Beating the Crunch?

How corporate real estate management responded to the credit crunch

Ruben Dalderup MSc Monique Arkesteijn MSc Louk Heijnders MSc Prof. Hans de Jonge MSc

Paper for the conference of the European Real Estate Society in Bucharest, Romania, 25-28 June 2014

Department of Real Estate and Housing, Faculty of Architecture, Delft University of Technology, Julianalaan 134, 2628 BL, Delft, The Netherlands e-mail: m.h.arkesteijn@tudelft.nl , tel: +31 152788427

Purpose: Which real estate strategy is most suitable during economic prosperity and downturn? This paper maps and analyses the relationship between the economic context, the corporate strategy and the real estate strategy of five multinational (Fortune 500) corporations over twenty years. The 2008 credit crunch is used as turning point in the strategy.

Design/methodology/approach: This paper is based on both quantitative and qualitative analysis. To understand and explain the case studies a conceptual model is constructed that connects the four research elements – being the economic context, the business results, the corporate strategy and the real estate strategy – through two alignment models: (1) the impact matrix and (2) the real estate classification model.

Findings: The credit crunch has directly and indirectly influenced the corporate real estate management strategy. Structural cost savings dominates the corporate objectives, primarily realized by portfolio reorganization. Corporations that use real estate for commercial purposes enable quick and efficient action, compared to those corporations whose primary purposes are production.

Implications for research: The research provides a first concept of describing the relationship between the corporate success and the real estate activities of a multinational corporation. In the next stage, a model may be developed to directly relate (successful) real estate strategies to the economic conjuncture at any given time. Consecutive research needs to address more case studies within the three assessed industries.

Keywords: corporate real estate management, credit crunch, corporate strategy, business indicators, sector analysis

1. Introduction

The world has been under the spell of the financial crisis, or credit crunch, since the financial breakdown of Lehman Brothers on September 14th 2008 (Hazeu 2011). At the basis of the credit crunch lies a series of (in)dependent events, decisions and actions, initiated and caused by multiple parties. Not one party is to blame, although many condemn the mentality of banks, the greed of consumers and their desire for instant gratification. The credit crunch blended into the European sovereign debt crisis, also known as the Eurozone crisis, in 2010 (Hazeu 2011).

The macroeconomic environment is important for business and their overall competitiveness (Schwab 2012). The threat of collapse of large financial institutions and the major downturn in stock markets have heavily influenced business and consumer confidence in the past seven years. Corporations suffered from poor business results, forcing them to strategically respond to the effects of the credit crunch. The most common response of corporations towards economic downturn is to cut back on spending to conserve cash, particularly on investment spending that can be deferred or delayed (Pearce and Michael 2006). All corporate resources are put to use, including real estate, for changes in the competitive, economic, financial and regulatory conditions ignite changes in corporate real estate decision-making (Wurdemann 2012). With real estate mostly being the second largest cost factor on the balance sheet (after

human resources), its impact on the business is significant (Hwa 2003; Heywood and Kenley 2008; Wurdemann 2012). Besides this direct financial impact on corporate performance it also has an indirect influence through accommodating core business activities. The credit crunch provides the opportunity to assess and review the relationship the corporate and the real estate strategy in practice: "Recessions are a godsend for they strain management capabilities to their limit, and they are, therefore, a natural setting in which to study how firms cope with environmental challenges" (Geroski and Gregg 1994).

Bon and Luck (1999) concluded that the importance of the real estate management function to the corporate executive increases substantially during periods of economic downturn, but tends to return to previous levels of insignificance in periods of economic boom (Edwards and Ellison 2004). However, there is still little scientific and practical understanding of real estate strategies within corporations (Roulac, Adair et al. 2005). Moreover, there is scarcity in research relating corporate real estate strategies with external business dimensions (Heywood and Kenley 2008).

Gibler and Lindholm (2012) found that strategic corporate real estate management is becoming common and better aligned with core business strategy, which should increase the value that corporate real estate management adds to the firm (Gibler and Lindholm 2012). However, they also concluded further research is needed to test which strategy or combination of strategies is most successful in assisting in accomplishing the firm's core business objective in both good and bad economic conditions combining information on firms' financial performance, core strategies, corporate real estate strategies and real estate operating decisions.

This paper provides an understanding of corporate real estate management within five Fortune 500 (2007) multinational corporations from different industries and demonstrates the impact of the economic conjuncture on corporate real estate strategy. The main research question is: 'What is the effect of the credit crunch on the real estate strategy of a multinational corporation?'

2. Methodology

The research method applied to collect, analyse and compare information in case studies, both quantitative and qualitative. The case studies analysis is performed on three levels: (1) individual corporate analysis, (2) sector analysis and (3) inter-sector analyses. See Figure 1. The methods are different for the four research elements: (1) macroeconomic environment, (2) corporate business results, (3) corporate strategy and (4) real estate strategy.

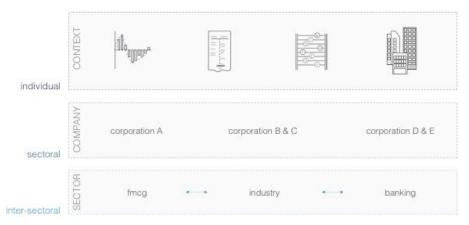


Figure 1: Case study structure

Quantitative research

Through a quantitative business analysis, the development of the business results and the corporate strategy are analysed and pictured for each individual corporation (Figure 2). Use is made of indicators to describe the macroeconomic environment and the corporate business results. The quantitative analysis served as input to the qualitative research and is used to verify and explain changes in the corporate and real estate strategy.

Indicators

The indicators are selected on the basis of financial-economic literature. The indicators are tracked and analysed over a period of twenty years: 1993-2012. The timespan is sufficient to alert changes in the corporate strategy.

The suitability of the indicators is tested by the use of three criteria: validity, objectivity and availability. Each and every selected indicator is required to show (reflect) the effect of the financial crisis in its own development over time. To picture the macro-economic environment, use is made of three independent institutions that perform, or have performed, global and national research on the (business) competitiveness of both countries and corporations: *Het Nederlandse Ondernemingsklimaat* (2006-2012); The Global Competitiveness Report – World Economic Forum (2012-2013); and the IMD World Competitiveness Yearbook – Institute of Management Development.

Qualitative research

A thorough qualitative document analysis on all case studies was performed. This data – originating primarily from annual reports, corporate publications, independent industry institutions and former case studies research – has been checked with and complemented by the interviewees. The interviews with both corporate and real estate managers provided indepth information on the real estate strategy and the linkage of all research elements.

The total (qualitative) data package has been generalized and made comparable by means of the theories of Porter, Tregoe & Zimmerman (corporate strategy) and O'Mara and the alternative real estate strategies of Nourse and Roulac (real estate strategy). To give insight in the way corporations deal with real estate, the theory of Joroff (1993) – the attitude towards real estate and the position in the organization – has been used.

Case study selection

The research is performed by means of case studies among five Dutch multinational corporations. The case studies selection is based on multiple criteria. First and foremost, the quantity of the case studies has to be sufficient to draw sound conclusions. This means that is has to be possible to compare individual case studies with each other, as well as one sector to another sector. Furthermore, the corporations have to be comparable in size and maturity to rule out as many factors as possible other than the economic context. They all have to be based in the Netherlands, for the research looks into the Dutch real estate market. Therefore, solely Dutch multinational corporations have been selected, all with a rich history and strong brand. Finally, the selected sectors have to be completely different in the way that they are impacted (affected) by the credit crunch. The stronger the sector is affected by the credit crunch, the stronger the impact on the real estate strategy is expected to be.

The corporations are divided into three industries, which offer different products and services. The industries are the Fast Moving Consumer Goods sector, the Industrial sector and the Financial sector. They have their own industry specific driving forces and target groups. The assumption is that they adopt different management styles. They are affected by the financial crisis on different levels.

Sector	Details	Company	Interviewees					
FMCG	Production of primary needs. Will always keep on going.	A	a. Senior Manager Acquisitionb. Business Controller					
Industrial	Duodystian of industrial goods Comparations	В	a. Director Real Estate					
	Production of industrial goods. Corporations with a globally spread and diversified portfolio.	С	a. Executive Vice-President Real Estate and all-round business analyst					
Financial	Origin of credit crunch. Faced internal	D	a. Head Portfolio Management b. Programmanager 'Herhuisvestingsprogramma'					
	reorganizations and corporate restructuring.	Е	a. Senior Manager Local Real Estate Management					

Table 1: Case study selection

The sector type relates to the type and importance of real estate: sales corporations hold different real estate than industrial corporations. Corporation A, D and E operate a retail portfolio of small and mid-size shops; corporation B and C operate industrial plants. All five case studies in addition have hundreds of thousands square meters of office space.

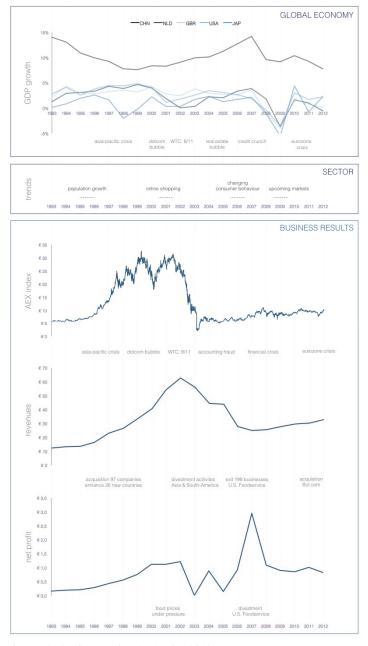


Figure 2: Example quantitative analysis, Corporation A (1993 – 2012)

3. Conceptual model

The conceptual model considers and links four research elements: (1) the macroeconomic environment, including regional trends and local market developments, (2) the corporate business results, (3) the corporate strategy and (4) the real estate strategy. One element helps to put the other in perspective. The relationships have been established and proved by many researchers. The link between corporate and real estate strategy can be traced back to the theory of Nourse and Roulac (1993); the link between the corporate business results and the corporate strategy is described by among others Michael and Robbins (1998). Gibler and Lindholm (2012) acknowledge it is necessary to connect all, including real estate operating decisions: "Further research is needed to test which (...) strategies are most successful (...) in both good and bad economic conditions combining information on firms' financial performance, core strategies, corporate real estate strategies and real estate operating decisions." The research elements are pictured and categorized by means of pre-defined indicators and theories. The linkage between the research elements is pictured in Figure 3.

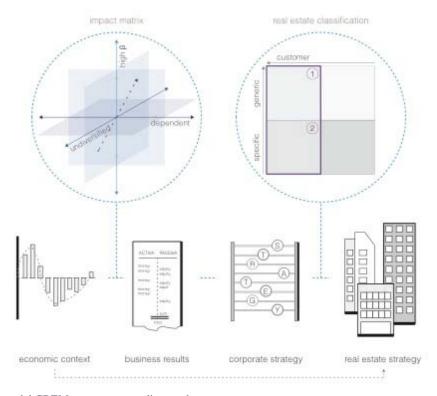


Figure 3: Conceptual model CREM response to credit crunch

The alignment between corporate and real estate strategy within a corporation is dependent on numerous factors, many of which are related to each other. Two models are designed to predict and describe the linkage or alignment between the research elements: (1) the impact matrix and (2) the real estate classification model. These regard only the volatility of the business and the classification of the real estate portfolio. Of course, more factors come into play. To begin with, it is the organization itself that has to be aware of and open to the possible added value of alignment for the business. The maturity of the organization plays a role; size of the firm is of importance as well.

Economic context

The economic context is described on three levels: (1) the global financial market, (2) the sector business market and (3) the local real estate market. Social and sector-specific trends and events determine day-to-day activities. The impact of the credit crunch on the business

activities of a specific corporation is dependent on how the corporation responds to these trends, events and conditions. The indicators used to picture the economic context are derived from the sources described in Chapter 2: Methodology, Quantitative Research.

Business results

The business results represent the financial and organizational performance of the individual corporations. Use is made of, among others, total revenues, net profit and FTEs. The data is required to reflect and explain changes in corporate and real estate strategy. The business results show instant growth and decline. Accounting irregularities are filtered. The indicators used to picture the business results are derived from the sources described in Chapter 2: Methodology, Quantitative Research.

Corporate strategy

At the basis of the conceptual model lies the assumption that a corporate strategy, classified by Porter (1985), is positioned around one or more strategic driving forces, originating from Tregoe and Zimmerman (1980). The driving forces are subject to the economic context. Depending on which driving force is pursued, one or more real estate strategies are suitable to support the specific driving force (Scheffer, Singer et al. 2006).

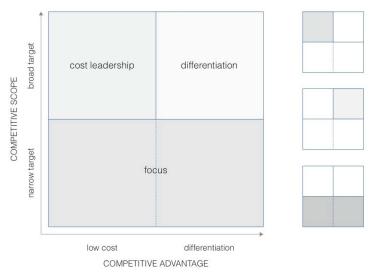


Figure 4: Generic strategies by Porter (1985)

Real estate strategy

The generic strategies of O'Mara (1999) are used to classify the real estate strategy of a multinational corporation, combining the response to strategic uncertainty and the view-on-action. The corporate driving forces are linked to nine alternative real estate strategies, deriving from the theories of Nourse and Roulac (1993), de Jonge (1996) and Gibler and Lindholm (2011). Whether or not the real estate strategies add value to the business depends on the corporation's attitude towards real estate and the position in the organization, which is illustrated by the development stages of Joroff (1993).

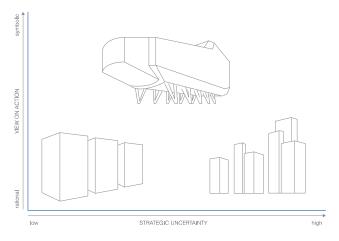


Figure 5: Generic real estate strategies by O'Mara (Singer 2005)

Impact matrix

The 'impact matrix' is used to describe and map the impact of economic downturn (credit crunch) on the business results of a multinational corporation, by means of three variables. By combining the three variables, a prediction of the financial-economic impact can be made. The research thereby assumes that the proposed influence on the business results is eventually translated to the strategic course of the business, i.e. the corporate strategy.

The impact matrix considers three factors along three axes: (1) the volatility of a the corporation's sector or industry relative to the overall market, expressed by the sector beta (Y-axis); (2) the geographic diversification of the corporation's activities (Z-axis); and (3) the dependence of the corporation on (external) cash flow (X-axis). A corporation can thus be placed on eight possible positions within the matrix. A corporation that is defined by a high beta coefficient, that is geographically undiversified and that is strongly dependent on external financing, is hit the hardest by the credit crunch as illustrated by the arrow (see Figure 6).

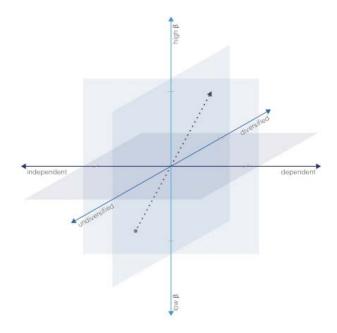


Figure 6: Impact matrix

The individual variables are frequently used in financial-economic literature and on itself not new. The authors have weighted and selected the primary variables, after which they have been put together in the impact matrix.

Real estate classification model

The alignment between corporate and real estate strategy, i.e. the impact of the business activities on the real estate activities, is determined by the real estate classification model. The classification model considers the (1) purpose – customer or production – and (2) type – generic (market-conform) or specific – of real estate (see Figure 7). The purpose of real estate follows from the nature of the industry or sector in which the multinational is active. Customer-focused property, i.e. a service-oriented portfolio, is managed more actively than industrial real estate (Krumm 1999; Roulac et al. 2005). The type of real estate defines the flexibility of the portfolio and the ability of real estate managers to respond to changes in the context. Generic or market-conform real estate is more flexible in terms of applicability (use) and transference (disposal) than specific real estate.

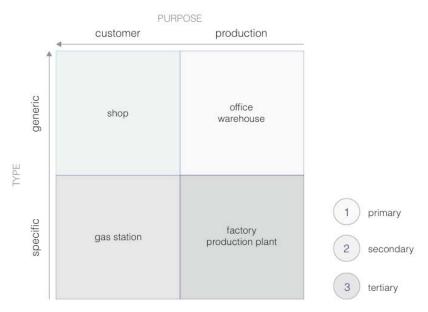


Figure 7: Real estate classification model

Together, the research elements and alignment models map and explain the relationship between the economic conjuncture and the real estate strategy of a multinational corporation. Following from the theory, a corporation that has a high beta coefficient, that is geographically undiversified and that is dependent on external financing, which operates consumer-specific real estate, is expected to have responded the strongest towards the credit crunch with its corporate real estate activities.

4. Case study results

The case study results provide a straightforward, practical answer to the main research question: 'What is the effect of the credit crunch on the real estate strategy of a multinational corporation?' The real estate responses to the credit crunch are laid side-by-side to reflect on both similarities and particularities. The full overview of real estate operations is presented in Table 2.

Real estate organization

Four out of five case studies corporations operated a real estate department before the credit crunch; after the credit crunch, all five did. Four of these five corporations have changed, or have been forced to change, the real estate organization under influence of the credit crunch. This resulted in the upgrading of the attitude towards real estate to a more pro-active strategic role. Only corporation C did not change its organizational structure at all.

For both corporation B and D, these changes have been the direct result of the impact of the credit crunch: a re-active change. Corporation D installed the 'Transition Team' in 2009 after the nationalization by the Dutch state, which required corporation D and *Fortis Bank Nederland* to quickly and efficiently integrate back- and front offices. Corporation B initiated the first real estate department in 2010, after the awareness was created that central real estate management could result in one-off and structural cost savings, contributing to the improvement of the company's performance and deliver €00 million EBITDA.

Corporations A and E restructured the real estate organization to stimulate improved collaboration and output of the real estate department in the future. Corporation A prepared for growth with the pro-active initiation of the RE&C department in 2008. It created economies of scale and increased efficiency. Fewer employees were given more responsibilities. Corporation A thereby upgraded the organization to 'business strategists'. Corporation E reorganized the CREM department in 2008: it reacted to long-lasting inefficiencies in the organization and tried to create more cohesion between CREM and FM by reorganizing and re-placing them. The newly founded organization was in its infancy during the major portfolio integration process and did not get the responsibility to strongly influence the decision-making process.

Real estate response

Structural cost savings

The credit crunch has stimulated all corporations to take a good look at their portfolio. Some do this to reduce costs, others to reduce risks and most to reduce both. Structural cost savings are primarily achieved by portfolio reorganization and by taking advantage of the real estate market. Part of reorganizing is cleaning the portfolio, for instance by disposing unused property. To some, this is done to remain competitive and respond to sector (customer) trends. Others try to find easy (structural) cost savings.

All corporations have *disposed lease contracts* if possible. When locked into a lease, one option is to buy off the contract; the other option is to sit out the contract. Corporations C and E chose to make un-used property empty and wait for the lease to expire. An unoccupied building is always cheaper to run than an occupied building.

Corporations C and D have made use of the deteriorating real estate market – caused by the real estate bubble – by *renegotiating existing lease contracts*. The contract negotiations first involved rental price, but also resulted in capital allowances and/or rent-free periods. The downside of the renewed contract deals is that the rental period is fixed for a longer period, thereby decreasing flexibility, which might be risky when faced with new and stronger recessions in the future. Corporation A, D and E have been able to make use of the deteriorating real estate market with the acquisition of new properties.

Quick wins

Corporations B and D did realize quick wins during the crisis. Corporation B decided to sell unused property – primarily production facilities and surplus land – immediately for market conform prices, for they do not want to act as real estate investors and wait for market recovery. Business yields higher returns than land. Corporation D closed down over 250 shops during the integration process. About 150 shops were in ownership. Not everything could be sold immediately. Corporation D is pro-actively looking for buyers, but since institutional investors have retreated this is difficult to realize.

Increase flexibility

Over the past decade, all corporations have been gradually disposing their real estate objects in ownership. This mainly concerns the market-conform (generic) objects. Corporations A, B and C hold their strategic objects in ownership in order to protect and secure it. Besides, these real estate objects often require major investments. In the case of corporations B and C, this concerns company-specific real estate that is not, or hardly transferable.

For market-conform real estate, leasing is generally favoured over ownership for flexibility reasons. Generating liquidity, for instance through sale-and-leaseback constructions, is not of primary importance. Corporations D and E are able to finance investments relatively cheap, which makes ownership often cheaper than leasing.

Working concept

When the portfolio reorganizations were almost successfully executed, corporations B, C, D and E made use of the situation to introduce a new working concept. Some of them had already started these transformation processes before the start of the credit crunch, but the portfolio reorganizations provided them the opportunity to implement the concepts on a larger scale. Corporation E is constantly turning the knobs, thereby lowering the flex ratios and introducing new working methods. This has to result in structural cost savings, year-on-year.

Corporation	Α	В	C	D	E	
Themes	Reduce costs with 'Wheel of retail' and invest in growth.	Reorganize portfolio: create quick wins.	Benchmark portfolio and enable cost savings.	Integration: 'Eerst draaien, dan verfraaien'.	Increase efficiency portfolio after costly integration.	
Department	Prepare for growth: 'plug-and-play'.Merger: Real Estate &	© Foundation Global Real Estate department.		 'Transition Team': full responsibility for quick decision- making. 	© Shift responsibilities to LREM and CREM.	
Awareness		Create awareness in Management.				
Governance		Create corporate guidelines.				
Reduce costs	 'Wheel of retail': invest in growth. Optimization current stones.	Renegotiation lease contracts.	 Renegotiation lease contracts. Move to low cost locations.	 Quick savings: 'Eerst draaien' Tackle hidden office vacancy.	 'Turning the knobs'. Manage vacancy level.	
Disposals	Dispose non-core real estate when market is ready.	Dispose (unused) portfolio objects, despite market conditions.	 Prepare owned objects for disposal in the future. 	 Dispose (overlapping) commercial portfolio network. 	 Gradually dispose owned portfolio: 'kilo-knallers'. 	
Working concept	Centralizing: headquarters closed and merged.	 Introduction new working concepts. 	⊙ Introduction Connect.	 Introduction new working concepts. 	 Introduction new working concepts. 	
Satisfaction			Satisfy employees with Connect.	 Prevent resistance: present all employees new working environment. 		
Expansion	• Foreign (Belgium, Germany) and non-food activities (Bol.com, PUP).					

Table 2: Overview real estate implementations after the credit crunch

5. Cross-case analysis through theoretical reflection

The theoretical reflection runs through the conceptual model and its (most important) research elements one by one, i.e. four elements and two matrices. The linkage between the elements is debated and the validity of the model is questioned.

Impact matrix

The impact matrix captures the financial-economic impact on the case studies corporations correctly based on the following observations: Those corporations that are affected the strongest by the credit crunch (corporations B, D and E) change their corporate course from a 'differentiation' to a 'focus' strategy according to the impact matrix. This drastic change in corporate course is the result of two variables of the impact matrix: all have a high beta and, more importantly, are strongly dependent on external financing (Figure 8). Long-term commitments are postponed; high value transactions and investments are avoided. This driver is reflected in the real estate activities as well. All case study organisations follow an 'incremental' approach towards real estate management and focus on costs and flexibility. Those corporations that are less affected by the credit crunch operate a 'differentiation' strategy (corporations A and C) and use the credit crunch to take advantage of the market. Corporation A tries to grow; corporation C consolidates. They lower the cost-base, but keep investing in the business.

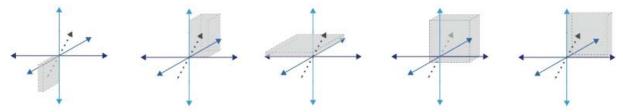


Figure 8: Overview impact matrices: A, B, C, D and E

Corporate response

The research shows that those corporations (B, D, E) that are affected the strongest by the economic downturn react by retrenchment. They try to restore profitability as quickly as possible by major and direct interventions. The corporate strategic perspective changes from a differentiation to a focus strategy (Figure 9). Those corporations (A, C) whose profitability is affected, but are in a position to keep calm, use the crisis to innovate and come out stronger. They adopt a differentiation strategy.

This corresponds with the research of Michael and Robbins (1998): "For the firm confronting severely declining performance, restoring profitability and stabilizing operations almost always entail pursuing strict cost reduction measures followed by a shrinking back to those segments of the business that have the most likely prospects of good margins" (Michael and Robbins 1998). Other possible strategic responses to economic downturn, besides retrenchment, are to alter the scope of the firm, to divest a strategic business unit or to diversify into a more stable business (Michael and Robbins 1998). According to Tubbs (2007) competitive advantage can be gained by increasing R&D at the start of a recession or downturn when competitors may be decreasing R&D; this boosts the relative advantage of the company's products and services and hence leads to increased sales and market capitalization in the subsequent upturn (Tubbs 2007). Gibler and Lindholm (2011) argue: "Some firms retrench, cut costs and divest of assets to ensure survival at the risk of reducing capacity to such a degree that competitiveness may be hampered when recovery comes."

Although it seems obvious, it is interesting to notice that those corporations that are strongly suffering during economic downturn, decide to – are forced to – reduce costs instead of invest capital, whilst the above theory tells them otherwise. It is too soon to tell whether or not the cost reduction strategy will pay off.

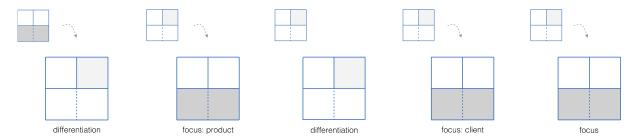


Figure 9: Overview corporate strategy pre- and post-crisis: A, B, C, D and E (based on Porter 1985)

Real estate classification model

The real estate classification model shows that the industry in which the corporation is active strongly determines the degree of alignment between corporate and real estate strategy. There are two observations: those corporations that have a customer-focus (corporations A, D and E) (1) invest in their marketing strategy for promotion is of crucial importance; and (2) adopt straightforward decision-making, i.e. respond quicker and more vigorously to changes in the context for this can have great influence on the competitive position.

Real estate organization

The credit crunch brought change in the organizational structure of the CREM organisations: it mostly moved up in the development stages of Joroff (1993) (Figure 10). However, the case studies show that their impact on the business is still limited. The credit crunch seems to make corporations aware of the opportunities to reduce costs of (and with) real estate; not so much aware of other added values. Apart from corporation A and B, the corporations adopt the role of 'dealmakers'. This means that the corporate real estate departments centralize, reduce risk by creating flexibility and reduce costs by creating portfolio efficiency. The lack of responsibility withholds the real estate departments from adding value to other corporate objectives.

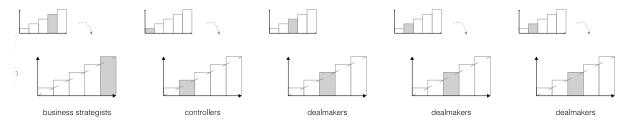


Figure 10: Overview organization pre- and post-crisis: A, B, C, D and E (based on development stages Joroff 1993)

Corporation B is catching up by centralising the CREM organisation. Although costs are clearly leading to support the corporate objectives, the proposed governance will make sure that corporation B real estate will adopt a 'dealmakers' role in the nearby future. Corporation E even has the potential to grow to a more developed role. Its real estate department is well organized. However, it did not achieve this stage because they were not given full responsibility of the customer-based portfolio, partly because the department was still in its infancy at the time of the integration. If they would have, this might have enabled them to lead and steer the integration process and accomplish more real estate objectives. Corporation

A did present the RE&C department these responsibilities, which made it possible to add (more) value to the organization in addition to reducing costs.

Real estate response

The corporations almost unanimously respond to the uncertainty in the markets with an 'incremental' approach in their real estate strategy (Figure 11). There are however dissimilarities in the actual real estate strategies. The two most common real estate strategies pursued during the financial crisis are (1) reducing costs and (2) increasing flexibility. This is understandable for the credit crunch has forced all corporations to take action: cost reductions are imposed on all levels and business units of the organization. This includes real estate as fifth resource as well. It is noticed that all corporations do compensate for the retrenchment, for most corporations combine these strategies with (3) reducing risk and (4) increasing satisfaction. Under these economic circumstances, reducing risk is often inherent to reducing costs and increasing flexibility, for this entails conservative decision-making and preparing for downturn in the future.

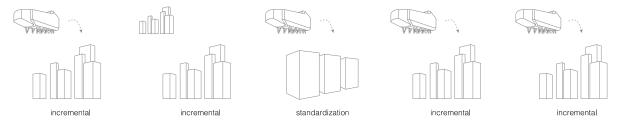


Figure 11: Overview real estate strategy pre- and post-crisis: A, B, C, D and E

The case studies demonstrate one important strategy does not correspond with the findings of Gibler and Lindholm (2011), which is: 'increasing employee efficiency & productivity'. They found that the three most pursued real estate strategies during economic downturn are: (1) reducing costs, (2) increasing employee efficiency & productivity and (3) enabling flexibility. Remarkably, all case studies corporations focused on efficiency & productivity before the credit crunch, but changed their main priorities to cost reduction after the credit crunch. This does not rule out that increasing efficiency & productivity is not pursued; it only proves that the accents during economic downturn change. The portfolio is shrunken and merged; new working concepts are introduced to lower costs and eventually, to increase productivity. This is illustrated by the integration motto of corporation D: 'eerst draaien, dan verfraaien'. After the transformation, the corporations have again invested in productivity and service-delivery.

Eight out of nine real estate strategies are pursued by one of the corporations at a certain point in time. Besides costs (reduce), efficiency (increase) and productivity (increase), also marketing (promote), risk (reduce) and satisfaction (increase) are quite common during recession. Pursuing increase of property value in the current real estate market is unreasonable, and will still be unreasonable for the coming years. Innovation and sustainability are on-going themes, but commonly not favoured during recession for this requires (major) investments. All real estate strategies preceding and after the start of the credit crunch are shown in Table 3. Unchanged aspects are indicated bold.

Period	Pre-crisis				Post-crisis					
Real estate strategies	A	В	C	D	Ε	A	В	C	D	Ε
Reduce Costs	X				X	X	X	X	X	
Increase Flexibility			X				X	X	X	X
Increase Satisfaction								X	X	

Encourage Innovation/creativity						X			
Promote Marketing				X				X	X
Increase Value									
Increase Efficiency/Productivity	X	X	X	X	X				X
Reduce Risk						X			
Support Sustainability									

Table 3: Real estate strategies: pre- and post-crisis (Scheffer Singer and van Meerwijk 2006, Bergh 2011)

6. Conclusions

The case studies prove that the credit crunch has directly and indirectly influenced the corporate real estate management strategy. It has created awareness among corporate managers that real estate as a means can contribute to the achievement of the corporate objectives. Almost all corporations have upgraded their strategic approach towards real estate management. In all cases, (structural) cost savings dominated the corporate objectives. This asked for an incremental approach towards real estate. The primary (direct) strategic response was portfolio reorganization, especially for those corporations that (still) used a re-active approach towards real estate management. Portfolio reorganization included gaining quick wins by disposing property and enabling structural cost savings by increasing flexibility and portfolio efficiency.

Corporations that use real estate for commercial purposes, and where real estate therefore has a direct effect on the turnover and business objectives, stimulated quick and efficient action, compared to those corporations whose primary purposes are production. Corporations that have been able to grow and expand during the credit crunch, make use of the real estate market to gain competitive advantage. The real estate market provided the opportunity to renegotiate lease contracts. Indirectly, the portfolio reorganization provided the opportunity to implement a new working concept and increase satisfaction among employees.

On the long-term, the credit crunch has changed the financial considerations regarding real estate management. In order to reduce risk, decision-making has become more conservative. The portfolio required a certain level of flexibility. Real estate disposals were generally put on hold. Pursuing increase of property value in the current real estate market is unreasonable, and will still be unreasonable for the coming years. Innovation and sustainability are on-going themes, but commonly not favoured during recession for this requires (major) investments.

Alignment

The research shows that corporations are changing the corporate strategic course quite often. In most cases, the real estate strategy or activities have been adapted in a direct response to the corporate course: an operational, top-down approach which basically means that management determines and the real estate department executes. It is therefore not surprising that the main objective of the real estate departments is to enable cost reductions. This is a response to the impact of the credit crunch on the business. Theory however claims that adopting a pro-active strategic role towards corporate real estate management is expected to yield more success when faced with economic downturn, than adopting a re-active purely operational role. It is assumed that adopting a pro-active role will enable a real estate department to make a quick and accurate response to changes in the context, because they are already one step ahead. This is only possible when working with multiple scenarios and preferably a long lasting strategy. Of the case studies corporations, only corporation A

achieves pro-active alignment by formulating a real estate strategy, including real estate specific objectives, annually.

The case studies however show that pro-active alignment is not necessary to be able to add value to the organization. All corporate real estate management departments have added value to the corporate objectives during the credit crunch, among others by reducing costs, increasing flexibility and promoting marketing, in a response to the business. Whether this is only for the short-term or also for the long-term, time will tell. It is too soon to measure the relative success of the real estate strategies implemented before and during the credit crunch.

Sector differences

Multiple authors, including Krumm (1999) and Roulac (2005), stated that there is a distinction between the performance of real estate operations of service corporations and industrial corporations. The case studies prove that the sector or industry is indeed relevant for the alignment between corporate and real estate strategy. Those corporations that operate an industrial portfolio (corporations B and C) are only focused on the office portfolio. The engineering department determines real estate characteristics of the production plants. Changes in the characteristics and/or location of the industrial portfolio are too time-consuming and expensive. Following from the case studies, the degree of alignment is stronger when real estate is of primary importance for the success of the business activities. Service corporations show greater coordination of real estate activities than industrial corporations.

Translating that to the model of Joroff, it is noticed that the more direct the relationship between real estate and the business results is, the higher the corporation is placed within the development stages of Joroff. However, this is mitigated by the credit crunch. It is noticed that the more sensitive a corporation is to the credit crunch according to the impact matrix, the more responsive the real estate activities become and the lower the corporation is placed within the development stages of Joroff.

Responsibilities

For a real estate department to become more strategic, it is important that the business is willing to shift responsibility. Too often, real estate departments do not have the ability to make (quick) decisions. They are bound to a constant dialogue that is dominated by the business units. The larger the influence of the business is, the larger the chance that the interests of the real estate department are undervalued. The ability to add value is cut short. This is the case with corporations B, D and E. Consequently, they are only contributing to pre-defined objectives of the business. Following from the case studies, the degree of alignment between corporate and real estate strategy is thus dependent on the stakeholders and responsibilities involved in the decision making process, next to other factors such as awareness, maturity and size of the organization.

7. Discussion and recommendations

The scope of the research leaves many aspects of the relationship between the economic context and the real estate strategy unanswered.

Extend case numbers and sectors: The in-depth cross-case analysis in the research is restricted to three sectors and only five corporations. In order to perform a sound sectoral and inter-sectoral analysis, it is evident that more case studies need to be regarded.

Post-crisis analysis: According to Gibler and Lindholm (2011), for firms that solely retrench and cut costs, competitiveness may be hampered when recovery comes. Although economic recovery has very carefully come to light in 2012, it is too soon to draw conclusions. Further research on the case studies subjects should be performed in 3 – 5 years to see what the credit crunch has actually done for the corporations on the long-term.

Impact matrix: The applicability of the impact matrix should be tested on different multinationals. Moreover, it is advised to investigate the possibility of quantifying the model.

Financial considerations: Most corporations have changed their financial considerations during the credit crunch (real estate bubble). It was not in the scope of the research to look at the effect of this measure. Did firms benefit from the flexibility built in their portfolios by leasing?

8. References

Appel - Meulenbroek, H.A.J.A. and Feijts, B.F.M. (2007). *CRE effects on organizational performance: measurement tools for management*. Journal of Corporate Real Estate, 9(4): 218 - 238.

Edwards, V. and L. Ellison (2004). *Corporate property management: Aligning real estate and business strategy*. Malden, Massachusetts, United States, Blackwell Publishing.

Geroski, P. A. and P. Gregg (1994). *Corporate Restructuring in the UK during the Recession*. Business Strategy Review. 1994: 1 - 19.

Gibler, K. M. and A. L. Lindholm (2011). "A test of corporate real estate strategies and operating decisions in support of core business strategies." Journal of Property Research 29(1): 25 - 48.

Hazeu, C. A. (2011). "De crisis, de bank en de wet." Tijdschrift voor Openbare Financien 43(2): 138 - 148.

Heywood, C. and R. Kenley (2008). "Evaluating the sustainable competitive advantage model for corporate real estate." Journal of Corporate Real Estate 10(3): 160 - 182.

Heywood, C. and R. Kenley (2008). "The sustainable competitive advantage model for corporate real estate." Journal of Corporate Real Estate 10(2): 85 - 109.

Hwa, T. K. (2003). *The Reorganisation and Restructuring of Corporate Real Estate*. 9th Pacific Rim Real Estate Society Annual Conference. Brisbane, Queensland, Australia.

Krumm, P. J. M. M. (1999). *Corporate real estate management in multinational corporations: a comparative analysis of Dutch corporations.* Real Estate and Housing. Nieuwegein, Delft University of Technology.

Krumm, P. J. M. M. and J. d. Vries (2003). "Value creation through the management of corporate real estate." Journal of Property Investment & Finance 21(1): 61 - 72.

Michael, S. C. and D. Robbins (1998). "Retrenchment among small manufacturing firms during recession." Journal of Small Business Management **36**(3): 35 - 45

Nourse, H. O. and S. E. Roulac (1993). "Linking Real Estate Decisions to Corporate Strategy." The Journal of Real Estate Research 8(4): 475 - 494.

Pearce, J. A. and S. C. Michael (2006). "Strategies to prevent economic recessions from causing business failure." Business Horizon 5(1): 1-19.

Porter, M. E. (1985). Competitive Advantage. New York, Free Press.

Roulac, S., et al. (2005). "Corporate strategic decision making: A comparative analysis of companies in the industrial and non-industrial sectors." Journal of Property Investment and Finance **23**(4): 364 - 378.

Scheffer, J. J. L., et al. (2006). "Enhancing the contribution of corporate real estate to corporate strategy." Journal of Corporate Real Estate 8(4): 188 - 197.

Schwab, K. (2012). *The Global Competitiveness Report 2012–2013*. Geneva, Switzerland, World Economic Forum: 1 - 527.

Singer, B. P. (2005). *Generic Strategies: in the footsteps of Martha O'Mara*. Corporate Real Estate Management. Delft, Delft University of Technology.

Tregoe, B. B. and J. W. Zimmerman (1980). *The Management Strategy: What it is and how to make it work.* New York, Simon and Schuster.

Tubbs, M. (2007). The relationship between R&D and company performance. Research Technology Management. **50:** 23 - 30.

Wurdemann, W. W. (2012). Corporate real estate performance: the added value measured. TiasNimbas Business School. Tilburg, Tilburg University. Master in Business Administration.