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**New competitors and their intra-industry
effects: The case of the hotel industry**

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Master Dissertation
Masters in Finance

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2014

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January 7, 2015

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To my girlfriend, Catarina

Abstract

This paper is a comprehensive literature review of the intra-industry effects of the entry of new competitors, in a specific industry, the hotel/lodging industry. To do this, a systematic approach is used in order to make the review replicable and transparent. The research show that there is a lack of papers on this specific subject, specially when the entry of the competitor is not done via a IPO and when the hotel industry is observed. Therefore, to my understanding, there is a gap in the literature that may be explored in the future. ¹

¹keywords: intra-industry; hotel industry; literature review; IPO

Resumo

Este trabalho é uma revisão da literatura existente sobre a temática dos efeitos intra-indústria da entrada de um novo competidor numa indústria em específico, no caso deste estudo, a indústria hoteleira. Para fazer isto, foi adotada uma abordagem sistemática à revisão de literatura, por forma a que esta seja facilmente replicável e transparente. A pesquisa mostra que há uma falta de trabalhos que abordem esta temática específica, especialmente quando a entrada do novo competidor se dá por outro meio que não uma IPO (Oferta Pública Inicial). É portanto, demonstrada a existência de uma falha na literatura existente que poderá ser explorada no futuro.

A execução deste trabalho tem várias etapas, em primeiro lugar é explicado o porquê de fazer uma revisão bibliográfica, procurando demonstrar o peso da indústria turística na economia portuguesa. Em segundo lugar são evidenciados os princípios por detrás da execução de uma revisão de literatura. Em terceiro lugar é explanada a metodologia de investigação a implementar. Posteriormente são analisados os resultados encontrados nas bases de dados e os estudos seleccionados são alvo de análise e incluídos nesta revisão.

Este estudo basear-se-á em estudos obtidos em duas bases de dados: B-on e SSRN. Por forma a encontrar nestas bases de dados os trabalhos mais relevantes, mantendo a imperativa objectividade que uma revisão sistemática de literatura exige, a selecção dos estudos terá várias etapas.

A primeira etapa é definir uma série de palavras chave que, da melhor forma possível, consigam captar a essência dos temas, por forma a que as pesquisas devolvam os melhores resultados em cada uma das três áreas de estudo (IPOs/ novos competidores, efeitos intra-indústria e hotelaria). Após esta pesquisa inicial cheguei à conclusão que as palavras chave são insuficientes para definir apropriadamente o âmbito da minha pesquisa, retornando demasiados resultados do que os que seriam possíveis de ser analisados em tempo útil. Desta forma, e após consulta com os meus orientadores, entendemos que a melhor forma de encontrar os estu-

dos mais adequados à minha análise seria utilizar uma combinação das palavras chave definidas na primeira etapa, criando assim frases que se revelaram muito mais certeiras nos resultados obtidos.

Após uma fase inicial de pesquisa, a fase seguinte passou por procurar, dentro dos estudos obtidos na pesquisa, aqueles que melhor se adequassem e enquadrassem com a pesquisa em mãos. Desta forma conduzi uma primeira análise que consistiu na análise do título e resumo de cada estudo por forma a perceber se a temática analisada coincidia com a do trabalho que estava a desenvolver ou se seria de alguma forma útil para o meu estudo. Desta primeira análise aos estudos resultou uma diminuição drástica do número de estudos já que a maioria dos estudos encontrados nas bases de dados tinha temas que não se enquadravam de forma alguma no estudo que conduzi, pelo que foram excluídos nesta fase.

Numa fase de pesquisa mais avançada, os estudos restantes foram lidos integralmente por forma a melhor compreender a sua metodologia, amostras e se o seu contributo para a literatura existente é significativo. Desta fase avançada de análise resultaram os onze estudos que foram efetivamente detalhados na revisão.

Após a revisão completa, ficou a certeza da existência de uma falha na literatura existente sobre a temática em análise. De facto, não existem nas bases de dados muitos trabalhos que incluam simultaneamente as três áreas em análise, apenas dois trabalhos relevantes nestas áreas (abordados na revisão) e mesmo no caso destes trabalhos eles focam-se em entradas no mercado por via de IPO, sendo que seria de enorme interesse analisar estudos que abordassem a entrada de novos competidores num mercado por outra via que não uma IPO, no entanto a pesquisa não retornou qualquer resultado neste sentido.

Num mercado de pequena dimensão como o Português, em que a esmagadora maioria das empresas não está cotada em bolsa de valores, é impossível realizar um estudo deste género focado numa industria especifica e que abranja um número suficiente de empresas para que dele se possam inferir resultados relevantes para a literatura sobre o tema. Deste modo, e para realizar um estudo deste género no nosso país, teríamos que definir “competidor” como uma empresa de similar

tamanho, a operar no mesmo mercado regional e que integre um mercado específico (neste caso o mercado hoteleiro pela abertura de um novo hotel) ao invés da habitual noção de “competidor” em que é uma empresa já existente e que realiza uma IPO para aumentar fundos vendendo acções no mercado de capitais. De notar que das 1.112.000 empresas existentes em Portugal em 2011 apenas 51 empresas estão cotadas em bolsa de valores e que o principal índice bolsista Português tem apenas 20 empresas, o que torna a amostra insignificante face ao universo de empresas existente.

Dada a grande dinâmica do turismo em Portugal, um estudo deste género deveria ser feito observando cada região separadamente, desta forma seria possível caracterizar melhor a oferta turística quanto à sua saturação e tipo.

Esta revisão da literatura existente providencia um primeiro ponto de partida para investigadores que desejem trabalhar nesta matéria. Podendo ser facilmente replicada e actualizada por forma a que, aquando do seu estudo, o investigador tenha disponíveis os estudos mais recentes nesta temática.

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1 Introduction

The literature on intra-industry effects is quite extensive, since such effects can be observed in a vast number of contexts. For example, numerous empirical studies address this issue as it relates to earnings announcements, mergers and acquisitions (M&A) and privatizations. Having said that, there is still a dearth of evidence on the intra-industry effects on the hotel industry.

As noted by Akhigbe, Borde and White (2003), the decision of a firm to go public may "cause investors to reevaluate the competitive position of the Initial Public Offering (IPO henceforth) firm relative to its rivals." Therefore, we can think of the intra-industry effect of an IPO as being the effect on the rivals originated by a new firm going public. This effect may result from the fact that an IPO "increases the visibility of the firm and raises funds that the firm can use to expand and compete more effectively".

As mentioned before, the intra-industry effects can be observed on a vast number of contexts. For instance, Akhigbe and Madura (1999) looked at the intra-industry effects in the context of a bank acquisition announcements. In a very different application of the same type of methodology, Tang (2010), looked at the effects on the industry competitors of a company reorganization within the industry.

The tourism industry is a natural target for an analysis like this. As can be seen in section 1.1, this industry has been growing at a steady pace in Portugal, increasing its contribution to the Portuguese Gross Domestic Product (GDP henceforth). Therefore, in my opinion is of great interest to evaluate the existence of intra-industry effects in the context of the tourism industry, specially in Portugal.

A core principle behind a systematic literature review (see section 2) is the organization of the review. As such, my review will have the following structure:

- Section on the drive behind this literature review, showing the importance to the economy of the Portuguese tourism industry;
- Explanation on the core principles of a systematic literature review and the

importance it has to anyone developing investigation in a determined area of research;

- Methodology used to obtain the papers that will be later reviewed, explaining all the steps and databases used;
- Implementation of the methodology defined on the previous section, elaborating on the search process and its refinement;
- Final analysis to determine the papers that will be reviewed;
- Review of the papers determined on the previous section, discussing the contributions, methods and samples that each author(s) uses to achieve the results and some considerations on those results;
- Section on how this type of study can be conducted when the Portuguese reality is taken into account;
- Concluding remarks exploring the results of the analysis and giving a perspective for future investigation.

The main goal of this study is to identify a possible gap on the existing literature. While doing this, I will be reviewing the most important studies in the three interconnected research areas: intra-industry effects, IPOs and hotel related literature. The present study thus seeks to provide a useful insight for anyone seeking to pursue future research on these matters.

1.1 Why tourism matters - The Portuguese case

The tourism industry in Portugal has been growing steadily over the last decade. As can be seen on the Figure 1 below, in 2000, Tourism represented 5.700 million euros in revenue (about 4.5% of the GDP), reaching 8.600 million euros (5.2% of the GDP) in 2012² Such increase is very significant, especially since the country has been facing a very acute financial and economic crises since 2008. However,

² Statistics of Portugal - <http://www.ine.pt/> accessed on 25/02/2014

despite such crisis the image of the country as a touristic destination remains largely unaffected².

There are four main touristic regions in Portugal: Algarve, Lisbon, Porto and the Autonomic region of Madeira. The first two are the most significant ones, representing 59,3% of the total tourism revenue in 2011. Also, in 2011, hotels in the Algarve had a total occupancy of 13.9 million, which represent 35.5% of the total in Portugal. The comparable figure for Lisbon's hotels is 9 million. Importantly, the overall occupancy in Portuguese hotels rose from 39.4 million in 2011 to 39.7 in 2012 (*i.e.*, 0,6% increase during the period). Yet, higher occupancy does not translate into higher revenue. For example, between 2011 and 2012, the rise in occupancy did not translate into an increase in hotels' revenue; which actually declined from 1.906 million to 1.860 million euros³. One popular performance measure used in the hotel industry is the revenue per available room (RevPar henceforth). This indicator represents the relation between the revenue generated by a given hotel and the number of available rooms in a given period. In 2012, Lisbon generated the highest RevPar in Portugal (40.5 euros), which may be the result of steadier demand throughout the year. Still, in 2012, the Algarve manages to have a RevPar of 31.6 euros (up from 31.2 euros in 2011). In 2012, the RevPar of Portuguese hotels was 28.5 euros, a decline from the 29.5 euros registered in 2011³.

The origin of the tourists that seek Portugal as a holiday destination varies significantly between regions. For instance, in 2011 UK tourists account for nearly half of all the tourists that the Algarve greeted; Germany and the Netherlands split the second place (each with roughly 14% of the total). In other regions such as Lisbon and Porto, the majority of the tourists come from Spain and Central Europe. Portuguese tourists are also important in this industry: they account for 34% of the total occupancy³.

In Portugal, the Tourism laws categorize the establishments into several types, being the most common the Hotel, Apartment Hotel, Touristic Village and Touristic

³ Statistics of Portugal - <http://www.ine.pt/> accessed on 25/02/2014

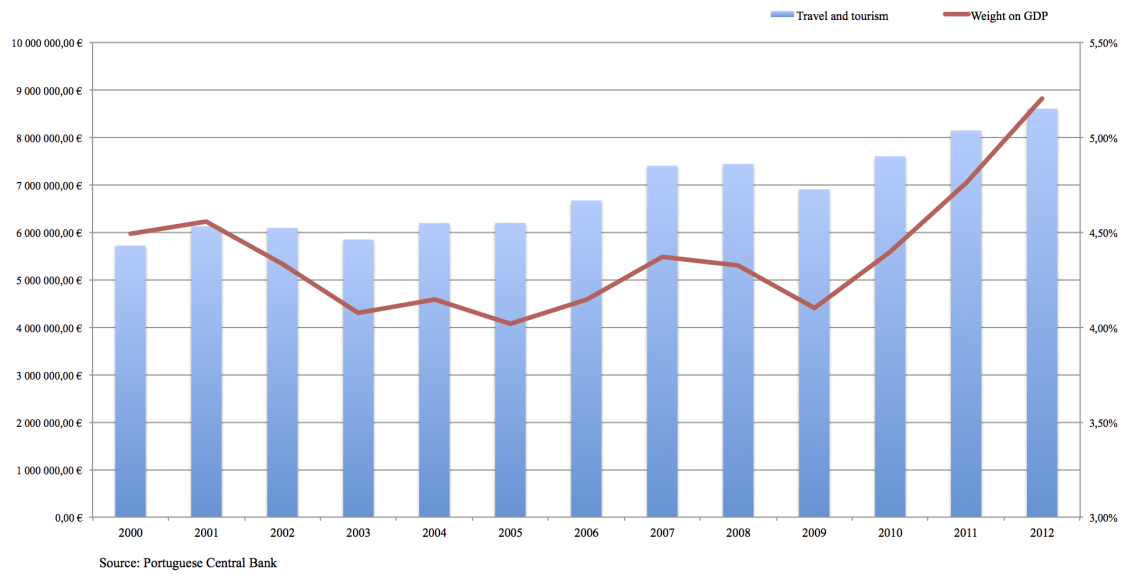


Figure 1: Travel and tourism revenue Vs. GDP Weight

Apartments. As can be seen on the table 1 below, most of the establishments fit the category of Hotels and are concentrated in the the Algarve, the country’s main touristic destination.

Region	Hotels	Apartment Hotel	Touristic Village	Touristic Apartments	Other establishments	Hotel establishments (total)
Portugal	160981	40499	15500	32855	39272	289107
Mainland	138294	31929	15074	31542	34298	251137
North (Porto)	27881	959	120	354	10842	40156
Centre	18359	811	472	290	6099	26031
Lisboa and Vale do Tejo	53604	4001	2268	1070	9787	70730
Alentejo	4873	1786	606	1256	3237	11758
Algarve	33577	24372	11608	28572	4333	102462
Azores Autonomic Region	6943	459	0	658	811	8871
Madeira Autonomic Region	15744	8111	426	655	4163	29099

Table 1: Distribution of the hotel units in Portugal by type - 2011

The touristic industry is also important job-wise. By the end of 2013, it accounted for 6.6% of the employed people on the tertiary sector (roughly 300.000 jobs)⁴. In the Algarve, this figure rises to 21.42% and in Madeira to 18.07%, with such really showing just how much these two regions rely heavily on tourism. The lack

⁴ Statistics of Portugal - <http://www.ine.pt/> accessed on 25/02/2014

of diversification of the regional economic basis presents clear challenges to the development of the Algarve, as this region is affected by a very seasonal touristic demand. The Tourism accounts for a truly important share of the wealth produced in Portugal. Therefore, it is important to understand the market dynamics of such an important sector of the Portuguese economy.

In 2011, Portugal had 1.112.000 firms, of which 1.110.905 firms were Small and Medium enterprises (SME henceforth). Of these, 1.066.065 having 10 or less employees⁴. Currently, only 51 firms are listed on the Portuguese Stock Exchange⁵. In the Lodging and Restaurant business, the reality is not much different if that of the country's average. From the 85.183 firms existing in 2011, 81.160 were SMEs. Also in 2011, the SME generated 204.110,6 million euros in net sales representing 58.8% of the nonfinancial firms turnover during that year⁴.

2 Systematic literature review: why?

As stated before on section 1, the main objective of this study is to produce a systematic review of the most relevant literature and therefore providing a theoretical background for subsequent research on the effects (intra-industry) of the entry of a new competitor in the hotel industry. This literature should include theoretical studies as well as applications of some different methodology's to real life examples, for instance, IPOs will be covered as the concept itself as well as example of IPOs studied by various investigators.

According to Fink (2005), a systematic literature review should follow a methodological approach, explaining the procedures utilized and being comprehensive in including the most relevant literature to the matter. Rosseau et al (2008) built on the research of Tranfield, Denyer & Smart (2003) and described a systematic literature review as "adopting a replicable, scientific, and transparent process, in other words a detailed technology, that aims to minimize bias through exhaus-

⁵ Euronext Lisbon - <http://www.bolsadelisboa.com.pt/> accessed on 25/02/2014

tive literature searches of published and unpublished studies". Also, Rosseau et al (2008) states that a systematic review must never provide answers, instead it should report as accurately as possible what is known and unknown about the questions addressed in the review. The fact that a explicit methodology will be employed to conduct this review makes it possible to be critically evaluated.

According to Fink (2005) a stand-alone literature review can be undertaken to describe available knowledge, to identify research projects and techniques. Also according to Fink (2005), this type of literature review may become useful to researchers that seek to have a first outline of the existing literature when undertaking an investigation. This is exactly the main objective of my study.

Also according to Rossueau et al (2008), there are a set of core principles that a systematic review should follow:

- Systematic/organized;
- Transparent/explicit;
- Replicable/updatable;
- Synthesize/summarize.

Such principles are at the core of the present review. In effect, it is systematic as it follows a procedure that is thoroughly explained in section 3. It is transparent and replicable as it uses a set of keywords and search strings that are well discriminated in the methodology section as well. Further, detailed results arising from the searches conducted on different databases are also presented. Finally, section 6 synthesizes the thinking, methods and results of the chosen papers, to allow anyone with interest on the matter to easily understand the existing literature on the subject.

3 Methodology

To produce a cohesive and systematic literature review, some measures must be in place in order to determine whether a study is relevant to be included on this review. A search field too wide will produce results that may include duplicates, papers not in the research area or simply not interesting for the matter at hand.

One of the methods to ensure that only the most relevant results are identified on the databases, is to put forward a set of keywords and search strings that are directly related to the subject matter. This helps remove the subjectivity and randomness in the search criteria, helping to make the search easily replicable. As such, in this study, the search will be conducted according to the following steps:

1. Selection of keywords related to my three areas of research (see table 2);
2. Preliminary search on B-on and SSRN in order to identify the available number of papers for each area;
3. Refinement of the search strategy, combining keywords to form search strings that yield more accurate results;
4. Title and abstract analysis of the papers selected after applying the search strings from the previous point;
5. Selection of the final sample of papers by fully reading the papers chosen on the previous point.

In order to to this, I start by clearly identify the specific areas of literature that will be used in this review:

The present review focus on the above-mentioned fields of research. Capturing the most relevant literature on the three areas allows me to do a exhaustive review, analyzing the studies with a deeper meaning to anyone interest in doing research in this field. Even though most of the papers reviewed on section 6 only cover one of the areas of research discussed on table 2 and figure 2, some papers may

Areas of research	Rationale
Intra-industry effects	The reaction provoked by the new competitor on the existing companies.
IPOs / new competitors	Events that may trigger a reaction from the industry rivals.
Hotel industry	Specific industry that is the focus of this review

Table 2: Areas of research

also combine areas, giving a deeper insight on how these areas interact with each other.

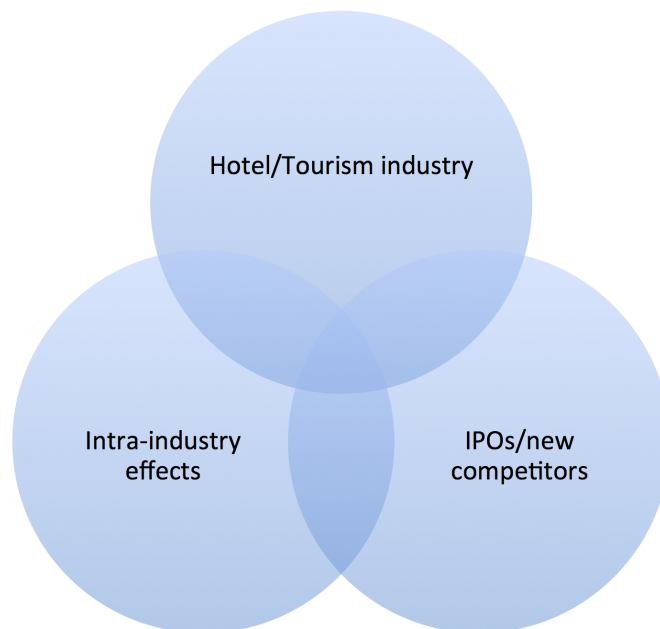


Figure 2: Mix of research areas

3.1 Keywords and search strings

With my interest areas identified, it is now possible to determine the strings used to research the most relevant studies in electronic databases. These strings were defined after some early readings on the subjects and after thorough discussion with my advisors and colleagues. I added a few keywords after such discussions, which help better portrait the relevant research areas of this review. Clearly, the objective of defining these initial keywords is to have a first view of the quantity of papers available. These are presented on table 3. As can be seen, the initial set of keywords yields a very large number of results. These had to be filtered in order to keep the number of studies to be analyzed at a reasonable level.

Area of research	Keyword/string
Intra-industry effects	intra-industry
	industry rivals
	industry contagion
IPOs/new competitors	IPO effects
	initial public offering
	new players
	new competitors
	IPO reaction
	IPO announcement
	market reaction to IPO
	IPO scale
Competition in Hotel/Lodging industry	hotel revenue determinant*
	hotel industry
	hotel revenue
	lodging industry
	competition hotel tourism industry

Table 3: Keywords/search strings

3.2 Databases

I use two databases to conduct this review, the Social Science Research Network (henceforth SSRN) and the B-on database, as they are very comprehensive and contain a vast amount of information. I do not use conference papers, books or newspapers due to availability issues and to the potential lower quality of such sources of information. Further, it is important to notice that the b-on database works as an aggregator of results from several other databases, so it is likely to provide most of the relevant papers⁶.

4 Search results

On this section I will present the results of applying the search methodology described on section 3.

4.1 Preliminary results

The first step is to conduct a preliminary search on the target databases in order to identify the sheer number of documents that may be retrieved using the customized search strings mentioned above.

The results of my preliminary run on the databases show a great disparity on the number of results for each search string. The B-on database a lot more hits than the SSRN database, which is likely due to the fact that the B-on includes studies and publications from many areas of knowledge that are not relevant for this review. As an example, consider the the results of the keyword "new players": SSRN returns 1.151 hits while the b-on returns a staggering 52.714 hits. Yet, this second database includes other sources of information besides academic studies,

⁶A side effect of the aggregation is that the multiple databases provide a vast number of duplicated papers that will be removed further on this review.

Search string	SSRN	b-on
intra-industry	695	1437
industry rivals	292	5816
industry leaders	385	46671
IPO effects	201	1727
new players	1151	52714
new competitors	818	29753
initial public offering	743	28863
IPO reaction	38	219
IPO announcements	52	464
market reaction to IPO	25	71
IPO scale	16	265
hotel revenue	42	3521
lodging industry	32	20764
competition hotel	34	1777
hotel industry	184	27253
tourism industry	472	37266
Total	5180	258401

Table 4: Preliminary search results

such as newspaper articles, books, other types of articles, *etc.*, that are included on the table 4 but will not be used on my review.

At a more general level, the results on Table 4, is evident that some refinement of the search strings needs to be done in order to obtain more manageable results. This is done in the next section.

4.2 Refinement of the search strategy

After reviewing and discussing the results on table 4 in great length with my advisors and colleagues, we agreed that the keywords used were not entirely appropriate to reach the goal of having a set of papers that could better represent the existing literature in the target research areas. This conclusion was reached mainly due to the high number of hits presented on table 4 that make the task of analyzing all the identified papers virtually impossible. As such, we concluded that the best way to proceed would be to combine the more meaningful keywords into search strings that could produce hits that are more closely related to the main objectives of the present review. I thus combined the sixteen keywords used in the first search into the following strings:

	Search string	SSRN	b-on
1.	(intra-industry) AND (IPO OR rivals OR leaders)	28	82
2.	(new competitors OR new players) AND (intra-industry OR effects)	17	91
3.	(intra-industry) AND (tourism OR hotel OR lodging)	10	45
4.	(IPO) AND (hotel OR lodging)	4	104
	Total	59	322

Table 5: Search results after strategy refinement

The logic presiding each string is as follows. On the first, I give a specific context to the intra-industry effect. In effect, this expression is too broad to be used on its own so using it cumulatively with IPO, rivals or leaders help to reduce the scope of the search. The second string deals with the idea of the entry of new

competitors on a specific market, and its impact of on the underlying industry. Finally, the third and fourth strings are industry specific, and essentially aim to identify the studies about the hotel industry in which the the intra-industry effects are addressed.

5 Selection criteria

Using the search strings above I identify more than 300 papers that are potentially interesting for the present study (see table 5). The next step is to separate those that are really relevant and of the highest quality from the rest. This section deals with this issue. In particular, it presents a number of objective criteria that help (at least partially) remove the bias of the observer while selecting the final set of papers to be reviewed.

5.1 Analysis in two stages

On this first stage, I look at the titles and abstracts of the papers and exclude those that are not in the fields of research that I am interested in. This stage is divided into two steps:

1. Analyze the title and abstracts to exclude papers that do not match the fields of interest of this study;
2. Secondly, the remaining papers will undergo a full paper analysis to further evidence if they are of interest to this review.

5.1.1 First stage - Title and abstract analysis

As can be seen on table 6 below, only 7% of the papers that are identified via the search strings met the title and abstract selection criteria. Note that papers are excluded at this stage if (by order of magnitude):

1. **Duplicates** - There were many duplicated papers, specially on the b-on database as this database gathers many studies for other databases resulting in many over-lapping results (one of the main reasons for the number of papers found on my preliminary searches);
2. **Area of research** - Papers returned by the search strings that are not included in my area of research - the b-on database includes papers from many different areas, so limiting the scope of the research is a problem;
3. **Scope within the research area** - Although in my areas of interest, their main theme not relevant to my review (e.g., papers dealing with staff policies in hotels).

This step is conducted by going through the search results one by one and reading the title and abstract and comparing them to the areas of research of figure 2, analyzing whether they are related to any of them and if so, the subject of the paper is of interest to the scope of this review. If I find the paper of interest, it will undergo the full paper analysis detailed on the next section.

	Search string	SSRN	b-on
1.	(intra-industry) AND (IPO or rivals or leaders)	2	16
2.	(new competitors OR new players) AND (intra-industry OR effects)	0	1
3.	(intra-industry) AND (tourism OR hotel OR lodging)	1	3
4.	(IPO) AND (hotel OR lodging)	1	3
Total		4	23

Table 6: Papers after title and abstract analysis

The results of table 6 may seem somehow contradictory with the ones on tables 4 and 5 as on these search runs there were many more results related to the hotel industry. The reason for this is that the papers on the hotel industry often focus on the "micro" side of the industry, looking at regional aspects instead of analyzing industry-wide themes, such as intra-industry effects. This apparent gap in the literature will be documented further on this review.

Also noteworthy is the almost complete absence of papers discussing the entry of a new competitor in a specific industry. Even though some literature exists, it focus on the effects of new businesses on economic growth, employment and not it's competitors, therefore being outside the scope of this study⁷.

5.1.2 Second stage - Full paper analysis

The papers analyzed on this section are the result of two earlier steps: the combination of keywords to create search strings and an analysis of the title and abstract of the papers. At this stage, I review the 27 papers on table 6 with the objective of selecting the final set that is to be included in my review.

To do this, I will be using the following criteria:

1. The paper should have been published on scholarly journal. This requirement helps exclude papers with inferior scientific rigor – the exception are papers selected from the SSRN database;
2. The paper must cover areas of research that are close to my own (directly or indirectly). For instance, papers that look at intra-industry effects but are not specifically related to IPOs or new competitors may be worth reviewing as the methodology is similar for that type of studies. On the other hand, I remove papers dealing with theme that are not of interest to this review. For instance, papers on the hotel business that focus on the "micro" side of the industry, and also papers on IPOs that cover (the very common) subject of pricing.

Before the full paper analysis, I had selected 27 potentially interesting papers (as in table 6). The main objective of analyzing the full papers is to understand the methodology and the areas of research that those papers cover, in order to determine whether they are related to my analysis and their methodology and/or results

⁷After the failure to find papers on the entry of new competitors I tested some other strings on the same subject, as suggested by my advisors but the results were the same, no literature was found covering this specific area of research.

are interesting to a researcher conducting an empirical study on these particular areas.

Reason for exclusion	Number of papers excluded
Duplicated	3
Theme of the paper not meaningful to my review	8
Data set quality	1
Newspaper article or unpublished studies	4
Total of papers excluded	16

Table 7: Number of papers excluded on full paper analysis

Table 7 shows the results of this last step. As can be seen, a number of studies are additionally deleted from the final set at this stage, most of which because they focus on areas that are not relevant to my review. For instance, Xiao Li and Greenwood (2004)⁸, this paper passed my initial title and abstract analysis (described in the previous section 5.1.1) as it discusses firm performance and intra-industry effects, both areas that are of interest to this study, but upon the full reading of the paper is evident that this paper does not add anything to my research for a few reasons: it analyzes a heavily regulated industry that is too far apart from the hotel industry; the sample used is rather small and the main focus of the study is market structure on that specific industry. For all this, the paper is excluded from my final sample.

5.2 Other papers included

Included in the papers on table 8 is a paper by Lang and Stulz (1992) that was not included on my final sample but is included as it is mentioned by many authors who built on this investigation in order to develop their studies. The reason that

⁸The paper's title is: "*The effect of within-industry diversification on firm performance: Synergy creation, multi-market contact and market structuration*"

this paper is not found on the final search results is likely due to the fact that on his title only one of the keywords that compose my search strings were present (intra-industry effects). Still, I believe this study adds depth to this review and therefore it will be mentioned on section 6.1 of this review.

5.3 Analysis of the final sample of papers

Table 8 summarizes the final set of papers to be included in the review. It includes seven papers that specifically deal with intra-industry effects, two papers on IPOs/new competitors, and two that focus on the hotel industry. Some papers discuss topics on two of more areas of interest to the present study.

Area of interest	Number of papers on the final review
Intra-industry effects / competitive effects	7
IPOs / new competitors	2
Tourism industry	2
Total	11

Table 8: Number of papers to be included on the review

After the thorough process of creating the keywords, strings, search process and result analysis, the final sample of papers to be analyzed on this literature review, is detailed on table 8. The final sample includes seven papers specifically on intra-industry effects, two on IPOs/new competitors and two about the hotel industry. Some of this papers areas of research is not exclusive as they relate to more than one area of research as I will discuss further on this review.

The final list of paper is as follows:

Author	Title	Included in section
Aigbe Akhigbe, Jeff Madura	Intra-industry signals embedded in bank acquisition announcements	Intra-industry effects
Aigbe Akhigbe, Anna D. Martin	Information-signaling and competitive effects of foreign acquisitions in the US	Intra-industry effects
Myron Slovin, Marie Sushka and Yvette Bendeck	The Intra-industry effects of going-private transactions	Intra-industry effects
Rosemond Desir	How Do Managers of Non-Announcing Firms Respond to Intra-Industry Information Transfers?	Intra-industry effects
Sheng-Syan Chen, Lan-Chih Ho, Yi-Cheng Shih	Intra-Industry Effects of Corporate Capital Investment Announcements	Intra-industry effects
Tseng-Chung Tang	The information content of reorganization procedures: contagion or competitive effects?	Intra-industry effects
Rupendra Paliwal	Intra-industry effects of takeovers: a study of the operating performance of rival firms	Intra-industry effects
Carmen Cotei, Joseph Farhat	Informational externalities of initial public offerings: Does venture capital backing matter?	IPOs / new competitors
Aigbe Akhigbe, Stephen Borde, Ann Marie Whyte	Does an industry effect exist for initial public offerings?	IPOs / new competitors
Richard Borghesi, Katerina Annaraud, Dipendra Singh	Are Hospitality Industry IPO Stock Returns Predictable?	Hotel industry
Dar-Hsin Chen e Chun-Da Chen	Initial Public Offerings In The Tourism Industry: An International Analysis of Taiwan	Hotel industry

Table 9: Authors and titles of the papers reviewed

Importantly, most of the papers included in the final set were published from 2000 onwards, with only three papers (out of eleven) being produced in the 1990s. Moreover, five papers were published after 2010, one of them in 2014. This goes to show that my area of research is relatively new and still developing.

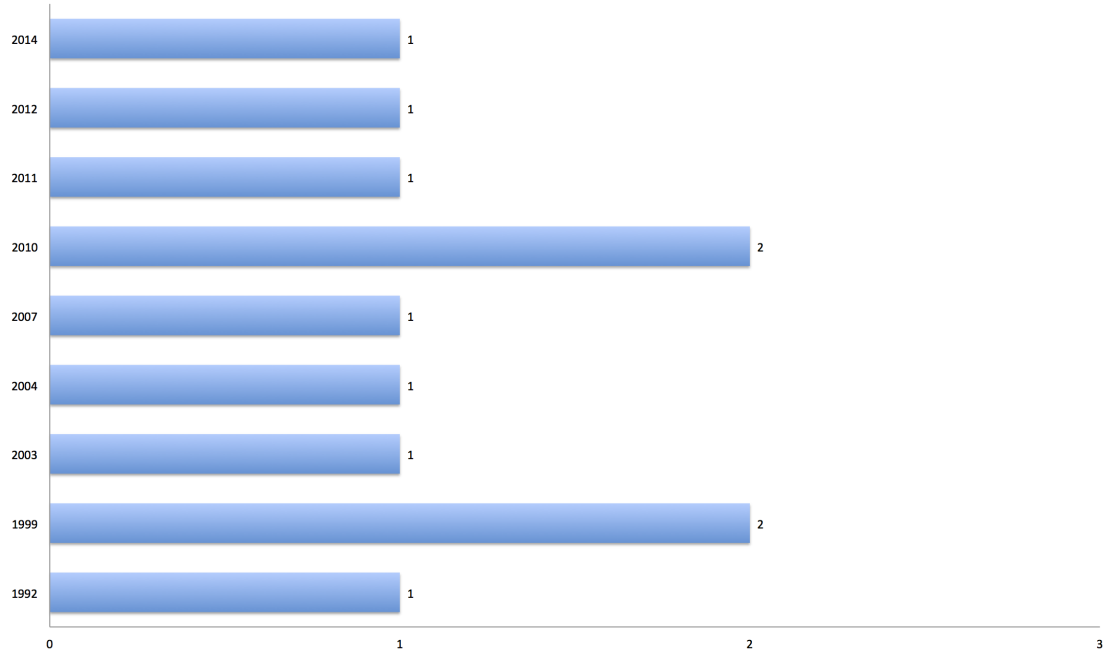


Figure 3: Distribution of papers by year

6 Findings

This section presents the contributions of the selected papers to the subject of my review. It is divided in three parts:

1. Intra-industry effects (subsection 6.1);
2. Initial public offerings and new competitors (subsection 6.2);
3. Tourism/hotel industry (subsection 6.3).

The first subsection focus on the intra-industry effects literature and covers many different events such as bankruptcy, investment announcement or acquisitions. The second subsection deals with the IPOs- and new competitors-related literature, particularly on how such events affects industry rivals. The third section looks at how both IPOs and intra-industry effects have been jointly researched on the tourism/hotel industry.

6.1 Intra-industry effects

On this section I will review the intra-industry effects related literature. This literature includes several different types of analysis but most of the times follows the same methodology. Interesting to notice are the results of this analysis that, even though they reach the consensus of the existence of intra-industry effects, they also show that these effects can have different looks and depend greatly on the type of event being study as well as the sample being used.

6.1.1 Akhigbe and Madura (1999)

The literature on intra-industry effects covers a wide range of industries and events. In effect, such concept can be applied to almost any event that might have some kind of repercussion across a specific industry. Most of these events are related to initial public offerings (IPOs), mergers and acquisitions (M&A) or information transfers within the industry.

Akhigbe and Madura (1999) tried to determine whether intra-industry effects could be detected following bank acquisition announcements. Their objective was to detect if the information of an acquisition was relevant to the valuation of the target bank only or would affect the valuation of the other banks in the industry. To do this the authors used the event study methodology, which is common on this type of study. According to Kothari and Warner (2004) "event studies examine the behavior of firms' stock prices around corporate events". The model used by Akhigbe and Madura (1999) was:

$$AR_{jt} = R_{jt} - (\alpha + \beta R_{mt})$$

On the model, AR_{jt} is the abnormal return, R_{jt} measured on a daily basis, and R_{mt} is the daily return of the market, using the CRSP index. t_0 is the first report date of the bank acquisition on *The Wall Street Journal*.

Akhigbe and Madura (1999) used an extensive database that covers acquisition announcements from 1983 to 1996. To avoid using banks too small or not representative of the sector, the authors choose to, for instance, only include in the final sample banks whose acquisition was reported on *The Wall Street Journal* or only include banks with a market value above \$ 100 million dollars. The final sample had 149 bank acquisitions.

Besides doing a time series analysis, the authors also conducted a cross-sectional analysis in order to learn if the intra-industry effects vary over a period of time and if these effects are due to some variables like: cumulative abnormal results (CAR henceforth) of the target bank; rival bank size; degree of local concentration; among others.

The authors conclude that that bank acquisitions can indeed have effects on the the industry rivals valuation and that this effects may influence the probability of the rival banks being acquired. Interestingly enough, the authors also conclude that the revaluation of the targeted banks begins well before the announcement date. The authors also conclude that the effects are conditioned by some of the event-specific characteristics mentioned above.

The analysis conducted by Akhigbe and Madura (1999) is of great interest to my review as it summarizes very well the methodology behind such study. The event study methodology used on this paper is replicable to the hotel business as it shares some of the characteristics and constraints of the banking sector. The conclusion of this paper is also interesting as it suggests that the intra-industry effects exist, and may be influenced by bank and event-specific characteristics.

6.1.2 Chen et al (2007)

Chen et al (2007) examined the announcements of corporate capital investment (as opposed to bank acquisition announcement event used by Akhigbe and Madura (1999)), but they looked at the intra-industry effects using a different perspective since they seek to distinguish between the competitive effect and the contagion effect. In particular, a competitive effect exists when "capital investment announcements by one firm result in negative valuation effects on other firms in the same industry". On the other hand, a contagion effect "suggests that capital investments announcements by one firm result in positive spillover effects on other firms in the same industry". The authors build on Lang and Stulz (1992) (which will be discussed further on on this review) to provide an insight on how these two effects work together and which prevails.

The authors applied a cross sectional approach (much alike Akhigbe and Madura (1999) I discussed earlier), using a set of different firm specific characteristics of the announcing firm (such as market share; stock price response; entry timing and growth opportunities), industry specific characteristics (like the degree of relatedness and degree of industry competition) and rivals firm characteristics (such as rival's relative size; investment opportunities; free cash flow; financial leverage and Research and Development (R&D henceforth) intensity).

The way the sample for this investigation was chosen is similar to Akhigbe and Madura (1999), relying on data on from the New York Stock Exchange (NYSE), American Stock Exchange (AMEX) and *The Wall Street Journal* for the announcements information. The final sample included companies from January 1989 up to December 1998, with a total of 250 announcements by 153 firms in 66 industries. One distinct characteristic that can be seen on this study (when compared to section 6.1.1) is that Chen et al (2007) does not focus solely on one industry, they examined all the announcements from all the different industries, and not just one industry (Akhigbe and Madura (1999) focused on the banking industry). This is important as it shows that the intra-industry effects type of studies can be applied to a variety of scenarios and not just in one specific industry.

The methodology behind this investigation is similar to the one used on section 6.1.1, relying on the event-study method to analyze the response of stock price to the event in question. The authors defined the day 0 (t_0) as being the day of the announcement. To measure the characteristics of the announcing firm, industry and rival firms mentioned above, the authors used proxies, for instance the growth opportunities of the announcing firms were estimated using Tobin's q (market to book value).

The study also uses the event-study method to analyze the response of stock price to the event in question and a number of proxies to account for the characteristics of the announcing firm, industry and rival firms. The authors concluded that indeed a competitive intra-industry effect exist in reaction to capital investment announcements, resulting in significant negative effect on share price of the rivals firms. Further, rivals' share prices are affected by firm, industry and rivals characteristics. This is an important contribution because it does not confine the event in itself and offers some degree of explanation on why the share prices of the rivals company react differently to announcements of different firms.

6.1.3 Lang and Stulz (1992)

As described on section 5.2, the study of Lang and Stulz is included on this review because it is a seminal paper in this area. Lang and Stulz (1992) addresses the intra-industry effects of bankruptcy announcements and explore to what extent a competitive or contagion effect exists on this context. In their case, a contagion effect that can be attributed to the fact that other companies on the same industry may have cash flow characteristics that are similar to those of the bankrupt firm; if this is the case, the announcement of Chapter 11 may convey negative news on the rival firms. In contrast, in this context, a competitive effect may occur due to a shift in demand. A customer may find the products of bankrupt firm less attractive, shifting his/her demand to the competitors in the industry.

The sample is based on a study by Altman (1990), and consists of all bankruptcies

between January 1970 and December 1989 of listed firms in the U.S. with liabilities in excess of 120 million dollars. According to the authors, the focus on bigger firms helps identify a potential industry-wide effect that may not be present in the case of smaller bankruptcies. Their final sample includes 41 industries, with 8 industries having more than one bankruptcy. As with the two papers reviewed before, Lang and Stulz (1992) also rely on *The Wall Street Journal* for publication dates of the Chapter 11 filing (t_0). Lang and Stulz (1992) also measured certain characteristics of the industries they explore using proxies. For example to proxy the degree of competition the authors use the Herfindahl ratio⁹.

Lang and Stulz (1992) find that the competitive effect is stronger than the contagion effect but only in industries where the leverage and degree of competition are lower¹⁰. This is due to the fact that firms with higher leverage are less likely to exploit changes in the competitive firms. These results, although somewhat contrary to those by Chen et al (2007), are interesting as we can now distinguish that the intra-industry effects may take different forms on different industries and, most importantly, they do depend on the type of event being analyzed. Also important in this research by Lang and Stulz (1992) is the core methodology defined by the authors that has since been used in many studies as the ones on sections 6.1.1 and 6.1.2 and some more that will be reviewed further on.

6.1.4 Desir (2012)

The research of Desir (2012) follows a different path than the previously reviewed papers, further demonstrating the list of possible origins for intra-industry effects and how differently they may apply, depending on a number of different factors and characteristics (discussed at length on previous sections). This study discussed the implications to the industry of the reactions of the managers on non-announcing firms to the announcements made by other firms in the industry.

⁹Ratio constructed using the sales of competitors of the whole industry.

¹⁰Chen et al (2007) concluded in their research that competitive effect is stronger than the contagion effect .

The author hypothesizes that "managers of non-announcing firms in more concentrated industries are more likely to issue good news when their industry peers have good news", what the author calls "*me-too*" story. Also hypothesized is the (*not-me*) story, where the managers of the non-announcing firms will issue good news in order to distance themselves from the bad news of their peers.

The sample on this study is not as comprehensive (timewise) as the studies reviewed before. In particular, it uses dividend announcements of randomly selected firms between 2003 and 2006. Due to several factors, the initial sample of 11591 was reduced to a final size of 606 observations (369 are dividend-increase and 237 are dividend-decrease firms), all of which were obtained through CRSP and Compustat. The author use Lexis-Nexis¹¹ for the public announcements made by the non-announcing firms in the period comprehended between (t_{-1}) and (t_{10}) (with t_0 being the date of the announcement).

The author of this study finds an intra-industry effects in a sense that the managers of non-announcing firms tend to react to public announcements of competitors by issuing good news when they expect that the announcements made by their competitors to negatively affect their firms' share price. Moreover, the author shows evidence that the market rewards the non-announcing firm that presents such good news.

The contribution of this paper to this review is not so much in the methodology department (which has been covered on sections 6.1.1, 6.1.2 and 6.1.3), but more importantly the added range of possibility of applications that the intra-industry effects may have and the type of analysis that can be conducted. In this study, the author looked at managerial reactions to a certain type of announcements from other firms, an area of research substantially different from the ones analyzed on previous sections but an important one nevertheless.

¹¹Lexis-Nexis is a company providing news and business insights for a variety of proposes, available at <http://www.lexisnexis.com/en-us/>.

6.1.5 Tang (2010)

Tang (2010) closely follows the early work of Lang and Stulz (1992) by analyzing the competitive/contagion intra-industry effect following reorganization filings. An important difference as it concerns the previous studies reviewed so far is that Tang (2010) works with a sample of Taiwanese firms. This explains the small sample size of the study, which totals 56 reorganization filings. Yet, the most important contribution of the paper is its insight that the intra-industry effects are not a "one off" event; instead it is a staged process where the market reassesses the valuation of the filer as well as the industry rivals. This is important as the previous studies tend to look at the intra-industry effect as a sum of the period after the announcement day (see section 6.1.4) and not how the process unfolds during the days after the announcement.

At a methodological level, Tang (2010) also presents some innovation as it uses a hybrid neuro-fuzzy model to capture the "nonlinear and chaotic way the market behaves toward industry rivals". This model incorporates five firm characteristics in order to capture their significance. Nevertheless, following the investigation of Lang and Stulz (1992), amongst others, the author includes in his analysis a series of industry characteristics to assess if the effects depend or not of a certain characteristic, such as cash flows, leverage, concentration level in the industry, *etc.*

The most important contribution of this paper is the acknowledgement that the intra-industry effects are not a "one off" event and are instead a staged process where the market reassesses the valuation of the filer as well as the industry rivals. This is important to understand because previous studies have covered the effect as a sum of the period after the announcements (see section 6.1.4) and not how the process unfolds during the days after the announcement. Also, this study goes further back in time to (t_{-250}) , which when compared to (t_{-1}) of Desir (2012) analysis gives a better insight on how the valuation of firm evolved on the (nearly a) year prior to the filing.

Following the investigation of Lang and Stulz (1992), amongst others, the author includes in his analysis a series of industry characteristics to access if the the effects depend or not of a certain characteristic, such as cash flows, leverage, concentration level in the industry, *etc.*.

One crucial finding of this study is that the markets starts to discount the possible failure of a company (and subsequent reorganization) long before the event actually happens. Also important to notice, upon the filing, the firm experiences a positive effect, as the investors view the reorganization as positive because they believe the announcement will solve the firm's problems. The author also confirmed that the neuro-fuzzy model may be applied as it is accurate demonstrating the contagion and competitive effects within the industry.

6.1.6 Paliwal (2010)

Paliwal (2010) focus on intra-industry effects on the managers reactions, in an attempt to understand the reaction of rival's firms to a takeover attempt in the industry. The author focuses on a subset of firms with very specific qualities: high levels of cash flow; low Tobin's q ¹²; low managerial ownership; low institutional holdings; lower external monitoring by debt holders and poor operating performance. This conditions are applied because a firm that fits them may be more exposed to being taken over than a company that has, for instance, good operating performance. The main purpose of the paper is to observe if any of those conditions above mentioned, change when the managers are aware that they may be bought out in a near future. The author hypothesizes that the rival's will improve their operating efficiency after an initial take over attempt in the industry.

The author uses a dataset composed of takeover attempts in the years of 1992 up to 2000 in the US, eliminating all the regulated industries (such as Financial). The final sample includes 511 initial targets and 4526 rivals. It is, however, important to define what the author considers as an initial target, he defines it as "the first firm

¹²Tobin's q is a ratio of asset's market value and their book value.

in an industry to experience acquisition activity following a minimum 12-month dormant period".

The methodology employed uses both univariate and multivariate analysis. The univariate analysis seeks to capture the impact on some financial ratios of the industry rivals. Also interesting to notice that the author uses data from 2 years before the takeover attempt in order to fully capture the effects on the ratios. The financial ratios analyzed were:

1. **OES** Operating expense to net sales;
2. **OEA** Operating expenses to total assets;
3. **FCFA** Free cash flow to total assets;
4. **CEA** Cash and cash equivalents to total assets;
5. **CAPEXA** Capital expenditures to total assets;
6. **TDA** Total debt to total assets;
7. **LTDA** Long term debt to total assets.

The results of the univariate analysis show that after a takeover attempt, the rivals adjust their cash flows (FCFA), lowering excess cash available to the managers, in order to reduce over-investment¹³. The results also show statistically significant results on the other indicators, the operating expenses are reduced after the takeover attempt, and so is the capital expenditure. On the other hand, the leverage is increased after the attempt.

The author also selects several sub-samples in order to analyze the effects on the financial ratios independently. The rivals are sub-sampled according to several characteristics:

1. Level of managerial ownership;

¹³Jensen (1976) argued that excess cash flow available to the managers works as an incentive for them to invest in projects with lower net present value (NPV).

2. Institutional holdings;
3. Nature of initial takeover bid;
4. Tender offers;
5. Industry concentration;
6. Investment opportunities.

In this respect the results show, once again the present of the intra-industry effects on the managers. The author finds evidence of a shift in behavior from the managers of the rivals firm in each sub-sample after the takeover attempt on a rival firm. For instance, by looking to the industry concentration (via the Herfindahl index¹⁴) the author finds that rivals in industries with lower concentration take more steps to reduce their agency exposure by lowering the excess cash, increasing leverage or generally improving operational performance. The results of the cross-sectional analysis further confirmed the ones from the univariate analysis, the behavior of the managers of the industry companies is affected when a company is targeted for a takeover.

This paper is relevant to the theme of this review as it finds that, the managers are aware of the possible effects of actions on other companies and take measures to change the path of their firms in order to stay competitive and not be taken over. Also important to notice is the hypothesis that this raises to the IPOs in hotel business, do the managers of the other hotels nearby the new one also try to improve their operation? Or do they think that the new hotel opening won't affect the performance of their firms and therefore no further action is necessary? The evidence from this study does support the first hypothesis but many other characteristics must be taken into account.

¹⁴The Herfindahl index is constructed using the market share of all firms in the industry

6.1.7 Akhigbe and Martin (2000)

Thus far, we have been focusing on the intra-industry effects confined in the borders of a country. The study from Akhigbe and Martin (2000) adds another dimension to the intra-industry effects. In particular, the authors want to learn to what extent does a competitive effect occurs when there are foreign acquisitions on US companies. In order to investigate this issue Akhigbe and Martin (2000) propose two hypotheses that are much in line with previously reviewed studies. The first is an information signaling hypothesis. It states that after an acquisition, investors may believe that that more acquisitions are near, which will push up the stock price of the industry rivals. The second is a competitive effect hypothesis, which states that the rivals will experience a decline of their stock price because the foreign companies that make the acquisition are deemed as having a competitive advantage over their rivals.

Akhigbe and Martin (2000) explore these hypothesis using a sample of 165 acquisition announcements made between 1985 and 1996, and that covers 119 industries. Further, the authors rely on the market model to analyze the share price returns, covering a period of 200 days before the announcement¹⁵. The data is retrieved from the CRSP database. Moreover, using a series of proxies, the authors run a cross-sectional analysis in order to evaluate how the different domestic competitors (as in US companies) valuation will react to the acquisition.

Results suggests that both a competitive and information signaling effect exist. In addition, as the authors hypothesized, the information signaling effect is greater for smaller rivals. Finally, there is evidence that rivals with poorer pre-event performance seem to perform in the aftermath of the acquisition announcement.

This paper is important to this review as it adds further depth to the type of events and impacts that can be analyzed for intra-industry effects. The methodology used on this paper is in the same line as other papers and results show that the effects on competitors depend on the size of the rivals and other relevant variables.

¹⁵To be precise, the period considered is from (t_{-220}) to (t_{-20}) .

6.2 Initial Public Offerings (IPOs) and new competitors

This section reviews papers that deal with IPOs, as unfortunately, I could not find a single paper that investigates the impacts of a new entrant on the market that is not about IPOs. As such, this section reviews a first paper that mixes the IPO literature with that of the intra-industry effects. Next, I consider another paper that investigates the role of venture capital on IPOs information externalities.

6.2.1 Cotei and Farhat (2013)

Cotei and Farhat (2013) explore the core hypothesis that sustains my literature review. In particular, they study the existence of a contagion or competitive effect as it relates to the use of venture capital backing on an IPO. As the authors explain, an IPO can have positive or negative effects on the industry rivals¹⁶. A positive effect is to be expected if there are growth opportunities for the industry that explain the IPO and also improve the competitors position within the industry. In contrast, a negative effect following an IPO is likely to exist if the challenger introduces important technology advances that disrupts the competitive ability of the rivals already in place.

Cotei and Farhat (2013) explore this question using a sample of firms that have venture capital backing their IPO vs. similar firms that do not have such business patterns (non-backed IPOS). The reasoning is venture capitalists investing in some of these companies play a "certification role", which help the backed firms to build a reputation much faster than their non-backed counterparts. Furthermore, the authors propose that some firm-specific and event-specific characteristics change how the IPO affects the competitors¹⁷:

1. Market-to-book ratio as a proxy for growth opportunities;
2. Firm size using the median size of the industry;

¹⁶Or no effects at all, therefore being a firm-specific event without intra-industry effects.

¹⁷It is important to note that these firm-specific characteristics were used in all the papers reviewed on section 6.1.

3. Herfindahl Index as a proxy for industry concentration;
4. IPO Size proxied by IPO proceeds.

The sample uses data from 1983 up to 2001. The initial list of IPOs is from the Thompson Financial Security Database and included 6,423 IPOs by industrial firms. Data from Compustat and CRSP additionally used. The raw list of IPOs was streamlined, removing for example, IPOs with offer price inferior to \$5 or unit IPOs. After matching the IPO firms with their rivals¹⁸ and their financial information, the final sample includes 1,681 IPOs and 38,791 rivals.

The authors relied on the event study methodology along similar lines to that that has been discussed previously in this review. (t_0) is the date of the filing of the IPO in the Securities and Exchange Commission (SEC). The model used follows the research of Fama and French (1993) and is estimated for the period between (t_{-255}) and (t_{30}). The univariate model used is the following:

$$R_{pt} = \alpha + \beta_p R_{mt} + s_p SMB_t + h_p HML_t + \epsilon_{pt}$$

R_{pt} is the equally-weighted rival portfolio return for day t ;

R_{mt} is the return of the market for the day t ;

SMB captures the size factor¹⁹;

HML captures the book-to-market factor¹⁹

Cotei and Farhat (2013) show that, in general, the decision to going public (*i.e.* undergoing an IPO) signals positive prospects for the industry, with this positive information transferred into the stock price of publicly traded rivals. Results depend on firm-specific characteristics, as discussed on page 33 of the paper. For instance, Cotei and Farhat (2013) find that the higher the market-to-book value, the stronger is the response to an IPO. Further, the effect is much stronger among the smallest size rivals.

¹⁸The authors required that each IPO had at least 5 rivals in order to be considered in the final sample.

¹⁹SMB and HML variables are described by Fama and French (1993) and used in this study.

More importantly, the authors find that venture backed IPOs have a positive valuation effect on their industry rivals while non-venture backed IPOs do not have that effect. In order to further understand this phenomenon, the authors estimate the following cross-sectional model:

$$RCAR_i = \alpha_0 + \alpha_1 CONC_i + \alpha_2 RSIZE_i + \alpha_3 RMB_i + \alpha_4 VCIPO_i + \alpha_5 IPO SIZE_i + \alpha_6 MB * HI_i + \epsilon_i$$

The model above uses several dummy variables in order to explain the variation in rivals valuation following an IPO and the results confirm the ones from the univariate analysis. In particular, rivals experience positive and significant valuation effect when an IPO occurs in an industry and is venture backed. Also firm characteristics are relevant to the existence of an intra-industry effect. For instance, the degree of concentration relates negatively with the rivals valuations and IPOs with higher proceeds have more impact on the rivals than the IPOs that generate smaller proceeds.

This study clearly contributes to the literature on IPOs and intra-industry effects and is very important to my research as it explores a mix of areas that have not received much attention so far ²⁰. The methodology is standard but the large sample size adds to the robustness of the results.

6.2.2 Akhigbe et al (2003)

This paper is similar to that analyzed in the previous section but much broader in scope. In effect, Akhigbe et al (2003) analyze the intra-industry effects of IPOs independently of their funding or any other particular characteristic. In effect, the authors posit that IPOs may send signals about the future of the industries they compete in, which could also benefit their rivals. In contrast, IPOs may change the competitive balance within the industry, which could harm the interests of the outstanding rivals. Accordingly, Akhigbe et al (2003) compile a list of 2,493 IPOs

²⁰See table 5 for details

from 1989 to 2000 from Thomson Financial database to study this issue. They also employ a cross-sectional model very similar to that of Cotei and Farhat (2013) to explore the determinants of an IPO-driven intra-industry effect.

Results are, however, at odds with those of Cotei and Farhat (2013), insofar that Akhigbe et al (2003) find that IPOs tend to have an insignificant impact on rivals' valuation. In effect, the authors suggest that IPOs are purely a firm-specific event, unable to generate a contagion or competitive effect. Importantly, this study does not focus on a single industry nor explicitly considers the type of financial backing of the IPO as Cotei and Farhat (2013) do. This actually leads Cotei and Farhat (2013) to mention that Akhigbe et al (2003) simply pool all the IPOs together without taking into consideration the differences between the industries and they also did not control for other type of events that may influence the rivals valuation behavior.

Despite the difference in results noted above, the study by Akhigbe et al (2003) is also important to my review. In effect, it shows that differences in research design may yield very different results even when the topic addressed is very similar.

6.3 Hotel/tourism Industry

As the results on table 8 document, there are not that many studies focusing on the hotel industry. This is even more of an issue when we search for literature on a specific topic inside the hotel industry as I did (documented on table 8). Still, my research found two papers that seem to closely match the research areas described on section 3 (also see figure 2), and thus should be very relevant to my study. The first looks at IPOs in the hotel industry and the second talks about the returns of IPOs on the hospitality industry. The next subsections summarize their main research questions, methodology and results.

6.3.1 Borghesi et al (2014)

Borghesi et al (2014) is one of two papers uncovered during the search stage of this review that brings together two of my areas of interest. In particular, it analyzes the post-IPO stock returns of the hospitality industry. The authors state that the main reason for this study is that the hotel industry has different characteristics and reacts differently to IPOs than other industries do. The sample spans from 1996 to 2012 and includes 63 IPOs. Data is collected from the CRSP database, with the authors using regression models to evaluate the post-IPO returns. A cross-sectional model is also employed to explore the difference in returns, with the following explanatory variables:

1. Total assets;
2. Free Cash flow;
3. Discretionary accruals;
4. Altman's Z^{21} ;
5. Market returns.

Borghesi et al (2014) find that these variables in a pre-IPO phase influence the returns of the years after the IPO. The results of this study also follow the existing literature on IPO pricing as the authors find that the hospitality firms tend to under-perform on the first few years after the IPO.

The results of this study are relevant to this review as they show that the hospitality industry follows the same behavioral pattern showed by various other industries in previous studies. The specifics of the industry do not seem to affect the pricing of the IPO as they do under-perform just like the other industries do in general.

²¹According to the authors Altman's Z measures the firm financial health, the highest the Z-score, the less financial distress the firm is.

6.3.2 Chen and Chen (2004)

This paper uses 10 events identified from 1982 to 2002 to explore the IPO pricing performance of Taiwanese firms competing in the hospitality industry. Data is collected from the *Taiwan Economic Journal* and the AREMOS database (provided by the Taiwan Economic Data Center). Despite their small sample size, Chen and Chen (2004) aim at understanding the first-day, short-term (up to 8 weeks after the IPO) and long-term (one year after the IPO) performance of their IPOs. The authors report that, in general, IPOs in Taiwan in the hospitality industry are no different from their US counterparts. In fact, just as American IPOs, Taiwanese IPOs tend to underperform in the long-run. Yet, Chen and Chen (2004) claims that the short-run returns of the Taiwan's IPO are less under-priced than the US counterparts.

I decided to include this study in my final review due to its particular nature. In effect, it is difficult to find an empirical paper that focus on IPOs in the hospitality industry. Yet, one must realize that the Chen and Chen (2004) study has many fragilities vis-à-vis comparable studies done outside the scope of the hospitality industry. Yet, there is a lesson to be learnt here. Using data from a country outside the US of A and that focuses on a specific sector may result in very little observations, which can question the final results and findings.

7 My take on an analysis like this

As discussed several times during this review, the literature combining intra-industry effects, IPOs and the hotel industry is non-existent. Fortunately, as seen on section 1.1 in 2014 we saw some attempts to pricing of the IPOs in the tourism industry. These papers do not address a possible contagion or competitive effect within the industry, but they do provide some insight on how the market sees these IPOs.

What the available studies do not explore is how the industry rivals react to an

IPO, i.e., to the entry new competitor on the market. In the case of the hotel industry, we could define 'industry rival' as a similar size hotel, with the same type of target audience and located in the nearby region. The Portuguese hotel industry is, in my view, a great case study to analyze the impacts of a new hotel opening. Yet, traditionally, Portuguese companies do not seek funds via the stock market; instead they rely on shareholders' equity and bank debt to that purpose. In effect, the number of listed companies in the Portuguese Stock Exchange is quite small (in absolute and relative terms) and none of the companies on the main index (PSI-20) compete in the hospitality industry.

Given the above, studying the intra-industry effects of a new entrant in the hospitality industry in Portugal would require some critical thinking. In particular, in this context, the researcher should think of "new entrants" as new competitors that come into the market and not as an existing firm that seeks to increase its financial resources by selling shares on the market. An immediate consequence would be on the methodology required for such a study as it would not be possible to rely on stock price and standard event-study methodology. Instead, one should look elsewhere and a possible option would be to study the abnormal operating performance of both event and rival firms as Barber and Lyon (1996) suggest.

Let me materialize this idea with a simple example: in a touristic region of Portugal such as the Algarve, there are several five-star hotels²², Let us assume that a new five-star hotel starts operating in the region. This may have two possible effects on the existing rivals. First, it could be argued that the new unit captures some of the existing demand directed to the other hotels, which would experience a reduction on their revenues and, eventually, their operating income. Yet, one can also argue that the new hotel actually expands the total demand for five starts hotels in the Algarve region as there is now another unit one can visit. The extra visitors may at one time choose the new hotel but may well come back and stay at a different unit subsequently. If this is the case, total revenues should increase, and thus some

²²To be precise, according to the Tourism of Portugal in 2013 the Algarve had 19 five-star hotels. <http://www.turismodeportugal.pt/Português/ProTurismo/> - accessed on 03/11/2014

rival may even experience an increase in operating income over time.

Clearly, distinguishing between these two scenarios is an empirical question, which could be explored if data is available. Such data should include a somewhat large time-span so that one can investigate the impact of the new entry over long periods just as in the IPO literature. Moreover, one should have access to the characteristics of the hotels (type, location, management and shareholders structure) and, of course, financial data. To the best of my knowledge, the Amadeus database covers some of this data requirements but does not have information on the characteristics of hotel (*i.e.* the number of stars). Defining rivals here is relatively straightforward: these would be the five star hotels operating in the same region as the new hotel. Finally, the basic methodology could that put forward by Barber and Lyon (1996). This paper refines the event-study method that uses prices to explore the impact of a given event on a firm and/or its rivals considering accounting information instead. As such, the object of Barber and Lyon (1996) is the abnormal operating performance of firms and not their market abnormal performance, making this paper very suitable for the type of study now being considered. Furthermore, in line with the literature reviewed above, one could also consider some kind of cross-sectional model to try identify the key variables that might explain cross-sectional differences in how rival react to new entrants in the hospitality industry in Portugal.

Given the differences in the touristic offer in Portugal the results of such study should be presented regionally. This way it would be possible to analyze differences between regions and better characterize the touristic offer of each region. A generalized absence of intra-industry effects may indicate that the touristic demand for a touristic destiny is increasing more than the touristic demand, as the existing hotels are not suffering from the opening of a new one.

This type of study can be applied to many economic sectors because, as mentioned before, Portugal has a very small stock market, making impossible to analyze IPOs through stock returns. My focus on tourism is merely because the Tourism represents an important part of the national income (see section 1.1).

8 Conclusion

The main purpose of this review is to evaluate the existing literature in a very specific area, namely the intra-industry effects of a new competitor in the hotel industry. To do this, I use a systematic literature review, designed to be replicable and coherent. In particular, as suggested by the theory in this area, I followed the following steps: 1) definition of the keywords; 2) evaluation of the results; 3) refinement of the search strategy; 4) title and abstract analysis and full paper analysis. In the end, I identified a number of papers that are relevant for my research topic. Yet, my main conclusion is that no paper to date addresses the three areas of knowledge I am cumulatively interested in. In effect, even though many studies explore the intra-industry effects in different contexts and many others investigate different aspects that relate to IPOs, the hotel industry seems to not have captured a lot of attention from researchers, with the extant literature focusing on industry-specific policies and very regional matters. Furthermore, the literature discussing the impact of new competitors entering a specific industry is, as far as I can see, nearly non-existent. Therefore, to my understanding there is an important gap in the literature that is yet to be explored.

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