studies in organizational sciences:

Institutional theory examines the changes when the existing rules have changed, especially with a coercive isomorphism (DiMaggio & Powell, 1983). Studies on the manufacturing industry also suggest that pro-market reforms in form of trade liberalization and the reduction of import tariffs in various products account for 31% of the new products introduced by the domestic firms (Goldberg et al., 2010). The business cycle times also matters in reforms. A product market reform, in the form of reduction in entry costs in service industries, is found less sensitive to business cycle conditions. Lack of access to international financial markets makes product market reform more costly in terms of short-run consumption and output, as more domestic resources must be directed to producer entry in the deregulated sector (Cacciatore et al., 2016). The introduction of pro-market reforms involves foreign firms to the home market with new and superior products. In case of inability to modify the new products that would be demanded by the whole market, foreign firms might limit themselves in upper limit segments where there creates an unmet demand for the products. This gap can be filled by the new entrants or the business groups domestically (Khanna & Palepu, 2006). Developments in the markets do not occur immediately after the reforms, instead they progress gradually in a longer period. This continuity is based on the institutional change, which has an incremental nature, comprising the reforms implemented as well. (Ghemawat & Khanna, 1998).

MTPL policy, in our case, is a compulsory insurance where the scope and guarantees are determined by the standard tariff where the borders are set by regulatory bodies. In this respect, the MTPL policy can be seen as “given” and the only contribution might be regarded different pricing schemes of insurance companies. *“From the basic insurance perspective, traffic insurance is the line where the highest irrational competitive environment is formed Therefore, when we consider both the product simplicity and the involvement of official authorities such as treasury, from the perspective of know-how needs, it is actually a very limited place in terms of*

distinguishing itself with know-how. Most of the products in insurance are commodity, but if we draw a line of commodity products, we can put the probable health on the most complex side, and the traffic on the simplest side, where the highest commoditization exists”⁶⁰

The commodity perspective of MTPL also allows the insurance companies to penetrate the market easily: *“If you underestimate the reserve requirements and do not obey the actuarial techniques, MTPL is the simple product as long as you supply your product. It is compulsory; no demand requirement exists. With a modest IT infrastructure and well address agency network, you immediately run MTPL whatever you do...”⁶¹*

However, reform periods also revealed some changes in the product details. As we have seen in Table-19, 68 MTPL product based change has been mapped with the analysis of insurance regulations. Consequently, the highest frequency of product-related changes has occurred in the Free Tariff Period as summarized in Figure-53. There have been many new definitions in scopes, guarantees, claim rights and payment schemes: re-designing TPL premiums for the vehicles of municipalities, the conditions of tramways, the rights of leasing companies in compensation cases, conditions for short-term insurances, selection of the “city” when registering the vehicle, the discounts in non-paid claims, submitting additional guarantees that are not mandatory and demanded by the consumer, the share of the additional guarantees in the overall pricing, etc. All these new implementations in MTPL policy suggest that in times of pro-market reforms insurance companies facilitate more product-based changes.

These changes have also been reflected in the news. In February 2017, Noyan Doğan, the insurance writer in Sözcü, informs the change in pricing techniques: *“The premiums of drivers who have had a lot of accidents or whose license is seized for reasons such as alcohol will be high, while the driver who has no damage and no penalty will be low”* (“Sürücü Bazlı Yeni Trafik Sigortası Sistemi Geliyor,” 2017).

Insurance companies firstly regarded this change as a policy-making tool. As Özer Şimşek, Deputy General Manager comments in Cumhuriyet: *“We interpret this change as an additional premium*

⁶⁰ Participant-2, Code-30, No-1

⁶¹ Participant-2, Code-30, No-3

increase above the ceiling for bad drivers. Because we are still free to set prices up to the ceiling. For example, for those who receive a traffic ticket above a certain score, it may be possible to increase the premium by 5-10 percent above the ceiling” (“Hazine, Zorunlu Trafik Sigortası’nda Prim Hesaplama Yöntemini Değiştirdi,” 2019).

Driver based MTPL pricing is a good example showing how the change was treated by the different interest groups in the market. Bendevi Palandöken, General Manager of Confederation of Crafts and Artisans (TESK)⁶² underlines the other side of the coin: *“Those who comply with the rules in driving should be given incentives by making special discounts in their insurance premiums. Otherwise, this system will not go beyond just protecting insurance companies”* (“TESK Genel Başkanı Palandöken: Trafikte Teşvik Önemli,” 2019).

Insurance companies still demand for more clarification in the implementation. Uğur Gülen, the General Manager of Aksigorta put forwards this issue: *“This risk and score will be effective in insurance companies' customer choices. In doing so, it is necessary to know which penalty will get which score. There are dozens, hundreds of types of punishment. I give an example; getting a parking ticket is not considered risky, so it may not be effective. However, being caught on the radar means you are speeding up and increasing the risk. The risk and score of all this should vary”* (“Trafik Sigortasında Artık Sürücü Radarda,” 2019).

Driver based pricing case indicates that, even if the MTPL product is regarded as simple and commodity, once a change occurs due to a reform or regulation, new changes are expected to arise in processes to fill the gaps. The changes in processes are discussed in the next part.

6.5.Changes in Processes

Regulatory and supervisory institutions enforce the use of new processes and some of the processes are internalized by learning by doing. In some cases where the rules and processes evolve over time whenever the regulatory agencies realize the necessary changes in products or processes (Panagariya, 2008). Reforms in most cases are perceived as more liberalized strategies, withdrawal

⁶² TESK – Türkiye Esnaf ve Sanatkarlar Konfederasyonu

of subsidies to narrow clientele groups or greater reliance on market self-functioning but all these efforts do not imply the disappearance of governments. Markets cannot function without developed legal system, enriched framework, updated processes, new products and services covering the spirit of the reform (Patashnik, 2014). In some cases, market reforms are not necessary for change. There might be no exogenous interventions, crisis, no heroic entrepreneurs, no noise or controversies in the environment, but change still occurs. New practices might grow up gradually within an organization, “moved up” to the level of the field, and stimulated a shift in institutional logics (Smets et al., 2012). Changes might also be disruptive and they might be driven by social forces or social movements instead of regulatory bodies. In this situation, the players are the challengers who contest existing institutions and seek to displace the powerful apparatus that supports social reproduction. The fight between the incumbents who defend the actual status and the game changers produce new changes in processes, outputs, networks and other auxiliary dimensions. (Fligstein & McAdam, 2012). Social construction might also be the case in changing conditions. In that case, rather than causing institutional change, events are a part of the change processes and only become significant as actors bring them to our notice and ‘theorize’ around them. This social construction process determines the scope and introduces new artifacts, new enrolment of new stakeholders in the field. Thus, the process itself becomes endogenous to construct the change (Munir, 2005).

The continuous change in the processes was emphasized in interviews with the development of regulations. *“Now it is interesting; I was in the middle of this change. If I am not mistaken on September 1 of 2002, I went to England for training. As of January 1, 2003, I started to work as the CFO at the Company. I took office, and my duty as CFO continued until 2010. During this period, regulation changed almost every year”*⁶³

In our findings in Table-20, we had assigned 92 process-related changes in MTPL insurance and 74 of them exerted a real impact on the development of processes whereas the remaining 18 were the update of the existing procedures and implementations as summarized in Table-21. When we analysed the frequencies, contrary to the changes in product, we see that much of the process changes were realized before the reform period. As shown in Figure-54, more than half of the

⁶³ Participant-4, Code-11, No-1

process related changes (51%) occurred in the Approved Tariff Period. The reason might be the fact that after the introduction of the new insurance law in 2007, many institution related regulations shape the insurance companies and many processes needed to fill the norm sets required and relevant for the daily businesses.

The subjects of the new processes vary widely and they are also approved by the Undersecretariat of Treasury, Turkish Insurance Association and other insurance-related organizations: Transforming hard copy of Accident Reports to the soft environment, determining a standard premium charged to the consumer when the agreement is not finalized as prescribed in law, setting minimum agency commission in short-termed insurances, setting a baseline for loss of income calculations in claim compensation, clarifying the compensation bases for the foreigners, opening the internet sites for MTPL pricing, determining the reporting templates for TRAMER, setting the threshold for the spare parts produced by Turkish firms used in claim payments, having the opportunity to fill Accident Reports even if the vehicle belongs to a public institution, defining the discounts for the accidents after the sale of the vehicle, etc. These new processes generally focused the extraordinary situations and created an alignment in ambiguous cases.

Sometimes the new processes are initiated by the regulator itself: *“With the increase of MTPL prices day by day, citizens started to look for institutions where they can pay their insurance according to their own budgets. Due to the fact that private insurance companies cannot offer alternative payment plans to citizens who have difficulty, many vehicles continue to be on the road without insurance. The state and ministries started negotiations with some institutions and organizations in order to facilitate our citizens who have difficulty in paying compulsory traffic insurance.”* (“Trafik Sigortası Yapan Bankalar,” 2019).

However, bringing new processes might not be the most efficient outcome for the industry. Can Kantar, in his corner in Posta, strongly challenges this: *“I believe penalty for uninsured vehicles has the least amount. While driving with alcohol, driving without a license or driving dangerously is punished between 2000-5000 TL. The penalty given for the possibility of causing material damage to the environment by driving without MTPL insurance is 108 TL. This is even less than wrong parking and avoiding seat belt fines. In fact, if you pay in cash, you can get rid of the fine with 70-80 TL with a 20 percent discount. In a period where traffic insurances are 500-600 TL on*

average, a fine of 70 TL is not a deterrent in my opinion. I do not believe that this amount of fine pushes the drivers to purchase MTPL” (Kantar, 2018).

Alternatively, probable new processes sometimes are foreseen by the insurance experts. The insurance writer Noyan Dođan points potential areas to improve: *“Saying -there is insurance, it covers- and hiding behind it is not valid for every accident. That is why I always say, once again, the operators of heavy vehicles such as buses and trucks should be carefully chosen and the maintenance of their vehicles should not be neglected.” (Dođan, 2019).*

CONCLUSION

In this study, the responses to pro-market reforms in Turkish MTPL Insurance market are evaluated in different periodization perspectives. Results are obtained from primary and secondary data sources and built as a qualitative study. The main question of the study is to figure out how the firms respond to the pro-market reforms. Three motives are leading me to study on this issue. Firstly, MTPL insurance had been regulated by the government for years until there had been a reform allowing the price determination to insurance companies. This was the first in the insurance history. Secondly, MTPL had always been an attractive industry and the high number of players would provide the richness that the study requires. Thirdly, companies were different in size, from private to public ownership, with the increasing rate of mobility with mergers and acquisitions, and the industry became more open with FDIs. This compound could be providing diversities in responses.

The results obtained verify the conventional theoretical findings in many ways. Firstly, the industry-related growths are apparent with the introduction of pro-market reforms. The production (the premiums) increases faster in pro-market reform periods than the regulation periods. Though more slightly, the number of the players was also higher in reform periods. Industry composition also changes in favour of the reformed branch. In our study, the reform realized in the MTPL branch, increased its share in the overall insurance industry. This brings out, insurers change their business-mix in times of reforms; they produce less in other insurance lines and concentrate on more in the reform-related lines.

Secondly, the reform causes the market concentration to fall. This movement is realized in two steps. Firstly, nearly most of the companies switch their internal production to the reform areas from the non-reform lines. This switch causes the production in the reform area to boom as a whole. However, more and more companies enter the market, or some companies, which do not consider producing when there is no reform, are immediately alerted and they are positively encouraged to produce in reform area to capture the benefits of the reform. Thus, their sudden embracement of reform increases faster than the traditional, existing firms' rates of growth. Therefore, the concentration is spread to the market. Here we should emphasize that the sharp increases in the newcomers' production in the reformed field.

From the theoretical perspective, a coercive isomorphism is different from cognitive isomorphism; hence, the firms feel the pressure of externally, so they do not produce taken for granted behaviours. This causes different ways of responding by firms, they behave more strategically to coercive changes than they do cognitive ones (Oliver, 1991). From the theoretical perspective, the homogeneous effect of the reforms shifts to either leads firm to interact for the adoption of the reform, or they may create choices by delaying or avoiding. Thus, when the reforms (or the regulations) coming from coercive organizations, firms make heterogeneous responses rather than isomorphic ones (Pfeffer & Salancik, 1978). In the insurance industry, when the pro-market reform was applied, the strategy of insurance companies relating to profitability and MTPL orientation shows different sets of patterns. Interestingly, these patterns cannot be attributed to the changes in size, age and origin of the capital of the insurance companies. The difference in pursuing a common strategy to the pro-market reform is often blurred when there is no change between newcomers and existing companies, market leaders and small-sized ones or even state-owned firms and international companies. The responses reveal that state is seen as an external factor and the adaptation of each insurance company differs.

Thirdly, as contrary to the literature, the reform did not necessarily cause the prices to fall. Again, we can see two impacts. Firstly, as more players enter the market or existing players increase their production in the reformed line, more competition between sellers cause an average price to fall. However, competition between sellers changed its direction past years losses are reflected in the prices. This reform period was seen as an opportunity to offset the losses, therefore the higher prices are charged to consumers. These high prices can be seen in every vehicle type. In this context, the premium increase should be considered as a result of higher average prices, not from the absolute policy increase in the industry. These developments rehabilitate the profitability problems of the producers in the reform period.

The tendency of increasing prices can be attributed to the low exposure to regulatory changes which results in decoupling activities of the firms. Insurance companies show symbolic visible compliance to the change in regulation. They also want to demonstrate their attention and managerial interest in the regulatory change (Meyer & Rowan, 1977). However, expected competition and price fall are no longer realized when the companies have captured the power of

setting their own prices. Here, the revenge of previous years with large losses in MTPL became the major trigger for increasing the prices.

It is also possible to evaluate the change from state point of view. When a pro-market reform is applied, the expectation of the state is the increased competition with better actuarial pricing development in insurance companies which would lead to lower prices. Hence, the state just responds slowly and let the firms comply first. After analysing the risks of adoption, they respond to the adoption with a lag. In the MTPL industry, once the prices have risen in all vehicle types, the state turned back to regulatory administration in MTPL pricing. Pool administration and setting price ceiling represent a U-turn from pro-market activity to regulation again. This advocates us to the result that if the institutionalization has not been finalized, the effect of state in reform implementation overshoots creating more disappointment for the possibility of future reforms.

Fourth, pro-market reforms are the times when certain institutional changes are seen in products, services or the parties involved in the market. Results of this study hold that, any movement from regulation to a more deregulated state, the scope, rate and the content of the change accelerates. On the contrary, any movement from deregulation to regulation, the change is blocked or limited in all areas.

Fifth, FDI increases in parallel with the reforms. In fact, FDI in our case does not solely depend on the good news about the upcoming pro-market reform. The trends of market, growth potential, scope, opportunity to develop, appetite for growth, coming from behind, competition between peers also affect the growth rate of FDI. Similarly, as getting closer to the reform period, more foreign companies encounter to enter the market. Interestingly, after the reform period, though decreases slightly, FDIs are quite high. This might also represent that the size of the sunk cost, remains as a critical obstacle to remove back. At the same time, they respond with more patiently for the conditions to improve once again.

The study has three limitations. Firstly, it focused on MTPL insurance in Turkey. From the macro perspective, Turkey can be defined as a developing country and it might not be satisfying the similar results held in developed countries. Furthermore concluding specific results for Turkey is quite limited scope because no other developing countries are added in the analysis. From the

micro perspective, the insurance industry occupies a relatively low share in Turkish GDP therefore the impact could only be valid in the very restricted area.

The second limitation is the length of the intervals. When we analyse the history of the traffic insurance industry for the last 65 years (the whole life between 1954-2019), we encounter 53 years passed under the fixed tariff system (standard for all companies between 1954-2007). When we compare this period with 7 years of partly deregulation period between 2007-2014, and 3 years of fully deregulation period between 2014-2017, the deregulation periods under examination can be quite short. This might create a limitation because some institutional changes might be longer to emerge

The third limitation of the study is the acquisitions and mergers that occurred in the insurance industry in the last ten years. Except for few state-owned insurance companies, most of the private insurance companies experienced a kind of takeover in this time, mainly by the foreign capital owners in Turkey. As it is very clear that, takeovers, mergers, acquisitions and liquidations might lead strategies to change. Thus new capital formation in the industry may create a biasing impact like leaving a market, or just the contrary penetrating into a new market or product. For that reason, in the study, the impact of the change in the corporate ownership may limit the significance of the study.

The significance of this study matters in two dimensions. Firstly, pro-market reforms in the insurance industry, especially in MTPL business is a new attempt in the literature. There are some examples but rather they highlight institutional change rather than reforms and merely focus U.S. insurance industry. Secondly, MTPL insurance has been the subject material in Turkey, these papers studied claim and pricing mechanisms especially for best actuarial modelling to find the optimum pricing. These studies are also based on generally quantitative models, which prefer mathematical approach to figure out optimum pricing in Turkey. Thirdly, though MTPL policy is considered a homogeneous good, product-related and process-related changes as a response to reform and regulations are new in the literature. Here we find that as the institutions change, the insurance companies develop their processes and bring product based changes in Free Tariff and Price-Cap Periods.

Secondly, the results of this study might be applicable to the pension industry in Turkey. Similar to the traffic insurance, pension is again a highly regulated industry and the changes in pension companies can be studied in the light of this thesis. To put it in a broad perspective, this study can be used as a reference point in any financial industry in Turkey when studying the organizational change with respect to reform and regulation. The results can also be used other than the financial areas if the public interest matters as in energy consumption, electricity or natural gas usage. The close monitoring of the Energy Board can turn to a pro-market reform where the state sensitivity and free-market pricing intersect at a rational price level where buyers and sellers can gain.

Of course, we have lessons to learn. Insurance companies should use advanced actuarial techniques, make their reserving on strong assumptions and update their requirements instantly according to the changes in economic and social developments. At the same time, considering the long-run impacts of MTPL claims, companies should target technical profitability. In the short run, they may benefit from the investment income from the early collections of policies sold, but long-run profitability should be sustained. Competition is necessary but pricing the risk correctly constructs the long run trust that is missed for years for insurers.

Regulators were right in one perspective that the markets should produce the equilibrium prices where the cost or the risk is covered just by the prices charged. Since MTPL is the product to protect the third parties, the main mission should be to differentiate the companies by imposing sanctions from financial perspective. Disruptive companies, despite low, can always exist however, reserve requirements can be a good threshold for issuing policy instead of setting ceiling price for the whole market.

One final note is that political interests mostly hinder the sustainability of the pro-market reforms. The reform packages should not be presented as a reward for election, just the contrary, should be given to the market itself but closely monitored by the establishment of the rational sanctions. Profitability does matter but a close connection should be established between the public authorities which trigger the cost base of the companies, so the consumers consequently. Subsidizing the cost or distributing the burden through pool might be used, but in the long run cost increase should be controlled. That might be the golden key to increase the MTPL insurance rate in future.

REFERENCES

- 27 sigorta şirketine “trafik” cezası. (2016, December 18). Dünya.
<https://www.dunya.com/sectorler/sigortacilik/27-sigorta-sirketine-trafik-cezasi-haberi-342193>
- 33 sigorta şirketine “fahiş fiyattan” soruşturma. (2016, March 28). CNN Turk.
<https://www.cnnturk.com/ekonomi/turkiye/33-sigorta-sirketine-fahis-fiyattan-sorusturma>
- Abiad, A., & Mody, A. (2005). Financial reform: What shakes it? What shapes it? In *American Economic Review* (Vol. 95, Issue 1, pp. 66–88). <https://doi.org/10.1257/0002828053828699>
- Acemoglu, D., Aghion, P., & Zilibotti, F. (2006). Distance to frontier, selection, and economic growth. *Journal of the European Economic Association*, 4(1), 37–74.
<https://doi.org/10.1162/jeea.2006.4.1.37>
- Acemoglu, D., Johnson, S., & Robinson, J. A. (2005). Chapter 6 Institutions as a Fundamental Cause of Long-Run Growth. In *Handbook of Economic Growth* (Vol. 1, Issue SUPPL. PART A, pp. 385–472). [https://doi.org/10.1016/S1574-0684\(05\)01006-3](https://doi.org/10.1016/S1574-0684(05)01006-3)
- Actuaries Regulation. (2007). Regulation, Official Gazette (26614-15.08.2007).
<https://www.resmigazete.gov.tr/eskiler/2007/08/20070815-3.htm>
- Agricultural Insurance Implementation Regulation. (n.d.). Regulation, Official Gazette (26172-18.05.2006). <https://www.resmigazete.gov.tr/eskiler/2006/05/20060518-4.htm>
- Agricultural Insurance Law. (n.d.). Law (5363-14.06.2005), Official Gazette (25852-21.06.2005).
<https://www.resmigazete.gov.tr/eskiler/2005/06/20050621-2.htm>
- Aktüerler Derneği. (n.d.). Anasayfa. <http://www.aktuerlerdernegi.org/index.php>
- Aktüerler Derneği. (n.d.). Faaliyet Raporu 2018 - 2019.
http://www.aktuerlerdernegi.org/staticfiles/files/Faaliyet_Raporu_2018_2019.pdf

- Alesina, A., Drazen, A., Alesina, A., & Drazen, A. (1991). Why Are Stabilizations Delayed? *American Economic Review*, 81(5), 1170–1188. <https://doi.org/10.2307/2006912>
- Alesina, A. F. (2020). Structural Reforms and Elections: Evidence from a World-Wide New Dataset. *NBER Working Papers*, 1–59. <https://doi.org/10.3386/w26720>
- Allard, G., Martinez, C. A., & Williams, C. (2012). Political instability, pro-business market reforms and their impacts on national systems of innovation. *Research Policy*, 41(3), 638–651. <https://doi.org/10.1016/j.respol.2011.12.005>
- Allen, D. (2009). Reinsurance. In S. O. Gönülal (Ed.), *Motor Third-Party Liability Insurance in Developing Countries Raising Awareness and Improving Safety*. World Bank, Washington, DC.
<https://openknowledge.worldbank.org/bitstream/handle/10986/12960/699710ESW0P09800liability0insurance.pdf?sequence=1&isAllowed=y>
- AM Best. (2019). Market Segment Report Turkey.
https://cts.businesswire.com/ct/CT?id=smartlink&url=http%3A%2F%2Fwww3.ambest.com%2Fbestweek%2Fpurchase.asp%3Frecord_code%3D289908&esheet=52097415&newsitemid=20190918005867&lan=en-US&anchor=http%3A%2F%2Fwww3.ambest.com%2Fbestweek%2Fpurchase.asp%3Frecord_code%3D289908&index=1&md5=775a9507d0ddafb5b540f43dfc3bd0cd
- Amendments in the Regulation of Tariff Application Principles in Highway Motor Vehicles Compulsory Financial Liability Insurance. (n.d.). Regulation, Official Gazette (30121-11.07.2017). <https://www.resmigazete.gov.tr/eskiler/2017/07/20170711-3-1.pdf>
- Amiti, M., Itskhoki, O., & Konings, J. (2014). Importers, exporters, and exchange rate disconnect. *American Economic Review*, 104(7), 1942–1978.
<https://doi.org/10.1257/aer.104.7.1942>
- Ana Hedefimiz İlk 5’e Girmek. (2006, October 1). Capital.
<https://www.capital.com.tr/finans/sigorta/8220ana-hedefimiz-ilk-58217e-girmek8221>

Approval of European Convention Law on Compulsory Motor Third Liability Insurance. (n.d.).
Law (4477, 04.11.1999), Official Gazette (23873-11.11.1999).
<https://www.tmtb.org.tr/Forms/AvrupaSozlesmesi.pdf>

Assurance Account Regulation. (n.d.). Regulation, Official Gazette (26594-26.07.2007).
<https://www.guvencehesabi.org.tr/source/GHYonetmelik.aspx>

Authorization for actions relating to measures to be taken against natural disasters and remove their damages. (n.d.). Law (4452-27.08.1999), Official Gazette (23801-29.08.1999).
<https://www.mevzuat.gov.tr/MevzuatMetin/1.5.4452.pdf>

Awate, S., Larsen, M. M., & Mudambi, R. (2012). EMNE catch-up strategies in the wind turbine industry: Is there a trade-off between output and innovation capabilities? *Global Strategy Journal*, 2(3), 205–223. <https://doi.org/10.1111/j.2042-5805.2012.01034.x>

Aziz, O. G. (2018). Institutional quality and FDI inflows in Arab economies. *Finance Research Letters*, 25(1), 111–123. <https://doi.org/10.1016/j.frl.2017.10.026>

Babecký, J., & Campos, N. F. (2011). Does reform work? An econometric survey of the reform-growth puzzle. *Journal of Comparative Economics*, 39(2), 140–158.
<https://doi.org/10.1016/j.jce.2010.11.001>

Babecky, J., & Havranek, T. (2014). Structural reforms and growth in transition: A meta-analysis
Structural reforms and growth in transition Babecky and Havranek. *Economics of Transition*, 22(1), 13–42. <https://doi.org/10.1111/ecot.12029>

Bacchiocchi, E., Florio, M., & Gambaro, M. (2011). Telecom reforms in the EU: Prices and consumers satisfaction. *Telecommunications Policy*, 35(4), 382–396.
<https://doi.org/10.1016/j.telpol.2011.03.001>

Bakan'dan flaş trafik sigortası açıklaması! (2018, February 19). Haber 7.
<https://ekonomi.haber7.com/sigorta/haber/2554018-bakandan-flas-trafik-sigortasi-aciklamasi>

- Baldwin, R., Cave, M., & Lodge, M. (2015). Understanding Regulation. In Understanding Regulation. <https://doi.org/10.1093/acprof:osobl/9780199576081.001.0001>
- Banalieva, E. R. (2014). Embracing the Second Best? Synchronization of Reform Speeds, Excess High Discretion Slack, and Performance of Transition Economy Firms. *Global Strategy Journal*, 4(2), 104–126. <https://doi.org/10.1111/j.2042-5805.2014.1075.x>
- Banalieva, E. R., Cuervo-Cazurra, A., & Sarathy, R. (2018). Dynamics of pro-market institutions and firm performance. *Journal of International Business Studies*, 49(7), 858–880. <https://doi.org/10.1057/s41267-018-0155-7>
- Banalieva, E. R., Cuervo-Cazurra, A., & Sarathy, R. (2012). Pro-market reforms in developing countries and the marketing capability-performance relationship. *Academy of Management Proceedings*, 2012(1), 17689. <https://doi.org/10.5465/ambpp.2012.17689abstract>
- Bao, L., & Gu, Z. (2014). A Study of the Deficit of the Third Party Liability Compulsory Insurance of Motor Vehicle. *Accounting and Finance Research*, 3(1). <https://doi.org/10.5430/afr.v3n1p116>
- Barnard, H. (2013). Migrating EMNCs and the theory of the multinational. In *Understanding Multinationals from Emerging Markets* (pp. 195–223). <https://doi.org/10.1017/CBO9781107587632.014>
- Bassanini, A. (2015). A Bitter Medicine? Short-term Employment Impact of Deregulation in Network Industries. *IZA Discussion Paper, DP(9187)*, 37. <http://ftp.iza.org/dp9187.pdf>
- Bassanini, A., & Cingano, F. (2019). Before It Gets Better: The Short-Term Employment Costs of Regulatory Reforms. *ILR Review*, 72(1), 127–157. <https://doi.org/10.1177/0019793918766054>
- Beck, T.; Maimbo, S. (2012). Financial Sector Development in Africa. In *Financial Sector Development in Africa*. The World Bank. <https://doi.org/10.1596/978-0-8213-9628-5>

- Behrman, J. R., Birdsall, N., & Székely, M. (2007). Economic policy changes and wage differentials in Latin America. *Economic Development and Cultural Change*, 56(1), 57–97. <https://doi.org/10.1086/520556>
- Bertrand, M., & Kramarz, F. (2002). Does entry regulation hinder job creation? Evidence from the French retail industry. *Quarterly Journal of Economics*, 117(4), 1369–1414. <https://doi.org/10.1162/003355302320935052>
- Bertrand, M., Schoar, A., & Thesmar, D. (2007). Banking deregulation and industry structure: Evidence from the French banking reforms of 1985. *Journal of Finance*, 62(2), 597–628. <https://doi.org/10.1111/j.1540-6261.2007.01218.x>
- Bevan, A., Estrin, S., & Meyer, K. (2004). Foreign investment location and institutional development in transition economies. *International Business Review*, 13(1), 43–64. <https://doi.org/10.1016/j.ibusrev.2003.05.005>
- Bhagwati, J. (2007). In Defense of Globalization : With a New Afterword. In *Other Dimensions of Globalization*. Oxford University Press.
- Bhandari, K. N. (2009). Pricing and Political Economy: The Indian Experience. In S. O. Gönülal (Ed.), *Motor Third-Party Liability Insurance in Developing Countries Raising Awareness and Improving Safety*. World Bank, Washington, DC. <https://openknowledge.worldbank.org/bitstream/handle/10986/12960/699710ESW0P09800liability0insurance.pdf?sequence=1&isAllowed=y>
- Biglaiser, G., & DeRouen, K. (2006). Economic reforms and inflows of foreign direct investment in Latin America. *Latin American Research Review*, 41(1), 51–75. <https://doi.org/10.1353/lar.2006.0001>
- Blanchard, O. J., Froot, K. A., & Sachs, J. D. (2013). The Transition in Eastern Europe, Volume 2. In *The Transition in Eastern Europe, Volume 2*. <https://doi.org/10.7208/chicago/9780226056821.001.0001>

- Blanton, R. G., & Peksen, D. (2016). Economic liberalisation, market institutions and labour rights. *European Journal of Political Research*, 55(3), 474–491.
<https://doi.org/10.1111/1475-6765.12137>
- Blomstrom, M. (1986). Foreign Investment and Productive Efficiency: The Case of Mexico. *The Journal of Industrial Economics*, 35(1), 97. <https://doi.org/10.2307/2098609>
- Bouis, R., & Duval, R. (2011). Raising Potential Growth After the Crisis: A Quantitative Assessment of the Potential Gains from Various Structural Reforms in the OECD Area and Beyond. In *OECD Economics Department Working Papers*. <https://www.oecd-ilibrary.org/docserver/5kgk9qj18s8n-en.pdf?expires=1615204650&id=id&accname=guest&checksum=58074AFACDB9D791B45484BA102178F2>
- Boycko, M., Shleifer, A., & Vishny, R. W. (1996). A theory of privatisation. *Economic Journal*, 106(435), 309–319. <https://doi.org/10.2307/2235248>
- Boycko, M., Shleifer, A., Vishny, R. W., Fischer, S., & Sachs, J. D. (1993). Privatizing Russia. *Brookings Papers on Economic Activity*, 1993(2), 139. <https://doi.org/10.2307/2534566>
- Bresser-Pereira, Luiz. (1993). Economic reforms and economic growth: efficiency and politics in Latin America, *Journal of Logic and Computation - LOGCOM*.
<http://www.bresserpereira.org.br/papers/1992/93-EconomicReforms-EconomicGrowth.pdf>
- Brau, R., Doronzo, R., Fiorio, C. V., & Florio, M. (2010). EU gas industry reforms and consumers' prices. *Energy Journal*, 31(4), 167–182. <https://doi.org/10.5547/ISSN0195-6574-EJ-Vol31-No4-8>
- Brown, J. R., & Goolsbee, A. (2002). Does the internet make markets more competitive? Evidence from the life insurance industry. *Journal of Political Economy*, 110(3), 481–507.
<https://doi.org/10.1086/339714>

- Bruton, H. J. (1998). A Reconsideration of Import Substitution. *Journal of Economic Literature*, 36(2), 903–936.
- Buchanan, B. G., Le, Q. V., & Rishi, M. (2012). Foreign direct investment and institutional quality: Some empirical evidence. *International Review of Financial Analysis*, 21(1), 81–89. <https://doi.org/10.1016/j.irfa.2011.10.001>
- Büyüme yok. (2019, August 19). *Cumhuriyet*. <https://www.cumhuriyet.com.tr/haber/buyume-yok-1540517>
- Cacciatore, M., Duval, R., Fiori, G., & Ghironi, F. (2016). Market reforms in the time of imbalance. *Journal of Economic Dynamics and Control*, 72(1), 69–93. <https://doi.org/10.1016/j.jedc.2016.03.008>
- Campos, N. F., & Coricelli, F. (2012). Financial liberalization and reversals: Political and economic determinants. *Economic Policy*, 27(71), 483–513. <https://doi.org/10.1111/j.1468-0327.2012.00288.x>
- Campos, N. F., & Horváth, R. (2012). On the reversibility of structural reforms. *Economics Letters*, 117(1), 217–219. <https://doi.org/10.1016/j.econlet.2012.04.102>
- Campos, N. F., & Horváth, R. (2012). Reform redux: Measurement, determinants and growth implications. *European Journal of Political Economy*, 28(2), 227–237. <https://doi.org/10.1016/j.ejpoleco.2011.12.002>
- Catastrophic Insurances. (n.d.). Law (6305), Official Gazette (28296-18.05.2012). <https://www.dask.gov.tr/mevzuat-6305Sayili-kanun.html>
- Chakrabarti, A. B., & Ray, S. (2018). An exploratory study on the impact of pro-market reforms on the Indian corporate sector. *Journal of Economic Policy Reform*, 21(1), 1–20. <https://doi.org/10.1080/17487870.2016.1235498>

- Chakraborty, C., & Nunnenkamp, P. (2008). Economic Reforms, FDI, and Economic Growth in India: A Sector Level Analysis. *World Development*, 36(7), 1192–1212.
<https://doi.org/10.1016/j.worlddev.2007.06.014>
- Change in Insurance Information Centre Regulation. (n.d.). Regulation, Official Gazette (28131-03.12.2011). <https://www.resmigazete.gov.tr/eskiler/2011/12/20111203-5.htm>
- Chari, A., & Gupta, N. (2008). Incumbents and protectionism: The political economy of foreign entry liberalization. *Journal of Financial Economics*, 88(3), 633–656.
<https://doi.org/10.1016/j.jfineco.2007.07.006>
- Chari, M. D. R., & Banalieva, E. R. (2015). How do pro-market reforms impact firm profitability? The case of India under reform. *Journal of World Business*, 50(2), 357–367.
<https://doi.org/10.1016/j.jwb.2014.05.004>
- Chari, M. D. R., & David, P. (2012). Sustaining superior performance in an emerging economy: An empirical test in the Indian context. *Strategic Management Journal*, 33(2), 217–229.
<https://doi.org/10.1002/smj.949>
- Chemillier-Gendreau, D. (2009). Calculation of Premiums and Reserving: Experience from Developing Countries. In S. O. Gönülal (Ed.), *Motor Third-Party Liability Insurance in Developing Countries Raising Awareness and Improving Safety*. World Bank, Washington, DC.
<https://openknowledge.worldbank.org/bitstream/handle/10986/12960/699710ESW0P09800liability0insurance.pdf?sequence=1&isAllowed=y>
- Chemillier-Gendreau, D., Gönülal, S. (2009). Motor Third-Party Liability Insurance: From Statutory to Liberalized Motor Tariffs. In S. O. Gönülal (Ed.), *Motor Third-Party Liability Insurance in Developing Countries Raising Awareness and Improving Safety*. World Bank, Washington DC.
<https://openknowledge.worldbank.org/bitstream/handle/10986/12960/699710ESW0P09800liability0insurance.pdf?sequence=1&isAllowed=y>

- Chittoor, R., Sarkar, M. B., Ray, S., & Aulakh, P. S. (2009). Third-world copycats to emerging multinationals: Institutional changes and organizational transformation in the Indian pharmaceutical industry. *Organization Science*, 20(1), 187–205.
<https://doi.org/10.1287/orsc.1080.0377>
- Circular relating to Tariff Application Principles in Highways Motor Vehicles Compulsory Liability Insurance. (2017). Circular (10.04.2017).
[https://tsb.org.tr/images/Documents/2017-1 Genrlgr.pdf](https://tsb.org.tr/images/Documents/2017-1_Genrlgr.pdf)
- Contractor, F. J., Dangol, R., Nuruzzaman, N., & Raghunath, S. (2020). How do country regulations and business environment impact foreign direct investment (FDI) inflows? *International Business Review*, 29(2), 1–13. <https://doi.org/10.1016/j.ibusrev.2019.101640>
- Cuervo-Cazurra, A. & Stal, E. (2011). The Investment Development Path and FDI From Developing Countries: The Role of Pro-Market Reforms and Institutional Voids. *Latin American Business Review*. <https://doi.org/10.1080/10978526.2011.614174>
- Cuervo-Cazurra, A. (2015). The co-evolution of pro-market reforms and emerging market multinationals. *Advances in International Management*, 28, 71–94.
<https://doi.org/10.1108/S1571-502720150000028007>
- Cuervo-Cazurra, A., & Dau, L. (2009a). Multinationalization in response to reforms. *Academy of Management 2009 Annual Meeting: Green Management Matters, AOM 2009*.
<https://doi.org/10.5465/ambpp.2009.44249859>
- Cuervo-Cazurra, A., & Dau, L. (2009b). Promarket reforms and firm profitability in developing countries. *Academy of Management Journal*, 52(6), 1348–1368.
<https://doi.org/10.5465/AMJ.2009.47085192>
- Cuervo-Cazurra, A., & Dau, L. A. (2009c). Structural reform and firm exports. *Management International Review*, 49(4), 479–507. <https://doi.org/10.1007/s11575-009-0005-8>

- Cuervo-Cazurra, A., Gaur, A., & Singh, D. (2019). Pro-market institutions and global strategy: The pendulum of pro-market reforms and reversals. In *Journal of International Business Studies* (Vol. 50, Issue 4, pp. 598–632). <https://doi.org/10.1057/s41267-019-00221-z>
- Çelebi, E. (1998, October 11). Trafik Sigortası'nda serbest rekabet. *Hürriyet*.
<https://www.hurriyet.com.tr/trafik-sigortasinda-serbest-rekabet-39042408>
- Çelebi, E. (1999, February 8). Sigortacılar ödeme yerine yasa deliyor. *Hürriyet*.
<https://www.hurriyet.com.tr/sigortacilar-odeme-yerine-yasa-deliyor-39062150>
- Çelebi, E. (2001, July 3). Sigortada hasar ödemesi gecikiyor. *Hürriyet*.
<https://www.hurriyet.com.tr/erkan-celebi-sigortada-hasar-odemesi-gecikiyor-39246742>
- Dacin, M. T. (1997). Isomorphism in context: The power and prescription of institutional norms. *Academy of Management Journal*, 40(1), 46–81. <https://doi.org/10.2307/257020>
- Dafe, F. (2012). The potential of pro-market activism for finance in Africa: A political economy perspective. *Financial Sector Development in Africa: Opportunities and Challenges*. Washington, DC: World Bank, 177–231. https://doi.org/10.1596/9780821396285_CH06
- Dau, L. A. (2011). Reforms, multinationalization, and profitability. *Academy of Management 2011 Annual Meeting - West Meets East: Enlightening. Balancing. Transcending, AOM 2011*. <https://doi.org/10.5464/AMBPP.2011.92.a>
- Dau, L. A. (2012). Pro-market reforms and developing country multinational corporations. *Global Strategy Journal*, 2(3), 262–276. <https://doi.org/10.1111/j.2042-5805.2012.01033.x>
- Dau, L. A. (2013). Learning across geographic space: Pro-market reforms, multinationalization strategy, and profitability. *Journal of International Business Studies*, 44(3), 235–262. <https://doi.org/10.1057/jibs.2013.5>
- Dau, L. A. (2016). Knowledge will set you free: Enhancing the firm's responsiveness to institutional change. *International Journal of Emerging Markets*, 11(2), 121–147. <https://doi.org/10.1108/IJoEM-02-2014-0019>

- Dau, L. A. (2018). Contextualizing international learning: The moderating effects of mode of entry & subsidiary networks on the relationship between reforms & profitability. *Journal of World Business*, 53(3), 403–414. <https://doi.org/10.1016/j.jwb.2016.10.005>
- Dau, L. A., & Cuervo-Cazurra, A. (2014). To formalize or not to formalize: Entrepreneurship and pro-market institutions. *Journal of Business Venturing*, 29(5), 668–686. <https://doi.org/10.1016/j.jbusvent.2014.05.002>
- Dau, L. A., Moore, E. M., & Kostova, T. (2020). The impact of market based institutional reforms on firm strategy and performance: Review and extension. In *Journal of World Business* (Vol. 55, Issue 4). <https://doi.org/10.1016/j.jwb.2020.101073>
- Daveri, F., & Tabellini, G. (2000). Unemployment and taxes: Do taxes affect the rate of unemployment? *Economic Policy*, 15(30), 48–104.
- Decision: 13-27/369-171. (2013, May 9). Competition Authority. <https://www.rekabet.gov.tr/tr/Kararlar?sayfaAdi=&YayinlanmaTarihi=&PdfText=&KararTuruID=&KararSayisi=13-27%2F369-171&KararTarihi>
- Decision: 17-20/324-144. (2017, July 3). Competition Authority. <https://www.rekabet.gov.tr/tr/Kararlar?sayfaAdi=&YayinlanmaTarihi=&PdfText=&KararTuruID=&KararSayisi=17-20%2F324-144+&KararTarihi=>
- Decision: 17-23/383-166. (2017, July 19). Competition Authority. <https://www.rekabet.gov.tr/tr/Kararlar?sayfaAdi=&YayinlanmaTarihi=&PdfText=&KararTuruID=&KararSayisi=17-23%2F383-166&KararTarihi=>
- del Sol, P. (2010). Chilean regional strategies in response to economic liberalization. *Universia Business Review*, 25(25), 112–131. [https://doi.org/Del Sol, P. \(2010\). Chilean regional strategies in response to economic liberalization. Universia Business Review, 25\(1\), 112–130. https://dialnet.unirioja.es/descarga/articulo/3143815.pdf](https://doi.org/Del%20Sol,%20P.%20(2010).%20Chilean%20regional%20strategies%20in%20response%20to%20economic%20liberalization.%20Universia%20Business%20Review,%2025(1),%20112-130.%20https://dialnet.unirioja.es/descarga/articulo/3143815.pdf)

- Delis, M. D. (2012). Bank competition, financial reform, and institutions: The importance of being developed. *Journal of Development Economics*, 97(2), 450–465. <https://doi.org/10.1016/j.jdeveco.2011.05.012>
- Dewatripont, M., & Roland, G. (2008). Transition as a process of large-scale institutional change. In *Advances in Economics and Econometrics: Theory and Applications* (pp. 240–278). <https://doi.org/10.1017/ccol0521580129.007>
- Di Tella, R., & MacCulloch, R. (2009). Why doesn't capitalism flow to poor countries? *Brookings Papers on Economic Activity*, 1, 285–321. <https://doi.org/10.2139/ssrn.361560>
- DiMaggio, P. J., & Powell, W. W. (1983). The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. *American Sociological Review*, 48(2), 147. <https://doi.org/10.2307/2095101>
- Disçi, M. (2009). Creation of a Common MTPL Database. In S. O. Gönülal (Ed.), *Motor Third-Party Liability Insurance in Developing Countries Raising Awareness and Improving Safety*. World Bank, Washington, DC.
- Djankov, S., La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (2002). The regulation of entry. *Quarterly Journal of Economics*, 117(1), 1–37. <https://doi.org/10.1162/003355302753399436>
- Djankov, S., McLiesh, C., & Ramalho, R. M. (2006). Regulation and growth. *Economics Letters*, 92(3), 395–401. <https://doi.org/10.1016/j.econlet.2006.03.021>
- Doğan, N. (2019, March 25). Otobüs sahibine ve araçları hasarlanan sürücülere kötü haber. *Hürriyet*. <https://www.hurriyet.com.tr/yazarlar/noyan-dogan/otobus-sahibine-ve-araclari-hasarlanan-suruculere-kotu-haber-41160423>
- Doh, J., Rodrigues, S., Saka-Helmhout, A., & Makhija, M. (2017). International business responses to institutional voids. In *Journal of International Business Studies* (Vol. 48, Issue 3, pp. 293–307). <https://doi.org/10.1057/s41267-017-0074-z>

- Doshi, A. R., Dowell, G. W. S., & Toffel, M. W. (2013). How firms respond to mandatory information disclosure. *Strategic Management Journal*, 34(10), 1209–1231. <https://doi.org/10.1002/smj.2055>
- Driffield, N. L., Mickiewicz, T., & Temouri, Y. (2013). Institutional reforms, productivity and profitability: From rents to competition? *Journal of Comparative Economics*, 41(2), 583–600. <https://doi.org/10.1016/j.jce.2012.08.001>
- Duckett, J. (2001). Bureaucrats in business, Chinese-style: The lessons of market reform and state entrepreneurialism in the People's Republic of China. *World Development*, 29(1), 23–37. [https://doi.org/10.1016/S0305-750X\(00\)00083-8](https://doi.org/10.1016/S0305-750X(00)00083-8)
- Dunning, J. H. (1982). Explaining the International Direct Investment Position of Countries: Towards a Dynamic or Developmental Approach. In *International Capital Movements* (pp. 84–121). https://doi.org/10.1007/978-1-349-05989-8_4
- Easterly, W. (2011). National Policies and Economic Growth: A Reappraisal. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.507402>
- Ebell, M., & Haefke, C. (2009). Product market deregulation and the US employment miracle. *Review of Economic Dynamics*, 12(3), 479–504. <https://doi.org/10.1016/j.red.2008.11.002>
- Edelman, L. B. (1992). Legal ambiguity and symbolic structures: Organizational mediation of civil rights law. *American Journal of Sociology*, 97(6), 1531–1576. <https://doi.org/10.1086/229939>
- Ege, İ. (2020). Bağımsız İdari Otoriteler: Bağımsız Düzenleyici Kurumlar: Sigortacılık ve Özel Emeklilik Düzenleme ve Denetleme Kurumu Örneği. *Kapadokya Akademik Bakış*, 4(1), 1–29. <https://dergipark.org.tr/en/download/article-file/1178936>
- Elango, B., Dhandapani, K., & Giachetti, C. (2019). Impact of institutional reforms and industry structural factors on market returns of emerging market rivals during acquisitions by foreign firms. *International Business Review*, 28(5). <https://doi.org/10.1016/j.ibusrev.2018.03.008>

Emeklilik Gözetim Merkezi. (n.d.). Anasayfa. <https://www.egm.org.tr/>

Emeklilik Gözetim Merkezi. (n.d.). Bilgi Merkezi. <https://www.egm.org.tr/bilgi-merkezi/istatistikler/>

Eslava, M., Haltiwanger, J., Kugler, A., & Kugler, M. (2004). The effects of structural reforms on productivity and profitability enhancing reallocation: Evidence from Colombia. *Journal of Development Economics*, 75(2 SPEC. ISS.), 333–371.

<https://doi.org/10.1016/j.jdeveco.2004.06.002>

European Automobile Manufacturers Association. (n.d.). Vehicles in use in Europe 2019. https://www.acea.be/uploads/publications/ACEA_Report_Vehicles_in_use-Europe_2019.pdf

Falcetti, E., Lysenko, T., & Sanfey, P. (2006). Reforms and growth in transition: Re-examining the evidence. *Journal of Comparative Economics*, 34(3), 421–445.

<https://doi.org/10.1016/j.jce.2006.06.008>

Fang, L., & Rogerson, R. (2011). Product market regulation and market work: A benchmark analysis. *American Economic Journal: Macroeconomics*, 3(2), 163–188.

<https://doi.org/10.1257/mac.3.2.163>

Fiori, G., Nicoletti, G., Scarpetta, S., & Schiantarelli, F. (2012). Employment effects of product and labour market reforms: Are there synergies? *Economic Journal*, 122(558).

<https://doi.org/10.1111/j.1468-0297.2011.02494.x>

Moosa, I. A. (2021). The Washington Consensus. In F. C. . Bergsten & R. C. Henning (Eds.), *The Washington Consensus* (pp. 11–24). Peterson Institute for International Economics Washington, DC. <https://doi.org/10.1142/12260>

Fishlow, A., Gwin, C., Haggard, S., Rodrik, D., & Wade, R. (1994). Miracle or design? Lessons from the East Asian experience. *Miracle or Design? Lessons from the East Asian Experience*. [https://doi.org/10.1016/0030-4387\(95\)90071-3](https://doi.org/10.1016/0030-4387(95)90071-3)

- Fligstein, N., & McAdam, D. (2012). *A Theory of Fields*. In *A Theory of Fields*. Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199859948.001.0001>
- Gal, P., & Hijzen, A. (2016). The Short-Term Impact of Product Market Reforms: A cross-country firm-level analysis. *IMF Working Papers*, 16(116), 1. <https://doi.org/10.5089/9781475516852.001>
- Galaskiewicz, J., & Wasserman, S. (1989). Mimetic Processes Within an Interorganizational Field: An Empirical Test. *Administrative Science Quarterly*, 34(3), 454. <https://doi.org/10.2307/2393153>
- Gao, L., & Kling, G. (2006). Regulatory changes and market liquidity in Chinese stock markets. *Emerging Markets Review*, 7(2), 162–175. <https://doi.org/10.1016/j.ememar.2005.11.001>
- Gaur, A. S., & Delios, A. (2006). Business group affiliation and firm performance during institutional transition. *Academy of Management 2006 Annual Meeting: Knowledge, Action and the Public Concern, AOM 2006*. <https://doi.org/10.5465/ambpp.2006.22896765>
- Gaur, A. S., Kumar, V., & Singh, D. (2014). Institutions, resources, and internationalization of emerging economy firms. *Journal of World Business*, 49(1), 12–20. <https://doi.org/10.1016/j.jwb.2013.04.002>
- Gaur, A., & Kumar, V. (2010). Internationalization of emerging market firms: A case for theoretical extension. *Advances in International Management*, 23, 603–627. [https://doi.org/10.1108/S1571-5027\(2010\)00000230031](https://doi.org/10.1108/S1571-5027(2010)00000230031)
- Ge, J., Stanley, L. J., Eddleston, K., & Kellermanns, F. W. (2017). Institutional deterioration and entrepreneurial investment: The role of political connections. *Journal of Business Venturing*, 32(4), 405–419. <https://doi.org/10.1016/j.jbusvent.2017.04.002>
- Gehlbach, S., & Malesky, E. J. (2010). The contribution of veto players to economic reform. *Journal of Politics*, 72(4), 957–975. <https://doi.org/10.1017/S0022381610000460>

- General Terms in Highways Motor Vehicles Compulsory Liability Insurance. (2015). Notification, Official Gazette (29355-14.05.2015).
<https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=20752&MevzuatTur=9&MevzuatTertip=5>
- Ghemawat, P., & Khanna, T. (1998). The nature of diversified business groups: A research design and two case studies. *Journal of Industrial Economics*, 46(1), 35–61.
<https://doi.org/10.1111/1467-6451.00060>
- Gilardi, F. (2005). Evaluating Independent Regulators. In *Proceedings of an Expert Meeting in London, United Kingdom* (Issue January, pp. 101–125). OECD Publications, Paris.
<http://www.oecd.org/regreform/regulatory-policy/35028836.pdf>
- Goldberg, P. K., Khandelwal, A. K., Pavcnik, N., & Topalova, P. (2010). Imported intermediate inputs and domestic product growth: Evidence from India. *Quarterly Journal of Economics*, 125(4), 1727–1767. <https://doi.org/10.1162/qjec.2010.125.4.1727>
- Goldsmith, E., & Mander, J. (2014). The case against the global economy: And for a turn towards localization. In *The Case against the Global Economy: And for a Turn Towards Localization*.
<https://doi.org/10.4324/9781315071787>
- Goolsbee, A., & Syverson, C. (2011). How do Incumbents Respond to the Threat of Entry on Their Networks? Evidence from the Major Airlines. *SSRN Electronic Journal*.
<https://doi.org/10.2139/ssrn.618261>
- Gönülal, S. (2010). Motor Third-Party Liability Insurance. In *Motor Third-Party Liability Insurance*. <https://doi.org/10.1596/27732>
- Gönülal, S. O. (2009). Motor Third-Party Liability Insurance in Developing Countries: Raising Awareness and Improving Safety. 236.
- Gönülal, S., & Chemillier-Gendreau, D. (2009). Motor Third-Party Liability Insurance: From Statutory to Liberalized Motor Tariffs. In S. O. Gönülal (Ed.), *Motor Third-Party Liability Insurance in Developing Countries Raising Awareness and Improving Safety*. World Bank.

- Graham, C., Grindle, M. S., Lora, E., & Seddon, J. (1999). *Improving the Odds: Political Strategies for Institutional Reform in Latin America*. Inter-American Development Bank.
- Gray, C. W. (1997). Reforming legal systems in developing and transition countries. *Finance and Development*, 34(3), 14–16.
[http://issat.dcaf.ch/sqi/layout/set/print/content/download/2312/20094/file/Reforming Legal Systems in Developing and Transitional Countries Gray \(1997\).pdf](http://issat.dcaf.ch/sqi/layout/set/print/content/download/2312/20094/file/Reforming_Legal_Systems_in_Developing_and_Transitional_Countries_Gray_(1997).pdf)
- Grossman, G., & Helpman, E. (1994). Protection for sale. *The American Economic Review*, 84(4), 833–850. <https://doi.org/10.2307/2118033>
- Gubbi, S. R., Aulakh, P. S., & Ray, S. (2015). International search behaviour of business group affiliated firms: Scope of institutional changes and intragroup heterogeneity. *Organization Science*, 26(5), 1485–1501. <https://doi.org/10.1287/orsc.2015.0990>
- Gültay, H. (2011, January 17). Trafikte soygun var! *Milliyet*.
<https://www.milliyet.com.tr/yazarlar/hilmi-gultay/trafikte-soygun-var-1340107>
- Güvence Hesabı. (n.d.). Anasayfa. <https://www.guvencehesabi.org.tr/>
- Haggard, S. & Williamson, John (1994). *The political conditions for economic reform*. Institute for International Economics, Washington D.C.
<http://pressfiles.anu.edu.au/downloads/press/p239311/pdf/ch018.pdf>
- Haidar, J. I. (2012). The impact of business regulatory reforms on economic growth. *Journal of the Japanese and International Economies*, 26(3), 285–307.
<https://doi.org/10.1016/j.jjie.2012.05.004>
- Halpern, L., Koren, M., & Szeidl, A. (2015). Imported inputs and productivity. *American Economic Review*, 105(12), 3660–3703. <https://doi.org/10.1257/aer.20150443>
- Hayes, L. D. (2014). Political systems of East Asia: China, Korea, and Japan. In *Political Systems of East Asia: China, Korea, and Japan*. ME Sharpe. <https://doi.org/10.4324/9781315701677>

Hazine Müsteşarı'ndan flaş trafik sigortası açıklaması. (2017, April 28). Sabah.

<https://www.sabah.com.tr/ekonomi/2017/04/28/hazine-mustesarindan-flas-trafik-sigortasi-aciklamasi>

Hazine ve Maliye Bakanlığı. (n.d.). Anasayfa. <https://www.hmb.gov.tr/>

Hazine ve Maliye Bakanlığı. (n.d.). Sigortacılık ve Özel Emeklilik İstatistikleri.

<https://www.hmb.gov.tr/sigortacilik-ve-ozel-emeklilik-istatistikleri>

Hazine, şirketlerden trafik sigortasında indirim sözü istedi. (2016, July 26). Sigorta Medya.

<https://www.sigortamedya.com.tr/hazineden-sigorta-sirketlerine-acil-fiyat-indirin-cagrisi-geldi/>

Hazine: Trafik sigortası primlerini sektör belirleyecek. (2008, July 5). Dünya.

<https://www.dunya.com/ekonomi/hazine-trafik-sigortasi-primlerini-sektor-belirleyecek-haberi-37562>

Hazine, Zorunlu Trafik Sigortası'nda prim hesaplama yöntemini değiştirdi. (2019, April 24).

Cumhuriyet. <https://www.cumhuriyet.com.tr/haber/hazine-zorunlu-trafik-sigortasinda-prim-hesaplama-yontemini-degistirdi-1361642>

Hinings, C. R., & Greenwood, R. (1988). The normative prescription of organizations. In Institutional patterns and organizations: Culture and environment. (Vol. 21, Issue 4, pp. 53–70).

Highway Traffic Law. Law (2918-13.10.1983), Official Gazette (18195-18.10.1983).

<https://www.mevzuat.gov.tr/MevzuatMetin/1.5.2918.pdf>

Hedefimiz İlk 5'e Girmek. (2004, April 1). Capital.

<https://www.capital.com.tr/finans/sigorta/hedefimiz-ilk-5e-girmek>

Henebry, K. L., & Rejda, G. E. (1995). Principles of Risk Management and Insurance. In The Journal of Risk and Insurance (Vol. 62, Issue 4). <https://doi.org/10.2307/253600>

- Hogan, V. V. P. (2006). A cost benefit analysis of the Personal Injuries Assessment Board.,PIAB https://researchrepository.ucd.ie/bitstream/10197/333/3/hoganv_report_pub_007.pdf
- Hoskisson, R. E., Wright, M., Filatotchev, I., & Peng, M. W. (2013). Emerging Multinationals from Mid-Range Economies: The Influence of Institutions and Factor Markets. *Journal of Management Studies*, 50(7), 1295–1321. <https://doi.org/10.1111/j.1467-6486.2012.01085.x>
- İliman, T., & Tekeli, R. (2016). Türkiye’deki Düzenleyici ve Denetleyici Kuruluşlar: İdari Para Cezalarının Hukuksal Zeminlerinin Değerlendirilmesi. *Adnan Menderes Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 3(1), 23–36. <https://doi.org/10.30803/adusobed.188789>
- C Working Paper (2004). Fostering structural reforms in industrial countries. *World Economic Outlook*, 2004, 103–146. <https://www.elibrary.imf.org/view/IMF081/07991-9781589063372/07991-9781589063372/ch03.xml?language=en&redirect=true>
- Insurance Agents Regulation. (n.d.). Regulation, Official Gazette (28980-22.04.2014). <https://www.tsb.org.tr/default.aspx?pageID=654&yid=1054>
- Insurance and Private Pension Regulation and Supervision Agency Appointment. Appointment (2020/245-23.05.2020), Official Gazette (31136-24.05.2020). <https://www.resmigazete.gov.tr/eskiler/2020/05/20200524-3.pdf>
- Insurance and Private Pension Regulation and Supervision Agency Establishment. Presidential Decree (47), Official Gazette (30922-18.10.2019). <https://www.resmigazete.gov.tr/eskiler/2019/10/20191018-6.pdf>
- Insurance and Private Pension Regulation and Supervision Agency Organization. (n.d.). Regulation (3093-15.10.2020), Official Gazette (31276-16.10.2020). <https://www.resmigazete.gov.tr/eskiler/2020/10/20201016-12.pdf>
- Insurance and Reinsurance Brokers Regulation. (2008). Regulation, Official Gazette (26913-21.06.2008). <https://www.resmigazete.gov.tr/eskiler/2008/06/20080621-8.htm>

Insurance and Reinsurance Brokers Regulation. (2015). Regulation, Official Gazette (29368-27.05.2015). <https://www.resmigazete.gov.tr/eskiler/2015/05/20150527-2.htm>

Insurance Audit Law. (1959). Law (7397 – 21.12.1959), Official Gazette (10394-30.12.1959). <https://www.tsb.org.tr/default.aspx?pageID=654&yid=996>

Insurance Europe. (2015). European Motor Insurance Markets 2015. [https://www.insuranceeurope.eu/sites/default/files/attachments/European motor insurance markets.pdf](https://www.insuranceeurope.eu/sites/default/files/attachments/European%20motor%20insurance%20markets.pdf)

Insurance Europe. (2018). Annual Report 2018-2019. [https://www.insuranceeurope.eu/sites/default/files/attachments/Annual Report 2018-2019_WEB.pdf](https://www.insuranceeurope.eu/sites/default/files/attachments/Annual%20Report%202018-2019_WEB.pdf)

Insurance Europe. (2019). Annual Report 2019-2020. [https://www.insuranceeurope.eu/sites/default/files/attachments/Annual Report 2019-2020.pdf](https://www.insuranceeurope.eu/sites/default/files/attachments/Annual%20Report%202019-2020.pdf)

Insurance Europe. (2019). European Motor Insurance Markets 2019. [https://www.insuranceeurope.eu/sites/default/files/attachments/European Motor Insurance Markets 2019.pdf](https://www.insuranceeurope.eu/sites/default/files/attachments/European%20Motor%20Insurance%20Markets%202019.pdf)

Insurance Europe. (2020). European Insurance Industry Database - Health. <https://www.insuranceeurope.eu/sites/default/files/assets/DatabaseAugust2020-Health.xlsx>

Insurance Europe. (2020). European Insurance Industry Database - Life. <https://www.insuranceeurope.eu/sites/default/files/assets/DatabaseAugust2020-Life.xlsx>

Insurance Europe. (2020). European Insurance Industry Database - Motor. [https://www.insuranceeurope.eu/sites/default/files/assets/Motor database publish.xlsx](https://www.insuranceeurope.eu/sites/default/files/assets/Motor%20database%20publish.xlsx)

Insurance Europe. (2020). European Insurance Industry Database - P/C. <https://www.insuranceeurope.eu/sites/default/files/assets/DatabaseAugust2020-P%26C.xlsx>

Insurance Europe. (2020). European Insurance Industry Database - Total.

<https://www.insuranceeurope.eu/sites/default/files/assets/DatabaseAugust2020-Total.xlsx>

Insurance Experts Appointment Regulation. (2015). Regulation, Official Gazette (29456-25.08.2015). <http://www.eksperlerdernegi.com/tr/mevzuat-yonetmelikler-sigorta-eksperleri-atama-yonetmeligi.html>

Insurance Experts Regulation. (2008). Regulation, Official Gazette (26914-22.06.2008).

<http://www.eksperlerdernegi.com/tr/mevzuat-yonetmelikler-sigorta-eksperleri-yonetmeligi.html>

Insurance Information Centre. (n.d.). Regulation, Official Gazette (26962-09.08.2008).

<https://www.resmigazete.gov.tr/eskiler/2008/08/20080809-3.htm>

Insurance Law. (n.d.). (5684-03.06.2007), Official Gazette (26552-14.06.2007).

<https://www.resmigazete.gov.tr/eskiler/2007/06/20070614-2.htm>

Ishii, H. (2000). Insurance Regulation and Supervision in Asia. In Insurance Regulation and Supervision in Asia. OECD Publications.

https://www.oecd-ilibrary.org/insurance-regulation-and-supervision-in-asia_51mqcr2kmt31.pdf?itemId=%2Fcontent%2Fpublication%2F9789264180123-en&mimeType=pdf

İlk Akla Gelen Şirket Olacağız. (2008, August 1). Capital.

<https://www.capital.com.tr/finans/sigorta/ilk-akla-gelen-sirket-olacagiz>

Joskow, P. L. (2010). Market imperfections versus regulatory imperfections. CESifo DICE Report, 8(3), 1–7.

https://www.researchgate.net/publication/227359812_Market_Imperfections_versus_Regulatory_Imperfections

Kafouros, M., & Aliyev, M. (2016). Institutional development and firm profitability in transition economies. *Journal of World Business*, 51(3), 369–378.

<https://doi.org/10.1016/j.jwb.2015.06.002>

- Kahneman, D., & Tversky, A. (1979). Prospect Theory: An Analysis of Decision under Risk
Daniel Kahneman; Amos Tversky. *Econometrica*. <https://doi.org/10.1111/j.1536-7150.2011.00774.x>
- Kantar, C. (2013, October 1). Taksicilerin belini sigorta mı büküyor? Sigorta Medya.
<https://www.sigortamedya.com.tr/taksicilerin-belini-sigorta-mi-bukuyor/>
- Kantar, C. (2018, November 5). Trafik sigortası yaptırmam ne olur? Posta.
<https://www.posta.com.tr/yazarlar/can-kantar/trafik-sigortasi-yaptirmam-ne-olur-2064420>
- Karakaş, M. (2008). Devletin Düzenleyici Rolü ve Türkiye’de Bağımsız İdari Otoriteler. *Maliye Dergisi*, 154 (Ocak-Haziran), 99–120.
<https://ms.hmb.gov.tr/uploads/2019/09/7.MehmetKARAKAs.pdf>
- Karpoff, J. M., Lee, D. S., & Vondracik, V. P. (1999). Defence procurement fraud, penalties, and contractor influence. *Journal of Political Economy*, 107(4), 809–842.
<https://doi.org/10.1086/250080>
- Kasko Çekti Sağlık İtti! (2004, July 1). *Capital*. <https://www.capital.com.tr/finans/sigorta/kasko-cekti-saglik-itti>
- Kaskoda fiyat %20 artacak. (2018, November 12). *Hürriyet*.
<https://www.hurriyet.com.tr/ekonomi/kaskoda-fiyat-20-artacak-41016017>
- Katrak, H. (2000). Economic liberalization and the vintages of machinery imports in developing countries: An empirical test for India’s imports from the United Kingdom. *Oxford Development Studies*, 28(3), 309–322. <https://doi.org/10.1080/713688317>
- Kedia, B. L., Mukherjee, D., & Lahiri, S. (2006). Indian business groups: Evolution and transformation. In *Asia Pacific Journal of Management*. <https://doi.org/10.1007/s10490-006-9020-5>

- Khanna, T., & Palepu, K. (2006). Emerging giants: Building world-class companies in emerging markets. *Harvard Business Review*, 84(10), 1–43.
https://www.academia.edu/download/6101156/growth_jan_2006.pdf#page=62
- Khemani, S. (2017). Political economy of reform. The World Bank.
<https://openknowledge.worldbank.org/bitstream/handle/10986/28584/WPS8224.pdf?sequence=1&isAllowed=y>
- Kinoshita, Y., & Campos, N. F. (2008). Foreign Direct Investment and Structural Reforms: Evidence From Eastern Europe and Latin America. *IMF Working Papers*, 08(26), 1.
<https://doi.org/10.5089/9781451868883.001>
- Klapper, L., Amit, R., & Guillén, M. F. (2013). Entrepreneurship and Firm Formation across Countries. In *International Differences in Entrepreneurship*. The World Bank.
<https://doi.org/10.7208/chicago/9780226473109.003.0005>
- Kotabe, M., Martin, X., & Domoto, H. (2003). Gaining from vertical partnerships: Knowledge transfer, relationship duration, and supplier performance improvement in the U.S. and Japanese automotive industries. *Strategic Management Journal*, 24(4), 293–316.
<https://doi.org/10.1002/smj.297>
- Krueger, A. O. (1995). Political Economy of Policy Reform in Developing Countries. *The Economic Journal*, 105(428), 198. <https://doi.org/10.2307/2235332>
- Krueger, A. O. (2013). *The Political Economy of Trade Protection*. In *The Political Economy of Trade Protection*. University of Chicago Press.
<https://doi.org/10.7208/chicago/9780226455020.001.0001>
- Kumar, R., & Patibanda, M. (2009). Institutional dynamics and the evolution of the Indian economy. In *Institutional Dynamics and the Evolution of the Indian Economy*. Springer.
<https://doi.org/10.1057/9780230620131>

- Laffont, J.-J., & Tirole, J. (1991). The Politics of Government Decision-Making: A Theory of Regulatory Capture. *The Quarterly Journal of Economics*, 106(4), 1089–1127.
<https://doi.org/10.2307/2937958>
- Lambert, J. D. (2006). *Energy companies and market reform : how deregulation went wrong*. PennWell Books.
- Law Amending the Private Pension Savings and Investment System Law and Certain Laws and Decree Laws. (n.d.). Law (6327- 13.06.2012), Official Gazette (28338 -29.06.2012).
<https://www.resmigazete.gov.tr/eskiler/2012/06/20120629-1.htm>
- Law on the Protection of Competition. (1994). Law (4054-07.12.1994), Official Gazette (22140 - 13.12.1994). <https://www.mevzuat.gov.tr/MevzuatMetin/1.5.4054.pdf>
- Lawrence, T. B. (1999). Institutional strategy. *Journal of Management*, 25(2), 161–187.
<https://doi.org/10.1177/014920639902500203>
- Lawrence, T. B., & Suddaby, R. (2006). Institutions and institutional work. In *The SAGE Handbook of Organization Studies* (pp. 215–254).
<https://doi.org/10.4135/9781848608030.n7>
- Leitzel, J. (2002). The Political Economy of Rule Evasion and Policy Reform. In *The Political Economy of Rule Evasion and Policy Reform*. <https://doi.org/10.4324/9780203217115>
- Leonidou, L. C., Katsikeas, C. S., Palihawadana, D., & Spyropoulou, S. (2007). An analytical review of the factors stimulating smaller firms to export: Implications for policy-makers. *International Marketing Review*, 24(6), 735–770.
<https://doi.org/10.1108/02651330710832685>
- Levi-Faur, D. (2009). Regulatory capitalism and the reassertion of the public interest. *Policy and Society*, 27(3), 181–191. <https://doi.org/10.1016/j.polsoc.2008.10.002>

- Levy, B., & Spiller, P. T. (1994). The institutional foundations of regulatory commitment: A comparative analysis of telecommunications regulation. *Journal of Law, Economics, and Organization*, 10(2), 201–246. <https://doi.org/10.1093/oxfordjournals.jleo.a036849>
- Lora, E. (2012). Structural Reforms in Latin America: What Has Been Reformed and How to Measure it (Updated Version), Inter-American Development Bank, IDB Working Paper No. (IDB-WP-346
<https://papers.ssrn.com/sol3/Delivery.cfm/IDB-WP-346.pdf?abstractid=2219778&mirid=1>
- Lora, E., Panizza, U. (2002). Structural Reforms in Latin America: Under scrutiny, Inter-American Development Bank, Reforming Reform Seminar, Brazil
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=311599
- Lora, E., & Panizza, U. (2003). The future of structural reform. In *Journal of Democracy* (Vol. 14, Issue 2, pp. 123–137). <https://doi.org/10.1353/jod.2003.0039>
- Lora, E. A., Panizza, U. G., & Quispe-Agnoli, M. (2004). Reform Fatigue: Symptoms, Reasons, Implications. *Federal Reserve Bank of Atlanta Economic Review*, II Quarter.
<https://doi.org/10.2139/ssrn.472421>
- Madhok, A., & Keyhani, M. (2012). Acquisitions as entrepreneurship: asymmetries, opportunities, and the internationalization of multinationals from emerging economies. *Global Strategy Journal*, 2(1), 26–40. <https://doi.org/10.1002/gsj.1023>
- Majumdar, S. K., & Bhattacharjee, A. (2014). Firms, markets, and the state: Institutional change and manufacturing sector profitability variances in India. *Organization Science*, 25(2), 509–528. <https://doi.org/10.1287/orsc.2013.0844>
- Manikandan, K. S., & Ramachandran, J. (2015). Beyond institutional voids: Business groups, incomplete markets, and organizational form. *Strategic Management Journal*, 36(4), 598–617. <https://doi.org/10.1002/smj.2226>

- Mateus, A. (2010). Competition and Development: Towards an Institutional Foundation for Competition Enforcement. *World Competition*, 33(2), 275–300.
- Maximum Gross Written Premiums that can be determined by the license holder Insurance Companies in Tariff Application Principles in Highways Motor Vehicles Compulsory Liability Insurance. (2015). Undersecretariat of Treasury Letter (27.10.2015). <https://tsb.org.tr/images/Documents/Azami Prim2.pdf>
- McIsaac, D. (2009). Motor Third-Party Liability Insurance in Europe. In S. O. Gönülal (Ed.), *Motor Third-Party Liability Insurance in Developing Countries Raising Awareness and Improving Safety*. World Bank, Washington, DC.
<https://openknowledge.worldbank.org/bitstream/handle/10986/12960/699710ESW0P09800liability0insurance.pdf?sequence=1&isAllowed=y>
- Mehmet Şimşek: Trafik sigortası primleri düşecek. (2016, February 16). *Sigorta Medya*.
<https://www.sigortamedya.com.tr/mehmet-simsek-trafik-sigortasi-primleri-dusecek/>
- Merlevede, B. (2003). Reform reversals and output growth in transition economies. *Economics of Transition*, 11(4), 649–669. <https://doi.org/10.1111/j.0967-0750.2003.00165.x>
- Meyer, J. W., & Rowan, B. (1977). Institutionalized Organizations: Formal Structure as Myth and Ceremony. *American Journal of Sociology*, 83(2), 340–363. <https://doi.org/10.1086/226550>
- Meyer, J., Scott, W. R., & Strange, D. (1987). Centralization, Fragmentation, and School District Complexity. *Administrative Science Quarterly*, 32(2), 186. <https://doi.org/10.2307/2393125>
- Meyer, K. E., Estrin, S., Bhaumik, S. K., & Peng, M. W. (2009). Institutions, resources, and entry strategies in emerging economies. *Strategic Management Journal*, 30(1), 61–80. <https://doi.org/10.1002/smj.720>
- Ministry of Trade Turkish Insurance and Reinsurance Companies Association Motor Vehicles Bureau Regulation. (n.d.). Regulation, Official Gazette (11535-19.10.1963).

- Mitra, D. (1999). Endogenous lobby formation and endogenous protection: A long-run model of trade policy determination. *American Economic Review*, 89(5), 1116–1134.
<https://doi.org/10.1257/aer.89.5.1116>
- Mody, A., & Pattillo, C. (2005). Macroeconomic policies and poverty reduction. In *Macroeconomic Policies and Poverty Reduction* (pp. 1–395).
<https://doi.org/10.4324/9780203005804>
- Morgan, B. (2008). The intersection of rights and regulation: New directions in sociolegal scholarship. In B. Morgan (Ed.), *The Intersection of Rights and Regulation: New Directions in Sociolegal Scholarship* (pp. 1–222). Ashgate Press, Aldershot.
<https://doi.org/10.4324/9781351146289-1>
- Motorway Traffic Law. (1953). Law (6085 – 11.05.1953), *Official Gazette* (8411-18.05.1953).
<https://www.resmigazete.gov.tr/arsiv/8411.pdf>
- Munir, K. A. (2005). The social construction of events: A study of institutional change in the photographic field. In *Organization Studies* (Vol. 26, Issue 1, pp. 93–112).
<https://doi.org/10.1177/0170840605049463>
- Nagayama, H. (2007). Effects of regulatory reforms in the electricity supply industry on electricity prices in developing countries. *Energy Policy*, 35(6), 3440–3462.
<https://doi.org/10.1016/j.enpol.2006.12.018>
- Naím, M. (2000). Washington consensus or Washington confusion? In *Foreign Policy* (Issue 118, pp. 87–103). <https://doi.org/10.2307/1149672>
- Ngan, H. W. (2010). Electricity regulation and electricity market reforms in China. *Energy Policy*, 38(5), 2142–2148. <https://doi.org/10.1016/j.enpol.2009.06.044>
- Nicoletti, G., & Scarpetta, S. (2003). Regulation, productivity and growth: OECD evidence. *Economic Policy*, 36, 9–72. <https://doi.org/10.1111/1468-0327.00102>

- North, D. C. (1990). Institutions, Institutional Change and Economic Performance. In Institutions, Institutional Change and Economic Performance.
<https://doi.org/10.1017/cbo9780511808678>
- OECD. (2002). Foreign Direct Investment for Development-Maximizing Benefits, Minimizing Costs. *Direct*, 1–32. <https://doi.org/10.1787/9789264174139-en>
- OECD. (2005) Reforming the Insurance Market in Russia.
<https://doi.org/10.1787/9789264011199-en>
- Okoroafo, S. C. (1993). Firm performance in a liberalized environment: Empirical evidence from a developing country. *Journal of Business Research*. 28(3), 175–189.
[https://doi.org/10.1016/0148-2963\(93\)90046-R](https://doi.org/10.1016/0148-2963(93)90046-R)
- Oliver, C. (1991). Strategic Responses to Institutional Processes. *The Academy of Management Review*, 16(1), 145. <https://doi.org/10.2307/258610>
- Ostry, J., Berg, A., & Kothari, S. (2018). Growth-Equity Trade-offs in Structural Reforms. *IMF Working Papers*, 18(5), 1–35. <https://doi.org/10.5089/9781484336809.001>
- Panagariya, A. (2008). *India: The Emerging Giant*: Oxford University Press.
- Panizza, U., & Yañez, M. (2005). Why Are Latin Americans So Unhappy About Reforms? *Journal of Applied Economics*, 8(1), 1–29. <https://doi.org/10.1080/15140326.2005.12040616>
- Park, S. H., Li, S., & Tse, D. K. (2006). Market liberalization and firm performance during China's economic transition. *Journal of International Business Studies*, 37(1), 127–147.
<https://doi.org/10.1057/palgrave.jibs.8400178>
- Patashnik, E. M. (2014). Reforms at risk: What happens after major policy changes are enacted. In *Reforms at Risk: What Happens After Major Policy Changes Are Enacted*.
<https://doi.org/10.5860/choice.46-4706>

- Peng, M. W. (2003). Institutional transitions and strategic choices. In *Academy of Management Review*. <https://doi.org/10.5465/AMR.2003.9416341>
- Peng, M. W., & Heath, P. S. (1996). The growth of the firm in planned economies in transition: Institutions, organizations, and strategic choice. *Academy of Management Review*. <https://doi.org/10.5465/AMR.1996.9605060220>
- Peng, M. W., Lee, S. H., & Wang, D. Y. L. (2005). What determines the scope of the firm over time? A focus on institutional relatedness. In *Academy of Management Review*. <https://doi.org/10.5465/AMR.2005.17293731>
- Pfeffer, J. (1972). Size and composition of corporate boards of directors: The organization and its environment. In *Corporate Governance: Values, Ethics and Leadership*. <https://doi.org/10.2307/2393956>
- Pfeffer, J., & Salancik, G. R. (1978). The external control of organizations: A resource dependence approach. In NY: Harper and Row Publishers. <https://doi.org/10.2307/2392573>
- Phillips, N. (2006). States and Modes of Regulation in the Global Political Economy. In M. Minogue & L. Carino (Eds.), *Regulatory Governance in Developing Countries*. Elgar Publishing, Cheltenham.
- Popli, M., Akbar, M., Kumar, V., & Gaur, A. (2017). Performance Impact of Temporal Strategic Fit: Entrainment of Internationalization with Pro-Market Reforms. *Global Strategy Journal*, 7(4), 354–374. <https://doi.org/10.1002/gsj.1160>
- Posner, R. A. (1998). Creating a legal framework for economic development. *World Bank Research Observer*, 13(1), 11. <https://doi.org/10.1093/wbro/13.1.1>
- Procedures and Principles Regarding the insurance to be made for legal responsibility arising from the operation of Foreign Plated Motor Vehicles in Turkey. (n.d.). Regulation, Official Gazette (27993-13.07.2011). <https://www.tmtb.org.tr/Forms/YabancEHY.pdf>

Providing monthly salaries for Turkish Citizen who are over 65 year old, alone, need for care and poor and Changes in some Laws and Regulations Law. (n.d.). Law (6704-14.04.2016), Official Gazette (29695-26.04.2016).

<https://www.resmigazete.gov.tr/eskiler/2016/04/20160426-11.htm>

Public Financial Management and Control Law. (n.d.). Law (5018-10.12.2003), Official Gazette (25326-24.12.2003). <https://www.mevzuat.gov.tr/MevzuatMetin/1.5.5018.doc>

Putzhammer, M., Slangen, A., Puck, J., & Lindner, T. (2020). Multinational firms' pace of expansion within host countries: How high rates of pro-market reform hamper the local exploitation of foreign expansion knowledge. *Journal of International Management*, 26(1), 1–14. <https://doi.org/10.1016/j.intman.2019.100703>

Ramamurti, R., & Singh, J. V. (2009). Emerging multinationals in emerging markets. In *Emerging Multinationals in Emerging Markets*. <https://doi.org/10.1017/CBO9780511576485>

Ravallion, M. (2001). Growth, inequality and poverty: Looking beyond averages. *World Development*. [https://doi.org/10.1016/S0305-750X\(01\)00072-9](https://doi.org/10.1016/S0305-750X(01)00072-9)

Rees, R., & Kèssner, E. (1999). Regulation and efficiency in European insurance markets. *Economic Policy*, 29, 363–398. <https://doi.org/10.1111/1468-0327.00053>

Regulation on Arbitration in Insurance. Regulation, Official Gazette (26616-17.08.2007) <https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=11514&MevzuatTur=7&MevzuatTertip=5>

Regulation on Establishment and Working Principles of Insurance Companies and Reinsurance Companies. (2007). Regulation, Official Gazette (26623-24.08.2007). https://tsb.org.tr/media/attachments/Sigorta_Sirketleri_Ve_Reasurans_Sirketlerinin_Kurulus_Ve_Calisma_Esaslarına_Iliskin_Yonetmelik.pdf

Regulation on Establishment, Working Procedures and Principles of Insurance Experts Executive Committee. (2009). Regulation, Official Gazette (27156-01.03.2009).

<http://www.eksperlerdernegi.com/tr/mevzuat-yonetmelikler-sigorta-eksperleri-icra-komitesinin-kurulus-calisma-usul-ve-esaslari-yonetmeligi.html>

Regulation on Tariff Application Principles in Highways Motor Vehicles Compulsory Liability Insurance. (2007). Regulation, Official Gazette (26582-14.07.2007).

<https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=11444&MevzuatTur=7&MevzuatTertip=5>

Regulation on the Establishment and Working Principles of Pension Companies. (2002). Regulation, Official Gazette (24681-28.02.2002).

https://www.egm.org.tr/Sites/1/upload/files/yonetmelik5_1-364.pdf

Regulation on the Establishment and Working Procedures and Principles of the Insurance Agents Sector Assembly and the Insurance Agents Executive Committee. (2008). Regulation, Official Gazette (26993-10.09.2008). <https://tsb.org.tr/default.aspx?pageID=654&yid=9>

Regulation on Working Principles and Procedures of the Private Pension Advisory Board. (n.d.). Regulation, Official Gazette (24569- 31.10.2001).

<https://www.egm.org.tr/Sites/1/upload/files/yonetmelik1-35.pdf>

Regulation relating the updates in Actuaries Regulation. (2012). Regulation, Official Gazette (28425-28.09.2012). <https://www.resmigazete.gov.tr/eskiler/2012/09/20120928-1.htm>

Regulation relating the updates in Actuaries Regulation. (2015). Regulation, Official Gazette (29287-06.03.2015). <https://www.resmigazete.gov.tr/eskiler/2015/03/20150306-1.htm>

Regulation relating the updates in Insurance Agents Regulation. (2014). Regulation, Official Gazette (29221-30.12.2014).

<https://www.resmigazete.gov.tr/eskiler/2014/12/20141230M1-7.htm>

Regulation relating the updates in Insurance Agents Regulation. (2016). Regulation, Official Gazette (29595-16.01.2016). <https://www.resmigazete.gov.tr/eskiler/2016/01/20160116-3.htm>

- Regulation relating the updates in Insurance Experts Appointment Regulation. (2020). Regulation, Official Gazette (31079-25.03.2020). <http://www.eksperlerdernegi.com/tr/mevzuat-yonetmelikler-sigorta-eksperleri-atama-yonetmeliginde-degisiklik-yapilmasina-dair-yonetmelik.html>
- Regulation relating the updates in Insurance Experts Regulation. (2010). Regulation, Official Gazette (27575-08.05.2010). <https://www.resmigazete.gov.tr/eskiler/2010/05/20100508-4.htm>
- Rejda, G. E., & McNamara, M. J. (2017). Principles of Risk Management and Insurance. In Pearson Education Limited.
- Ritchie, W. J., & Melnyk, S. A. (2012). The impact of emerging institutional norms on adoption timing decisions: Evidence from C-TPAT-A government antiterrorism initiative. In Strategic Management Journal. <https://doi.org/10.1002/smj.1948>
- Rodríguez, F., & Rodrik, D. (2001). Trade policy and economic growth: A skeptic's guide to the cross-national evidence. NBER Macroeconomics Annual. <https://doi.org/10.2307/3585399>
- Rodrik, D. (1994). The Rush to Free Trade in the Developing World: Why so late? Why now? Will it last? In Voting for Reform. National Bureau of Economic Research, Working Paper 3947. <https://doi.org/10.3386/w3947>
- Rodrik, D. (1995). Getting interventions right: how South Korea and Taiwan grew rich. Economic Policy, 10(20), 53–107. National Bureau of Economic Research, Working Paper 4964. <https://doi.org/10.3386/w4964>
- Rodrik, D. (1996). Understanding Economic Policy Reform. In Journal of Economic Literature (Vol. 34, Issue 1).
- Rodrik, D. (1997). Has globalization gone too far? California Management Review, 3, 29–53. <https://doi.org/10.2307/41165897>

- Rodrik, D. (2003). Growth Strategies. National Bureau of Economic Research. <https://doi.org/10.3386/w10050>
- Rodrik, D. (2006). Goodbye Washington Consensus, Hello Washington Confusion? *Journal of Economic Literature*, XLIV(December), 973–987. <https://doi.org/10.1257/jel.44.4.973>
- Sachs, J. D., Warner, A., Aslund, A., & Fischer, S. (1995). Economic Reform and the Process of Global Integration. *Brookings Papers on Economic Activity*. <https://doi.org/10.2307/2534573>
- Salim, R. A. (2003). Economic liberalization and productivity growth: Further evidence from Bangladesh. *Oxford Development Studies*. 31(1), 85–98. <https://doi.org/10.1080/1360081032000047203>
- SAPRIN, S. A. (2002). *The Policy Roots of Economic Crisis, Poverty and Inequality*. Zed Books.
- Schiantarelli, F. (2008). Product Market Regulation and Macroeconomic Performance : A Review of Cross-Country Evidence By. World Bank Policy Research Paper. https://www.researchgate.net/publication/5136034_Product_Market_Regulation_and_Macroeconomic_Performance_A_Review_of_Cross_Country_Evidence
- Schiantarelli, F. (2016). Do product market reforms stimulate employment, investment, and innovation? *IZA World of Labor*. <https://wol.iza.org/uploads/articles/266/pdfs/do-product-market-reforms-stimulate-employment-investment-and-innovation.pdf>
- Scott, W. R. (2001). *Institutions and Organizations: Foundations for Organizational Science*. In *Legal Theory*. <https://doi.org/10.1017/S1352325200000288>
- Sekiguchi, A. (2000). Policyholders Protection Funds in OECD Countries. In *Insurance Regulation and Supervision in Asia*. OECD Publications. https://www.oecd-ilibrary.org/insurance-regulation-and-supervision-in-asia_5lmqcr2kmt31.pdf?itemId=%2Fcontent%2Fpublication%2F9789264180123-en&mimeType=pdf

- Serra, N., & Stiglitz, J. E. (2008). The Washington Consensus Reconsidered. In The Washington Consensus Reconsidered. <https://doi.org/10.1093/acprof:oso/9780199534081.001.0001>
- Sezen, S. (2020). Düzenleyici ve Denetleyici Kurumlar. In Ankara University, Faculty of Political Sciences, Turkish Public Administration Lecture Notes.
https://acikders.ankara.edu.tr/pluginfile.php/168597/mod_resource/content/1/13_HAFTA.pdf
- Shleifer, A., & Vishny, R. W. (1993). Corruption. *The Quarterly Journal of Economics*, 108(3), 599–617. <https://doi.org/10.2307/2118402>
- Sigorta Acenteleri İcra Komitesi. (n.d.). Anasayfa. <http://www.tobbsaik.org.tr/>
- Sigorta Bilgi ve Gözetim Merkezi. (n.d.). Anasayfa. <https://www.sbm.org.tr/>
- Sigorta Bilgi ve Gözetim Merkezi. (n.d.). Trafik Sigortası Raporları.
<https://www.sbm.org.tr/tr/trafik-sigortasi-raporlari>
- Sigorta Tahkim Komisyonu. (n.d.). Anasayfa. <http://www.sigortatahkim.org.tr/>
- Sigorta Tahkim Komisyonu. (n.d.). Faaliyet Raporu 2019.
<http://www.sigortatahkim.org.tr/files/2019yilifaaliyetraporu.pdf>
- Sigorta ve Reasürans Brokerleri Derneği. (n.d.). Anasayfa. <https://www.sbd.org.tr/>
- Sigorta ve Reasürans Brokerleri Derneği. (n.d.). Brokerlarımız.
<https://www.sbd.org.tr/tr/brokerlerimiz>
- Sigortacılık ve Özel Emeklilik Düzenleme ve Denetleme Kurumu. (2019). Faaliyet Raporu 2019.
<https://ms.hmb.gov.tr/uploads/2020/08/2019-Faaliyet-Raporu-I.-Bolum.docx>
- Sigortadan 23 aldılar 12 verdiler. (2017, March 25). Memurlar. Net.
<https://www.memurlar.net/haber/655986/sigortadan-23-aldilar-12-verdiler.html>

- Silva, A. D., Givone, A., & Sondermann, D. (2017). When do countries implement structural reforms? In *The Political Economy of Structural Reforms in Europe*. <https://doi.org/10.1093/oso/9780198821878.003.0002>
- Silverstein, D., & Hohler, D. C. (2010). A Rule-of-law metric for quantifying and assessing the changing legal environment of business. *American Business Law Journal*. <https://doi.org/10.1111/j.1744-1714.2010.01109.x>
- Singh, D., Pattnaik, C., Gaur, A. S., & Ketencioglu, E. (2018). Corporate expansion during pro-market reforms in emerging markets: The contingent value of group affiliation and diversification. *Journal of Business Research*, 82(1), 220–229. <https://doi.org/10.1016/j.jbusres.2017.09.043>
- Skuterud, M. (2005). The impact of Sunday shopping on employment and hours of work in the retail industry: Evidence from Canada. *European Economic Review*. <https://doi.org/10.1016/j.euroecorev.2004.09.005>
- Smets, M., Morris, T., & Greenwood, R. (2012). From practice to field: A multilevel model of practice-driven institutional change. *Academy of Management Journal*, 55(4), 877–904. <https://doi.org/10.5465/amj.2010.0013>
- Stevens, G. V. G., & Lipsey, R. E. (1992). Interactions between domestic and foreign investment. *Journal of International Money and Finance*, 11(1), 40–62. [https://doi.org/10.1016/0261-5606\(92\)90020-X](https://doi.org/10.1016/0261-5606(92)90020-X)
- Stoian, C. (2013). Extending Dunning's Investment Development Path: The role of home country institutional determinants in explaining outward foreign direct investment. *International Business Review*, 22(3), 615–637. <https://doi.org/10.1016/j.ibusrev.2012.09.003>
- Stoian, C., & Mohr, A. (2016). Outward foreign direct investment from emerging economies: escaping home country regulative voids. *International Business Review*, 25(5), 1124–1135. <https://doi.org/10.1016/j.ibusrev.2016.02.004>

Sutton, J. R., & Dobbin, F. (1996). The two faces of governance: Responses to legal uncertainty in U.S. firms, 1955 to 1985. In *American Sociological Review* (Vol. 61, Issue 5, pp. 794–811). <https://doi.org/10.2307/2096454>

Sürücü bazlı yeni trafik sigortası sistemi geliyor. (2017, February 18). Sözcü.

<https://www.sozcu.com.tr/2017/ekonomi/surucu-bazli-yeni-trafik-sigortasi-sistemi-geliyor-1686428/>

Swiss Re Institute. (2020). World Insurance: Regional Review 2019, and Outlook.

<https://www.swissre.com/dam/jcr:864e8938-3d3c-48cc-a3d7-8682962971e7/sigma-4-2020-extra-complete.pdf>

Şimşek: Trafik sigortasında yeni model için çalışıyoruz. (2018, February 18). Sigorta Medya.

<https://www.sigortamedya.com.tr/simsek-trafik-sigortasinda-yeni-model-icin-calisiyoruz/>

Taksiciler sigorta zammını protesto etti. (2016, January 26). Dünya.

<https://www.dunya.com/gundem/taksiciler-sigorta-zammini-protesto-etti-haberi-305551>

Tavan fiyat doğru değil ama mecbur kaldık. (2017, August 3). Sigorta Medya.

<https://www.sigortamedya.com.tr/tavan-fiyat-dogru-degil-ama-mecbur-kaldik/>

TESK Genel Başkanı Palandöken: Trafikte teşvik önemli. (2019, April 28). Hürriyet.

<https://www.hurriyet.com.tr/ekonomi/tesk-genel-baskani-palandoken-trafikte-tesvik-onemli-41196801>

Thatcher, M. (2002). Regulation after delegation: Independent regulatory agencies in Europe.

Journal of European Public Policy, 9(6), 954–972.

<https://doi.org/10.1080/1350176022000046445>

The Law of Regulation of Public Finance and Debt Management and The Law of Some Adjustments in some laws and decrees. (n.d.). Law (6456-03.04.2013), Official Gazette

(28622-18.04.2013). <https://www.resmigazete.gov.tr/eskiler/2013/04/20130418-1.htm>

The Law on the Amendments of Some Tax Laws. (n.d.). Law (4697- 28.06.2001), Official Gazette (24458 -10.07.2001). https://www.egm.org.tr/Sites/1/upload/files/kanun2_1-19.pdf

Tolbert, P. S., & Zucker, L. G. (1983). Institutional Sources of Change in the Formal Structure of Organizations: The Diffusion of Civil Service Reform, 1880-1935. *Administrative Science Quarterly*, 28(1), 22. <https://doi.org/10.2307/2392383>

Tomeski, B. (2012). Development of Motor Third Party Liability Insurance Market in Terms of Changing Regulation. *Procedia - Social and Behavioral Sciences*, 44, 200–209. <https://doi.org/10.1016/j.sbspro.2012.05.021>

Tommasi, M. “Crisis, Political Institutions, and Policy Reform: The Good, the Bad, and the Ugly” in Tungodden, B., Stern, N., & Kolstad, I. (2003). *Toward Pro-Poor Policies: Aid, Institutions, and Globalization*. In Annual World Bank Conference on Evelopment Economics. <https://doi.org/10.1596/978-0-8213-7125-1>

Trading Economics. (n.d.-a). GDP - Turkey. <https://tradingeconomics.com/turkey/gdp>

Trading Economics. (n.d.-b). Turkey - Life Insurance Premium Volume To GDP. <https://tradingeconomics.com/turkey/life-insurance-premium-volume-to-gdp-percent-wb-data.html>

Trading Economics. (n.d.-c). Turkey - Nonlife Insurance Premium Volume To GDP. <https://tradingeconomics.com/turkey/nonlife-insurance-premium-volume-to-gdp-percent-wb-data.html>

Traffic Insurance Information Centre. (n.d.). Regulation, Official Gazette (25318-16.12.2003). <https://www.resmigazete.gov.tr/eskiler/2003/12/20031216.htm#4>

Trafik Havuzu ile sigorta sektörü rayına oturdu. (2017, September 5). Sigorta Medya. <https://www.sigortamedya.com.tr/trafik-sigortasinda-havuz-cozumu-tansiyonu-dusurdu/>

Trafik Sigortası motosikleti vurdu! (2016, May 17). Sigorta Medya. <https://www.sigortamedya.com.tr/trafik-sigortasi-motosikleti-vurdu/>

Trafik sigortası ve kasko ucuzlayacak. (2014, March 19). Cumhuriyet.

<https://www.cumhuriyet.com.tr/haber/trafik-sigortasi-ve-kasko-ucuzlayacak-52181>

Trafik Sigortası Yapan Bankalar. (2019, February 9). Kamuilanlari.Com.

<https://www.kamuilanlari.com/ekonomi-trafik-sigortasi-yapan-bankalar-h11257-1788/>

Trafik sigortasında araç değil şoför sigortalanacak. (2017, February 17). Dünya.

<https://www.dunya.com/ekonomi/trafik-sigortasinda-arac-degil-sofor-sigortalanacak-haberi-350427>

Trafik sigortasında artık sürücü radarda. (2019, April 25). Milliyet.

<https://www.milliyet.com.tr/ekonomi/trafik-sigortasinda-artik-surucu-radarda-2863663>

Trafik sigortasında havuz sigorta şirketleri için ilaç olmadı. (2017, November 15). Sigorta Medya.

<https://www.sigortamedya.com.tr/trafik-sigortasinda-havuz-sigorta-sirketleri-icin-ilac-olmadi/>

Trafik sigortasında inanılmaz oyun! (2017, February 13). Hukukihaber.Net.

<https://www.hukukihaber.net/ekonomi/trafik-sigortasinda-inanilmaz-oyun-h87754.html>

Trafik sigortasında şirketlerin yeni oyunu. (2017, April 24). Akşam.

<https://www.aksam.com.tr/otomobil/trafik-sigortasinda-sirketlerin-yeni-oyunu/haber-617450>

Turrini, A., Koltay, G., Pierini, F., Goffard, C., & Kiss, A. (2015). A decade of labour market reforms in the EU: Insights from the LABREF database. *IZA Journal of Labor Policy*.

<https://doi.org/10.1186/s40173-015-0038-5>

Türkiye Cumhuriyet Merkez Bankası. (n.d.). 1/3/6/12 Aylık EUR/USD/TRL Faiz Oranları.

<https://evds2.tcmb.gov.tr/index.php?/evds/portlet/qh1gwojhm%2Bw%3D/tr>

Türkiye Cumhuriyet Merkez Bankası. (n.d.). Enflasyon Hesaplayıcısı.

http://www3.tcmb.gov.tr/enflasyoncalc/enflasyon_hesaplayici.html

Türkiye Cumhuriyet Merkez Bankası. (n.d.). Enflasyon Verileri Tüketici Fiyatları.

<https://www.tcmb.gov.tr/wps/wcm/connect/TR/TCMB+TR/Main+Menu/Istatistikler/Enflasyon+Verileri>

Türkiye Cumhuriyet Merkez Bankası. (n.d.). Gösterge Niteliğindeki Merkez Bankası Kurları.

<https://www.tcmb.gov.tr/wps/wcm/connect/TR/TCMB+TR/Main+Menu/Istatistikler/Doviz+Kurlari/Gosterge+Niteligindeki+Merkez+Bankasi+Kurlarii/>

Türkiye İstatistik Kurumu. (2019). Karayolu Trafik Kaza İstatistikleri.

<https://data.tuik.gov.tr/Bulten/Index?p=Karayolu-Trafik-Kaza-Istatistikleri-2019-33628>

Türkiye İstatistik Kurumu. (2020). Motorlu Kara Taşıt Sayısı.

<https://data.tuik.gov.tr/Bulten/DownloadIstatistikselTablo?p=uOwld93e5q/SIGs//nx30Z6P8fhWPt2XJ80TSiMAVvwzoGdEJzR6qmFloJyFosQA>

Türkiye Motorlu Taşıt Bürosu. (n.d.). Anasayfa. <https://www.tmtb.org.tr/>

Türkiye Odalar ve Borsalar Birliği. (n.d.-a). Gerçek Kişi Eksper Listesi.

<https://sigorta.tobb.org.tr/Documents/GercekEksperListesi.xls>

Türkiye Odalar ve Borsalar Birliği. (n.d.-b). Sigorta Eksperleri.

Türkiye Odalar ve Borsalar Birliği. (n.d.-c). Tüzel Kişi Eksper Listesi.

<https://sigorta.tobb.org.tr/Documents/TuzelEksperListesi.xls>

Türkiye Sigorta Birliği. (2009). Motorlu Taşıtlar Sigorta İstatistikleri - Trafik

<https://www.tsb.org.tr/Document/istatistikler/Trafik2009-4.xls>

Türkiye Sigorta Birliği. (2018). Sektör Raporu.

https://tsb.org.tr/media/attachments/2018_Yılı_Sektor_Raporu_Turkce.pdf

Türkiye Sigorta Birliği. (2019a). Motorlu Taşıtlar Sigorta İstatistikleri - Trafik.

<https://www.tsb.org.tr/tr/istatistikler>

Türkiye Sigorta Birliği. (2019b). Trafik Prim Adet. <https://www.tsb.org.tr/tr/istatistikler>

Türkiye Sigorta Birliđi. (2020a). Direkt Endirekt Primler 2020 Kasım.

<https://www.tsb.org.tr/tr/istatistikler>

Türkiye Sigorta Birliđi. (2020b). Üye Şirketler. <https://www.tsb.org.tr/tr/uye-sirketler>

Türkiye Sigorta Birliđi. (2021). Strategy Report 2020 - 2024.

https://tsb.org.tr/media/attachments/20200604_TSB_STRATEJI_ENG_19-sıkıştırıldı.pdf

Türkiye Sigorta Eksperleri Derneđi. (n.d.). Anasayfa.

<http://www.eksperlerdernegi.com/tr/default.html>

Türkiye Sigorta Enstitüsü Vakfı. (n.d.). Anasayfa. <https://www.tsev.org.tr/>

Türkiye Sigorta Enstitüsü Vakfı. (n.d.). Vakıf Senedi. <https://www.tsev.org.tr/sayfa/vakif-senedi>

UNCTAD (2007). Transnational Corporations, Extractive Industries and Development, World

Investment Report 2007, United Nations, New York and Geneva (2007). Pergamon.

https://unctad.org/system/files/official-document/wir2007_en.pdf

Ungern-Sternberg, T. von. (2004). Efficient Monopolies: The Limits of Competition in the

European Property Insurance Market. In Efficient Monopolies: The Limits of Competition

in the European Property Insurance Market. <https://doi.org/10.1093/0199268819.001.0001>

Update in Regulation on Tariff Application Principles in Highways Motor Vehicles Compulsory

Liability Insurance. (2013). Regulation, Official Gazette (28682-19.06.2013).

<https://www.resmigazete.gov.tr/eskiler/2013/06/20130619-2.htm>

Update in Regulation on Tariff Application Principles in Highways Motor Vehicles Compulsory

Liability Insurance. (2017). Regulation, Official Gazette (30121-11.07.2017).

<https://www.resmigazete.gov.tr/eskiler/2017/07/20170711-3.htm>

Uyar, A., Kılıç, M., & Gökçen, B. A. (2016). Compliance with IAS/IFRS and firm characteristics:

Evidence from the emerging capital market of Turkey. Economic Research-Ekonomska

Istrazivanja, 29(1), 148–161. <https://doi.org/10.1080/1331677X.2016.1163949>

- Vachani, S., Doh, J. P., & Teegen, H. (2009). NGOs' influence on MNEs' social development strategies in varying institutional contexts: A transaction cost perspective. *International Business Review*, 18(5), 446–456. <https://doi.org/10.1016/j.ibusrev.2009.05.002>
- Vadlamannati, K. C. (2008). Do Insurance Sector Growth and Reforms Affect Economic Development? Empirical Evidence from India. *Margin*.
<https://doi.org/10.1177/097380100700200102>
- Vernon, R. (1966). International investment and international trade in the product cycle. *Quarterly Journal of Economics*, 80(2), 190–207. <https://doi.org/10.2307/1880689>
- Walder, A. G. (1995). China's Transitional Economy: Interpreting its Significance. *The China Quarterly*, 144, 963–979. <https://doi.org/10.1017/S0305741000004689>
- Warghade, S. (2016). Independent Regulatory Agencies in Water Sector in India: Debate and Discourse. In *Global Issues in Water Policy*. https://doi.org/10.1007/978-3-319-25184-4_6
- Westphal, J. D., & Zajac, E. J. (2001). Decoupling policy from practice: The case of stock repurchase programs. *Administrative Science Quarterly*, 46(2), 202–228.
<https://doi.org/10.2307/2667086>
- Weyland, K. (2006). Bounded rationality and policy diffusion: Social sector reform in Latin America. In *Bounded Rationality and Policy Diffusion: Social Sector Reform in Latin America*. <https://doi.org/10.5860/choice.45-4030>
- Wiesner, E. (2008). The political economy of macroeconomic policy reform in latin America: The distributive and institutional context. In *The Political Economy of Macroeconomic Policy Reform in Latin America: The Distributive and Institutional Context*.
- Williamson, J. (1990). *What Washington Means by Policy Reform*. Peterson Institute for International Economics.
- Williamson, J. (Ed.). (1994). *The political economy of policy reform*. Institute for International Economics Washington, DC.

- Williamson, J. (2003). An Agenda for Restarting Growth and Reform. After the Washington Consensus in “After the Washington Consensus: Restarting Growth and Reform in Latin America” edited by Pedro-Pablo Kuczynski and John Williamson, Peterson Institute Press.
- Williamson, J. (2004). The Washington Consensus as Policy Prescription for Development. Practitioners of Development. <https://doi.org/10.1007/978-3-319-19237-61>
- Williamson, J. (2005). The strange history of the Washington consensus. Journal of Post Keynesian Economics. <https://doi.org/10.1080/01603477.2004.11051438>
- Williamson, J. (2008). A Short History of the Washington Consensus. In The Washington Consensus Reconsidered: Towards a New Global Governance. <https://doi.org/10.1093/acprof:oso/9780199534081.003.0002>
- Witt, M. A., & Lewin, A. Y. (2007). Outward foreign direct investment as escape response to home country institutional constraints. Journal of International Business Studies, 38(4), 579–594. <https://doi.org/10.1057/palgrave.jibs.8400285>
- Working Procedure and Principles of Turkish Motor Insurers’ Bureau. (n.d.). Regulation, Official Gazette (21033-26.10.1991). <https://www.resmigazete.gov.tr/arsiv/21033.pdf>
- Working Procedure and Principles of Turkish Motor Insurers’ Bureau. (n.d.). Regulation, Official Gazette (26920-28.06.2008). <https://www.tmtb.org.tr/Forms/TMTBYonetmelik.pdf>
- Working Procedures and Principles of Agricultural Insurance Pool. (n.d.). Regulation, Official Gazette (26172-18.05.2006). <https://www.resmigazete.gov.tr/eskiler/2006/05/20060518-5.htm>
- Working Procedures and Principles of Turkish Insurance, Reinsurance and Pension Companies Association Regulation. (n.d.). Regulation, Official Gazette (28870-02.01.2014). <https://www.tsb.org.tr/default.aspx?pageID=654&yid=87>
- World Bank. (2009). Doing Business 2009: Comparing Regulation in 181 Economies. The International Bank for Reconstruction and Development.

<https://www.doingbusiness.org/content/dam/doingBusiness/media/Annual-Reports/English/DB09-FullReport.pdf>

World Health Organization, (2018) Global Status Report on Road Safety, Geneva: World Health Organization; 2018. Licence: CC BYNC-SA 3.0 IGO.

World Health Organization. (2020). Road Traffic Injuries. <https://www.who.int/news-room/factsheets/detail/road-traffic-injuries#:~:text=Every%20year%20the%20lives%20of,a%20result%20of%20their%20injury.&text=for%20the%20injured.-,Road%20traffic%20crashes%20cost%20most%20countries,of%20their%20gross%20domestic%20product.>

Xavier, R.A (2009). MTPL System in Brazil in “Motor third-party liability insurance in developing countries: raising awareness and improving safety” edit by Gönülal S.O., World Bank Publications.
<https://openknowledge.worldbank.org/bitstream/handle/10986/12960/699710ESW0P09800liability0insurance.pdf?sequence=1&isAllowed=y>

Yabancı Ortak Değil, Alacak Şirket Arıyoruz. (2017, January 1). Capital.
<https://www.capital.com.tr/finans/sigorta/yabanci-ortak-degil-alacak-sirket-ariyoruz>

Yang, Q., Mudambi, R., & Meyer, K. E. (2008). Conventional and reverse knowledge flows in multinational corporations. *Journal of Management*, 34(5), 882–902.
<https://doi.org/10.1177/0149206308321546>

Yeung, K. (2010). The Regulatory State. In *The Oxford Handbook of Regulation*.
<https://doi.org/10.1093/oxfordhb/9780199560219.003.0004>

Yüksek trafik sigortasını geri alma umudu doğdu. (2016, March 29). *Hürriyet*.
<https://www.hurriyet.com.tr/ekonomi/yuksek-trafik-sigortasini-geri-alma-umudu-dogdu-40077249>

Zingwevu, E., & Sibindi, A. B. (2014). Is compulsory third party motor insurance the panacea for the South African insurance industry? *Corporate Ownership and Control*, 11(4), 657–669. <https://doi.org/10.22495/cocv11i4c7p8>

Zorunlu trafik sigortası esnafı çileden çıkardı. (2013, November 25). *Dünya*. <https://www.dunya.com/ekonomi/quotzorunlu-trafik-sigortasi-esnafi-cileden-cikardiquote-haberi-228333>

Zorunlu trafik sigortası yargıya taşındı. (2016, January 20). *Hürriyet*. <https://www.hurriyet.com.tr/ekonomi/zorunlu-trafik-sigortasi-yargiya-tasindi-40042812>

Zorunlu Trafik Sigortasında Fiyatlar Düştü. (2017, May 29). *Mymemur.Com.Tr*. <https://www.mymemur.com.tr/zorunlu-trafik-sigortasinda-fiyatlar-dustu-87329h.htm>

Zorunlu trafik sigortasında indirim oyunu. (2016, August 24). *Finans.Mynet.Com*. <http://finans.mynet.com/haber/detay/ekonomi/zorunlu-trafik-sigortasinda-indirim-oyunu/121882/>

Zucker, L.G.(1983). Organizations as institutions. In S. B. Bacharach (Ed.), *Research in the sociology of organizations*: 1-42. Greenwich, CT: JAI Press.

Zuckerman, S., & Rajan, S. (1999). An alternative approach to measuring the effects of insurance market reforms. *Inquiry*, 36(1), 44–56.

Zylberberg, A. (2015). The Costs of Flexibility- Enhancing Structural Reforms. *OECD Economics Department Working Papers*, No. 1264, 1264. <https://doi.org/10.1787/5jrs558c5r5f-en>

APPENDIX

Appendix A Insurance Branches in Turkey

Main Branch	No	Sub Branch (EN)	Sub Branch (TR)
Accident	704	Compulsory Personal Accident for Mine Employees	<i>Maden Çalışanları Zorunlu Ferdi Kaza</i>
	718	Compulsory Personal Accident for Bus Passengers	<i>Karayolu Yolcu Taşımacılığı Zor.Koltuk F.K.</i>
	729	Personal Accident for Passenger in Airplane	<i>Uçak Yolcu Kaza</i>
	750	Personal Accident	<i>Ferdi Kaza</i>
	751	Long Term Personal Accident	<i>Uzun Süreli Ferdi Kaza</i>
Health and Sickness	784	Illness	<i>Hastalık</i>
	785	Health	<i>Sağlık Toplam</i>
	904	Health Insurance for Emergency Health Services	<i>Acil Sağlık</i>
	905	Health Insurance for Non-Turkish	<i>Yabancılar için Sağlık</i>
	906	Complementary Health Insurance	<i>Tamamlayıcı Sağlık</i>
	90601	Hospitalisation	<i>Yatarak Tedavi</i>
	90602	Hospitalisation and Outpatients	<i>Yatarak ve Ayakta Tedavi</i>
	907	Health	<i>Sağlık</i>
	90701	Hospitalisation	<i>Yatarak Tedavi</i>
	90702	Hospitalisation and Outpatients	<i>Yatarak ve Ayakta Tedavi</i>
786	Travel Health Insurance	<i>Seyahat Sağlık</i>	
Land Vehicles	717	Motor Own Damage	<i>Motorlu Kara Taşıtları - Kasko</i>
	737	Land Vehicle Which Doesn't Have Engine	<i>Motorlu Kara Taşıtları Dışındaki Kara Taşıtları</i>
Rolling Stock	713	Rolling Stock	<i>Raylı Araçlar</i>
Aviation	727	Aviation - Hull	<i>Uçak Tekne</i>
Ship Hull and Machinery	712	Marine Hull and Machinery	<i>Tekne</i>
	738	Hull and Machinery Insurance for Ships Used in Rivers	<i>Nehir Araçları</i>
	739	Hull and Machinery Insurance for Ships Used in Lakes	<i>Göl Araçları</i>
Marine Goods on Transit	710	Marine Cargo	<i>Emtea</i>
	711	Species	<i>Kıymet</i>
Fire and Allied Perils	701	Fire	<i>Yangın</i>
	900	Personal Lines	<i>Sivil</i>
	901	Commercial Lines	<i>Ticari</i>
	902	Industrial Lines	<i>Sinai</i>
	703	Turkish Catastrophe Insurance Pool (TCIP)	<i>Zorunlu Deprem</i>
	740	Earthquake and Volcanic Eruption	<i>İhtiyari Deprem</i>
	741	Flood	<i>Sel</i>
	742	Natural Disasters Excluding Earthquake and Flood	<i>Deprem ve Sel Dışındaki Doğal Afetler</i>
	743	Nuclear Risks	<i>Nükleer Enerji</i>
	744	Land Slide	<i>Toprak Kayması</i>
761	Fire Explosion	<i>Patlama</i>	
Miscellaneous	723	Glass Breakage	<i>Cam Kırılması</i>
	724	Theft and Burglary	<i>Hırsızlık</i>
	765	Machinery Breakdown	<i>Makine Kırılması</i>
	766	Erection All Risks	<i>Montaj</i>
	767	Construction All Risks	<i>İnşaat</i>
	768	Electronic Equipment	<i>Elektronik Cihaz</i>
	773	Apiculture Insurance Subsidised by Government	<i>Devlet Destekli Arıcılık</i>
	774	Aquaculture Insurance	<i>Su Ürünleri</i>
	775	Agriculture Insurance for Greenhouses	<i>Dolu Sera</i>
	776	Agriculture Insurance for Greenhouses Subsidised by Gov.	<i>Devlet Destekli Sera</i>
	777	Agriculture Insurance Subsidised by Government	<i>Devlet Destekli Bitkisel Ürün</i>
	778	Aquaculture Insurance Subsidised by Government	<i>Devlet Destekli Su Ürünleri</i>
	779	Livestock Insurance	<i>Devlet Destekli Hayvan Hayat</i>
	780	Livestock Insurance Subsidised by Government	<i>Hayvan Hayat</i>
	781	Livestock Insurance for Poultry	<i>Kümes Hayvan Hayat</i>
782	Livestock Insurance for Poultry Subsidised by Government	<i>Devlet Destekli Kümes Hayvan Hayat</i>	
783	Livestock Insurance for Ovine Subsidised by Government	<i>Devlet Destekli Küçükbaş Hayvan Hayat</i>	

Main Branch	No	Sub Branch (EN)	Sub Branch (TR)
Motor Vehicle Third Party Liability	714	Compulsory Third Party Liability for Road Passenger Transport	<i>Zorunlu Karayolu Tasımıcılık Mali Sorumluluk</i>
	715	Motor Vehicles Compulsory Third Party Liability	<i>Zorunlu Trafik (Yeşil Kart Harç)</i>
	903	Greencard	<i>Yeşil Kart</i>
	716	Motor Vehicles Third Party Liability	<i>Motorlu Kara Taşıtları İhtiyari Mali Sorumluluk</i>
Aviation Liability	728	Aviation Liability	<i>Uçak Mali Mesuliyet</i>
Marine Liability	735	Marine Liability	<i>Tekne Sorumluluk</i>
General Liability	719	Employer's Liability	<i>İşveren Mali Sorumluluk</i>
	720	Third Party Liability	<i>Üçüncü Şahıslara Karşı Mali Sorumluluk</i>
	721	Third Party Liability for Elevator Accidents	<i>Asansör Kaza Üçüncü Şahıslara Karşı Mali Sorumluluk</i>
	722	Environmental Pollution Liability	<i>Çevre Kirliliği Mali Sorumluluk</i>
	725	Compulsory Product Liability for LPG	<i>Tüpgaz Zorunlu Sorumluluk</i>
	726	Compulsory Third Party Liability for Dangerous Materials	<i>Tehlikeli Maddeler Zorunlu Sorumluluk</i>
	730	Compulsory Medical Malpractice	<i>Tıbbi Kötü Uygulamaya İşkin ZMSS</i>
	731	Compulsory Third Party Liability for Private Security	<i>Özel Güvenlik Mali Sorumluluk</i>
	732	Compulsory Professional Liability for Accreditation	<i>Zorunlu Sertifika Mali Sorumluluk</i>
	733	Professional Liability	<i>Mesleki Sorumluluk</i>
	734	Onshore Plants Sea Pollution Compulsory Environmental Liability	<i>Kıyı Tesisleri Deniz Kirliliği Zorunlu Mali Sorumluluk</i>
	769	Compulsory Decennial Liability	<i>Yapı Denetimi Zorunlu Mali Sorumluluk</i>
	770	Compulsory P & I	<i>Denizyolu Yolcu Taşımacılığı Zorunlu Mali Sorumluluk</i>
771	Product Responsibility	<i>Ürün Sorumluluk</i>	
Credit	707	Credit Insurance Supported by Government	<i>Devlet Destekli Alacak Sigortaları</i>
	745	Credit in Installments	<i>Taksitli Kredi</i>
	746	Mortgage	<i>Uzun Vadeli Konut Kredisi</i>
	747	Credit for Agriculture	<i>Tarım Kredisi</i>
	755	Credit	<i>Kredi</i>
	756	Credit for Export	<i>İhracat Kredi</i>
Bond Insurance	705	Direct Bond Insurance	<i>Doğrudan Kefalet</i>
	706	Indirect Bond Insurance	<i>Dolaylı Kefalet</i>
	708	Building Completion	<i>Bina Tamamlama</i>
	736	Abuse of Confidence	<i>Doğrudan Kefalet</i>
Financial Lines	702	Loss of Profit	<i>Kar Kaybı</i>
	748	Employment	<i>İstihdam</i>
	749	Income Gap	<i>Gelir Yetersizliği</i>
	752	Weather Conditions	<i>Hava Şartları</i>
	753	Others	<i>Genel Giderler</i>
	754	Unexpected Expenses	<i>Beklenmeyen Ticari Giderler</i>
	757	Capital Loss	<i>Piyasa Değerindeki Kayıp</i>
	758	Loss of Rent	<i>Kira Ve Gelir Kaybı</i>
759	Other Financial Losses	<i>Diğer Finansal Kayıplar</i>	
Legal Protection	760	Legal Protection	<i>Hukuksal Koruma</i>
Assistance	789	Travel , Vehicle Assistance	<i>Seyahat Araç Destek</i>
	798	Assistance	<i>Destek Genel</i>
Life	790	Annuity	<i>İrat Ödemeleri</i>
	791	Others	<i>Diğerleri</i>
	792	Marriage & Birth Insurance	<i>Evlilik/Doğum Sigortası</i>
	793	Unit Linked	<i>Yatırım Fonlu Sigortalar</i>
	794	Capital Redemption	<i>Sermaye İtfa Sigortası</i>
	795	Management of Pension Funds	<i>Fon Yönetim Sigortası</i>
	796	Illness	<i>Hastalık</i>
	797	Health	<i>Sağlık Toplam</i>
799	Tontine	<i>Tontin</i>	

Source: <https://www.tsb.org.tr/official-statistics.aspx?pageID=1003>

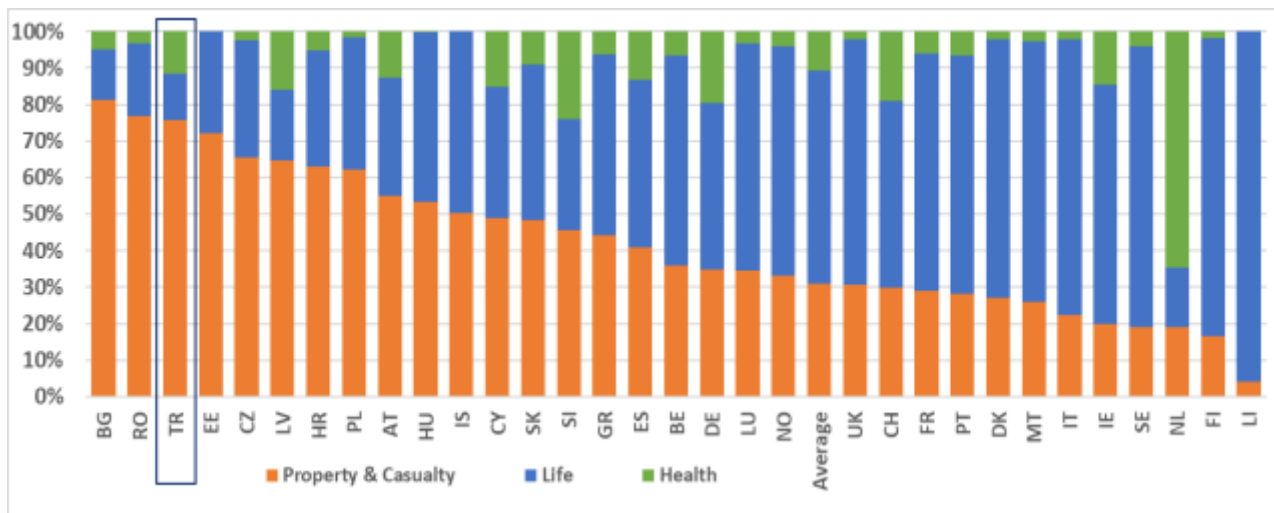
Appendix B Composition of Insurance Market

Table B1 Composition of Turkish Insurance Market

Segment1	Segment2	Segment3	Branch Name	Share in Total (%)	Share in None Life (%)
Non-Life	Property & Casualty	Motor	Motor Third Party Liability (MTPL) - Traffic-	32,3%	38,6%
			Motor Own Damage (MOD) - Land Vehicles-	16,3%	19,5%
		Other	Fire & Earthquake	14,6%	17,5%
			Other	6,0%	7,2%
	Health	Health	14,4%	17,2%	
Life	Life	Life	Life	16,4%	-

Source: [https://www.tsb.org.tr/Document/istatistikler/1%20Direkt%20Endirekt%20Primler%202019-12%20\(11110Ay122019\).xlsx](https://www.tsb.org.tr/Document/istatistikler/1%20Direkt%20Endirekt%20Primler%202019-12%20(11110Ay122019).xlsx)

Figure B2 Composition of European Insurance Market



Source: <https://www.insuranceurope.eu/sites/default/files/assets/DatabaseAugust2020-Total.xlsx>

Appendix C Premium Growth

Table C1 Development of Gross Written Premiums in Turkey

	2013	2014	2015	2016	2017	2018	2019
Premiums (mn TRL)	24.228	25.991	30.829	40.489	46.579	54.663	69.242
Change	22,2%	6,8%	15,7%	23,9%	13,1%	14,8%	21,1%
Premiums (mn USD)	12.670	11.861	11.310	13.411	12.819	11.356	12.212
Change	15,3%	-6,8%	-4,9%	15,7%	-4,6%	-12,9%	7,0%
Inflation (Consumer Prices)	7,4%	8,2%	8,8%	8,5%	11,9%	20,3%	11,8%

Sources:

Premiums (mn TRL) from Turkish Insurance Association (TSB)

Premiums (mn USD) calculated by dividing Premiums (mn TRL) to the average exchange rates

(<https://www.tcmb.gov.tr/wps/wcm/connect/TR/TCMB+TR/Main+Menu/Istatistikler/Doviz+Kurlari/Gosterge+Nite+ligindeki+Merkez+Bankasi+Kurlarii/>)

Inflation (Consumer Prices) from

<https://www.tcmb.gov.tr/wps/wcm/connect/TR/TCMB+TR/Main+Menu/Istatistikler/Enflasyon+Verileri>

Table C2 Development of Pension Funds in Turkey

	2013	2014	2015	2016	2017	2018	2019
# of Participants (th)	4.153	5.092	6.038	6.625	6.925	6.878	6.871
Change in # of Participants	32,8%	18,4%	15,7%	8,9%	4,3%	-0,7%	-0,1%
Participants' Fund (mn TRL)	25.146	34.793	42.979	53.409	67.677	76.962	101.883
Change in Participants' Fund	23,0%	27,7%	19,0%	19,5%	21,1%	12,1%	24,5%

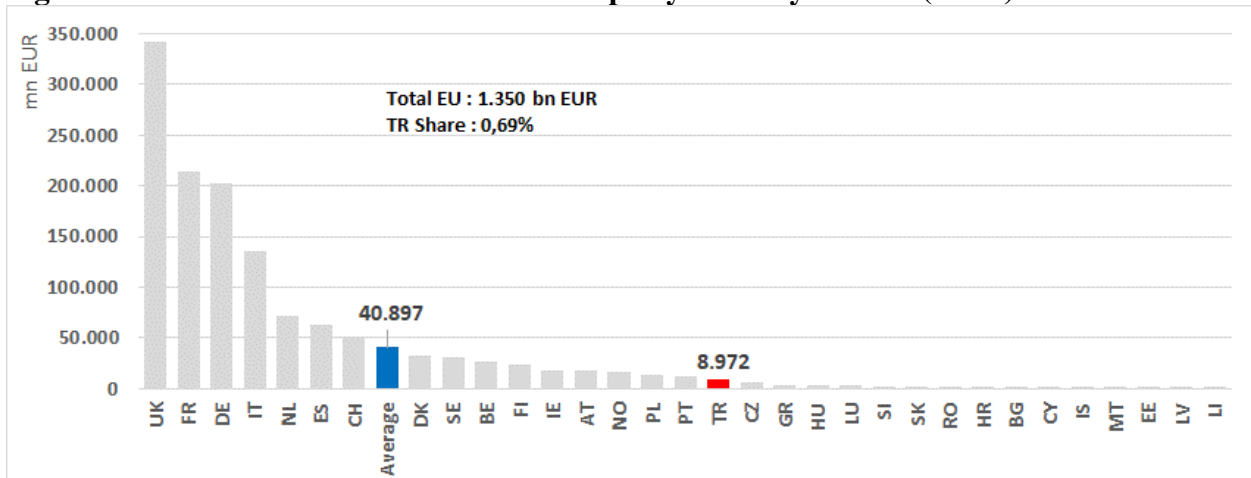
Source: Pension Monitoring Centre (EGM)

Table C3 Development of Gross Written Premium in the World

	2010	2011	2012	2013	2014	2015	2016	2017	2018
Premiums (bn USD)	4.310	4.574	4.614	4.615	4.784	4.602	4.695	4.958	5.193
Change	5,4%	6,1%	0,9%	0,0%	3,7%	-3,8%	2,0%	5,6%	4,8%

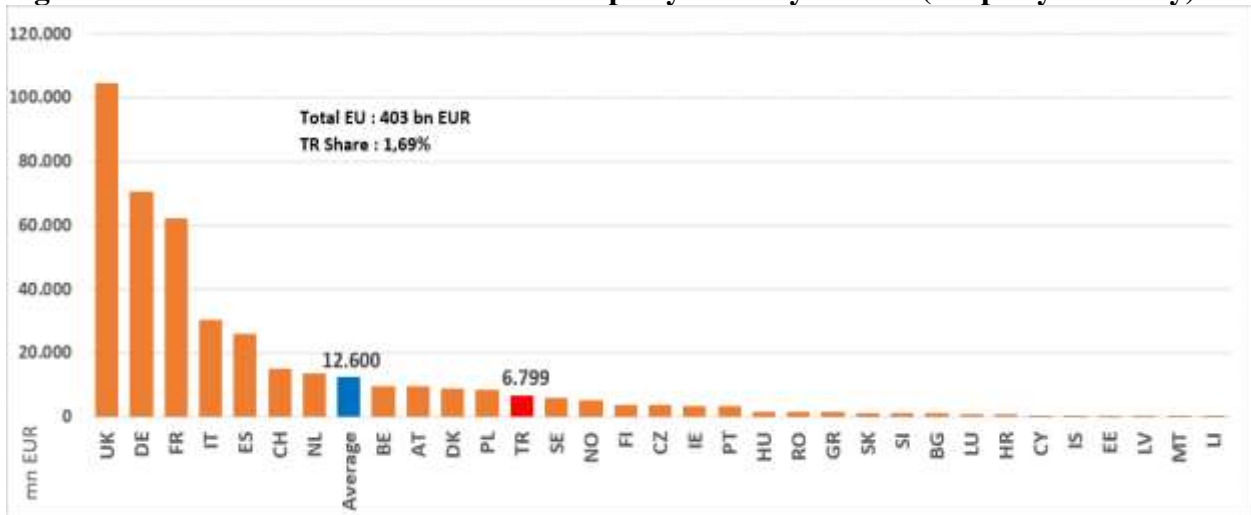
Source: <https://www.insuranceeurope.eu/sites/default/files/assets/DatabaseAugust2020-Total.xlsx>

Figure C4 Gross Written Premiums in Europe by Country in 2019 (Total)



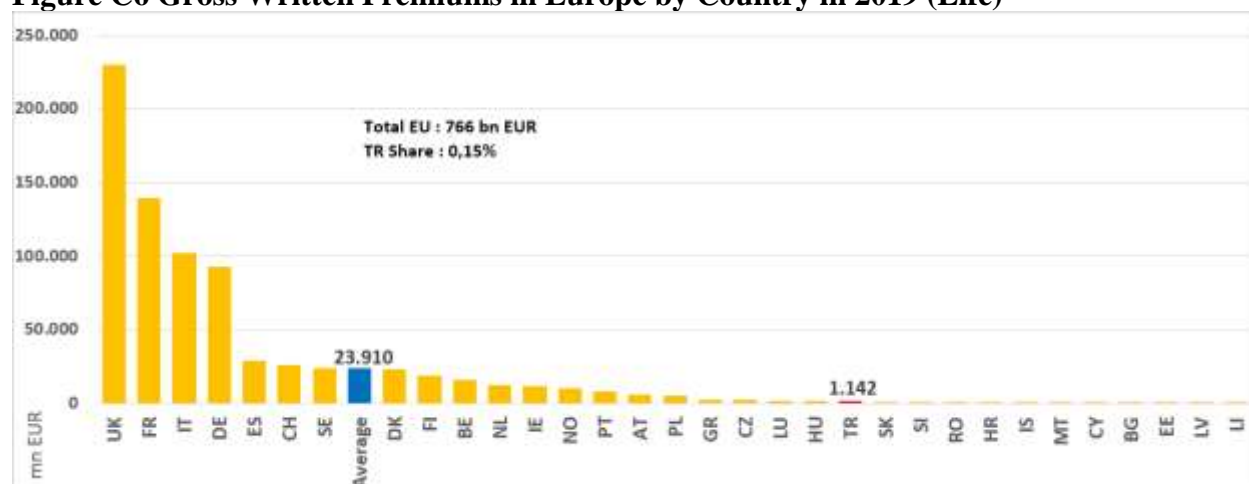
Source: <https://www.insuranceurope.eu/sites/default/files/assets/DatabaseAugust2020-Total.xlsx>

Figure C5 Gross Written Premiums in Europe by Country in 2019 (Property-Casualty)



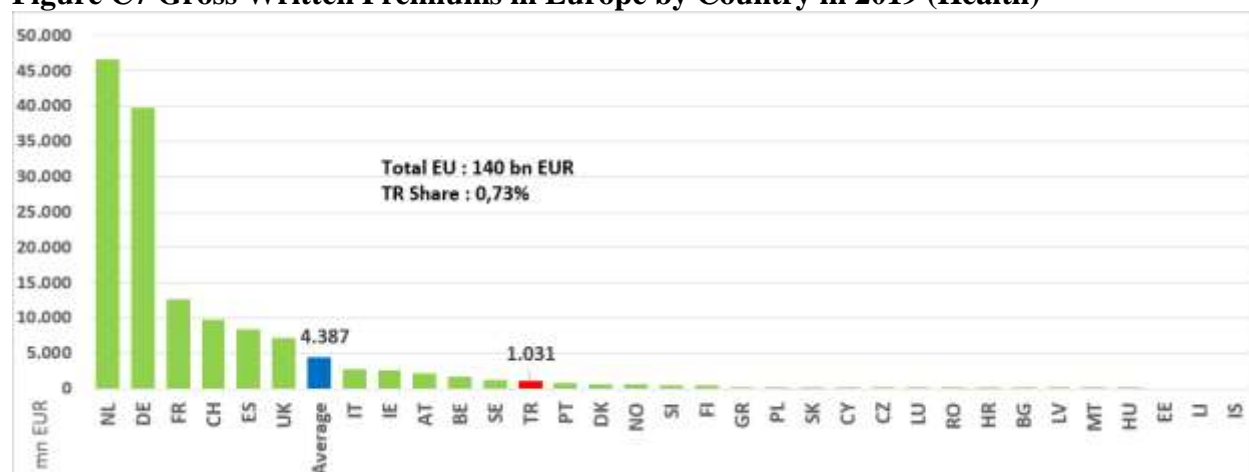
Source: <https://www.insuranceurope.eu/sites/default/files/assets/DatabaseAugust2020-Total.xlsx>

Figure C6 Gross Written Premiums in Europe by Country in 2019 (Life)



Source: <https://www.insuranceurope.eu/sites/default/files/assets/DatabaseAugust2020-Total.xlsx>

Figure C7 Gross Written Premiums in Europe by Country in 2019 (Health)



Source: <https://www.insuranceurope.eu/sites/default/files/assets/DatabaseAugust2020-Total.xlsx>

Table C8 Development of Gross Written Premiums in Europe (EUR)

	2010	2011	2012	2013	2014	2015	2016	2017	2018
Life Premium	677	637	632	649	703	736	685	718	765
P&C Premium	319	325	332	332	334	349	372	385	403
Health Premium	108	113	116	119	120	126	128	134	140
Premiums (bn EUR)	1.104	1.075	1.080	1.103	1.157	1.211	1.185	1.237	1.308
Change	2,7%	-3,3%	-0,5%	3,1%	3,8%	2,7%	1,0%	5,9%	6,2%

Source: <https://www.insuranceurope.eu/sites/default/files/assets/DatabaseAugust2020-Total.xlsx>

Table C9 Growth of Gross Written Premiums in Europe by segments

	2010	2011	2012	2013	2014	2015	2016	2017	2018
Life	4,4%	-5,9%	-0,8%	3,0%	7,7%	5,0%	-5,8%	3,6%	6,5%
Health	6,6%	4,5%	2,3%	2,2%	1,4%	4,7%	2,0%	2,4%	4,8%
Property & Casualty	3,5%	1,8%	2,2%	-0,1%	0,3%	4,9%	11,0%	-0,6%	4,6%

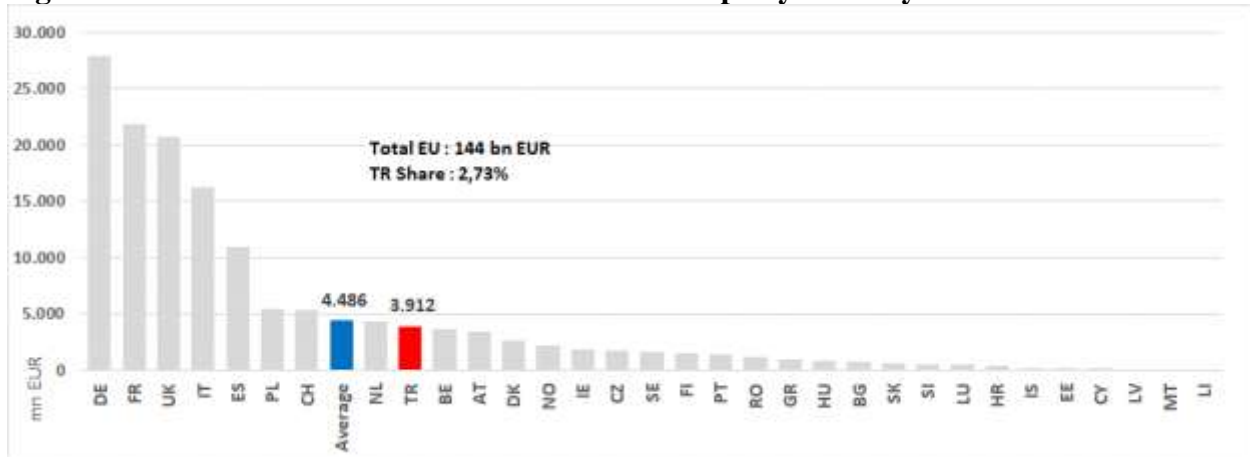
Source: <https://www.insuranceeurope.eu/sites/default/files/assets/DatabaseAugust2020-Total.xlsx>

Table C10 Development of Gross Written Premiums in Europe (USD)

	2010	2011	2012	2013	2014	2015	2016	2017	2018
Premiums (bn USD)	1.602	1.640	1.552	1.631	1.713	1.509	1.457	1.546	1.641
Change	0,1%	2,4%	-5,4%	5,1%	5,1%	-11,9%	-3,4%	6,1%	6,1%

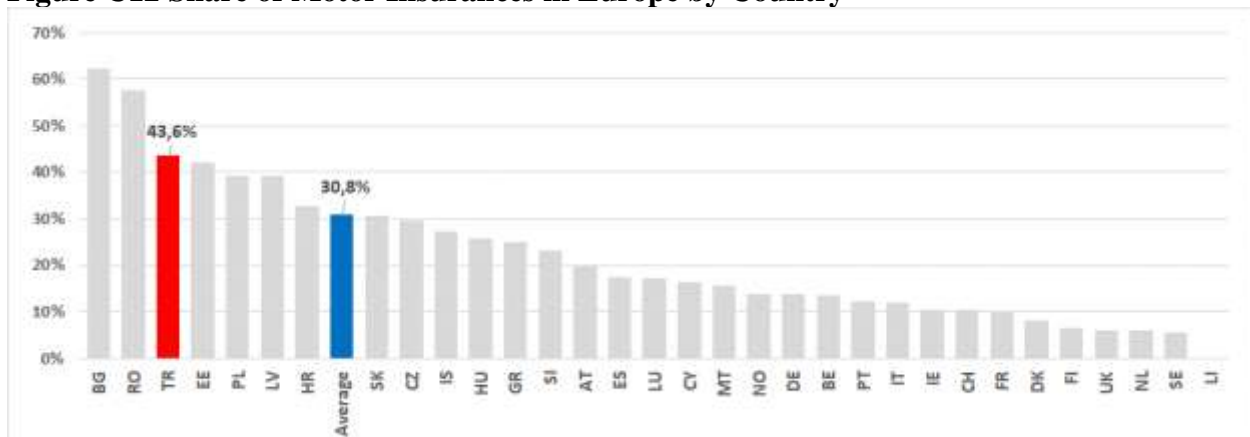
Source: <https://www.insuranceeurope.eu/sites/default/files/assets/DatabaseAugust2020-Total.xlsx>

Figure C11 Motor Gross Written Premiums in Europe by Country



Source: <https://www.insuranceeurope.eu/sites/default/files/assets/DatabaseAugust2020-P%26C.xlsx>

Figure C12 Share of Motor Insurances in Europe by Country



Source: <https://www.insuranceeurope.eu/sites/default/files/assets/DatabaseAugust2020-P%26C.xlsx>

Table C13 Development of Motor Insurance in Europe and in Turkey

	2010	2011	2012	2013	2014	2015	2016	2017	2018
GWP, Motor, Turkey (I) bn EUR	2,8	2,9	3,7	4,1	3,7	4,3	5,7	4,8	3,9
GWP, Motor, Europe (II) bn EUR	125	127	130	128	128	133	135	140	144
GWP, P&C, Turkey (III) bn EUR	5,1	5,3	6,4	7,2	6,8	7,8	9,3	8,4	6,8
GWP, P&C, Europe (IV) bn EUR	319	325	332	332	333	349	388	385	403
Turkey share in Europe, Motor (I/II)	2,3%	2,3%	2,8%	3,2%	2,9%	3,2%	4,2%	3,5%	2,7%
Motor share in P&C, Turkey (I/III)	55,4%	54,3%	57,1%	56,9%	53,7%	55,2%	61,2%	57,6%	57,5%
Motor share in P&C, Europe (II/IV)	39,1%	39,1%	39,2%	38,6%	38,4%	38,0%	34,9%	36,3%	35,6%

Source: <https://www.insuranceurope.eu/sites/default/files/assets/DatabaseAugust2020-P%26C.xlsx>

Table C14 Development of MTPL Share in Motor in Europe

	2008	2009	2010	2011	2012	2013	2014	2015	2016
GWP, MTPL Europe (bn EUR)	62,5	61,0	61,8	62,9	64,6	60,3	58,3	59,0	61,1
GWP, Motor Europe (bn EUR)	122,5	121,4	124,7	128,1	131,2	128,2	128,8	133,3	135,3
Share of MTPL in Motor	51,0%	50,3%	49,6%	49,1%	49,2%	47,1%	45,3%	44,3%	45,1%

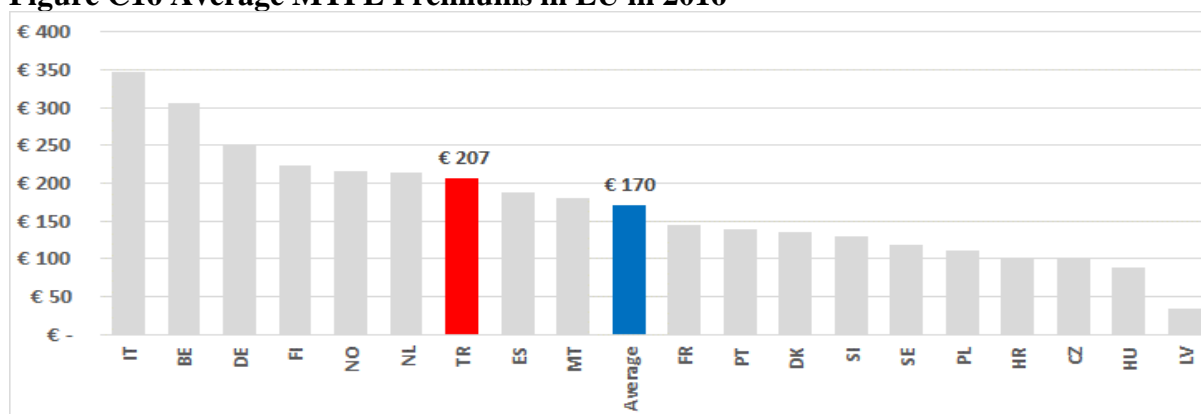
Source: <https://www.insuranceurope.eu/sites/default/files/assets/Motor%20database%20publish.xlsx>

Table C15 Development of MTPL Share in Motor in Turkey

	2008	2009	2010	2011	2012	2013	2014	2015	2016
GWP, MTPL Turkey (mn EUR)	845	915	1.114	1.105	1.529	1.677	1.791	2.315	3.498
GWP, Motor Turkey (mn EUR)	2.286	2.244	2.737	2.768	3.597	3.517	3.749	4.105	5.153
Share of MTPL in Motor	36,9%	40,8%	40,7%	39,9%	42,5%	47,7%	47,8%	56,4%	67,9%

Source: <https://www.insuranceurope.eu/sites/default/files/assets/Motor%20database%20publish.xlsx>

Figure C16 Average MTPL Premiums in EU in 2016



Source: <https://www.insuranceurope.eu/sites/default/files/assets/Motor%20database%20publish.xlsx>

Table C17 Development of Average MTPL Premium in Europe and in Turkey

EUR	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Avg. MTPL Premium, Europe	244	238	230	223	212	208	209	210	210	203	203	205
Avg. MTPL Premium, Turkey	37	36	42	47	49	53	55	70	94	85	125	207

Source:

<https://www.insuranceurope.eu/sites/default/files/assets/Motor%20database%20publish.xlsx>

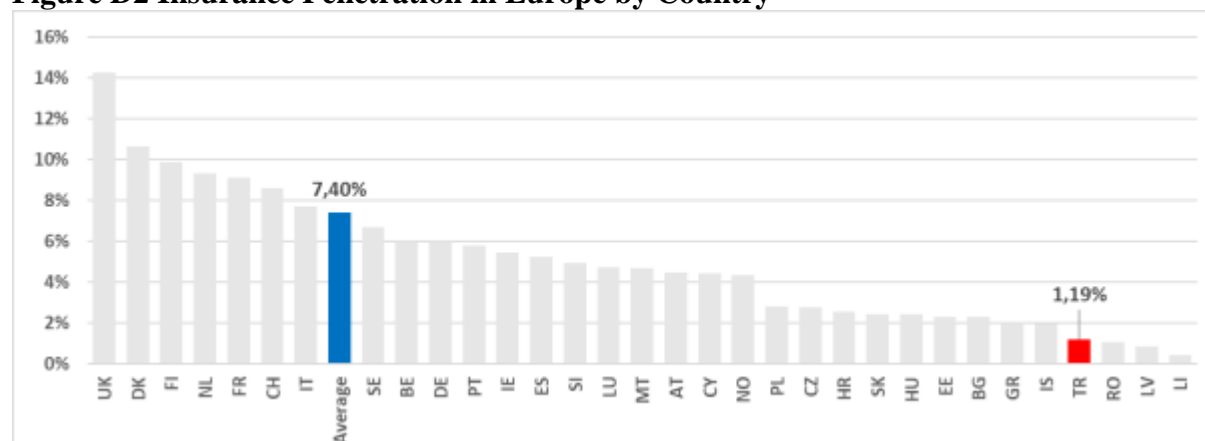
Appendix D Penetration

Table D1 Development of Insurance Penetration in Turkey

	2013	2014	2015	2016	2017	2018	2019
GDP (mn USD)	950.580	934.190	859.800	863.720	852.680	771.350	754.410
Change	8,1%	-1,8%	-8,7%	0,5%	-1,3%	-10,5%	-2,2%
Premiums / GDP	1,3%	1,3%	1,3%	1,6%	1,5%	1,5%	1,6%

Source: GDP (mn USD) from <https://tradingeconomics.com/turkey/gdp>

Figure D2 Insurance Penetration in Europe by Country



Source: <https://www.insuranceeurope.eu/sites/default/files/assets/DatabaseAugust2020-Total.xlsx>

Table D3 Development of Insurance Penetration in Europe

	2010	2011	2012	2013	2014	2015	2016	2017	2018
<i>Life Penetration</i>	4,7%	4,3%	4,1%	4,2%	4,3%	4,2%	4,1%	4,2%	4,4%
<i>PC Penetration</i>	2,2%	2,2%	2,1%	2,1%	2,0%	2,0%	2,3%	2,2%	2,3%
<i>Health Penetration</i>	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%
Average Penetration	7,6%	7,2%	7,0%	7,1%	7,2%	7,0%	7,0%	7,2%	7,4%
Change	-0,2%	-0,5%	-0,2%	0,1%	0,1%	-0,2%	0,0%	0,2%	0,2%

Sources:

<https://www.insuranceeurope.eu/sites/default/files/assets/DatabaseAugust2020-Life.xlsx>

<https://www.insuranceeurope.eu/sites/default/files/assets/DatabaseAugust2020-P%26C.xlsx>

<https://www.insuranceeurope.eu/sites/default/files/assets/DatabaseAugust2020-Health.xlsx>

Table D4 Development of Motor Insurance Penetration in Europe and Turkey

	2010	2011	2012	2013	2014	2015	2016	2017	2018
Motor Penetration, Europe	0,86%	0,85%	0,83%	0,82%	0,79%	0,77%	0,79%	0,81%	0,82%
Motor Penetration, Turkey	0,16%	0,19%	0,21%	0,24%	0,25%	0,28%	0,40%	0,44%	0,52%

Source: <https://www.insuranceeurope.eu/sites/default/files/assets/DatabaseAugust2020-P%26C.xlsx>

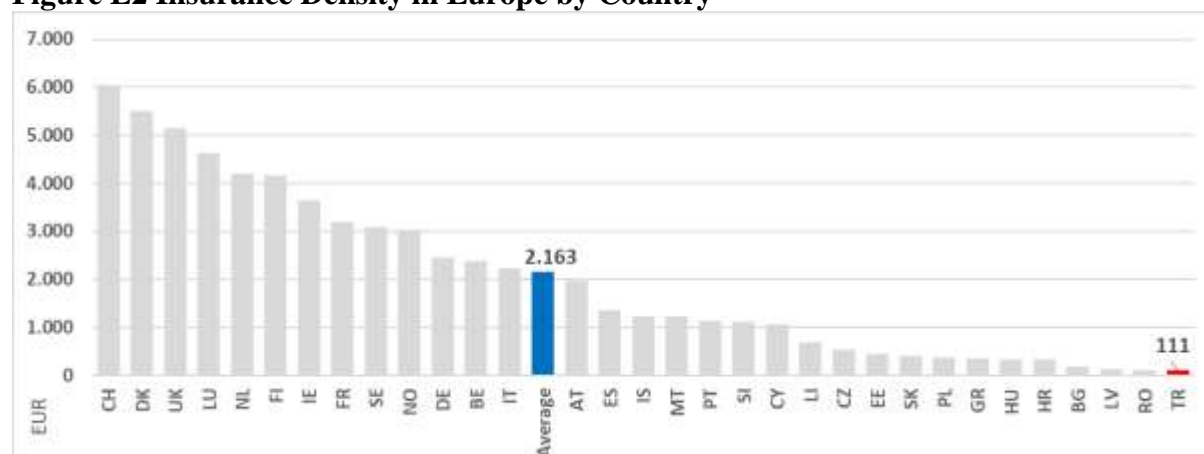
Appendix E Density

Table E1 Development of Insurance Density in Turkey

USD	2012	2013	2014	2015	2016	2017	2018
Premium per capita (total)	146	168	151	145	162	152	126
Premium per capita (Non-Life)	123	141	131	128	137	125	105
Premium per capita (Life)	23	26	19	17	25	27	21

Source: <https://stats.oecd.org/viewhtml.aspx?datasetcode=INSIND&lang=en#>

Figure E2 Insurance Density in Europe by Country



Source: <https://www.insuranceeurope.eu/sites/default/files/assets/DatabaseAugust2020-Total.xlsx>

Table E3 Development of Insurance Density in Europe

	2010	2011	2012	2013	2014	2015	2016	2017	2018
Life Density	1.142	1.063	1.040	1.078	1.141	1.168	1.137	1.189	1.266
PC Density	533	540	545	547	541	556	630	634	667
Health Density	187	194	197	202	203	209	214	220	230
Density (EUR)	1.859	1.794	1.779	1.827	1.887	1.928	1.938	2.043	2.163
Change	2,3%	-3,5%	-0,9%	2,7%	3,3%	2,2%	0,5%	5,4%	5,8%

Source: <https://www.insuranceeurope.eu/sites/default/files/assets/DatabaseAugust2020-Total.xlsx>

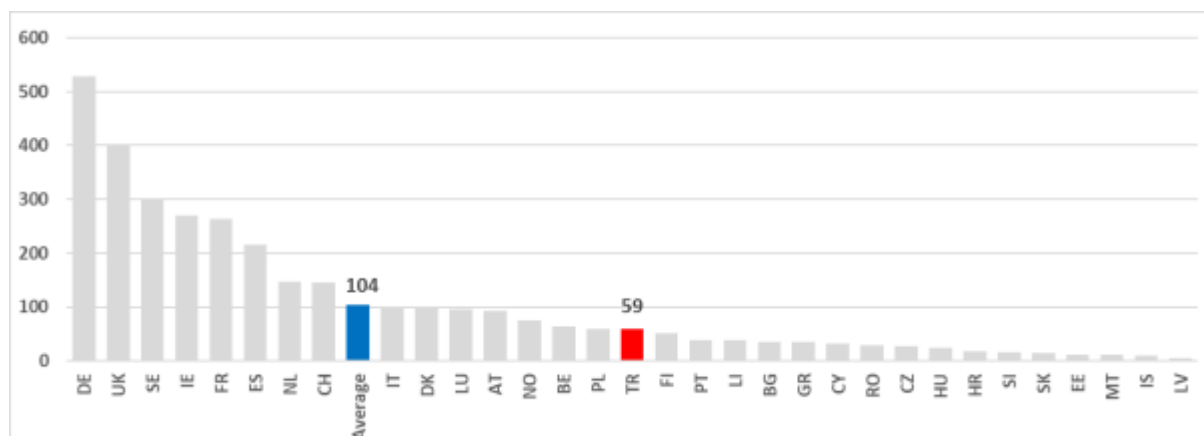
Table E4 Development of Motor Insurance Density in Europe and in Turkey

	2010	2011	2012	2013	2014	2015	2016	2017	2018
Motor Density, Europe -EUR	208	211	213	210	208	212	219	229	237
Motor Density, Turkey -EUR	13	15	19	23	23	28	40	41	48

Source: <https://www.insuranceeurope.eu/sites/default/files/assets/DatabaseAugust2020-Total.xlsx>

Appendix F Insurance Companies

Figure F1 Number of Insurance Companies in Europe by Country



Source: <https://www.insuranceeurope.eu/sites/default/files/assets/DatabaseAugust2020-Total.xlsx>

Table F2 Development of the Number of Insurance Companies in Europe

	2010	2011	2012	2013	2014	2015	2016	2017	2018
# of Companies	4.006	4.005	3.890	3.950	3.667	3.597	3.478	3.408	3.321
Change	-1,0%	0,0%	-2,9%	1,5%	-7,2%	-1,9%	-3,3%	-2,0%	-2,6%

Source: <https://www.insuranceeurope.eu/sites/default/files/assets/DatabaseAugust2020-Total.xlsx>

Table F3 Development of Motor Insurance Companies in Europe and in Turkey

Motor	2008	2009	2010	2011	2012	2013	2014	2015	2016
# of Companies, Europe	870	858	852	836	836	853	839	809	786
# of Companies, Turkey	30	28	29	30	31	31	34	32	33

Source: <https://www.insuranceeurope.eu/sites/default/files/assets/Motor%20database%20publish.xlsx>

Appendix G Motor Vehicles and Motorization Rate

Table G1 Development of Motor Vehicles in Europe and in Turkey

mn	2014	2015	2016	2017	2018
Total Motor Vehicles, Europe	356,1	362,3	370,5	378,7	386,4
Total Motor Vehicles, Turkey	14,4	15,4	16,3	17,3	17,8

Source: https://www.acea.be/uploads/publications/ACEA_Report_Vehicles_in_use-Europe_2019.pdf

Table G2 Development of Motorization in Europe and in Turkey

per 1.000 inhabitant	2014	2015	2016	2017	2018
Motorization Rate, Europe	417	423	430	438	446
Motorization Rate, Turkey	129	136	144	151	153

Source: https://www.acea.be/uploads/publications/ACEA_Report_Vehicles_in_use-Europe_2019.pdf

Appendix H Claims

Table H1 Development of MTPL Claim Frequency in Europe and in Turkey

MTPL	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Claim Frequency, Europe	6,2%	6,1%	6,1%	6,1%	6,2%	5,8%	5,4%	5,2%	5,2%	5,1%	5,1%
Claim Frequency, Turkey	5,8%	7,4%	8,3%	9,4%	9,5%	9,2%	9,1%	8,1%	6,9%	7,9%	7,5%

Source: <https://www.insuranceeurope.eu/sites/default/files/assets/Motor%20database%20publish.xlsx>

Table H2 Development of Bodily Injury Claim Frequency in Europe and in Turkey

MTPL-Bodily Injury	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Claim Frequency, Europe	0,83%	0,80%	0,79%	0,78%	0,78%	0,80%	0,69%	0,57%	0,53%	0,53%	0,58%	0,60%
Claim Frequency, Turkey	0,23%	0,23%	0,43%	0,54%	0,87%	1,38%	0,61%	0,26%	0,27%	0,27%	1,04%	1,28%

Source:

<https://www.insuranceeurope.eu/sites/default/files/attachments/European%20Motor%20Insurance%20Markets%202019.pdf>

Appendix I Leakage

Table I1 Leakage Rates by Vehicle Types in Turkey

November, 2020	Automobile	Minibus	Bus	Small Truck	Truck	Tractor	Motorbike	TOTAL
# of vehicle (thn)	13.044	494	213	3.927	859	1.953	3.506	23.995
Leakage Ratio	6,9%	21,7%	29,9%	11,6%	24,4%	44,5%	67,0%	20,6%
# of uninsured (thn)	895	107	64	456	209	869	2.347	4.947
Leakage Distribution	18,1%	2,2%	1,3%	9,2%	4,2%	17,6%	47,5%	100,0%

Sources:

of vehicle (thn) : <https://www.sbm.org.tr/tr/trafik-sigortasi-raporlari> accessed 05.01.2021

Leakage Ratio. <https://www.sbm.org.tr/tr/trafik-sigortasi-raporlari> accessed 05.01.2021

Leakage Ratio TOTAL : Calculated by # of uninsured total / # of vehicle total

of uninsured (thn) Calculated by # of vehicle * Leakage Ratio

Leakage Distribution Calculated by # of uninsured / # of uninsured total

Table I2 Leakage Rates by Highest Vehicle Numbers

November, 2020	İstanbul	Ankara	İzmir	Antalya	Bursa	Konya	Adana	İçel	Manisa	G.Antep
# of vehicle (thn)	4.363	2.149	1.490	1.156	945	744	682	646	610	538
Leakage Ratio	12,7%	11,0%	22,2%	23,8%	17,6%	27,0%	24,7%	23,6%	33,4%	27,3%
# of uninsured (thn)	555	237	331	275	167	201	169	152	204	147

Source: <https://www.sbm.org.tr/tr/trafik-sigortasi-raporlari> accessed 05.01.2021

Appendix J Insurance Companies and Licenses

Table J1 Non-Life Companies

	Accident	Health and Sickness	Land Vehicles	Rolling Stock	Aviation	Ship Hull and Machinery	Marine Goods on Transit	Fire and Allied Perils	Miscellaneous	Motor Vehicle	Third Party	Aviation Liability	Marine Liability	General Liability	Credit	Bond Insurance	Financial Lines	Legal Protection	Assistance	TOTAL License	
AK Sigorta A.Ş.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18	100%
Allianz Sigorta A.Ş.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17	94%
Anadolu Anonim Türk Sigorta Şirketi	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17	94%
Ankara Anonim Türk Sigorta Şirketi	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17	94%
Atradius Credit Insurance N.V.-Türkiye İstan															x					1	6%
Axa Sigorta A.Ş.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17	94%
Bereket Sigorta A.Ş.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17	94%
BNP Paribas Cardif Sigorta A.Ş.	x	x							x					x			x	x		6	33%
CHUBB European Group SE Merkezi Fransa T	x	x		x	x	x	x	x					x	x	x	x	x	x	x	15	83%
Coface Sigorta A.Ş.															x					1	6%
Doga Sigorta A.Ş.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17	94%
Dubai Sigorta A.Ş. ²	x	x	x	x	x	x	x	x			x	x	x	x	x	x	x	x	x	17	94%
Ethica Sigorta A.Ş.	x	x	x			x	x	x	x	x			x	x		x	x	x	x	14	78%
Euler Hermes Sigorta A.Ş.															x	x				2	11%
Eureko Sigorta A.Ş.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17	94%
Generali Sigorta A.Ş.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17	94%
Groupama Sigorta A.Ş.	x	x	x	x	x	x	x	x	x	x	x	x	x			x	x	x		16	89%
Gulf Sigorta A.Ş.	x	x	x	x	x	x	x	x			x	x	x	x	x	x	x	x	x	17	94%
HDI Sigorta A.Ş. ¹	x	x	x	x	x	x	x	x	x	x	x	x	x			x	x	x		16	89%
Koru Sigorta A.Ş.	x	x	x			x	x	x	x	x			x	x		x	x	x	x	14	78%
Magdeburger Sigorta A.Ş.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18	100%
Mapfre Sigorta A.Ş.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17	94%
Neova Sigorta A.Ş.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18	100%
Orient Sigorta A.Ş.	x	x	x	x	x	x	x	x			x	x	x	x	x	x	x	x	x	17	94%
Quick Sigorta A.Ş.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18	100%
Ray Sigorta A.Ş.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17	94%
S.S. Atlas Sigorta Kooperatifi	x	x	x			x	x	x	x								x	x	x	11	61%
Şeker Sigorta A.Ş.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17	94%
Sompo Sigorta A.Ş.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18	100%
Corpus Sigorta A.Ş.	x	x	x	x	x	x	x	x	x	x	x	x	x			x	x			15	83%
Türk Nippon Sigorta A.Ş.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17	94%
Türk P&I Sigorta A.Ş.						x							x							2	11%
Unico Sigorta A.Ş.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17	94%
Zurich Sigorta A.Ş.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17	94%
S.S. Tüm Motorlu Taşıyıcılar Karşılıklı Sigorta			x				x													2	11%
Ana Sigorta A.Ş.	x	x	x					x	x	x				x	x	x				9	50%
Bereket Katılım Sigorta A.Ş.	x	x	x				x	x	x					x		x	x	x		10	56%
Türkiye Sigorta A.Ş. ⁴	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18	100%
GRI Sigorta A.Ş.	x		x					x	x					x						5	28%
Total License	34	33	33	27	27	31	32	33	34	26	26	30	33	28	33	33	32	31	13		
	87%	85%	85%	69%	69%	79%	82%	85%	87%	67%	67%	77%	85%	72%	85%	82%	79%	33%			

Source: <https://ms.hmb.gov.tr/uploads/2020/10/Sigorta-ve-Reas%C3%BCrans-%C5%9Eirketleri-ile-Emeklilik-%C5%9Eirketlerinin-Ruhsat-Sahibi-Oldu%C4%9Fu-Bran%C5%9Flar%C4%B1-G%C3%B6sterir-Tablo-26.10.2020.xlsx> (accessed 08/12/2020)

Table J2 Life and Pension Companies

	Life Annuity	Health	Illness	Personal Accident	Marriage & Birth	Capital Redemption	Management of Pension	Unit Linked	Tontine	TOTAL License	
BUPA Acıbadem Sigorta A.Ş.	1	1	1	1	1	1	1			7	78%
Aegon Emeklilik ve Hayat A.Ş.	1	1	1	1	1	1	1	1		8	89%
Allianz Hayat ve Emeklilik A.Ş.	1			1	1	1	1	1		6	67%
Allianz Yaşam ve Emeklilik A.Ş.	1			1	1	1	1	1		6	67%
Anadolu Hayat Emeklilik A.Ş.	1	1	1	1	1	1	1	1	1	9	100%
Avivasa Emeklilik ve Hayat A.Ş.	1			1	1	1	1	1		6	67%
Axa Hayat ve Emeklilik A.Ş.	1			1	1	1	1	1		6	67%
Bereket Emeklilik ve Hayat A.Ş.	1			1	1	1	1	1	1	7	78%
BNP Paribas Cardif Emeklilik A.Ş.	1			1	1	1	1	1		6	67%
BNP Paribas Cardif Hayat Sigorta A.Ş.	1	1	1	1	1	1	1			7	78%
Cigna Sağlık Hayat ve Emeklilik A.Ş.3	1	1	1	1	1	1		1		7	78%
Demir Sağlık ve Hayat Sigorta A.Ş.	1	1	1	1	1	1	1			7	78%
Fiba Emeklilik ve Hayat A.Ş.	1	1	1	1	1	1	1	1		8	89%
Garanti Emeklilik ve Hayat A.Ş.	1			1	1	1	1	1		6	67%
Groupama Emeklilik A.Ş.	1			1	1	1	1	1		6	67%
Katılım Emeklilik ve Hayat A.Ş.	1	1	1	1	1	1	1	1		8	89%
Mapfre Yaşam Sigorta A.Ş.	1	1	1	1	1	1	1			7	78%
Met Life Emeklilik ve Hayat A.Ş.	1			1	1	1	1	1		6	67%
NN Hayat ve Emeklilik A.Ş.	1	1	1	1	1	1	1	1		8	89%
Bereket Katılım Hayat A.Ş.	1	1	1	1	1					5	56%
Türkiye Hayat ve Emeklilik A.Ş.5	1	1	1	1	1	1	1	1	1	9	100%
Total License	21	12	12	21	21	20	19	16	3		
	100%	57%	57%	100%	100%	95%	90%	76%	14%		

Source: <https://ms.hmb.gov.tr/uploads/2020/10/Sigorta-ve-Reas%C3%BCrans-%C5%9Eirketleri-ile-Emeklilik-%C5%9Eirketlerinin-Ruhsat-Sahibi-Oldu%C4%9Fu-Bran%C5%9Flar%C4%B1-G%C3%B6sterir-Tablo-26.10.2020.xlsx> (cached 08/12/2020)

Appendix K Organization of Ministry of Treasury and Finance

Figure K1 Insurance Regulatory Institutions before the Decree

MINISTRY DEPARTMENTS	AFFILIATED INSTITUTIONS
Directorate General of Chief Legal Counsel	Revenue Administration
Directorate General of Public Financial Management	Turkish Statistical Institute
Directorate General of Accounting	Directorate General of National Lottery Administration
Directorate General of Risk Analysis	Fund of Bail
Directorate General of Public Finance	Directorate General of Mint and Stamp Printing House
Directorate General of Debt Management	Privatization Administration
Directorate General of State Owned Enterprises	
Directorate General of Foreign Economic Relations	
Directorate General of Financial Markets and Exchange	
Directorate General of Insurance	
General Directorate of Economic Programs and Research	
Directorate General of Personnel	
Directorate General of IT	
Board of Auditors	
Tax Inspection Board	
Board of Treasury Controllers	
Insurance Supervisory Board	
The Financial Crimes Investigation Board	
Strategy Development Unit	
Support Services Department	
Press and Public Relations Department	
Office of Chief of Staff	
Internal Audit Unit	
ASSOCIATED INSTITUTIONS	RELATED INSTITUTIONS
Public Procurement Institution	Directorate General of State Materials Office
	Public Oversight, Accounting and Auditing Standards Authority
	Banking Regulation and Supervision Agency
	Capital Markets Board
	Central Bank of the Republic of Turkey
	Ziraat Bank
	Halkbank
	Vakıfbank
	Development Investment Bank of Turkey
	Merkezi Finans ve İhale Birimi
	COUNCILS & BOARDS
	Tax Council
	Internal Audit Coordination Board
	Board of Ethics
	Government Accounting Standards Board

Source: <https://www.hmb.gov.tr/bakanlik-birimleri> (caught 08/12/2020)

Figure K2 Insurance Regulatory Institutions After the Decree

MINISTRY DEPARTMENTS	AFFILIATED INSTITUTIONS
Directorate General of Chief Legal Counsel	Revenue Administration
Directorate General of Public Financial Management	Turkish Statistical Institute
Directorate General of Accounting	Directorate General of National Lottery Administration
Directorate General of Risk Analysis	Fund of Bail
Directorate General of Public Finance	Directorate General of Mint and Stamp Printing House
Directorate General of Debt Management	Privatization Administration
Directorate General of State Owned Enterprises	
Directorate General of Foreign Economic Relations	
Directorate General of Financial Markets and Exchange	
General Directorate of Economic Programs and Research	
Directorate General of Personnel	
Directorate General of IT	
Board of Auditors	
Tax Inspection Board	
Board of Treasury Controllers	
The Financial Crimes Investigation Board	
Strategy Development Unit	
Support Services Department	
Press and Public Relations Department	
Office of Chief of Staff	
Internal Audit Unit	
ASSOCIATED INSTITUTIONS	RELATED INSTITUTIONS
Public Procurement Institution	Directorate General of State Materials Office
Insurance and Pension Regulation and Supervision Agency	Public Oversight, Accounting and Auditing Standards Authority
	Banking Regulation and Supervision Agency
	Capital Markets Board
	Central Bank of the Republic of Turkey
	Ziraat Bank
	Halkbank
	Vakıfbank
	Development Investment Bank of Turkey
	Merkezi Finans ve İhale Birimi
	COUNCILS & BOARDS
	Tax Council
	Internal Audit Coordination Board
	Board of Ethics
	Government Accounting Standards Board

Source: <https://www.hmb.gov.tr/bakanlik-birimleri> (caught 28/04/2021)

Appendix L FDI in Turkish Insurance Industry

Table L1 Capital Amount of Investing European Countries in Non-Life Insurance

mn TRL	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Germany	0	1	2	2	73	110	279	254	213	221	221	317	550	586	586	586	788
Austria	0	0	0	0	0	48	57	82	115	154	154	154	155	155	155	155	155
Belgium	0	0	0	0	0	0	0	0	0	101	110	110	110	110	110	110	110
France	13	13	23	23	85	174	434	432	497	514	563	1.375	1.410	1.418	1.699	1.712	1.703
Holland	0	0	0	0	0	58	58	58	230	242	242	242	461	519	294	294	175
UK	14	14	20	25	25	25	49	89	93	130	186	204	61	40	36	36	36
Spain	0	0	0	0	14	294	373	496	536	536	556	556	491	491	491	491	349
Switzerland	1	2	2	4	0	0	47	72	83	134	161	169	169	169	169	169	169
Italy	6	12	22	22	22	4	18	26	26	26	26	26	104	147	272	272	302
Total	34	42	69	76	219	713	1.317	1.509	1.794	2.058	2.221	3.154	3.512	3.635	3.812	3.825	3.787

Source: Author

Table L2 Capital Shares of Investing European Countries in Non-Life Insurance

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Germany	1,2%	2,4%	2,9%	2,6%	33,5%	15,5%	21,2%	16,8%	11,9%	10,8%	10,0%	10,1%	15,7%	16,1%	15,4%	15,3%	20,8%
Austria	0,0%	0,0%	0,0%	0,0%	0,0%	6,8%	4,3%	5,4%	6,4%	7,5%	6,9%	4,9%	4,4%	4,3%	4,1%	4,0%	4,1%
Belgium	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	4,9%	5,0%	3,5%	3,1%	3,0%	2,9%	2,9%	2,9%
France	37,9%	30,8%	32,5%	29,6%	38,8%	24,4%	33,0%	28,6%	27,7%	25,0%	25,4%	43,6%	40,1%	39,0%	44,6%	44,8%	45,0%
Holland	0,0%	0,0%	0,0%	0,0%	0,0%	8,2%	4,4%	3,9%	12,8%	11,8%	10,9%	7,7%	13,1%	14,3%	7,7%	7,7%	4,6%
UK	40,4%	32,8%	29,2%	32,4%	11,2%	3,5%	3,7%	5,9%	5,2%	6,3%	8,4%	6,5%	1,7%	1,1%	0,9%	0,9%	0,9%
Spain	0,0%	0,0%	0,0%	0,0%	6,2%	41,1%	28,3%	32,9%	29,9%	26,0%	25,0%	17,6%	14,0%	13,5%	12,9%	12,8%	9,2%
Switzerland	2,0%	4,7%	2,9%	5,9%	0,0%	0,0%	3,6%	4,8%	4,7%	6,5%	7,3%	5,4%	4,8%	4,6%	4,4%	4,4%	4,5%
Italy	18,4%	29,4%	32,5%	29,6%	10,3%	0,6%	1,4%	1,7%	1,5%	1,3%	1,2%	0,8%	3,0%	4,0%	7,1%	7,1%	8,0%
Total	78,4%	63,6%	65,0%	62,0%	72,3%	65,5%	61,3%	61,4%	57,6%	51,0%	50,4%	61,2%	55,8%	55,1%	59,9%	60,1%	65,8%

Source: Author

Table L3 Non-Life Insurance Companies and Composition of Capital

(1/3) mn TRL

Group	Company	Source	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Ak	Ak	Belçika										101	110	110	110	110	110	110	110	
		Türkiye	68	153	153	153	306	306	306	306	306	306	205	196	196	196	196	196	196	196
Allianz	Allianz	Almanya							168	168						329	341	341	341	509
		Hollanda									168	168	168	168	168	168	168	168	168	
		Japonya								20	20	20	20	20	20	20	20	20	20	20
		Türkiye								12	12	12	12	12	12	12	12	0	0	0
	Koç Allianz	Almanya	0	1	2	2	2	22												
		İtalya	4	10	20	20	20													
		Japonya	1	3	6	6	6	6												
		Türkiye	6	16	32	32	32	32												
	Magdeburger	Almanya								2	2	2								
		Türkiye	2	2	2	2	2	2												
Yapı Kredi	Almanya													96						
	Türkiye	60	80	80	80	80	80	80	80	80	80	80	102	6						
Anadolu	Anadolu	Türkiye	80	80	100	150	200	275	350	425	500	500	500	500	500	500	500	500	500	
Ankara	Ankara	Türkiye	10	10	20	33	78	150	150	170	220	261	140	140	148	148	148	148	148	
Atlas	Atlas	Türkiye																13	12	
Atradius	Atradius	Hollanda						10	10	10	14	14	14	14	14	18	18	18	18	
Axa	Axa	Fransa					0	0	226	226	265	282	331	1136	1136	1136	1136	1136	1136	
		Türkiye	36	50	63	154	171	222	85	85	99	106	124	90	90	90	90	90	90	
Batı	Batı	Türkiye	5	8	10	10	10	10	10											
Bereket	Bereket	Türkiye																59	59	
		İşık	Türkiye	6	6	12	15	20	40	60	60	60	60	60	60	60	57	57		
BNP	BNP	Fransa										10	10	10	10	10	10	18	18	
		Cardif	Fransa						10	10	10									
Chartis	AIG	BAE	5	5	5	18	18	18	18				44	146	146	168	168			
		Chartis	BAE								44	44	44							
Chubb	Ace	İngiltere								15	15	15	15	33	57	36	36			
		Chubb	İngiltere																36	36
Coface	Coface	Fransa						10	10	18	18	18	18	18	18	26	34	34	25	
		Doğa	Türkiye												8	57	88	6	70	
Dubai	Dubai	ABD											32	10	17	19	19	19	25	
		BAE							65	64	64	65	33	11	17	20	20	20	26	
Ege	Ege	Türkiye	1												50	50				
		Euro	Türkiye							20	20	35	35	50						
		Toprak	Türkiye	3	4	4	4	4	4											
EGS	EGS	Türkiye	3																	
Ergo	Ergo	Türkiye								102	145	379	379	461	461	461	487	487	487	
		Ergo İsviçre	Almanya					49	49	49										
		İsviçre	Türkiye					16	16	16										
İsviçre	İsviçre	İsviçre	1	2	2	4														
		Türkiye	6	18	18	41														
Ethica	Ethica	Türkiye															50	50	95	
Euler Hermi	Euler Hermes	Fransa									5	5	5	12	21	21	21	26	26	
Eureko	Eureko	ABD						12	12	12	12									
		Hollanda						48	48	48	48	60	60	60	60	60	60	60	60	
		Garanti	ABD				35	60												
Türkiye		9	16	25																

(2/3) mn TRL

Group	Company	Source	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
G.I.C	G.I.C	Türkiye	5	5	5															
Generali	Generali	İtalya	2	2	2	2	2	4	18	26	26	26	26	26	104	147	272	272	302	
		Japonya	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Groupama	Başak	Türkiye	30	50	50	110														
		Başak Grouparı	Fransa					62	108	108										
	Groupama	Türkiye					48	2	2											
		Fransa									132	153	153	153	153	179	179	443	443	443
		Türkiye									2	2	2	2	2	2	2	2	2	2
Güven	Fransa	Türkiye	7	7	16	27	35	35	0											
		Türkiye								35										
Gulf	Gulf	Kuveyt															11	179	179	
		Türkiye															1	1	1	
	Turins	Türkiye											12	12	12					
Halk	Birlik	Türkiye	5	7	7	20	20	25	30	40										
	Halk	Türkiye									40	40	70	70	94	94	129	187	280	
HDI	HDI	Almanya					23	39	60	84	211	221	221	221	221	245	245	245	279	
		İspanya						14	93	181	187	187	207	207	142	142	142	142		
	Liberty	Türkiye						1	2	2	2	2	1	1	1	1	1	1		
Hür	Hür	Türkiye	2	3	4	5	6	8	9	11	15	15	15	15	35					
İhlas	İhlas	Türkiye	6	6	6	6														
İnter	İnter	Bulgaristan										1								
		Türkiye							1	1	0									
Kapital	Kapital	Türkiye	18	18																
Koru	Koru	Türkiye										1	10	9	16	34	34	0	11	
Magdeburg	Magdeburger	Türkiye																	50	
Mapfre	Genel	İspanya						280												
		Türkiye	100	140	140	350	350	70												
	Mapfre	İspanya															349	349	349	
		Türkiye															1	1	1	
Mapfre Genel	İspanya								280	315	349	349	349	349	349	349				
	Türkiye								70	35	1	1	1	1	1					
Merkez	Merkez	Türkiye	2	2	2	2	1	1	2	1	1									
Neova	Neova	Kuveyt								40	40	40	48	54	69	71	85	85	85	
Nippon	Nippon	İsrail							11	27	38	49	49	15	29	39	45	45	45	
		Japonya	0	0		0	0	0	0	0										
		Libya	4	10		11	11	11												
Orient	Orient	Türkiye	0	0		0	0	0	1	1	1	0	0	0						
		BAE													18	18	18	36	63	
Quick	Corpus	Türkiye																	21	
		BAE												5	6	6				
	Demir	Lübnan												7	7	7				
		Türkiye	4	4	4	4	4	4	4	10	10	10	10	13	1					
	Quick	Türkiye																50	50	
Turkland	BAE	Lübnan															9	9		
		Lübnan															11	11		
Ray	Ray	Avusturya						48	57	82	115	154	154	154	155	155	155	155	155	
		Türkiye	15	25	29	29	29	17	20	15	22	9	9	9	8	8	8	8	8	
Rumeli	Rumeli	Türkiye	3	3	3	3	3	3	3	3	3									
Sanko	Sanko	Türkiye	6	12																

(3/3) mn TRL

Group	Company	Source	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
= SBN	SBN	Türkiye							23	26	30	50	65	103	103	103	103	103	103
	Şeker	İspanya					14												
	Ticaret	Türkiye	5	10	9	15	1												
= Sompo	Fiba	Türkiye						40	40	40									
	Finans	Türkiye	5	12	12	20	40												
	Sompo	İngiltere									4	4	4	4	4	4			
= Türk P&I	Türk P&I	Japonya									36	36	36	36	36	36	40	190	190
	Türk P&I	Türkiye													6	6	6	6	8
= Unico	Aviva	Hollanda													219				
	Aviva	İngiltere			20	25	25	25	49	74	74	111	168	167					
	Aviva	Türkiye			0	0	0	0	1	1	1	1	2	2	3				
	Commercial	İngiltere	14	14															
	Unico	Türkiye	0	0															
= Vakıf	Güneş	Hollanda														273	48	48	97
	Güneş	Fransa	13	13	23	23	23	45	45	45	45	45	45	45	45	45	54	54	54
= Ziraat	Ziraat	Türkiye	30	30	53	53	53	105	105	105	105	105	105	105	105	105	216	216	216
	Ziraat	Türkiye								20	20	20	20	50	50	50	50	50	50
= Zurich	Teb	Türkiye	3	10	25	30	30	30											
	Zurich	İsviçre							47	72	83	134	161	169	169	169	169	169	169

Source: Author

Table L4 Life Insurance Companies and Composition of Capital

(1/2) mn TRL

Group	Company	Source	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Acıbadem	Acıbadem	İngiltere												64	105	105	117	117	117	
		Malezya							21	21	23	36	36	36						
		Türkiye			8	15	30	21	21	23	36	36	36	36	7	12	12			
	Bayındır	Türkiye	2	2																
Aegeon	Aegeon	Hollanda							54	75	133	185	238	88	70	126	190	249	156	
	Ankara	Türkiye	20	20	20	20	20	40												
Allianz	Allianz Hayat	Almanya							18	18					2	2	2	2	2	
		Hollanda									18	18	18	69	68	68	68	68	68	
		İtalya							0	0	0	0	0	0	1	1	1	1	1	1
		Japonya							2	2	2	2	2	2	9	9	9	9	9	9
	Allianz Yaşam	Almanya														46	46	46	46	46
		Türkiye													58	12	12	12	12	12
	Koç Allianz	Koç Allianz	Almanya	1	1	1	1	1	7											
İtalya			7	7	7	7	7	0												
Japonya			2	2	2	2	2	2												
Türkiye			10	10	10	10	10	10												
Yapı Kredi	Türkiye	30	48	58	58	58	58	58	58	58	58	58	58							
Anadolu	Anadolu	Türkiye	65	65	100	150	175	175	250	250	250	300	300	350	380	410	430	430	430	
Aviva	Ak	Türkiye	20	20	20	20	20													
		Aviva			82	82	82													
		Avivasa							18	18	18	18	18	18	18	15	47	47	47	72
		Türkiye							18	18	18	18	18	18	18	21	71	71	71	108
Commercial	İngiltere	67	75																	
Axa	Axa	Fransa							27	27	31	33	63	63	63	63	63	63	63	
		Türkiye	6	10	11	23	23	26												
Bereket	Asya	Türkiye											20	30	30	30	30			
	Bereket	Türkiye																30	30	
BNP	BNP	Fransa										353	468	468	468	468	468	468	468	
		Cardif	Fransa					10	10	13	13									
		Fortis	Belçika				27	38	51	51										
Chartis	AIG	ABD						2	2											
		Türkiye						0	0											
CIV	CIV	Almanya						10	24	24	24	24	24	24	24					
Cigna	Cigna Finans	Hollanda												23	23	23	23	23		
		Katar														22	22	22		
	Yunanistan													22	22					
	Finans	Hollanda											23							
Demir	Demir	Hollanda																19	19	
		Türkiye	4	8	12	12	15	15	15	15	15	15	15	15	15	19	19			
Doğan	Doğan	Belçika				21														
		Türkiye	1	21	21	0														
Ege	Global	Türkiye		3	3	3	3	5												
	Toprak	Türkiye	1																	
Ergo	Ergo	Türkiye								60	60	60	60	41	25	25				
		Ergo İsviçre	Almanya				35	35												
	İsviçre	Türkiye	5	15	15	15			55											

(2/2) mn TRL

Group	Company	Source	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
= Fiba	= Fiba	Türkiye												20	20	20	20	20	20		
= Garanti	= Garanti	ABD				50	50	42	42	42	42	42									
		Hollanda						8	8	8	8	8	8	8	8	8	8	8	8	8	
		İspanya																	42	42	
		Türkiye	20	20	20									42	42	42	42	42			
= Groupama	= Başak	Türkiye	20	20	20	50															
		Fransa					40	45	45												
	= Groupama	Türkiye					11	5	5	5	5	5	5								
		Fransa								50	50	50	50	55	55	55	55	55	55	55	55
= Halk	= Birlik	Türkiye	2	2	3	5	5	6	9												
		Türkiye	1	7	7	7	7	7	7												
= ING	= ING	Hollanda							45	45	45	49	107	54							
		Hollanda													39	88	39	40	40		
	= Oyak	Türkiye		20	20	30	40	45													
		Türkiye	6																		
= Katılım	= Katılım	Bahreyn													11	16	20	20	20		
		Kuveyt													11	16	20	20	20		
= Mapfre	= Genel	Türkiye	4	6	10	10	10	25													
		İspanya																	12	12	12
	= Mapfre Genel	İspanya							25	25	32	32	32	32	12	12					
		Türkiye							0	0	0	0	0	0	0	0			0	0	0
= Met	= American	ABD	2	2	2	2	2			10	10	435									
		BAE										0									
		Türkiye	0	0	0	0	0				0	0									
	= Deniz	Belçika								24	24										
		Türkiye								0	0	25									
= Met	= Met	ABD										24	451								
		İsviçre													451	451	451	451	451	451	451
= New Life	= New Life	Türkiye	3	3	3								0	0	0	0	0	0	0	0	
		Bahama							13	17	18	18									
= Rumeli	= Rumeli	Almanya	0	0	0	0	0	0	0	0	0	0									
		Türkiye	0	0	0	0	0	0	0	0	0	0									
= SBN	= Şeker	Türkiye	0	0	0																
= Vakıf	= Güneş	Türkiye	20	20																	
		Türkiye		20	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27
= Ziraat	= Ziraat	Türkiye								20	20	20	20	80	80	80	80	80	80		

Source: Author

Appendix M Product Based Changes

Table M1 The guarantees covered by MTPL policy

		Teminatlar(YTL)					
		A-Maddi ^{*5}		B-Tedavi Gideri		C-Sakatlanma ve Ölüm	
Araç Grup Kodu	Araç Grubu	Araç Başına	Kaza Başına	Kişi Başına	Kaza Başına	Kişi Başına	Kaza Başına
1	Otomobil	17.500	35.000	175.000	875.000	175.000	875.000
2	Taksi	17.500	35.000	175.000	875.000	175.000	875.000
3	Mimibüs (Sürücü dahil 9-15 koltuk)	17.500	35.000	175.000	1.750.000	175.000	1.750.000
4	Otobüs (Sürücü dahil 16-30 koltuk)	17.500	35.000	175.000	2.800.000	175.000	2.800.000
5	Otobüs (Sürücü dahil 31 ve üstü koltuk)	17.500	35.000	175.000	5.425.000	175.000	5.425.000
6	Kamyonet	17.500	35.000	175.000	1.750.000	175.000	1.750.000
7	Kamyon	17.500	35.000	175.000	1.750.000	175.000	1.750.000
8	İş Makinesi ^{*1}	17.500	35.000	175.000	1.750.000	175.000	1.750.000
9	Traktör	17.500	35.000	175.000	875.000	175.000	875.000
10	Römork ^{*2}	17.500	35.000	175.000	1.750.000	175.000	1.750.000
11	Motosiklet ve Yük Motosikleti	17.500	35.000	175.000	525.000	175.000	525.000
12	Tanker	17.500	35.000	175.000	1.750.000	175.000	1.750.000
13	Çekici	17.500	35.000	175.000	1.750.000	175.000	1.750.000
14	Özel Amaçlı Taşıt ^{*3}	17.500	35.000	175.000	875.000	175.000	875.000
16	Dolmuş (Sürücü dahil 5-8 koltuk)	17.500	35.000	175.000	875.000	175.000	875.000
17	Mimibüs Dolmuş (Sürücü dahil 9-15 koltuk)	17.500	35.000	175.000	1.750.000	175.000	1.750.000
18	Otobüs Dolmuş (Sürücü dahil 16-30 koltuk)	17.500	35.000	175.000	2.800.000	175.000	2.800.000
19	Otobüs Dolmuş (Sürücü dahil 31 ve üstü koltuk)	17.500	35.000	175.000	5.425.000	175.000	5.425.000
20	Diğer Araçlar ^{*4}	17.500	35.000	175.000	875.000	175.000	875.000

Source: <https://www.tsb.org.tr/Default.aspx?pageID=1092> accessed in 04.02.2021

Figure M2 City Discounts

A.1.2. İndirimler ve Artırımlar	
A.1.2.1. İl Trafik Hasar Yoğunluğu İndirimi	
4925 sayılı Karayolu Taşıma Kanununa tabi şehirlerarası ve uluslararası eşya ve yolcu taşımacıları hariç olmak üzere, araç işletenlerine kayıtlı oldukları illere göre aşağıda belirlenen oranlarda il trafik hasar yoğunluğu indirimi yapılır.	
a)	Ankara (06), İstanbul (34), İzmir (35) illeri için indirim uygulanmaz.
b)	Adana (01), Antalya (07), Bursa (16), Kocaeli (41), Konya (42) illeri için yüzde 10.
c)	Aydın (09), Balıkesir (10), Denizli (20), Eskişehir (26), Gaziantep (27), Hatay (31), Mersin (33), Kayseri (38), Manisa (45), Muğla (48), Sakarya (54), Samsun (55) illeri için yüzde 15.
d)	(a), (b) ve (c)'de yer alan illerin dışındaki iller için yüzde 20.

Source: <https://www.tsb.org.tr/Default.aspx?pageID=1087> accessed in 04.02.2021

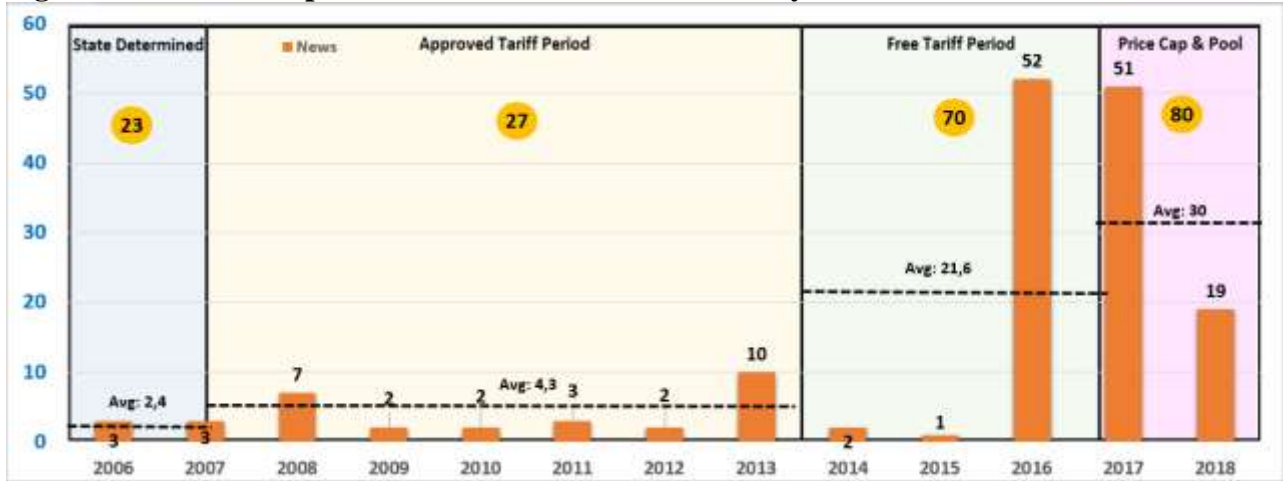
Table M3 No Damage Discounts and Claim Charges

		Pool	Non-Pool	+ charges (%)		- discounts (%)									
	Step	Private	Small Truck	Working Machine	Tractor	Trailer	Motor cycle	Tanker	Special Vehicle	Other	Taxi	Minibus	Bus	Long Truck	Tow
with claim	1	150%	150%	150%	150%	150%	150%	150%	150%	150%	150%	150%	150%	150%	150%
	2	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	3	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
Entrance	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
without claim	5	-15%	-15%	-15%	-15%	-15%	-15%	-15%	-15%	-15%	-10%	-10%	-10%	-10%	-10%
	6	-30%	-30%	-30%	-30%	-30%	-30%	-30%	-30%	-30%	-20%	-20%	-20%	-20%	-20%
	7	-45%	-45%	-45%	-45%	-45%	-45%	-45%	-45%	-45%	-30%	-30%	-30%	-30%	-30%

Source : Author (compiled as of January 2021)

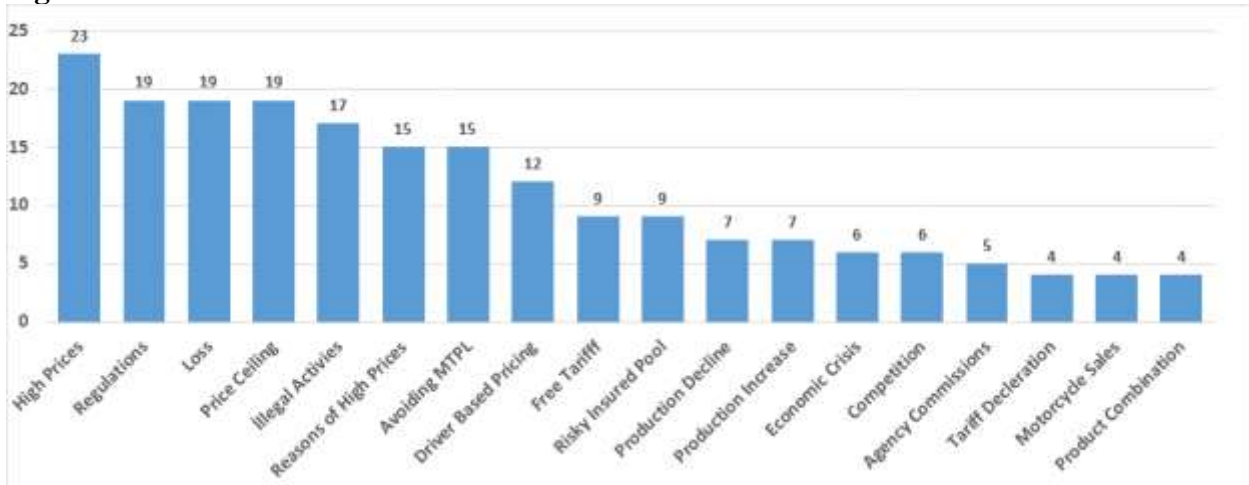
Appendix N Results of the MTPL News Study

Figure N1 The Development of MTPL news on Internet by Periods



Source : Author

Figure N2 The Themes of the MTPL News



Source : Author

Table N3 The Results of the Study on MTPL News on Internet

	State Determined Period	Approved Tariff Period	Free Tariff Period	Price Cap & Pool Period
Term				
<i>Interval</i>	42	42	42	42
<i>Length (year)</i>	9,5	6,5	3,3	2,5
News				
<i># of News</i>	23	27	70	80
<i>Share in Total</i>	11,5%	13,5%	35,0%	40,0%
Sources				
<i>Share of Sources</i>	1. 61% Eco. Publication 2. 39% Newspaper 3. -	1. 41% Newspaper 2. 19% Eco. Publication 3. 40% Other	1. 39% Sectoral Publication 2. 24% Eco. Newspaper 3. 37% Other	1. 45% Newspaper 2. 23% Sectoral Publication 3. 31% Other
<i># of Unique Source Group</i>	2	6	6	7
<i># of Unique Source</i>	3	9	20	23
<i>Frequent Source</i>	Capital (61%)	Dünya (19%), Capital (19%)	Sigorta Medya (39%)	Sigorta Medya (20%)
Writer				
<i>Share including writer name</i>	26%	7%	14%	30%
<i>Frequent Writer</i>	Erkan Çelebi / Milliyet	Can Kantar / Dünya Hilmi Gültay / Milliyet	Can Kantar / Dünya	Noyan Doğan / Hürriyet
Reference				
<i># including reference</i>	13	24	56	62
<i>Share including reference</i>	57%	89%	80%	78%
<i>Share of Sources</i>	1. 85% Insurance Company 2. 15% Public Institution 3. -	1. 33% Insurance Company 2. 29% Public Institution 3. 38% Other	1. 27% Public Institution 2. 13% Turkish Ins. Assc. 3. 60% Other	1. 26% Public Institution 2. 19% Insurance Company 3. 55% Other
<i># of Unique Reference Group</i>	2	7	12	13
<i># of Unique Reference</i>	12	20	37	38
<i>Frequent Reference</i>	Mehmet Aydoğdu - Güneş Sigorta General Manager - 2 times	Bendevis Palandöken - Turkey Tradesman and Artisans Confederation (TESK) Manager - 3 times	Mehmet Şimşek- Deputy Prime Minister - 10 times	Mehmet Şimşek- Deputy Prime Minister - 6 times Levent Küçük - Consumer Association (TÜDER) President - 6 times
Subjects				
<i># of Unique Subjects</i>	7	9	15	13
<i>Share of Subjects</i>	1. 22% Economic Crisis 2. 17% Loss 17% Competition 17% Tariffs 3. 27% Other	1. 30% Tariff 2. 15% High Prices 15% Illegal Activities 3. 40% Other	1. 26% High Prices 2. 14% Reasons of High Prices 3. 60% Other	1. 18% Price Ceiling 18% Avoiding MTPL 2. 11% Risky Insured Pool 3. 53% Other

State Determined Period	Approved Tariff Period	Free Tariff Period	Price Cap & Pool Period
-------------------------	------------------------	--------------------	-------------------------

Categories

Share of Categories	State Determined Period	Approved Tariff Period	Free Tariff Period	Price Cap & Pool Period
	1. 43% Complaint 2. 26% Information 3. 21% Other	1. 37% Informative 2. 33% Complaint 3. 30% Other	1. 40% Complaint 2. 20% Intervention 3. 40% Other	1. 38% Complaint 2. 18% Information 3. 44% Other

Complaints

Complainants	State Determined Period	Approved Tariff Period	Free Tariff Period	Price Cap & Pool Period
	1. 50% Insurance Companies 2. 30% Newspapers 3. 31% Other	1. 34% Automative Chambers 2. 22% TESK 22% Insurance Companies 3. 11% Public Institutions 11% Newspapers	1. 11% Agencies 11% Parliamentarian 11% Automative Chambers 11% Press 2. 56% Other	1. 20% TÜDER 2. 17% Insurance Companies 3. 63% Other
to be complained	1. 70% Regulations 2. 30% Insurance Companies 3. -	1. 78% Regulations 2. 22% Insurance Companies 3. -	1. 46% Insurance Companies 2. 40% Regulations 3. 14% Other	1. 47% Insurance Companies 2. 40% Regulations 3. 13% Other
complaint topics	1. 40% Standard Tariff 2. 30% Late Claim Payment 3. 20% Economic Crisis	1. 45% High Prices 2. 22% Claim Frauds 3. 11% Standard Tariff 11% Loss 11% Avoiding MTPL	1. 54% High Prices 2. 11% Claim Calculation 3. 7% Agency Commissions 7% Third Party Insurance 7% Loss of Value	1. 53% Avoiding MTPL 2. 10% Price Ceiling 10% Loss of Value 3. 7% Agency Commissions 7% Claim Calculation 7% Pool Implementation

Information

Informants	State Determined Period	Approved Tariff Period	Free Tariff Period	Price Cap & Pool Period
	1. 34% Insurance Companies 2. 33% Newspapers 33% Economic Publications	1. 30% Public Institutions 2. 20% Insurance Companies 3. 10% Turkish Insurance Assc.	1. 25% Turkish Insurance Assc. 2. 17% Public Institutions 17% Consumer Assc. 17% Media	1. 25% Public Institutions 2. 22% Agencies
information topics	1. 33% Fierce Competition 33% Standard Tariff 2. 17% Loss 17% Production Numbers	1. 30% Free Tariff 2. 20% High Prices 3. 10% Regulations	1. 50% Production Numbers	1. 36% Regulations 2. 29% Driver Based Pricing 3. 22% Price Ceiling

Other

Demands	State Determined Period	Approved Tariff Period	Free Tariff Period	Price Cap & Pool Period
	1. 100% Regulations	1. 50% Price Reduction 50% Slower Competition	1. 64% Price Reduction 2. 12% Commission Increase 12% Unification of Product 12% Regulations	1. 24% Price Increase 2. 18% Fine increase 18% Unification of Product 18% Driver Based Pricing
Interventions	1. 40% Tramer Establishment 2. 20% Economic Crisis 20% Competition	1. 50% Subrogations 2. 25% Competition 25% Standard Tariff	1. 42% High Prices 2. 14% Policy Cancellation 14% Subrogations	1. 54% High Prices 2. 24% Risky Insured Pool 3. 16% Agency Commissions
Sanctions	1. 100% Financial Structure	-	1. 40% High Prices 40% Distorted Competition 2. 20% Avoiding MTPL	1. 50% Avoiding MTPL 2. 25% Financial Structure 25% Fake Insurance

Appendix O Results of the Interview

Figure O1 Frequency Table- Foreign Direct Investments

	Count	% Codes	Cases	% Cases	Nb Words	% Words
FDI		17,8%				15,7%
Reasons						
Legal Structure	3	0,6%	3	25,0%	264	0,8%
Market Economy	13	2,8%	8	66,7%	821	2,3%
Penetration Rate	10	2,2%	9	75,0%	956	2,7%
Population	6	1,3%	5	41,7%	293	0,8%
Results						
Negative Impacts						
Unrealized Expectations	8	1,7%	5	41,7%	700	2,0%
Unreliable Regulations	16	3,4%	7	58,3%	1208	3,5%
Positive Impacts						
Growing Market	7	1,5%	6	50,0%	383	1,1%
Know How Transfer	11	2,4%	9	75,0%	734	2,1%
Localization	3	0,6%	2	16,7%	149	0,4%
Technical Income Rise	6	1,3%	4	33,3%	436	1,2%

Source : Author

Figure O2 Frequency Table- Legal Framework

	Count	% Codes	Cases	% Cases	Nb Words	% Words
Legal Framework		6,0%				7,8%
Change Management	7	1,5%	7	58,3%	475	1,4%
EU Compliance	4	0,9%	3	25,0%	421	1,2%
Need for Legitimacy	3	0,6%	3	25,0%	449	1,3%
Reforming the Market	5	1,1%	2	16,7%	481	1,4%
Technological Developments	9	1,9%	4	33,3%	886	2,5%

Source : Author

Figure O3 Frequency Table- Pro-Market Reform

	Count	% Codes	Cases	% Cases	Nb Words	% Words
Reform		12,9%				12,9%
Reform Background	6	1,3%	6	50,0%	566	1,6%
Requirements	11	2,4%	6	50,0%	798	2,3%
Reform Process	9	1,9%	7	58,3%	873	2,5%
Public Pressure	12	2,6%	7	58,3%	908	2,6%
Price Increase	22	4,7%	12	100,0%	1355	3,9%

Source : Author

Figure O4 Frequency Table- Regulation

	Count	% Codes	Cases	% Cases	Nb Words	% Words
Regulation		20,9%				25,5%
Pool Implementation	15	3,2%	6	50,0%	1118	3,2%
Price Cap	21	4,5%	10	83,3%	1869	5,3%
Avoid Premium Production	8	1,7%	6	50,0%	668	1,9%
Actions						
Predictability	5	1,1%	4	33,3%	479	1,4%
Capital Requirement	11	2,4%	7	58,3%	1001	2,9%
Standardization	9	1,9%	7	58,3%	998	2,9%
Expectations						
How regulation should be	11	2,4%	6	50,0%	1108	3,2%
Turn to Reform again ?	17	3,7%	12	100,0%	1644	4,7%

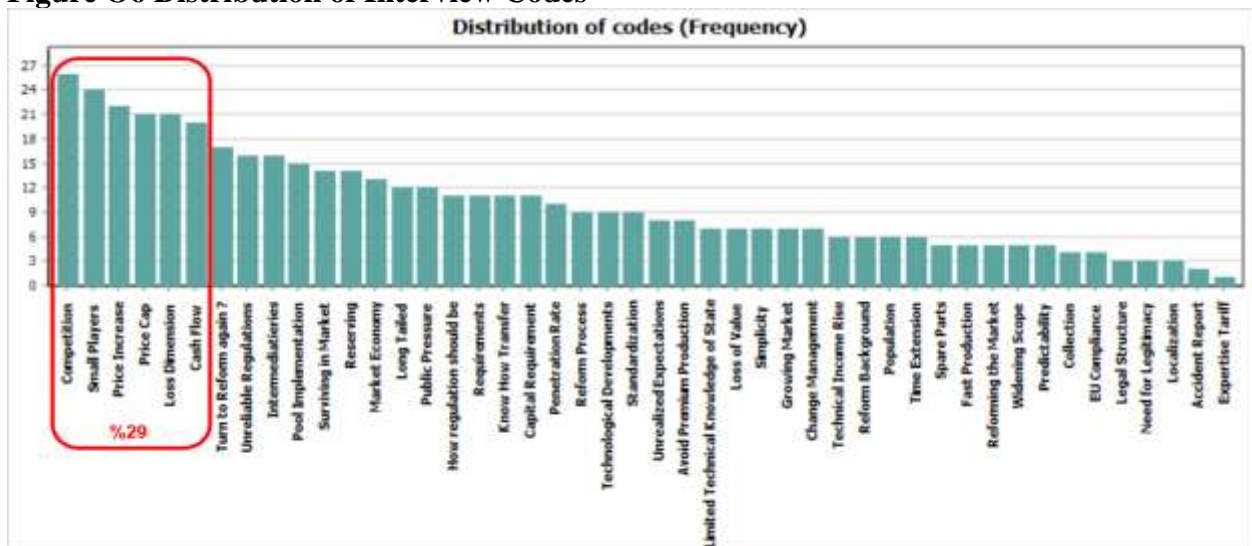
Source : Author

Figure O5 Frequency Table- Market Structure

	Count	% Codes	Cases	% Cases	Nb Words	% Words
Market Structure		42,2%				48,1%
Product						
Long Tailed	12	2,6%	7	58,3%	1053	3,0%
Simplicity	7	1,5%	4	33,3%	842	2,4%
Fast Production	5	1,1%	3	25,0%	435	1,2%
Parties						
Competition	26	5,6%	8	66,7%	2224	6,4%
Intermediaries	16	3,4%	2	16,7%	1522	4,4%
Small Players	24	5,2%	9	75,0%	1838	5,3%
Surviving in Market	14	3,0%	8	66,7%	1027	2,9%
Pricing						
Cash Flow	20	4,3%	11	91,7%	2175	6,2%
Collection	4	0,9%	4	33,3%	334	1,0%
Reserving	14	3,0%	7	58,3%	1627	4,7%
Loss in Industry						
Loss Dimension	21	4,5%	9	75,0%	1493	4,3%
Loss of Value	7	1,5%	4	33,3%	474	1,4%
Expertise Tariff	1	0,2%	1	8,3%	89	0,3%
Widening Scope	5	1,1%	5	41,7%	357	1,0%
Accident Report	2	0,4%	1	8,3%	136	0,4%
Time Extension	6	1,3%	3	25,0%	312	0,9%
Limited Technical Knowledge of State	7	1,5%	3	25,0%	459	1,3%
Spare Parts	5	1,1%	3	25,0%	357	1,0%

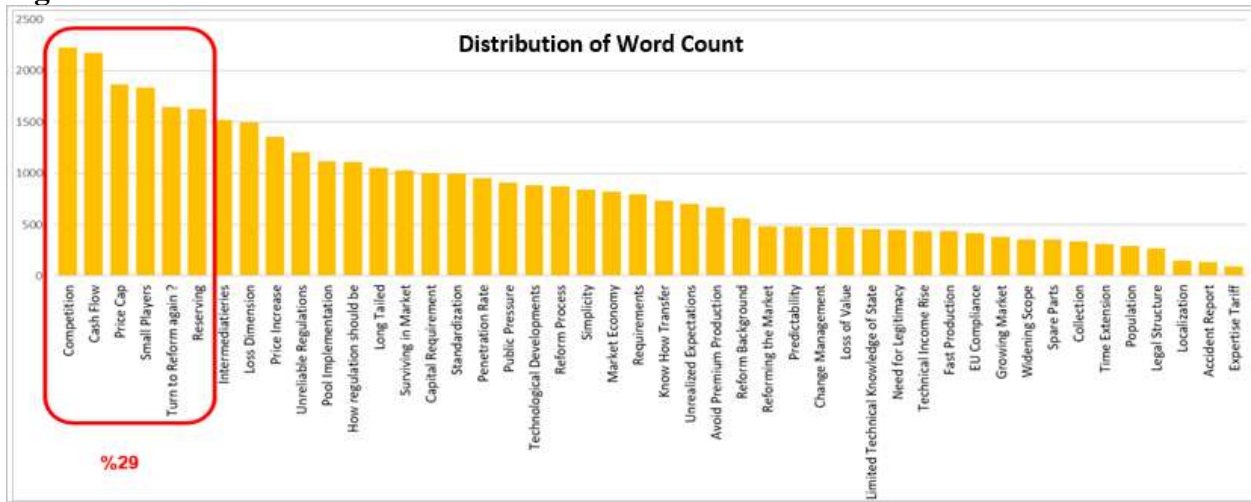
Source : Author

Figure O6 Distribution of Interview Codes



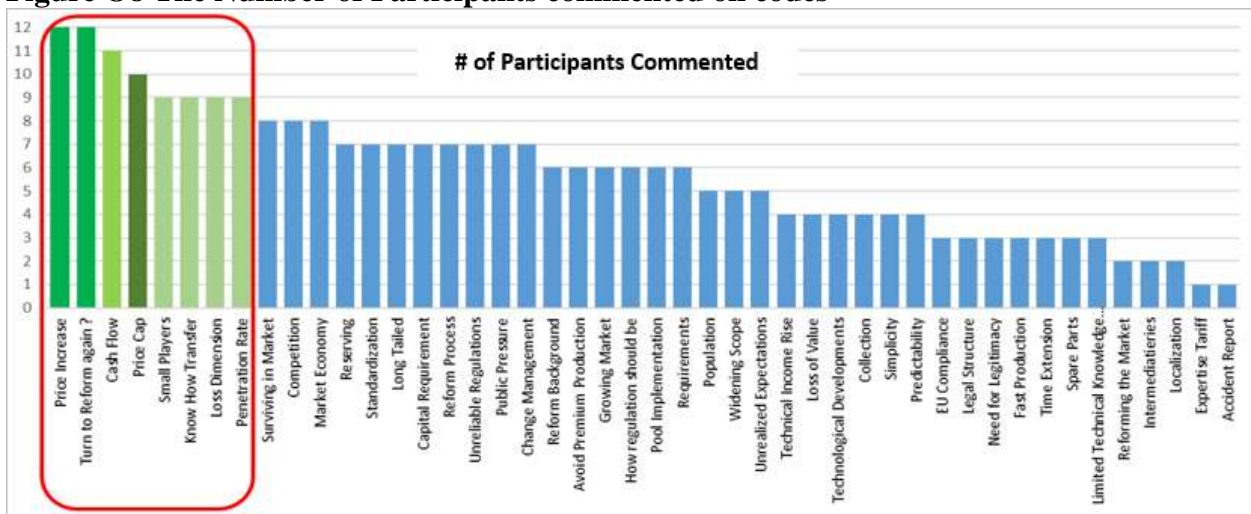
Source : Author

Figure O7 Distribution of Word Count



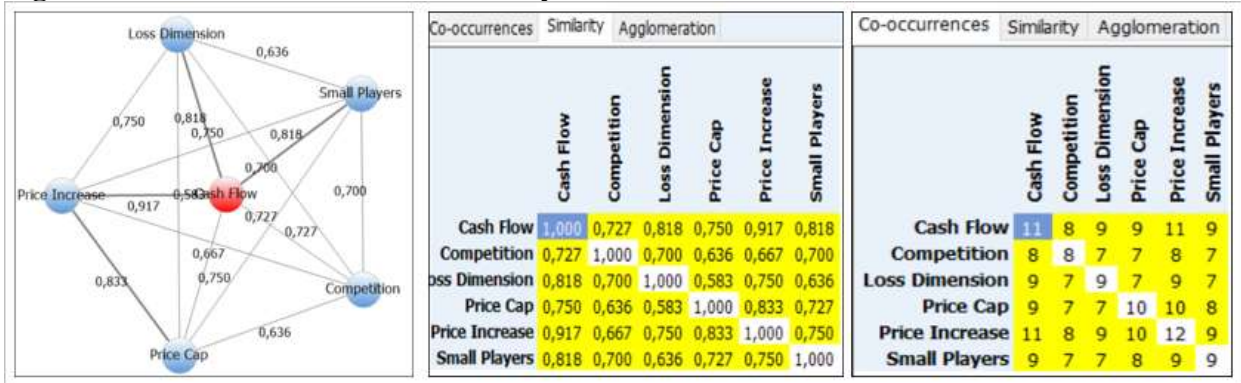
Source : Author

Figure O8 The Number of Participants commented on codes



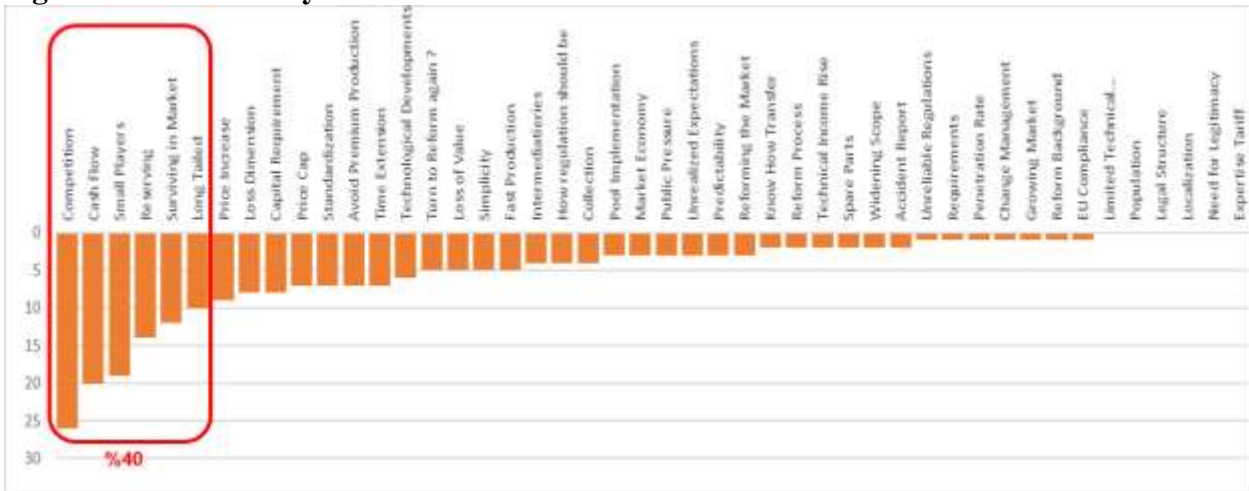
Source : Author

Figure O9 Co-occurrence and Similarity of Codes



Source : Author

Figure O10 Commonly Used Codes



Source : Author

Table O11 Participants' Distribution

	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12
FDI	23%	15%	19%	19%	7%	11%	17%	15%	10%	14%	20%	5%
Legal Framework	10%	7%	0%	9%	11%	7%	10%	16%	2%	0%	7%	0%
Market Structure	31%	56%	18%	27%	57%	43%	45%	30%	59%	38%	52%	22%
Reform	18%	3%	43%	13%	3%	14%	5%	3%	4%	21%	8%	31%
Regulation	17%	19%	20%	32%	21%	24%	24%	35%	25%	27%	14%	42%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Source : Author

Table O12 Participants' Distribution (with normalized Market Structure)

	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12
FDI	19%	16%	14%	16%	7%	11%	17%	13%	12%	13%	21%	4%
Legal Framework	17%	16%	0%	15%	24%	14%	19%	28%	4%	0%	14%	0%
Market Structure	15%	35%	7%	13%	34%	22%	25%	15%	38%	19%	30%	9%
Reform	31%	7%	61%	23%	7%	26%	10%	6%	10%	38%	16%	48%
Regulation	18%	26%	18%	34%	28%	27%	29%	38%	37%	30%	18%	39%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Source : Author

Table O13 Company Based Distribution

	TSB	Agent	Small Insurer-1	Small Insurer-2	Small Insurer-3	Big Insurer-1	Big Insurer-2
FDI	21%	7%	17%	12%	20%	14%	5%
Legal Framework	10%	11%	10%	5%	7%	6%	0%
Market Structure	30%	57%	45%	46%	52%	43%	22%
Reform	16%	3%	5%	8%	8%	16%	31%
Regulation	24%	21%	24%	28%	14%	21%	42%
Grand Total	100%	100%	100%	100%	100%	100%	100%

Source : Author

Table O14 Institution Based Distribution of Number of Codes

	TSB	Agent	Insurer
FDI	21%	7%	15%
Legal Framework	10%	11%	6%
Market Structure	30%	57%	45%
Reform	16%	3%	11%
Regulation	24%	21%	23%
Grand Total	100%	100%	100%

	TSB	Agent	Insurer
FDI	9	3	10
Legal Framework	3	2	5
Market Structure	14	8	16
Reform	5	2	5
Regulation	8	4	8
Grand Total	39	19	44

Source : Author

Table O15 Function Based Distribution

	Technical	Finance	Sale	Other
FDI	14%	14%	15%	21%
Legal Framework	6%	6%	8%	10%
Market Structure	54%	33%	54%	30%
Reform	4%	20%	6%	16%
Regulation	23%	27%	17%	24%
Grand Total	100%	100%	100%	100%

Source : Author

Appendix P Ethics Board Approval

Ethics Board Approval is available in the printed version of this dissertation.