A study of inter-firm opportunism in the construction industry

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<td>CM</td>
<td>Construction Management</td>
</tr>
<tr>
<td>CMR</td>
<td>Construction Management Research</td>
</tr>
<tr>
<td>CPGMP</td>
<td>Cost Plus Guaranteed Maximum Price</td>
</tr>
<tr>
<td>EFW</td>
<td>Energy from Wastes</td>
</tr>
<tr>
<td>EPC</td>
<td>Engineering Procurement and Construction</td>
</tr>
<tr>
<td>GT</td>
<td>Grounded Theory</td>
</tr>
<tr>
<td>GMP</td>
<td>Guaranteed Maximum Price</td>
</tr>
<tr>
<td>MC</td>
<td>Management Contractor</td>
</tr>
<tr>
<td>NES</td>
<td>New Economic Sociology</td>
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<tr>
<td>PMBOK</td>
<td>Project Management Body of Knowledge</td>
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<tr>
<td>RC</td>
<td>Relational Contracting</td>
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<tr>
<td>SNA</td>
<td>Social Network Analysis</td>
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<td>SI</td>
<td>Symbolic Interactionism</td>
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<td>TC</td>
<td>Transaction Cost</td>
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<td>TCE</td>
<td>Transaction Cost Economics</td>
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Abstract

The University of Manchester | Elika Aminian | Doctor of Philosophy (PhD)
A study of inter-firm opportunism in the Construction Industry
21 December 2014

The construction industry has been identified with fragmentation, adversarial relationships, opportunism, and high rates of disputes. Therefore, there has been a call for the improvement of inter-firm relations in the sector through more appropriate governance strategies.

This study drew upon transaction cost economics theory and new economic sociology in relation to the problem of inter-firm opportunism in economic relations. The study argues that depending on how patterns of inter-firm opportunism are viewed, different governance strategies may be formulated. Through a critical review of the prior publications concerning the problem of opportunism in the sector, the study argues that the construction management literature used theoretical works at both normative and explanatory levels. However, little is known about the construct of inter-firm opportunism itself and how it materialises within the construction industry. Therefore, this study aimed to provide insights into how practitioners in the construction industry conceptualise inter-firm opportunism and its patterns. Such insights extend the knowledge of how they approach governance strategies, and generally why they do what they do.

To build a conceptual framework of inter-firm opportunism in the construction industry, this study was guided by a constructivist grounded theory. Rich qualitative data were constructed through 20 semi-structured interviews with practitioners involved in the construction industry who were working in the UK in either construction law firms, construction companies, construction development companies, or construction consultancy firms. The qualitative data were analysed following the Charmaz (2003 and 2006) guideline.

In relation to the construct of inter-firm opportunism, the findings of the study indicate that there are considerable variations between the constructs of inter-firm opportunism. However, regardless of these variations, a win-lose relationship feeling is central to practitioners’ construct of inter-firm opportunism. The study argues that in response to the risk of inter-firm opportunism through setting up contractual governance, parties usually conduct a casual cost-benefit trade-off.

In relation to the patterns of inter-firm opportunism from the points of view of the practitioners in the sector, the study provides a conceptual framework grounded in the data. This framework places emphasis on the dynamics of different types of power constructed between the client and its first tier suppliers in the pre- and post-contract stages. This framework is the study’s contribution to the body of knowledge concerned with the inter-firm relations in the construction industry.

Key words: Inter-firm opportunism, Transaction cost economics, Construction, Power
Declaration

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List of publications

Conference Papers


Poster

Chapter 1  Introduction

1.1  Structure of the chapter

This introductory chapter is composed of four main parts.

First, section 1.2 establishes the research context and provides the rationale for the research. Second, section 1.3 and section 1.4 indicate the study’s aim, objectives, and the research questions. Third, section 1.5 highlights the scope of the research. Finally, section 1.6 provides an overview of the structure of the thesis.

1.2  Research background and motivation

In the management literature, there is an agreement on the negative consequences of adversarial environments and opportunistic behaviours in inter-firm relationships (Wathne and Heide, 2000; Rodriguez et al., 2007). General management literature highlights the negative impact of inter-firm opportunism in organisational performance, relationship commitment, dispute resolution, exchange costs, and so on (e.g. Wang and Yang, 2013). Clearly, opportunism is not specific to economic relations between firms, and it could exist in other kinds of relationships such as marriage and employment (Boukendour, 2007).

In economic relations, when risk of opportunism is high, considerable resources are spent on control and monitoring through negotiation, search and information costs, drafting appropriate contracts, and so on. In addition, when opportunistic behaviours are materialised, significant resources are spent on negotiation, dispute resolution, and enforcements of agreements, resources that could have been deployed for other purposes (Li et al., 2012; Wathne and Heide, 2000).

Within the context of construction management, there is an agreement on the existence and importance of the problems of inter-firm opportunism, adversarial environments, and non-collaborative relationships. In fact, the sector is usually criticised for adversarial relationships, fragmentation, high rates of disputes, clients’ dissatisfaction, and so on (e.g. Latham, 1994; Cox and Thompson, 1997; Egan, 1998; Bresnen and Marshall, 2000b; Cheung et al., 2003; Meng, 2010). These problems of the construction industry have consequences in forms of delays, difficulty in dispute resolution, cost overruns, and general dissatisfaction of the
parties involved in the sector, and so on (Bresnen and Marshall, 2000b; Chan et al., 2003a). Therefore, research concerned with examining the conditions which prevent inter-firm opportunism and adversarialism or encourage collaborative ways of working has been an important element of recent studies in the context of construction management (Bresnen and Marshall, 2000b and 2001).

It must be noted that the agreement on the existence and importance of adversarial relationships in the construction industry is despite the reality that the literature is mixed on the extent of the problem. While some researchers claim that the problem in the construction industry is more severe than other industrial sectors (e.g. Black et al., 2000), some other researchers hold the view that there is not enough evidence supporting such a claim (e.g. Fenn, 2002).

To respond to the problem of inter-firm opportunism in the construction industry, the concept of governance has become one of the major themes of the relevant literature (Sanderson, 2012). As highlighted by Winch (2001 and 2006), in this context, governance refers to management of inter-firm relations for which the methods used refer to the mechanisms or processes that are organised ex ante and carried out ex post between two or more parties involved in the construction projects (Ruuska et al., 2011; Winch, 2006).

At the risk of over-simplification, in construction management literature, studies concerned with the governance of inter-firm relations could be categorised into two broad groups. The first group of studies calls for cultural changes to trust-based and collaborative attitudes in procurement strategies within the sector. For example, some of the more prescriptive literature on partnering could be seen in this group (e.g. Chan et al., 2003a). It will be shown in section 2.4.2.6.8 that there are serious criticisms on this group of studies. The second group of studies, places emphasis on the most appropriate governance strategies to reduce the costs involved in the risk of inter-firm opportunism (e.g. Winch, 2006).

To formulate the most appropriate governance strategies, the construction management literature has benefited from various theoretical foundations which originated from different bodies of enquiry. In doing so, transaction cost economics (TCE) theory and relation-based approaches (such as new economic sociology (NES) or relational contracting) are two main directions. Theoretical frameworks
concerned with the problem of opportunism in economic relations usually conceptualise the conditions which increase the risk of inter-firm opportunism and then accordingly formulate governance strategies to solve the problem in a cost effective way relevant to each condition. It will be shown in the study’s literature review (Chapter 2) that the differences between these governance strategies are because of the differences in their conceptualisations of the conditions giving rise to inter-firm opportunism. Therefore, the way the pattern of inter-firm opportunism is viewed plays a crucial role on how the governance strategies are formulated.

Chapter 2 will show that to formulate appropriate governance strategies the construction management literature has borrowed the conceptualisations of patterns of inter-firm opportunism from different theoretical frameworks (e.g. TCE and NES). However, little is known about how the pattern of inter-firm opportunism is viewed by practitioners involved in the construction industry. Such understandings provide insights on the views held by practitioners in the construction industry regarding the inter-firm opportunism and its occurrence. This research intends to contribute to such understandings. As mentioned earlier, the governance strategies are formulated on the basis of how the pattern of opportunism is conceptualised. Therefore, understanding the practitioners’ conceptualisations of the pattern of inter-firm opportunism will assist understanding of why they formulate their governance strategies in certain ways. In addition, on another level, such understandings could provide a basis for insights on why some normative governance strategies are accepted by practitioners in the sector and some are not.

1.3 Research aim and objectives

The overall aim of this research is to provide a conceptual framework of the patterns of inter-firm opportunism in the construction industry from the points of view of the practitioners involved in the sector. To do so, the following objectives are established:

1. To review analytically the theoretical literature concerned with the problem of inter-firm opportunism (Chapter 2)

2. To review critically the construction management literature concerned with the problem of inter-firm opportunism (Chapter 2)
3. To examine the social construct of inter-firm opportunism in the construction industry between clients and their suppliers by analysing the interview data (Chapters 5 and 7)

4. To examine the social construct of the patterns of inter-firm opportunism in the construction industry between clients and their suppliers by analysing the interview data (Chapters 5 and 7)

5. To correlate the findings from the data analysis to construct a conceptual framework (Chapter 7)

6. To identify the limitations of the research and propose directions for further research (Chapters 3 and 7)

1.4 Research questions

The two primary questions of the research are:

- How do practitioners involved in the construction industry develop the notion of inter-firm opportunism?
- How do practitioners involved in the construction industry view the patterns of inter-firm opportunism?

1.5 Scope of the research

This is a qualitative research study which holds a social constructivist view of knowledge. The study attempted to provide a conceptual understanding of the constructs of inter-firm opportunism in the construction industry, and to provide a conceptual framework of the patterns of inter-firm opportunism in the construction industry from the points of view of the practitioners involved in the sector. In this study, the data were collected through 20 semi-structured interviews with practitioners involved in the construction industry who were working in the UK in either construction law firms, construction companies, construction development companies, or construction consultancy firms. The interviews were conducted between 2012 and 2014.
Considering the study’s aim, objectives, and research design, it might be worth emphasising the following scope-related issues:

- As mentioned earlier, the study attempted to find out how the patterns of inter-firm opportunism are constructed within the construction industry. Therefore, normative questions such as how inter-firm opportunism should be conceptualised are beyond the scope of this research.

- The research attempted to provide a conceptual image of the constructs of practitioners relevant to the research questions. However, these constructs are based on the practitioners’ experiences in society. Therefore, they are not fixed; rather they are in constant flux. In other words, the research deals with realities which may change if practitioners’ environment changes.

- The unit of analysis in this research is the inter-firm relationships between the projects’ clients and their first tier suppliers in the construction industry. Construction clients refer to individuals or firms who commission a construction project (Chinyio et al., 1998; Murdoch and Hughes, 2000) which can mean anything from individuals buying garages to national governments buying power plant facilities. In addition, the construction industry comprises a wide range of sub-industries including building, repair and demolition of projects such as houses, bridges, motorways, and factories (Murdoch and Hughes, 2000).

- As highlighted by Winch (2001) and Eccles (1981), in practice there are fundamental differences in the inter-firm relations between clients and their first tier suppliers and principal contractors and their subcontractors. The inter-firm relations with the subcontractors are not within the scope of this research although their importance is acknowledged.

- As all the interviews were conducted in the UK, the study acknowledges that the findings of this research reflect the relevant constructs in the UK, and they may not be applicable to other contexts.

- As mentioned earlier, the research was carried out within the context of the construction industry. It is beyond the scope of this research to be involved in the long-lasting question of whether or not the construction industry is actually different
from other industrial sectors, and if so how this affects the transferability of the contributions of this study. Rather than taking a position on this question, the study places emphasis on the context of the research, and acknowledges that one should be selective and circumspect in dealing with the study’s conclusions outside its industrial sector.

1.6 Structure of the thesis

The thesis is structured in eight chapters, including this introductory chapter. Each of the following chapters starts with a ‘chapter brief’, which includes the gist of the chapter as well as the chapter’s goal(s) and objectives. In each chapter, its ‘chapter brief’ is followed by a short section entitled the ‘structure of the chapter’, which provides a map of how the chapter is structured. Each chapter finishes with a summary, which highlights the main points of the discussions/arguments. The flow of the chapters is as follows:

**Chapter 1: Introduction**: This chapter begins by laying out the research rationale and its context. Then, it presents the study’s aim, objectives, and research questions. Subsequently, it highlights the scope of the research, and provides an outline of some of the interesting subjects of enquiry which are beyond the scope of this study. Finally, this introductory chapter provides an overview of the structural flow of the thesis.

**Chapter 2: Theoretical works on inter-firm opportunism**: The place and purpose of a literature review in social research has often been the subject of debate (e.g. Glaser and Strauss, 1967; Charmaz, 2006; Creswell, 2007). In more scientific studies the purpose of a literature review is usually to provide key concepts and to suggest hypotheses (Saunders et al., 2009). However, in social research, the literature review serves different purposes. While some research methodologists consider a review of literature to be necessary at the early stage of a study to clarify the context and the research gap within which the research sits, others argue that the research should commence with data itself to make sure that the result is not coloured by the existing literature (Charmaz, 2006; Creswell, 2007).

Within the research strategy of this study, a review of literature at an early stage of the study can show gaps and thus rationale for the study (Creswell, 2007), and can
provide a context within which the research sits (Auerbach and Silverstein, 2003). In addition, a literature review can provide a loose framework for researchers in the early stages of the research (Charmaz, 2006). In fact, as argued by Charmaz (2003 and 2006), a review of the literature can provide departure points which are called ‘research footholds’ or ‘sensitising concepts’ as well. However, within the research strategy of this study, the point is to leave these sensitising concepts if they are found irrelevant later in the data analysis stage.

In this study, the research commenced with a review of the literature concerning the problem of inter-firm opportunism. Such a literature review highlighted a research gap within which the study sits. In addition, using Charmaz’s (2006) language, the literature review provided the research journey with sensitising concepts.

Chapter 2 draws upon transaction cost economics (TCE) and new economic sociology (NES) as two prominent theoretical frameworks concerned with the problem of opportunism in economic relations. In addition, it discusses how construction management literature has benefited from these two theoretical frameworks. By doing so, chapter two highlights a research gap within which the research sits, and presents the research sensitising concepts.

**Chapter 3: Research methodology:** This chapter explains the philosophical view of the study about the nature of knowledge and reality. Then, it discusses and justifies the choice of grounded theory as the study’s research strategy. Subsequently, the chapter established a set of evaluation criteria for the research. Finally, the chapter discusses that positivist and quantitative studies usually follow a standard presentation format: introduction, literature review, method, results and discussion. However, inductive and qualitative studies are conducted within different research strategies and each aims to facilitate research process in distinct ways and under its own epistemological assumptions. Therefore, as highlighted by Creswell (2007), in relation to the structural format of their reports, they cannot be viewed as one single type. The last section in chapter 3 explains the rationale for the way this thesis is presented.

**Chapter 4: Data collection process:** This chapter attempts to explain how the research data are prepared for analytical analysis. It includes a description of the
research sampling strategies, interview procedures, and transcription method. In addition, it provides an overview of the interviewees’ profiles.

It might be worth clarifying that to present the thesis with a clear structure, a decision was made to place a conceptual boundary between the data collection and data analysis although the data were not ‘collected’ in an objective way. In fact, the researcher’s analysis started in interviews. This is because the interviews were semi-structured, and therefore, asking each question involves elements of the researcher’s interpretation/analysis even if they were hidden. The study acknowledges the role of the researcher in the data construction, and emphasises that the name of the chapter as data collection does not intend to imply that the data were objectively collected.

**Chapter 5: Data analysis and findings:** This chapter first presents an overview of the analysis process; it describes how the data are coded, and how the categories are constructed. Then, it highlights the research findings in the form of categories constructed from the data. Subsequently, each of the categories of findings is explained.

**Chapter 6: Foundations of inter-firm power literature:** This chapter provides a focussed overview of the existing literature in relation to the research findings. Within the research strategy of this study, during the data analysis stage, the research may travel to new subjects of knowledge. In such cases, a fresh and focussed review of the literature is required after the data analysis, to locate the work within the relevant literature.

**Chapter 7: Discussion of findings:** This chapter discusses the links between the categories of findings, and provides a conceptual framework of the construct of inter-firm opportunism and its patterns in the construction industry. In addition, chapter 7 discusses the relation of the research findings with the existing literature.

**Chapter 8: Conclusion:** This chapter discusses the conclusion of the research along with its contributions to knowledge. In doing so, the chapter reviews briefly the research aim and objectives, and highlights how they are achieved.

Figure 1-1 provides an overview of the flow of the study. In addition, it shows in which chapter each of the research steps is discussed.
Figure 1-1: The flow of the study.
Chapter 2  Theoretical works on inter-firm opportunism

2.1  Chapter brief

Transaction cost economics (TCE) and new economic sociology (NES) are two prominent theoretical foundations relating to the problem of opportunistic behaviour in economic relationships including inter-firm relations.

TCE conceptualises the occurrence of opportunism in economic transactions mainly through transactions’ characteristics which have important ramifications for governance. Then, in its normative part, TCE theory suggests contractual governance modes appropriate for each set of transaction characteristics to govern the relationships from opportunism in an economic way. In contrast, NES criticises TCE for the lack of attention to study the role of social influences in economic behaviour. NES places emphasis on the role of personal and network relations in its conceptualisation of the problem of opportunism. Therefore, it uses the features of dyadic and network relations to solve the problem of opportunism.

This chapter analytically reviews the literature in relation to these two theories. In addition, it provides a critical review of how these theories are used to solve the problem of inter-firm opportunism in the context of the construction industry. By doing so, the chapter identifies a research gap in relation to the problem of inter-firm opportunism in the construction industry.

2.1.1  Chapter’s goal

The overall goal of this chapter is to explore the two theoretical foundations of transaction cost economics (TCE) and new economic sociology (NES) as well as to identify a research gap regarding these theoretical works in the context of the construction industry.

The measurable objectives of this chapter are as follows:

• To explore transaction cost economics (TCE) theory

• To outline the existing studies on TCE in the context of construction management
• To provide a review of procurement strategies available in the construction industry by a review of the literature

• To explore the new economic sociological (NES) approach to the problem of opportunistic behaviour

• To outline the existing studies on NES in the context of construction management

• To identify a research gap regarding NES and TCE in the context of the construction management


2.2 Structure of the chapter

This chapter is composed of four main parts.

First, in section 2.3, this chapter explores the transaction cost economics (TCE) theory, including its background, its fundamental insights into the patterns of opportunism, and its suggestions on the appropriate governance modes to decrease the costs of opportunism. Then, it critically reviews how TCE has been used in the construction management literature to solve the problem of inter-firm opportunism (section 2.3.6).

Second, in section 2.4, the chapter provides an overview of main procurement strategies available in the construction industry. The reason behind such an overview is twofold: (1). TCE places emphasis on the contractual governance modes to decrease the cost of opportunism. Therefore, deep understanding of TCE in the context of the construction industry requires an understanding of the nature of contracts and procurement strategies available in the sector. (2) Such an overview will assist with understanding the research data. Amongst the procurement strategies, partnering is discussed in more depth. This is because partnering is introduced to eliminate adversarial behaviour (Cheung et al., 2003). Therefore, its evaluation is directly related to the rationale of this study.

Third, in section 0, the chapter explores new economic sociology (NES) take on the problem of opportunism. Then, it critically reviews how NES has been used in the construction management literature to solve the problem of inter-firm opportunism (Section 2.5.4).

Finally, in section 2.6, the chapter identifies a research gap on the basis of the literature review.

2.3 Transaction cost economics (TCE) Theory

2.3.1 Background of TCE

Transaction cost (TC) was first introduced by the Nobel economics prize winner Ronald Coase (1910-2013) in the papers published in 1937 and 1960 entitled respectively ‘The nature of the firm’ and ‘The problem of social cost’. Then, based
on his works, transaction cost economics (TCE) theory was introduced by the Nobel economics prize winner Oliver Williamson (1932) in 1975. Since then, the theory has been elaborated without losing its initial insight. Since the late 1980s, TCE has spread out from its original scope to several other branches of knowledge; to business-related areas such as accounting and organisation theory and to disciplines further removed from economics and business such as law (Macher and Richman, 2008). According to Lai et al. (2008), in construction-related studies TCE theory as formulated by Williamson (1975 and 1985) has attracted more applications and citations than its intellectual origins formulated by Coase (1937 and 1960).

The main question of interest for Ronald Coase, leading to the publication of ‘The Nature of the Firm’, was “Why do firms exist?” In other words, what makes an entrepreneur hire someone instead of contracting for a particular task? This question is very similar to the dilemma of ‘make or buy’ faced by commercial managers. Coase (1937) introduced the notion of transaction costs (TC), which is the cost inherent in each transaction, and argued that high levels of TC justify the existence of the firms and relatively low levels of transaction costs prevent firms growing forever. The firm was viewed as a production function before Coase (1937) and his construct of transaction costs introduced the view of the firm as governance function.

Williamson (2002) asserts that TCE provides insight into understanding complex economic organisations by combining law, economics, and organisational sciences. Williamson (1979, 1985, and 1991) elaborated TCE theory, and argued that to economise the total costs of acquiring a product or service, both production costs and transaction costs must be considered. Should the product/service be purchased from outside of the firm, the TCE attempts to economise the governance of a transaction. To do this, the theory relies on the comparison of transaction costs in different forms of governance modes.

2.3.2 Transaction cost (TC)

Before the emergence and development of TCE theory by Williamson, there was a consensus on the definition of a discrete transaction as ‘sharp in by clear agreement; sharp out by clear performance’ which satisfies researchers both in law and economics. However, in practice such clarity does not usually exist in a transaction (Williamson, 1979). Therefore, in TCE terminology, the transaction is an ultimate
unit of activity which must contain principles of conflict, mutuality, and order (Williamson, 2002).

Transaction cost (also known as transaction-specific expenses) is about the costs inherent in each transaction with the exception of the cost agreed in the contract (contract price) (Williamson, 2002). While at first Williamson was vague in defining the TC and described it as equivalent to friction in a physical system (Ross, 2005), in his later works (Williamson, 1981, p. 552) he defined it as “the cost for transferring goods or services across technologically separable interfaces”. Then, in a less strict definition, Williamson (1985, p. 8) conceptualised the TC as “the costs of running the economic system”. North (1990, p. 27) conceptualises the transaction costs as the cost of measuring the “wanted attributes of the product/service, the costs involved in policing, and the costs of protecting the rights”. More specifically, Hodgson (1993) categorises the transaction costs into three groups, including ‘search and information costs’, ‘bargaining and decision costs’ and ‘policing and enforcement costs’. This is consistent with Dahlman’s (1979) construct of TC.

Opportunism between parties plays an important role in the occurrence of transaction cost. Williamson (1973, p. 6) describes opportunism as “self-interest seeking with guile”. Although exploring the notion of opportunism is not the centre of interest in Williamson’s literature on TCE theory, his definition of opportunism in economic relations is widely used in governance-related studies (Wathne and Heide, 2000).

TC occurs because of governance costs (Williamson, 1979). Governance refers to the process of control and direction of an organisation. According to Winch (2006), in project management research, the concept of ‘governance’ is used in at least two distinct ways. In one meaning, it refers to the accountability of the project organisation to its sponsors. This is the meaning that derives from the literature on ‘corporate governance and accountability’. The second application of governance refers to the management of inter-firm relations. This is the meaning that derives from the literature on institutional economics such as Transaction Cost Economics theory. In TCE, governance refers to the mechanisms or processes that are organised ex ante and carried out ex post between two or more parties (Ruuska et al., 2011).

As it is clear in the definitions, transaction costs do not only refer to the costs incurred after the contract is signed; TC includes both the pre-contract and post-
contract transaction costs (Lingard et al., 1998). Pre-contract TC includes the costs incurred in finding the most appropriate contractor, the costs of negotiating the contract, and so on. Post-contract TC includes the costs incurred in governing inter-firm relations, re-negotiating the contract, conflict management, dispute resolutions, and so on (Li et al., 2012). Williamson (1973 and 2002) argues that TC is a catch-all term, and mathematical economics can only partially deal with that. This is consistent with Dahlman (1979).

Incomplete information and asymmetrical information play an important role in transaction costs. Asymmetric information arises when there is some private information which is not available to all the parties involved in the transaction (Williamson, 1979). In the pre-contract stage, as an example, the information asymmetry exposes the client to the cost of examining whether the potential contractor is sufficiently competent to deliver the project. In the post-contract stage, the information asymmetry generates costs such as monitoring the performance of the contractor. In perfect markets in which information is perfectly available to all parties involved in a transaction, this cost is zero. However, in practice, transaction costs exist, and contracting does not come without a cost. That is why, Dahlman (1979) describes TC as the ‘root of all evil’ when it comes to trades.

In the construction industry, Li et al. (2012) identified some of the elements that comprise the TC as: costs involved in bidding such as evaluating a tender, drawing up a contract, administrating the contract, administrating costs occurring because of design variation, conflict management and dispute resolution costs.

TCE highlights the critical dimensions of the transaction which lead to transaction costs. These transaction dimensions are called contingency factors. Then, having identified the main governance structures of transactions, TCE shows how it is possible to minimise the transaction cost by choosing the appropriate governance structure.

2.3.3 Understanding contingency factors and behavioural factors

Williamson (1979) identifies critical dimensions of transactions that have important ramifications for governance. These transaction-related dimensions, known as contingency factors, include asset specificity, uncertainty, and frequency of the
transaction. Each of these contingency factors relates to one of the ‘behavioural factors’ of economic agents involved in the transaction. Behavioural factors refer to the ways in which agents respond to contingency factors; bounded rationality, learning and opportunistic behaviour are human reflections towards respectively uncertainty, frequency and asset specificity (Figure 2-1). Each of the contingency factors and their related behavioural factors are discussed in detail in the following sections.

![Figure 2-1: Contingency factors and behavioural factors. Source: Winch (2001).](image)

### 2.3.3.1 Asset specificity and opportunistic behaviour

Asset specificity refers to investments conducted specifically for the transaction. These specialised investments may be in the form of physical assets, specialised human assets, site specificity, dedicated assets, or brand-name capital (Williamson, 2002).

Some transactions have high levels of asset specificity. Williamson (1979) refers to these transactions as ‘idiosyncratic’. Their considerable transaction-specific expenses may have significant cost consequences after the contract is signed (Williamson 1979; Winch 2006). In contrast with generic transactions, in idiosyncratic transactions clients cannot switch easily to alternative suppliers after the contract is signed. This is because the suppliers cannot sell the output intended for one order to another client easily, and the client cannot benefit fully from the unfinished work (Williamson, 1979). This is why in idiosyncratic transactions, contracting is a ‘fundamental transformation’ (Williamson, 1979; Winch, 2006).
In idiosyncratic transactions, to replace a supplier, the client is exposed to a significant switching cost, and this gives the supplier a significant margin for opportunistic behaviour (Williamson, 1979 and 1991). The margin for opportunistic behaviour by the suppliers could be as high as the client’s switching cost. According to Winch (2006), the costs of switching include:

- transaction costs of re-tendering
- costs already generated by the original supplier
- possible litigation costs related to uncertainties concerning already completed work; it is not always clear what has been done and what has yet to be done. In addition, the new supplier would be uncertain about the quality of the work done.

Asset specificity is the source of switching costs that the clients face should the original transaction be prematurely terminated (Williamson, 1979; Winch, 2006). Figure 2-2 shows the total cost to which the client is exposed if the client decides to switch contractor.

![Figure 2-2: Total cost in case of changing the contractor adopted and adjusted from Winch (2006).](image)

2.3.3.2 Uncertainty and bounded rationality

Transaction uncertainty contributes to the transaction costs. Project risk management as a separate branch of knowledge emerged only in the 1950s (Perminova et al.,
and since then risk and uncertainty have been conceptualised in different ways (Chapman and Ward, 2011). For example, the 5th edition of PMBOK defines project risk as “an uncertain event or condition that, if it occurs, has a positive or negative effect on one or more project objectives such as scope, schedule, cost, and quality” (PMBOK, p. 310), then it categorises risks into known risks and unknown risks. From this definition, one can easily conclude that risk is uncertainty. However, Chapman and Ward (2011), Perminova et al. (2008) amongst others believe that the concepts of risk and uncertainty do not convey the same meaning. As Perminova et al. (2008) show, the two terms have been used differently in other branches of knowledge. Therefore, there is no common understanding between scholars about the notions of risk and uncertainty. While there is an ongoing attempt to conceptualise risk and uncertainty appropriately by some authors, the Society of Risk Analysis argues that it is not possible to reach a comprehensive definition for the terms which is suitable in all contexts, and it is better that each author defines the terms in his/her own way (Kaplan, 1997). In economics, risk usually refers to events subject to knowable probability distribution while uncertainty concerns cases in which it is impossible to specify a numerical probability (Perminova et al., 2008). This is the view taken in TCE. Taking this view of risk and uncertainty, Winch (2006) discusses that project progress transforms uncertainty through risks into certainties (Figure 2-3).

Agents deal with high levels of uncertainties at early stages of the project. Human behaviour towards uncertainty is bounded rationality, which refers to the human feature by which behaviour is intentionally rational, but only partially so.
Bounded rationality leads to the problem of contract incompleteness (Williamson, 1979). A contract is complete if it covers all the contingencies. As human beings’ rationality is bounded, parties involved in a contract cannot foresee all the contingencies and eventualities. Therefore, not all future contingencies for which adaptations are required can be drafted in a contract at the outset (Williamson, 1979). Consequently, in reality, contracts tend to be incomplete. In the literature, bounded rationality and prohibitive costs of covering all foreseeable contingencies are commonly known as reasons for contract incompleteness (Hart and Moore, 1988). In addition, Spier (1992) shows that asymmetric information could also lead to incomplete contracts. In fact, while bounded rationality inevitably makes all contracts incomplete, the prohibitive costs of covering all known risks in a way that can be enforced as well as asymmetries in information may both lead the parties to deliberately form an incomplete contract.

2.3.3.3 Frequency and learning

The frequency with which the transaction happens in negatively linked with the transaction costs. Human beings’ behaviour towards the frequency of a transaction is learning. Through learning from repetitive transactions, parties may become familiar with each other. The familiarity between the parties involved in the transaction permits both institutional and personal trust relations to evolve (Williamson, 1979).

Lui and Ngo (2004) differentiate between ‘goodwill trust’ and ‘competence trust’. Goodwill trust refers to the expectation that one’s transaction partner intends to behave co-operatively in the relationship. Batenburg et al. (2003) call this kind of
trust ‘strategic trust’. Competence trust, which is sometimes referred to as ‘confidence’, concerns the expectation that one’s transaction partner has the knowledge and skills required to deliver the product/service based on the agreed specifications (Batenburg et al., 2003). In the literature, usually the term ‘trust’ addresses the problem due to the intention of the trustee to behave co-operatively rather than the ability of the trustee to meet the objectives (Buskens and Raub, 2002). In fact, in the literature, the term ‘trust’ usually refers to goodwill trust.

Lui and Ngo (2004) claim that high levels of goodwill trust decrease the necessity of controlling instruments, but there is no such relationship between competence trust and governance mode. However, in TCE, Williamson (1973) refers to ‘trust’ as a general term. Trust decreases the transaction cost through decreasing the required levels of policing and limiting the information costs. In addition, Williamson (1975) highlighted the role of ‘familiarity between the agents’ in the development of a specialised language in which “even nuances are signalled and received in a sensitive way” (Williamson, 1975, p. 240).

Trust can emerge through different sources. Adler (2001) identified three sources as follows:

- familiarity through repeated transactions
- sober assessment of costs and benefits for the trustee to behave co-operatively
- norms and values of the trustee

It is probably worth emphasising that in the discussion of Williamson (1973 and 2002) on TC, trust refers to the kind that originates from familiarity through repeated transitions. Although other sources of trust discussed by Adler (2001) could potentially decrease the negotiation and policing costs and ultimately the transaction costs, they are not considered in TCE.

Williamson (1979) considers transactions as one-off, occasional, and recurrent. The learning element could contribute to the transaction cost in recurrent transactions. However, in transactions with very long durations, learning characteristics could emerge. Frequency in construction projects tends to be low, which acts as a barrier to emerging trust between the parties (Winch, 2006).
An interesting feature of the TCE framework is that if uncertainty or asset specificity could be eliminated, then there would be no transaction cost; when there is no uncertainty, it is possible to draft a complete contract which does not leave any room for renegotiation and opportunistic behaviour. However, in reality, bounded rationality and incomplete contracting require considerable levels of adaptation during inter-firm relations. Similarly, when there is no asset specificity, it is possible to replace the contractor without any switching costs (Winch, 2006).

Another interesting feature of TCE framework is that the transaction characteristics that highly influence governance issues are mostly nontechnological (Williamson, 1973). This may be greeted without surprise by sociologists. However, it has been a turning point in the economic literature (Williamson, 1973).

### 2.3.4 Choosing appropriate governance structure in TCE

The TCE framework has two parts. First, it conceptualises the occurrence of opportunism in economic relations using transaction characteristics and economic actors’ behaviour. This part of the framework was discussed in section 2.3.3. Then, in its second part, the TCE framework comparatively analyses the transaction costs inherent in any governance mode. By doing so, TCE suggests the most appropriate governance mode for each set of transaction characteristics. This section discusses the second part of TCE.

Williamson (1979) categorised the governance modes into three different types: market, hierarchy, and intermediate hybrid structure. TCE provides a conceptual model which suggests one of these governance modes for each set of transaction-related dimensions.

Market is a non-transaction-specific governance mode set up by price equilibrium (Williamson, 1975 and 1979). Price works as an ‘invisible hand’ in this mechanism (Eriksson and Laan, 2007). In market, the relationships between the parties are governed through national laws and contracts (Winch, 2006). However, as it is not a specific governance mode, some authors prefer to associate its legal framework with the legal concept of ‘sale’ and reserve the concept of ‘contract’ for more specific modes (Williamson, 1975). Highly standard transactions could benefit from the market mode. Therefore, under negligible levels of asset specificity, regardless of the
frequency level of transaction occurrence, market structure can be the most efficient form of governance (Williamson, 1979 and 2002). Market is the most efficient mode if parties are involved in recurrent standard transactions, as in these cases clients can easily refer to their own experiences to choose the supplier in the market. In occasional standard transactions, buyers need to consult with the experience of other buyers. However, as it is a standard transaction, the risk of opportunism is very low.

Hierarchy is a governance mode where relationships between the parties are all internally governed within a firm through authority relations (Winch, 2006). Eriksson and Laan (2007) describe the hierarchy mode as a ‘visible hand’ which governs the relations by giving authoritative orders to the agent executing them. The hierarchy mode of governance corresponds to the ‘make’ option in the make or buy dilemma. In idiosyncratic transactions with high levels of frequency, TCE suggests hierarchy as the preferred governance mode.

The hybrid mode is an intermediate governance mode which could be categorised into two groups: bilateral and trilateral. In bilateral mode, the autonomy of the parties is maintained, but they solve any conflicts between themselves through negotiation. In trilateral mode, because of the prohibitive costs of setting up such negotiation frameworks, parties refer to third parties for dispute resolution. To minimise the transaction costs, TCE suggests hybrid modes of governance for transactions with medium levels of asset specificity. If the transaction is an occasional one with medium asset specificity, then the trilateral mode is suggested. This is because of the prohibitive costs of setting up bilateral problem solving. However, if the transaction is a recurrent one, then the bilateral mode is more appropriate. Table 2-1, adopted from Williamson (1979) shows the governance mode suggested for each transaction.
Williamson (1979 and 2002) holds the view that there is always some level of transaction uncertainty involved. In combination with asset specificity and frequency involved in a transaction, one could define the most appropriate contract. High levels of uncertainty shift the governance mode towards more flexibility, and reduction in uncertainty shifts the governance mode in the opposite direction.

While Williamson (1979) discussion implies that he views governance modes as discrete modes, Bradach and Eccles (1989) argue that governance modes could be better conceptualised as a continuum in which the market and hierarchy are the two extreme poles, and the hybrid modes are in the middle of the continuum. This view of governance modes rests on the proposition that market and hierarchy are not mutually exclusive means; in other words, in practice, transactions are not governed solely through hierarchy or market. This is consistent with the view of Zenger and Hesterly (1997).

2.3.5 Choosing appropriate contract form in TCE

The concept of contract in literature per se is explored later in section 2.4.1. This section only provides insight into the suggestion of TCE on the choice of contract. Williamson (1979) categorised contracts into the three following groups:

- Classical contracts
- Neoclassical contracts
• Relational contracts

As discussed by Williamson (1979), classical contracts are formed on the basis of classical contract law. In classical contracts, parties try to draft a contract in which all the contingencies are determined. In this type of contract, all the emphasis is placed on the legal rules and formal documents. Therefore, the identity of the parties is not important. In this category of contracts, third party’s interference is discouraged. Classical contracts cannot fit the situation in which there are high levels of uncertainty at the early stages of the project. This is because of the fact that due to bounded rationality it is not possible to draft all the contingencies, and consequently it is not possible to rely on the documents which is drafted much in advance. Market mode of governance which discussed earlier is achievable within classical contracts.

Neoclassical contracts place more emphasis on the flexibility. In other words, this type of contracts acknowledges the bounded rationality of the human beings. Neoclassical contracts identify some forms of dispute resolution and encourage the interference of the third party to solve the dispute. Trilateral mode of governance could be maintained within the neoclassical contracts (Williamson, 1979). According to Macneil (1980), both classical and neoclassical forms of contracts could be seen as ‘spot contracts’. This is because in both kinds of contract the relationship between the buyer and seller is limited to the transaction.

The third type of contract in TCE is ‘relational contract’ which is influenced by the Macneil (1973) construct of it. Macneil (1973) in his well-cited paper entitled ‘The many futures of contracts’ claims that viewing an exchange as a discrete transaction is too simplified assumption behind the classical and neoclassical contract. He maintains that this assumption is not materialised in some economic relations. In relational contracts the emphasis is on the notions of ‘relationship’ and the ‘social context’ within which the contract happens. Williamson (1979) suggests that relational contracts are appropriate for transactions with high levels of asset specificity (i.e. idiosyncratic transactions) and high levels of uncertainty. In this type of contracts, bilateral mode of governance solves the problems between the parties in this type of contract.
2.3.6 TCE in construction management literature

Transaction cost economics theory (TCE) has received considerable attention by the academics interested in the subject of project-based organisations in general and construction project management in particular. Kumaraswamy et al. (2008) consider TCE as the most dominant theoretical foundation in construction management research subject area. Table 2-2 provides an overview of the studies that used TCE concepts in these subject areas. While the table is not meant to be exhaustive, it does capture the diversity of studies benefiting from TCE.

Amongst the papers exploring transaction cost in its broad meaning, there are more conceptual papers, and interestingly, a relatively limited number of quantitative papers. This is consistent with the view of Williamson (1975 and 2002) which doubts whether mathematical economics could capture transaction costs in its broadest meaning.

Most of the studies on TCE in the construction industry are more concerned with the governance of relations between the clients and their suppliers than the relations with the subcontractors. As discussed by Winch (2001), in construction management governance could happen in two dimensions: one is vertical, which refers to the management of relationships between the client and all parties who are in direct contractual relations with the client. The second dimension of governance is horizontal, which concerns the management of relations between first tier contractors and their suppliers. Using Winch’s (2001) language, in the construction management literature, most of studies that draw upon TCE are concerned with the vertical governance of projects. This could be justified by the argument of Eccles (1981). He discusses that the nature of contractual relations between the project owner and the principal contractor is different from that between the subcontractors and the principal contractor. However, Winch (2001 and 2006) calls for attention to the governance of relations with subcontracts.

Some studies used TCE only to show how contractual relations could be categorised (e.g. Pietroforte, 1997). However, TCE theory is at the core of certain construction-related studies (e.g. Winch, 2001; Müller and Turner, 2005) amongst which a number use TCE as a normative theory to contribute to the question of how contractual relations in the construction industry should be (e.g. Jobin, 2008), and
some have gone further and attempted to contextualise the theory based on the characteristics of the construction industry (e.g. Eccles, 1981).

<table>
<thead>
<tr>
<th>Ref.</th>
<th>Management related issue</th>
<th>How is TCE used?</th>
<th>Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eccles (1981)</td>
<td>Shaping the contractual relations between the general contractor and the sub-contractors</td>
<td>The paper used TCE as a theoretical foundation to justify the existence of quasifirm relations in the construction industry.</td>
<td>The construction industry</td>
</tr>
<tr>
<td>Cox (1996)</td>
<td>Procurement strategies</td>
<td>The paper used TCE as a theoretical foundation to explain the appropriate use of any of the procurement choices available. In addition, the paper criticise prescriptive studies which prefer one method of procurement to the others without any sound theoretical justification.</td>
<td>Project organisations</td>
</tr>
<tr>
<td>Pietroforte (1997)</td>
<td>Inter-firm Communication</td>
<td>The paper used TCE categorisation of contractual relations</td>
<td>The construction industry</td>
</tr>
<tr>
<td>Turner and Keegan (2001)</td>
<td>Roles in project organisations to manage inter-firm and intra-firm relations</td>
<td>The paper used TCE as its theoretical foundation to both make sense of the study observation and justify its suggestions</td>
<td>Project organisations</td>
</tr>
<tr>
<td>Winch (2001)</td>
<td>Governance</td>
<td>The paper used TCE to present a conceptual framework for governance of processes in construction projects</td>
<td>The construction industry</td>
</tr>
<tr>
<td>Turner and Simister (2001)</td>
<td>Contract management</td>
<td>The paper criticises TCE and highlighted that other cost elements, except TC are involved in the choice of contract</td>
<td>Infrastructure projects</td>
</tr>
<tr>
<td>Ref.</td>
<td>Management related issue</td>
<td>How is TCE used?</td>
<td>Context</td>
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<tr>
<td>Rahman and Kumaraswamy (2002)</td>
<td>Risk allocation in contractual relations</td>
<td>The paper integrates TCE with relational contracting (RC) to justify the concept of joint risk management.</td>
<td>The construction industry</td>
</tr>
<tr>
<td>Müller and Turner (2005)</td>
<td>Communication between the project owner and the contractor in different contractual relations</td>
<td>The paper used principal-agent theory to explore the communication issues between the contractor and the owner, and used TCE to explore the choices of contract available which could decrease the problem of communication.</td>
<td>Project organisations</td>
</tr>
<tr>
<td>Eriksson and Laan (2007)</td>
<td>Clients procurement preferences</td>
<td>The paper uses TCE as a theoretical foundation to categorise the governance modes and to explain the situation in which each governance mode is preferred</td>
<td>The construction industry</td>
</tr>
<tr>
<td>Jobin (2008)</td>
<td>Evaluation of the partnering relationships</td>
<td>The paper used the concept of TC to evaluate the partnering relations</td>
<td>Project organisations</td>
</tr>
<tr>
<td>Lai et al. (2008)</td>
<td>Literature review</td>
<td>The paper provides a conceptual research agenda for TC-related studies based on Coasian constructs of TC</td>
<td>The construction industry</td>
</tr>
</tbody>
</table>

Table 2-2: Diversity of studies benefiting from TCE in project management context

TCE could be seen as a two-limb theory: first, TCE explains how the opportunistic behaviour emerges, and second, how the contractual relations could be set up to reduce the costs of opportunism. Studies may use any or both of these two limbs.

Most of the studies on TCE in the construction industry placed emphasis on the second limb of the theory. In other words, most of them use the TCE suggestions on the choice of contractual governance. For example, they highlighted the governance choices available to the client in the construction industry (e.g. Eccles, 1981) or they
operationalised the governance modes described by TCE by the contract forms existing in the industries (e.g. Rahman and Kumaraswamy, 2002). However, only a very limited number of studies focussed on the first limb in the context of the construction industry. So, there is not much available on how the transaction-related characteristics conceptualised by TCE work in the context of the construction industry or how practitioners in the construction industry perceive the interactions between the transaction characteristics and the governance modes.

2.4 Procurement strategies in the construction industry

TCE places emphasis on contractual governance to solve the problem of opportunism in economic relations. However, contracts are at the heart of procurement strategies (Hodgkinson, 2001), and they are formed within procurement strategies. Therefore, deep understanding of TCE in the context of the construction industry requires familiarity with the procurement strategies available in the sector as well as the concept of contract.

2.4.1 The concept of contract

Williamson (1979) places emphasis on contracts as governance modes. This is because contractual arrangements affect the behaviours of parties both directly and indirectly (Lumineau and Malhotra, 2011).

A contract could be defined as an “agreement giving rise to obligations which are enforced or recognised by law” (Peel, 2003, p.1). One could differentiate a contract from other legal obligations based on the fact that in contracts, obligations come from the agreement between parties. Theorists used to define the contract as “a promise or a set of promises for the breach of which the law gives a remedy” (Macneil, 1973, p. 693). However, the agreement-based definition of the contract is now more plausible than the promissory definition, although the reasons for this are contested (Shiffrin, 2012). Macneil (1973) criticises the promissory definition of the contract mainly because of its fragmentary nature and the fact that it limits the ability to view the bigger picture of the relationship for which the contract is made. Penner (1996) argues that contracts are agreements rather than promises because of certain technical issues. Firstly, refusal is a legitimate response to the notion of ‘promise’, similarly to gifts, and this is not the case for what contracts are meant to be.
Secondly, viewing a contract as a promise has unwanted ramifications when it comes to the termination of the contract. For example, if the contract is frustrated, parties are not expected to be committed to the contract, but if they are seen as promisors, theoretically, they would be expected to follow the quality of promise.

The law of contract is based on a few simple but crucial assumptions: first, a contract is based upon a mutual understanding of the parties (known as a meeting of minds), second, the contract is based on the true intention of the parties, third, the parties enter into the contract freely, and finally the effects of the contract are limited to the parties who sign it (Peel, 2003; Hughes, 2006). Practice is miles away from these ideal assumptions due to high levels of uncertainty at the early stages of the project and opportunism (Hughes, 2006).

Researchers categorise contracts differently in order to provide frameworks that are appropriate for exploring different concepts; contracts are categorised based on methods of payment (e.g. Murdoch and Hughes, 2000; Turner and Simister, 2001), the level of formality (e.g. Cox and Thompson, 1997), and so on. According to Marsh (2003), the method of payment and the role and scope of supply are the two main identifying dimensions of the contract. Different types of contract based on the method of payment are discussed briefly in this section, and then the role and scope of supply is discussed under the methods of procurement in the following section.

According to Turner and Simister (2001), depending on the payment method, cost plus, fixed price, and remeasurement are the three broad types of contract, all of which will now be discussed below.

In cost plus contracts, the contractor is paid all its expenses plus an agreed profit margin which could be a fixed amount or could be a percentage of the expenses. The main point in the cost plus contract is that whatever amount the contractor spends for the project will be re-paid by the employer. Therefore, the contractor does not take any risks in terms of incorrect estimation of the costs involved in the project. In terms of the project’s total costs, the main issue with the cost plus contracts is that there is no considerable incentive for the contractor to keep the costs low after the formation of the contract.
In fixed price or lump sum contracts, the contractor is paid a fixed amount for the entire project regardless of the amount it spends. In this type of contract, the employer needs to specify the project deliverables in detail before the contract is formed. In lump sum contracts, the contractor takes all the risks involved in the estimation of the costs of the pre-specified works.

In remeasurement contracts, the contractor is paid a standard rate for the agreed-upon measurable items. Remeasurement could happen on the basis of the bill of materials, the bill of quantities, or the schedule of rate. This type of contract is more appropriate for projects in which the types of resources required are identifiable prior to the commencement of the project, but their quantity is not clear.

As discussed by Turner and Simister (2001), the total cost of setting up and administrating the contract is different under each of the contract types. This is because the costs involved in preparing the tender documents and the costs involved in managing the variations occurring after the contract’s formation are different for each contract type. Lump sum contracts require detailed product specification in the tender documentation. In addition, contractors can claim for the extra costs incurred because of the variations in project deliverables occurring after the contract formation. Therefore, in projects with high levels of uncertainty in the project deliverables, lump sum contracts lead to significant contract administration costs. In cost plus contracts, the tender preparation cost is not significant because the client does not need to specify the product/service in detail prior to project commencement as the contract price is not based on the estimation of the costs involved in the product/service. In other words, the administration cost in the cost plus contract is independent of project uncertainty. However, there is usually considerable administrating cost involved in having the record of costs incurred in the project. Cost-plus contracts could be appropriate for projects with high levels of uncertainty in project deliverables. In remeasurement contracts, the client does not need to specify the quantity of the agreed-upon measurable element of the contract prior to the contract formation. Therefore, there are fewer costs involved in the tender preparation than in lump sum contracts at higher levels of uncertainty.

As is shown in Figure 2-4, the administration cost of the remeasurement contract is higher than the cost plus contract at significant levels of uncertainty. However, at
medium levels of product/service uncertainty, the administration cost of the remeasurement contract lies between the other two types of contract. At very low levels of uncertainty, lump sum contracts have the lower administration costs (Turner and Simister, 2001).

It might be worth highlighting that the administration costs of contracts conceptualised by Turner and Simister (2001) cover only some parts of the transaction costs (TC) conceptualised earlier in TCE. In addition, undoubtedly, rather than contract administration costs, the main price concern of the client is the total project cost. Therefore, the problem of lack of incentives in cost plus contracts could be problematic as it may increase the project’s total cost.

2.4.2 Project procurement strategies in the construction industry

Procurement is “the process of acquiring new services or products” (Bower, 2003, p.2). The scope of parties’ involvement in the process of the construction project, the contractual links they have with each other, and the risk allocation arrangements differentiate procurement strategies (Hughes et al., 2007). Contracts are at the heart of procurement strategies (Hodgkinson, 2001). Different payment methods in contracts, which are discussed earlier, are not specific to the construction sector. However, inherent characteristics of the sector, the particular parties involved in the
construction industry and its ever-changing business environment form procurement methods which are specific to construction industry.

Researchers concerned with procurement strategies in the construction industry believe that the sector has its own characteristics and conventions which have given rise to its own contextualised body of knowledge on procurement management. For example, Hughes (2006) highlights the volume of contractual agreements in a construction project in comparison with other project-based sectors. Gruneberg et al. (2007) maintain that conventionally in construction industry clients pay for what projects are made of rather than what the finished product does. In other words, in the construction sector, the value of the finished product is usually determined based on the labour and material, while in other industries the value of the product is usually determined on the basis of its performance. In addition, some other characteristics of the construction industry such as being site-specific, one-off, lack of standardisation of designs and components, and so on, are repeatedly highlighted as features that differentiate the procurement choices available in the construction industry from those in other sectors (e.g. Thompson et al., 1998; Bower, 2003).

Despite the existence of a good deal of textbooks on construction procurement strategies, there is little consensus on how they could be categorised. This is partly because the boundaries of the construction sector are unclear and sometimes textbooks are more focussed on strategies which are more popular in one of the many industries in the construction sector (for example infrastructure projects or private buildings) (Hughes et al., 2007). In addition, most of the textbooks describe and categorise the procurement methods from the point of view of the discipline from which they arise. In addition, while the main core features remain the same, each country has its own conventions in construction procurement (Walker and Hampson, 2003). This sub-sections hopes to provide an overview of the major types of procurement strategies which are recognised as separate types by well-cited works.

To explain each of the procurement strategies, some standard forms of contract are used in the following sub-sections. It is worth clarifying that as the main focus of this research is not on the forms of contract, the study only relies on well-referred work of Hughes et al. (2007) on the versions of the standard forms of contract. The
study acknowledges that the standard forms of contract are updated regularly although their spirits usually remain the same. Therefore, a reader seeking the latest version of a contract may wish to refer to the guidelines of the construction bodies drafting these contracts such as Joint Contracts Tribunal (JTC), The International Federation of Consulting Engineers (FIDIC), The Institution of Civil Engineers (ICE) and so on.

### 2.4.2.1 General contracting (traditional procurement method)

General contracting involves the separation of the construction role from the design role. This choice of procurement is usually known as traditional, although it has been used formally only since the early 19th century, due to increased sophistication in terms of construction technology and professionalism in the sector since the Industrial Revolution. Before the Industrial Revolution, clients procured construction projects either by a lump-sum design and build contract or by entering into a series of contracts with the trade contractors (Hughes et al., 2007).

In this procurement strategy, the client is usually in direct contract with the designers, quantity surveyors and the general contractor. Contracts are awarded to the general contractor usually based on the competitive tender and lump-sum method of payment. The general contractor is appointed to build what is drawn by the designers in accordance with the bill of quantities prepared by the quantity surveyors. In cases where the design cannot be completely prepared before the building phase, approximate quantities and re-measurement contracts will be used. There are many standard contracts drafted for this strategy, each of which is appropriate in different projects, such as JCT IC 05 (lump sum contract, for intermediate building contract), and JCT MW05 (lump sum contract for minor buildings) or JCT SBC 05 (re-measurement contract for approximate quantities).

The main drawbacks of this procurement strategy are the need for the design to be completed prior to the construction phase, inefficiency in communication between the design and construction parties, and too many contact points to be dealt with by the client (Bower, 2003). In text books, usually the ‘traditional’ procurement strategy indicates to the total lack of early involvement of contractors in the project process (Walker and Hampson, 2003).
2.4.2.2 Design and build (DB)

In design and build (DB) procurement strategy, the client approaches a contractor with a set of requirements to which the contractor responds with a proposal. Then, if the contractor wins the contract (through negotiation or competition), it will carry out both the design and the construction phase. This is similar to what happens in many other industries. For example when somebody buys a car, the usual process is to buy a car which is both designed and produced by a seller.

In this choice of procurement, usually the client is solely in direct contract with the design and build contractor (DB contractor). This is the DB contractor who is then in contract with the architects (designers), surveyors, structural engineers, and so on. This single-point responsibility is usually attractive for the clients (Bower, 2003). However, if the client requires initial sketch plans, it might appoint a design advisor for the early stages of the project. Contracts are awarded to the DB contractor usually based on cost plus guaranteed maximum price (CPGMP) which assures the client that total price of the project is capped.

According to Walker and Hampson (2003), as the DB contractor does not rely on other firms (e.g. design firm), there is less communication inefficiency and more integration in the project team which both contribute positively to the buildability of the designs and consequently to the early completion of the project. In addition, the early involvement of the contractors means that the construction phase can begin prior to the completion of the design phase. There are many standard forms of contract drafted for this strategy which covers various levels of involvement of DB contractors in design. For example, JCT DB05 is one of the contracts that fits within design and build procurement strategy and is used in cases when the design responsibility of the DB contract extends over the whole work.

The main drawback of the design and build strategy is the lack of independent quantity surveyors. In addition, in practice DB contractors tend to win the contracts with minimum possible efforts on the design, which eventually leads to a lack of architectural quality in the final products (Hughes et al., 2007). However, it might be worth emphasising that this is not a valid criticism of the philosophy of the design and build process, and the clients could always demand higher quality design before awarding the contract (Walker and Hampson, 2003; Hughes et al., 2007).
availability of a suitable contractor capable of delivering the client’s requirements is another concern in choosing this strategy (Walker and Hampson, 2003).

2.4.2.3 Management contracting

Management contracting emerged to maintain the advantages of design and build strategy such as early involvement of the contractors, but at the same time it intends to separate the design and construction parties and transfers only a small risk to the main contractor.

In management contracting, from the early stage of the project, the client enters to a contract with a management contractor who co-ordinates the project for a fee. In terms of contractual relations, the main feature of this procurement strategy is that the client is in direct contract with the design team and quantity surveyors in addition to the management contractor (MC), who is in direct contract with the work contractors. MC is not employed to undertake any work except co-ordination. Contracts are awarded to the management contractors usually based on the remeasurement method of payment in which the MC is reimbursed for the costs incurred by the work contractors in addition to a fee. The MC/A 2011 contract is one of the standard contracts drafted specifically for management contracting procurement strategy.

In this procurement strategy, the construction work is divided into smaller work packages which are let separately. Therefore, it is possible to start the construction phase prior to the design completion. However, the critics of this strategy claim that in practice, the increased number of work packages in the construction phase tends to lead to an increase in start-up costs, which ultimately leads to increased project costs (Hughes et al., 2007).

In contrast with the general contracting (i.e. the traditional method of procurement), in management contracting there is very limited risk for the MC. Therefore, management contracting is possible for those clients who are capable of absorbing the remaining risk, and that is why building developers tend to use this strategy (Hughes et al., 2007).
2.4.2.4 Construction management Procurement strategy

Construction management (CM) procurement strategy originated from the USA construction industry (Walker and Hampson, 2003). Its main difference with management contracting is the direct contractual relations which are formed between the client and the work contractors. However, in the UK it has not been successful and gradually it lost its spirits (Hughes et al., 2007).

In this procurement strategy, the CM contractor co-ordinates the project process for a fee. The role of the contractor in this approach is more similar to a consultant. Therefore, there is very limited risk for the CM contractor. In theory, due to the active role expected from the client, CM strategy is only possible if the client has a good knowledge of construction (Walker and Hampson, 2003; Hughes et al., 2007). However, in the UK, in practice, some construction contractors use CM strategy as a marketing tool, and their role has shifted from that of an ‘advisor’ to an ‘executor’. Therefore, sometimes, the project which is claimed to fit within the CM procurement strategy is more similar to the general contracting (Hughes et al., 2007) and consequently suffers from the drawbacks of the traditional procurement strategy. The CM/A 05 is one of the standard form of contracts drafted for this strategy.

2.4.2.5 Private finance initiative (PFI)

Public-private partnership is one of the procurement strategies to provide public services. In the UK, public private partnership is usually known as PFI (private finance initiative). In this procurement strategy, the private sector enters into a contractual relationship with the public sector (Hughes et al., 2007).

In PFI, a private sector consortium is usually formed which funds, designs, builds, and/or operates a facility for a specified number of years. After this specified number of years, the capital asset is usually transferred to the public sector (Hughes et al., 2007).

While PFI strategy plays an important role in privatisation in the UK, over the years it has received increasing criticisms for not delivering value for money. In response to these criticisms, in 2012, the UK government has reformed PFI into what is now called PF2. This new procurement strategy maintains the partnership of public and
private sectors but it includes changes to make it faster and more transparent. The changes include imposing a cap of 18 month on the negotiating the procurement phase, more transparency on project’s revenue, greater emphasis on flexibility, and more stakes for the government in each project (HM treasury, 2013).

2.4.2.6 Partnering

Adversarial relationships and fragmentation have been claimed frequently as important problems in the construction industry (Latham, 1994; Cheung et al., 2003). The research interest in partnering and generally co-operative inter-firm relationships is a response to this concern since the 1990s (Cheung et al., 2003).

This section discusses partnering as a procurement strategy in more depth than the other procurement choices reviewed earlier due to the reality that the partnering concept was introduced to eliminate adversarial behaviour and nourish co-operative relations. Logically, when there is a co-operative relation, there is less opportunistic behaviour. Therefore, considering the focus of this study, partnering logics and assumptions, its success, and so on could directly relate to the research.

2.4.2.6.1 What is partnering?

According to the Construction Industry Institute (CII, 1991), Partnering is “a long-term commitment between two or more organisations for the purpose of achieving specific business objectives by maximizing the effectiveness of each participant’s resources. This requires changing traditional relationships to a shared culture without regard to organizational boundaries. The relationship is based on trust, dedication to common goals, and an understanding of each other’s individual expectations and values”. This is perhaps the most frequently cited definition of partnering in the context of construction management research. However, this is a very broad definition and does not provide a clear picture of what constitutes partnering and what cannot be seen as a partnering relationship (Eriksson, 2010).

It is generally agreed that there is no single, agreed-upon understanding of partnering (Cheung et al., 2003; Nyström, 2005; Bygballe et al., 2010). However, it seems that only a limited number of authors identify it as a problem (e.g. Eriksson, 2010; Bresnen, 2010), and most of studies on partnering are relatively quiet on lack of an
agreed-upon picture of the concept (e.g. Chan et al., 2003a). Amongst studies which contribute to the debate about the definition of partnering, some studies claim that the lack of such clear understanding on partnering is because it is a multifaceted concept and the subject area is yet to mature (e.g. Li et al., 2000; Cheung et al., 2003). In addition, some studies place emphasis on the misunderstanding of the partnering concept on the practitioner’s side (e.g. Chan et al., 2003b). Consequently, there have been limited attempts to provide such a definition or to categorise the existing takes on partnering (e.g. Eriksson, 2010; Bygballe et al., 2010).

Eriksson (2010) conducted a thorough literature review on different definitions and takes on the concept of partnering. He categorised the partnering definitions into four groups as follows: The first group of studies takes a quite generic and simple approach to what partnering is. Chan et al. (2003a and 2003b) belong to this group of studies. Chan et al. (2003a, p.524) define partnering as “the simple process of establishing good working relations between project parties”, and maintain that “its premise is simple: all contracts build upon the implied covenant of good faith”. Therefore, the emphasis is placed on “the fundamental principles of partnering such as commitment, trust, respect, communication, and equality” (Chan et al., 2003b, p. 126). However, in this conceptualisation of partnering, any guide on how it could be achieved is sparse if available at all. This group of studies does not contribute much to the debate about the definition of partnering. This leads to problems both in terms of theoretical developments of the concept as well as its practical implementation. Although this group of studies took the simple definition of partnering, they acknowledge that the successful implementation of partnering is not easy (e.g. Chan et al., 2003a).

According to Eriksson (2010), the second type of partnering conceptualisation provides a richer picture of what constitutes partnering by contributing to a means of achieving partnering. Mutual objectives, trust, commitment on the project objectives, co-operative conflict management, and continuous improvement are repeatedly highlighted as the main components of partnering in this type of studies (Cheung et al., 2003). In addition, this group of studies provides some insight on ‘how’ partnering could be achieved and nourished. They also acknowledge the lack of clear understanding on partnering, but it is usually associated to the nature of the concept (Cheung et al., 2003). This argument presupposes that a definition of partnering
eventually will arise. However, as Eriksson (2010) asserted, there is difficulty in distinguishing between the results and the means in this take on partnering. For example, it is not easy to understand if ‘continuous improvement’ emerges because of partnering or vice versa, as crafted in the partnering arrangement.

According to Eriksson (2010), the third group of studies acknowledges the lack of common understanding on partnering as a problem and attempts to redefine the concept (e.g. Nyström, 2005; Yeung et al., 2007). Methodologically, studies in this group usually build the partnering concept based upon its most frequently identified factors in the literature. Therefore, they fail to support their conception of partnering with sound theoretical foundations (Anvuur and Kumaraswamy, 2007).

Nyström (2005) claimed that the lack of an agreed-upon definition is because the concept of partnering is a complex one due to all its variants. Nyström (2005) attempted to distinguish between the partnering means and results. He made a distinction between ‘general prerequisites’, ‘components’, and ‘goals’ of partnering through a literature review. In Nyström’s (2005) words, general prerequisites refer to factors that are not unique to partnering such as top management support and adequate resources. He claims that trust and mutual objectives are the most important components of partnering in the literature. In addition, Nyström (2005) maintains that the following factors are respectively the most frequently identified components of partnering in literature.

- Economic incentives in contracts
- Relationship building activities
- Continuous and structured meetings
- Facilitator (e.g. impartial discussion leader)
- Choosing working partners
- Appropriate dispute resolution methods
- Openness (e.g. through information sharing)

A distinctive point in Nyström (2005) take is that there is no single partnering form. According to Nyström (2005) any form of partnering relationship includes high levels of trust and mutual objectives between parties, however, on the basis of the combination of the remaining components of partnering mentioned earlier, various
forms of partnering emerge. However, it might be worth noting that Nyström’s (2005) study is formed on the basis of a limited literature review, and method wise, there is not much available on how papers are selected for his literature review.

Yeung et al. (2007) conducted a study similar to Nyström (2005) in which they went one step further and categorised the components into hard (i.e. contractual) and soft (i.e. behavioural) ones. They placed emphasis on the pain-share/gain-share settings as the most important contractual components of partnering. Their soft components are very similar to those highlighted by Nyström (2005).

According to Eriksson (2010), the fourth and last group of studies, similar to the third type, attempts to separate partnering means and results but does not include the discussion of the results in the definition. Lu and Yan (2007) belongs to this group of studies. According to Lu and Yan (2007, p. 165) partnering is “a structured sequence of processes initiated at the outset of a project that is based on mutual objectives and utilizes specific tools and techniques such as facilitated workshops, a charter, a dispute resolution system, and continuous improvement techniques”.

Despite the differences in partnering definitions, the spirit of most partnering constructs is about the procurement method which aims to eliminate adversarial relationships between the parties by encouraging them to work co-operatively towards shared objectives (Black et al., 2000).

In this study, similar to Bresnen and Marshall (2000b), partnering is used as an umbrella term to cover all forms of collaborative working settings such as alliances, supply chain management, and so on. In addition, the word co-operation and collaboration are used interchangeably.

2.4.2.6.2 Tools and techniques in partnering

A number of authors have placed emphasis on the following collaboration tools and techniques, in addition to the general requirements of relational contracts, as effective means for forming a partnering relationship (Eriksson and Laan, 2007; Löfgren and Eriksson, 2010):

• Joint objectives
• Follow up workshops including pre-project meetings
• Dispute resolution techniques
• Joint IT database
• Joint project office
• Teambuilding activities
• Joint risk management

In contrast with studies emphasising the role of collaboration tools in partnering, some scholars argue that successful implementation of partnering settings requires a cultural change within the industry (Bresnen and Marshall, 2000b; Cheung et al., 2003). This leads to a highly controversial issue about partnering; the main question is whether or not partnering and co-operative inter-firm relations could be ‘engineered’ or they should be ‘evolved’. Chan et al. (2003a, p. 523) discuss that “changing old habits and building trust do not magically happen”. Similarly, Cheung et al. (2003) place emphasis on the importance of behavioural factor to make partnering settings effective; nevertheless, the engineered view of partnering tends to underestimate if not ignore the subtleties of organisational culture and the very complex dynamics of a project team (Bresnen and Marshall, 2000a). Bygballe et al. (2010) addressed this controversy and argue that effective implementation of a partnering relationship requires more attention to its social dynamics, and focus on technical managerial tools does not solve the problems of partnering. Löfgren and Eriksson (2010) investigated the influence of collaborative tools on the project performance through quantitative data collected from construction client organisations. Their study shows a small positive relation between these two concepts. However, it is worth noticing that their study does not show if the collaborative tools were implemented fully or they were only treated as written strategies which are never referred to. Bresnen and Marshall (2000a) discussed the question of ‘engineered’ vs. ‘evolved’, and argue that successful partnering cannot simply be engineered by formal tools and techniques or simply be ‘evolved’ without any ex ante plans. They hold the view that to set up and sustain a partnering relationship, informal and dynamic processes as well as formal tools and techniques need attention.
2.4.2.6.3 Duration of partnering relationship

As mentioned earlier, the Construction Industry Institute (CII) places emphasis on the ‘long-term’ duration of partnering relationships. However, the literature concerned with partnering in the construction industry has departed from CII definition and distinguishes between project and strategic partnering (Winch, 2000). While project partnering refers to a specific project and shorter duration, the strategic partnering refers to a long-term commitment. Strategic partnering is sometimes called alliancing in the literature (e.g. Lu and Yan, 2007; Anvuur and Kumaraswamy, 2007). According to Bygballe et al. (2010), there is a tendency in the literature to focus on project partnering rather than strategic partnering. Some studies view strategic partnering as a step further than project partnering, and explain this tendency towards short-term project partnering with the difficulties of change in the adversarial culture of the sector (Cheng et al., 2000). Logically, based on this explanation, there should be more studies concerned with strategic partnering in the recent literature. However, the extensive and systematic literature review conducted by Bygballe et al. (2010) shows that the focus on project partnering in papers published between 2002 and 2010 is as much as it used to be in papers published earlier than 2002. The considerable focus on project partnering could be explained by the characteristic of the construction industry as being project-based and one-off. However, the critiques of such focus raise doubts about it, and argue that being project-based is not an essential and built-in characteristic of the construction industry. Furthermore, the critiques of such focus claim that being project base is a heritage of the construction industry which could/should be abandoned to solve the problem of co-operation (Love et al., 2002b; Bygballe et al., 2010).

2.4.2.6.4 Scope of partnering

Construction managerial literature concerned with partnering tends to focus on the co-operative relationships between the clients and the main contractors, and only a limited number of studies explore the partnering relations between the contractors and subcontractors (Li et al., 2000). According to Bygballe et al. (2010), this is in line with partnering practice. Similarly, Bresnen and Marshall (2000b) discuss that although contractors encourage the partnering settings with the clients, they usually tend to avoid partnering relations with the subcontractors. While some scholars
associate this pattern with differences in the nature of inter-firm relations on the upstream side of the value chain in the construction industry and the downstream side (e.g. Thompson et al., 1998), some others view it as a problem. Bygballe et al. (2010) use the supply chain management concept to argue that to use the partnering benefits fully, all the parties involved in the supply chain should work with each other co-operatively.

2.4.2.6.5 Benefits of partnering

Chan et al. (2003a) conducted a review of the literature encouraging partnering, and grouped the common benefits of partnering into the following thirteen headings:

• Closer relationship
• Better quality product
• Better cost control
• Better time control
• Reduced litigation
• Lower administrative cost
• Increased satisfaction
• Efficient problem solving
• Continuous improvement
• Potential for innovation
• Enhanced communication
• Better safety performance
• Improved culture

As most of the papers included in their literature review are theoretical papers, one can claim that theoretically co-operative inter-firm relations are expected in the abovementioned benefits. This is in line with a more recent extensive literature review conducted by Hong et al. (2011).

2.4.2.6.6 Success factors of partnering

Even the advocates of partnering hold the view that successful implementation of a partnering process is not easy (Chan et al., 2003a). Numerous authors identified the
success factor of partnering. According to Meng (2010) the most ten frequent success factors identified in the literature are as follows:

- Mutual trust
- Shared objectives
- Teamwork
- Share risk allocation
- Continuous improvement
- Win-win business attitude
- Problem solving and dispute resolution settings
- Pain share-gain share procurement methods
- Senior management commitment
- Shared information

Meng (2010) admits that there are overlaps between the above-mentioned success factors. Generally, except for some variations in emphasis, the result of studies concerned with partnering success factors are very similar (e.g. Black et al., 2000; Wood and Ellis, 2005) which might be explained by the similarity exist in their research designs. Methodologically, this type of studies is often conducted on the basis of questionnaires which are designed based on reviewing the literature.

Most of these success factors are about the behaviour of parties involved in the project (Cheung et al., 2003). That is why many commentators place great emphasis upon the importance of changing attitudes for true implementation of partnering concepts (Wood and Ellis, 2005). Kwawu (2009) suggests that in practice sometimes partnering relations do not live up to the benefits theoretically expected because not much attention given to intangible and dynamic social success factors such as trust and teamwork.

As highlighted by Cheung et al. (2006), a conceptual problem in the studies concerned with the success factors of partnering is that by definition success factors of a goal refers to those key factors which are absolutely necessary to reach the goal. However, most of partnering success factors studies (similar to the ones mentioned above) tend to mix success factors and important component of partnering.
2.4.2.6.7 Procurement related issues in partnering

Numerous scholars have emphasised the lack of sound theoretical support for the entity of partnering and guiding theory on its application (e.g. Cheung et al., 2006; Anvuur and Kumuraswamy, 2007).

Relational contracting

In a significant number of studies, the contractual-related issues of partnering are underpinned by Macneil’s conception of relational contracting (e.g. Rahaman and Kumuraswamy, 2002; Cheung et al., 2006). Hong et al. (2011) discuss that partnering and other co-operative procurement settings in the construction industry embody relational contracting (RC).

According to Macneil (1986), relationships are at the heart of economic exchanges. He places great emphasis on the notion of relations in the concept of the contract, and views a contract as the ongoing dynamic state of relations between parties involved in the exchange relation. Macneil (1999, p. 873) asserts that “contracts mean relationships among people in exchange relations”; this view is very different from that considering contracts as solid terms and conditions. Macneil (1986) argues that each economic transaction is part of a system of transactions. Therefore, the discrete transaction-driven view of economic exchanges is problematic. In addition, he asserts that in order to understand any transaction, all of the surrounding relations must be understood. In other words, economics exchanges take place against a background of social contexts. Parties involved in an economic exchange follow certain patterns of behaviour built upon shared social norms. In other words, the actual behaviour of parties and the standards of proper conduct give rise to prescriptive norms which govern the exchange relations (Macneil, 1980 and 1986).

Macneil (1980 and 1986) highlights that exchange relations might be too complex to be fully specified during pre-contract negotiations, or may require the parties to adjust their obligations and expectations during the exchange. He argues that this type of exchange relations cannot be governed appropriately by the fully drafted contracts and must be governed by relational contracting. In relational contracting, the legal mechanisms offered by contracts are not strictly followed (Kwawu, 2009). Instead, parties govern the exchange by mutually accepted social guidelines. This is
because of the evolving nature of the transaction, and the fact that written forms of contracts cannot adjust themselves in line with the changes (Macneil, 1973). Recognising the confusing terminology between ‘relational’ applying to the ‘nature of all contracts’ and at the same time to ‘a special type of contracts’, Macneil (2000) subsequently referred to these special types of contract as ‘complex’ contracts. However, in construction managerial research, ‘relational contracting’ generally refers to particular forms of inter-firm relations rather than placing emphasis on the feature of all contracts (e.g. Kwawu, 2009). This study follows the same tradition.

For the purpose of legal requirements, relational contracting is usually characterised by the substitution of more flexible and informal agreements such as promises, letters of intent, and ‘gentlemen’s agreements’ for formal and carefully drafted contracts. Therefore, conflicts are expected to be solved by negotiations based on the social norms formed between parties (Macneil, 1980). As Bradach and Eccles (1989) pointed out, Macneil agrees with the transaction cost economics that asset specificity and uncertainty play important roles in the behaviour of parties in an exchange relationship, but his view diverges from TCE when it comes to the governance of the relations; in contrast with neo-classical forms of contracts, in Macneil’s view of economic exchange, the norm-referenced behaviour of parties is highlighted (Kumaraswamy et al., 2008). In RC, the relations are governed by the shared and often implicit norms (Macneil, 1980).

Macneil (1999) conceptualises the inter-firm relations as a spectrum of contractual forms in which the arm’s length relationship with fully drafted contracts are on one side and fully relational contracts on the other. Therefore, price, trust and authority are the three control factors in governance of an exchange relation. On the basis of the level of emphasis on any of these three factors, the governance of an exchange relation could be located on this spectrum. There is a subtle difference between Macneil’s illustration of contractual relations as a range when compared to that of Williamson (1979). Macneil holds the view that contractual relations form a spectrum and there is no discrete type of contract. In contrast, Williamson’s view is more about the continuum of contracts in which discrete types could be delineated. As pointed out by Kumaraswamy et al. (2008), recognising just how subtle the difference is, Macneil (2000) highlighted his position by using the phrase ‘as-if-discrete’ for his classification-related analysis.
Scholars interested in partnering relations have used the propositions of relational contracting, and investigated the factors which support relational contracting. Thompson et al. (1998), in a well-cited paper, identify the following contractual factors supportive of relational contracting and co-operative relations:

- Incentives (i.e. incentive-based compensation)
- Risk-sharing schemes
- Shared rewards
- Promotion of joint working

Generally, the above-mentioned factors are widely known to support the cooperation in contractual relations (Kumaraswamy et al., 2008). In addition, Eriksson and Pesämaa (2007) highlighted the positive effect of the following issues on partnering through a quantitative study:

- Early contractor involvement
- Incentive-based compensation
- Limited bid invitation
- Task-related attributes (in contrast with lowest price criteria)

Thompson et al. (1998) illustrate the continuum of contractual relations as arms-length transactions, preferred supplier, single sourcing, network sourcing, and strategic alliance: each respectively having more elements of co-operation. They link each of the contractual relations to one type of contract (Figure 2-5). As illustrated in Figure 2-5, the extent to which the formal forms of contracts are used has a negative relation to the role of relationships in governing the contract. Their illustration of range of contracts is used in many other studies (e.g. Kumaraswamy et al., 2008).
2.4.2.6.8 Evaluation of partnering

In this research, partnering as a procurement strategy has been discussed in more detail than other procurement strategies. This is because advocates of partnering view it as a response to the problem of inter-firm opportunism (Cheung et al., 2006). If scholars can introduce a workable procurement strategy which could eliminate the problem of inter-firm opportunism, then there would no longer be much benefit in conducting research on the problem of inter-firm opportunism. This section provides an overview of the evaluation of partnering from the existing literature.

As pointed out by Nyström (2006, p. 435), “the overwhelming part of the partnering literature is of [an] optimistic nature”. More recent studies show that the promises on partnering have only to some extent been satisfied (e.g. Kwawu, 2009; Gottlieb and Haugbolle, 2013). Numerous papers criticise the prescriptive and overwhelming part of partnering studies (Wood and Ellis, 2005; Nyström, 2008; Bresnen, 2009). The critiques concern the conceptualisation of partnering (e.g. Bresnen 2009 and 2010), theoretical foundations supporting the concept (e.g. Anvuur and Kumaraswamy, 2007; Smyth and Pryke, 2008), the evaluation of partnering implementation (e.g. Nyström, 2008), and so on. Interestingly, the criticism exists between both advocates and sceptics of collaborative relations.
Evaluation of partnering conceptualisation

As highlighted by Bresnen (2009), in partnering literature there is a focus on what partnering should be. The problem with such common focus is that it does not provide the required knowledge on why partnering cannot be implemented as it is prescribed in the literature. Bresnen (2009) suggests that partnering is a socially constructed notion. Therefore, a more constructivist approach towards partnering research is required. The proposition behind his argument is that partnering is an emergent phenomenon which is constructed and constituted locally in projects (Bresnen, 2009 and 2010). Being socially constructed, it could be better studied through more constructivist views. In addition, placing emphasis on the emergent nature of partnering, Bresnen (2009 and 2010) argues that any generalisation of the partnering concept is very difficult. Methodological criticism of Bresnen (2009 and 2010) on the lack of constructivist research could be linked with the frequently highlighted problem of little attention being paid to the behavioural issues influencing the implementation of partnering (e.g. Bresnen and Marshall, 2000b). However, it is worth highlighting that both critiques could exist independently of each other.

Another problem with the common conceptualisation of partnering refers to the unproblematic and causal attitudes between partnering components (tools) and the expected desired outcomes (Gottlieb and Haugbølle, 2013). However, recently, numerous studies have highlighted that shaping a collaborative relationship is not as cut-and-dried as it is described in prescriptive studies (e.g. Bresnen and Marshall, 2000b). In line with this, Hong et al. (2011) show statistically that the number of papers concerned with the barriers to partnering implementation between 2000 and 2009 is eight times higher than between 1990 and 1999.

Evaluation of theoretical foundations of partnering

Lack of sound theoretical support for suggestions/descriptions in partnering literature is frequently highlighted in numerous papers (e.g. Anvuur and Kumaraswamy, 2007; Smyth and Pryke, 2008). The overwhelming part of the partnering literature suggests partnering as the best choice which suits all inter-firm relations. However, as discussed by Cox (2001b), firms enter into business relations primarily to make profit and not to satisfy ‘the human desire for human contact’. Therefore, any
suggested inter-firm relations should be in line with their primary aim. Cox (2001b) places emphasis on the notion of ‘appropriateness’ in shaping the inter-firm relations, and criticises the ‘tide of writings’ which tries to introduce partnering as the best possible procurement strategy. It is worth highlighting that his argument is not against the benefits of removing adversarialism from inter-firm relations, but is against suggesting trust-based relations with mutual objectives for all cases.

To alleviate the problem of lack of theoretical foundations, some scholars have attempted to explore the concept, its presumed benefits, and its barriers by drawing upon theories from other branches of knowledge (for example, activity theory in Gottlieb and Haugbølle, 2013). However, as there are only few studies on each of the theories, one could raise concerns on how well the theories fit the context.

**Evaluation of partnering implementation**

Evaluation of partnering implementation is difficult partly because it is not easy to judge whether or not a project is a true partnering. For example, in Nyström’s (2008) study, half of the projects that mentioned partnering in their tendering documents did not include partnering components during the project. This affects research data in at least two ways. First of all, it brings subjectivity to the researcher’s work, as the researchers need to set up criteria to sift out the ‘true’ partnering projects. In addition, research participants might dismiss the below.expectation results of the partnering setting as the project was not ‘proper partnering’.

In addition, in evaluation of partnering implementation, relying on successful cases is common (Wood and Ellis, 2005). Such reliance brings methodological concerns, as it does not allow an understanding of how much of any observed improvement in performance is directly attributable to partnering (Bresnen and Marshall, 2000b). To solve the problem in quantitative studies, Nyström (2006 and 2008) suggests for comparative studies in which the other variables affecting the outcome of the project are controlled. However, clearly, collecting such data on a large scale is very difficult.

In addition, in a study of the literature concerned with partnering evaluation, it is not easy to draw a conceptual line between those studies which explore/report the benefits achieved from partnering implementation and those studies which
explore/suggest the benefits theoretically expected from collaborative relations. The well-cited paper entitled “An empirical study of the benefits of construction partnering in Hong Kong” (Chan et al., 2003a) could be used as an example to show how blurred such a conceptual line can be.

Chan et al. (2003a) mentioned that their study aimed to investigate ‘the benefits of partnering’. The study reviewed 29 relevant papers and identified the 13 most commonly highlighted partnering benefits. These 13 benefits in turn formed the basis of a survey which was conducted to find out how strongly different parties (i.e. clients, contractors, and consultants) involved in construction projects agreed with each of the particular benefits of partnering identified from the literature according to a five-point Likert scale. Based on the result of the questionnaire, Chan et al. (2003a) claim that the research study had identified the benefits of ‘implementing’ partnering, and consequently hold the view that “Partnering principles should be adopted to the fullest possible extent in future projects for improved project performance” (Chan et al., 2003a, p.524). However, there are methodological concerns which could make one more circumspect when dealing with the general suggestion of adopting partnering ‘to the fullest possible extent in future projects’. First, the questionnaire was not designed to allow comparisons to be drawn between parties who have experience of partnering and those without such experience; respondents were asked to rate their degree of agreement against each of the identified benefits in partnering settings, but they are not asked on how easily/frequently they could experience true partnering relations which may lead to such benefits. Second, it seems that respondents answered the questions based on their general understanding of the concept. This is a common practice in survey studies on benefits of partnering (e.g. Black et al., 2000). However, it can be problematic as the respondents may ignore the negative results of partnering projects by regarding them as not being ‘true partnering’. Therefore, it is not well-founded to rely on the benefits highlighted in this study as being the benefits of all so-called partnering settings.

By way of summary, Table 2-3 shows examples of criticisms of the partnering literature. Overall, logically, whatever can eliminate the problem of adversarialism could bring numerous benefits to the construction industry. However, as discussed in this section, there is not enough evidence to believe that partnering settings are doing so.
<table>
<thead>
<tr>
<th>Ref.</th>
<th>General criticisms of partnering literature</th>
<th>Which part of the problem is explored by the paper?</th>
<th>Conclusion</th>
<th>Focus of the concern</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bresnen and Marshall (2000b)</td>
<td>Being prescriptive and mainly anecdotal</td>
<td>The authors claim that social and psychological aspects of partnering as a mode of organising are omitted from the partnering literature.</td>
<td>It is only by fully appreciating the effects of the subtleties and intricacies of the concept of organisational culture that a more realistic and practical approach to the development and implementation of partnering will emerge.</td>
<td>Conceptualisation of partnering</td>
</tr>
</tbody>
</table>
| Bresnen (2009) | Much of the literature is about what partnering should be. | Partnering is viewed as an emergent concept which is constituted and reconstituted in practice. He introduced the practice-based approach in understanding partnering. | • Local circumstances play an important role in how partnering emerges.  
• Attempts to provide templates for partnering implementations may not be of much use in practice. | |
| Bresnen (2010) | • Lack of systematic theorising and empirical research on partnering  
• over-reliance on anecdotal or broad-brush survey data | Part of its implementation problems concern ambiguity with regard to what partnering actually is. There is little research that focuses on the socially constructed and constituted nature of partnering. | Partnering is a socially constructed concept. Therefore, more constructivist approaches are required | |
<table>
<thead>
<tr>
<th>Ref.</th>
<th>General criticisms of partnering literature</th>
<th>Which part of the problem is explored by the paper?</th>
<th>Conclusion</th>
<th>Focus of the concern</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cox (2001b)</td>
<td>Much of the partnering literature suggests it as the most appropriate procurement strategy for all the cases.</td>
<td>The influence of relative power between the buyer and supplier in shaping an appropriate procurement strategy is highlighted.</td>
<td>Partnering implementation is useful and possible only in certain cases.</td>
<td>Lack of theoretical foundation</td>
</tr>
</tbody>
</table>
| Gottlieb and Haugbølle (2013) | Simplistic view on the relationship between the partnering components (tools) and partnering’s desired outcome. | Dynamics of partnering in the construction industry. | - Partnering strategy is overlaid on the existing practices rather than substituting them.  
- The dynamics of partnering could be better understood in the interrelations of three systems of production, values, and interests. | |
| Nyström (2008) | Shortcomings in evaluation of partnering implementation in empirical studies of the subject | 1. objective data on the success of partnering projects  
2. Control variables to make sure that success could be associated with the partnering settings  
3. Comparative studies between partnering and non-partnering projects. | - Amongst his selected projects, half of the projects that mentioned partnering in the tendering documents did not include partnering components during the project.  
- His study does not show any positive general trend between the use of partnering settings and cost, time, and quality. | Evaluation of partnering implementation |

Table 2-3: Some of the criticisms of the partnering literature.
The previous sub-sections provided a brief overview of the procurement strategies available in the construction industry. Figure 2-6 adopted from Hughes et al. (2007) shows the distinguishing factor of each of the procurement strategies. It might be worth mentioning that most of procurement strategies could be combined with each other. For example, a general contractor may be in a partnering relationship with its client.
2.5 New economic sociology (NES)

New economic sociology (NES) is one of the prominent theoretical works concerning the problem of opportunism.
2.5.1 Background of NES

The subject area of new economic sociology originates from sociology and was consolidated by Granovetter’s (1985) well-referenced paper, entitled “Economic Action and Social Structure: The Problem of Embeddedness” (Batenburg et al., 2003). Embeddedness concerns the degree to which individuals or firms are involved in a social network. The idea of embeddedness originally introduced by Karl Polanyi (1886-1964), and then presented in a structured way by Granovetter (1985) to contemporary economists and sociologists (Woolcock, 1998). The main emphasis in NES is on the role of personal and network relations in discouraging economic actors from opportunism. The field has also been called ‘social economic’ and ‘sociology of economies’ (Smelser and Swedberg, 1994). Sometimes an emphasis is placed on the term ‘new’ to show that it refers to the Granovetter (1985) conceptualisation of the field rather than the earlier attempts to bridge economics with sociology. However, Granovetter (2000) mentioned that the field is not anymore new and he preferred to use the name ‘structural economic sociology’. In this report for the sake of consistency, the term ‘new economic sociology’ (NES) is preferred.

Granovetter (1985 and 2000) argues that conceptions about the level of an economic actor’s embeddedness are either ‘oversocialised’ or ‘undersocialised’. Oversocialised perspectives refer to the overestimation of the influence of social relations on the economic behaviour of the firms. These perspectives include “the conception of people as overwhelmingly sensitive to the opinions of others and hence obedient to the dictates of consensually developed systems of norms and values, internalized through socialization, so that obedience is not perceived as a burden” (Granovetter, 1985, p. 483).

In the oversocialised perspective, actors follow the norms and customs regardless of their rational preferences (Yilmaz, 2007). This is one of the points for which over-socialised views are criticised by the new economic sociology.

In addition, in the over-socialised conception of economic actors, ‘generalised morality’ is in charge to justify why opportunism does not always happen (Granovetter, 1985). According to Arrow (1974, p.26), generalised morality is the result of the belief that “societies in their evolution have developed implicit
agreements to certain kinds of regard for others, agreements which are essential to the survival of the society or at least contribute greatly to the efficiency of its working”. This is the second point for which over-socialised views are criticised by NES. Granovetter (1985) argues that hardly anyone can doubt the existence of generalised morality. However, he questions the extent of its influence. In fact, it is not easy to find examples among the real world economic transactions in which the opportunistic behaviour is avoided only because of generalised morality, as there are almost always other incentives for behaving non-opportunistically. In contrast with over-socialised views, in NES governance of relations is the result of purposive behaviour (Buskens et al., 2003a).

Finally, NES criticises the over-socialised view of economic actors for conceptualising the economic actors as atomised decision makers who follow the ‘internalised’ norms and values regardless of their relations. Granovetter (1985) emphasised that the norms and values are all outcomes of network relations, and excluding their study from the network structure limits the explanation and consequently prediction of economic behaviour.

In the context of NES, undersocialised perspectives refer to the common approach of classical and neoclassical economists towards the role of social influences in economic behaviour. From this point of view, social relations at most have a disruptive and frictional role in economic behaviours, and therefore, the social relations are not usually considered in explanations and predictions of economic behaviours (Granovetter, 1985). The assumption behind this view is that the behaviour of the agents is directed by the explicit goals of their firms, and the economic actors make decisions in isolation from their social connections (Smelser and Swedberg, 1994; Swedberg, 1997). Consequently, in pure spot markets, purchasing relations would happen between anonymous buyers and sellers. While this may be possible in theory, it is rather unusual in reality (Adler, 2001). Granovetter (1985) criticises this view of economic actors as atomised decision makers. Granovetter (1985 and 2000) criticises the TCE theory as an undersocialised perspective although he agrees that TCE is itself a revisionist theory because of inclusion of bounded rationality in its analysis. However, Granovetter (1985 and 2000) maintains that the reductionist rational choice assumption in TCE does not lead to a full picture of the situation.
Despite the apparent contrast between the over- and undersocialised conception of economic actors, Granovetter (1985) criticises both for holding an atomised view of the economic actors. When agents are considered as atomised decision makers, social relations are not incorporated in the study of economic behaviour (Batenburg et al., 2003). In fact, Granovetter (1985) introduced the concept of embeddedness as the counterpart to atomisation (Swedberg, 1997).

2.5.2 Concepts of embeddedness, control, and learning in NES

The concept of embeddedness refers to the involvement of economic actors in a social network. The level of embeddedness of each economic actor refers to ties and relations it has with its economic partner as well as its contacts and relations with third parties. These ties and relations cover a variety of levels, including personal relations, institutional relations, and economic relations (Granovetter, 1985). As pointed out by Woolcock (1998), the discussion of embeddedness in NES claims that every economic transaction happens in a social network, and the problem of opportunism has much to do with the characteristics of its social network.

Granovetter (1985) points out two types of embeddedness, namely dyadic embeddedness and network embeddedness (network relations). Dyadic embeddedness concerns the extent to which the same actors (e.g. client and contractor) are involved with each other over time (Buskens et al., 2003b). Dyadic embeddedness refers to both past experiences and expected future experiences.

Another kind of embeddedness is known as ‘network embeddedness’, which refers to the extent to which the two parties (e.g. client and contractor) are embedded in the networks of third parties (e.g. other clients and contractors) (Buskens et al., 2003b; Batenburg et al., 2003).

Embeddedness influences the economic behaviour through two mechanisms of ‘learning’ and ‘control’. Learning refers to the possibility for the actors to gain information through previous similar interactions (Buskens and Raub, 2002). In the case of the construction industry, for instance, a client might gain information through its previous experience with a contractor (dyadic embeddedness) or the client might be able to gain some information about the trustworthiness of a
contractor through those who have had similar interactions with it (network embeddedness). Positive experiences or negative information achieved through past experience could lead to the emergence of trust or distrust (Buskens and Raub, 2002; Buskens et al., 2003b). Buskens and Raub (2002) place emphasis on the greater influence of the buyer’s past experiences with the contractor in comparison to the influence of information gained through the network. Therefore, in case of conflicting information, the client tends to follow the knowledge based on his own past experiences with the trustee.

As argued by Buskens et al. (2003b), the second mechanism through which embeddedness explains why opportunistic behaviour does not happen is ‘control’. The dyadic aspect of control mechanism discourages opportunism by emphasising that the level of transactions between any two economic actors and the level of trust between them will be affected negatively if they behave opportunistically in the current transaction. Therefore, following this logic, in an economic relation, one party may associate opportunistic behaviour with the risk of losing potential jobs with its current economic partner in the future. The other aspect of control mechanism is related to network embeddedness. Control mechanism through network embeddedness concerns the ability of the trustor to inform other potential trustors about the low level of trustworthiness of a particular economic actor. In the case of the construction industry, for instance a client may discourage its contractor from opportunism when the opportunistic behaviour in the current transaction is negatively linked to future jobs with other potential clients. Control mechanism works as an incentive for honouring trust and discouraging opportunism (Buskens and Raub, 2002). Therefore, the stronger the opportunities for the client to sanction the contractor through its network, the stronger incentives the contractor has to honour trust and the stronger reasons the client has to place the exchange relationship based on trust (Buskens et al., 2003b). Depending on the nature of the exchange relationship, learning, control mechanism or both may be crucial.

On the basis of the NES argument regarding the role of past and future contacts in the occurrence of inter-firm opportunism, some scholars use the concept of ‘shadows of the past and the future’ (Batenburg et al., 2003; Kamann et al., 2006; Ruuska et al., 2011). Shadow of the past refers to the past dyadic and/or network
contacts. Therefore, it could decrease the risk of opportunism through the learning mechanism. Shadow of the future refers to potential future dyadic and/or network contacts. Therefore, shadow of the future could decrease the risk of inter-firm opportunism through the control mechanism. NES suggests that in the case of a high level of firm’s embeddedness, inter-firm opportunism is lower when the shadow of the past and/or the future is stronger (Batenburg et al., 2003; Kamann et al., 2006).

2.5.3 NES and its relationship with other theories

2.5.3.1 NES and TCE

Transaction cost economics (TCE) is preoccupied with the role of transaction characteristics in the occurrence of opportunism and places emphasis on the use of contractual governance to solve the problem of opportunistic behaviour. NES, on the other hand, places emphasis on the role of networks in explaining/solving the problem of opportunism. Granovetter (1985) explores this difference to clarify the conceptual foundations of NES in his seminal paper.

As mentioned earlier, Granovetter (1985) criticised TCE for holding an under-socialised view of economic actors. This criticism is sometimes used by advocates of NES to imply that one has to abandon rational choice models in order to have a rich understanding of the problem of opportunism (Biggart, 2004). Granovetter’s (1985) criticism, however, concerns the reductionist perspective on the rational choice assumptions and not the rational choice assumption itself. In other words, as pointed out by Granovetter (2000) and Batenburg et al. (2003), his view of economic behaviour maintains the rationality assumptions but questions the shortcomings of neo-classical economics in understanding the role of networks in making rational choices. That is why Granovetter (1985, p.506) argues that “while the assumption of rational action must always be problematic, it is a good working hypothesis that should not easily be abandoned. What looks to the analyst like nonrational behaviour may be quite sensible when situational constraints, especially those of embeddedness are fully appreciated”.

One response to differences in conceptualisations of any two theories including NES and TCE is to leave one theory in favour of the other, but as pointed out by
Williamson (1993), that is extreme. The other philosophical stand holds the view that any two theories including TCE and NES could complete each other. This view is labelled as type A in Table 2-4. For example, Cheah et al. (2007, p.29) generally claim that “different theoretical fields should be viewed as complementary rather than mutually exclusive.” However, they do not address how conflicting assumptions could be combined to form a rigorous and coherent theory.

Another response to formulating the relationship between NES and TCE is to consider their specific assumptions and then maintain that they could coexist. This view is labelled as type B in Table 2-4. Williamson (1993) amongst others holds the view that TCE and NES could both contribute to the understanding of the problem in hand and would benefit each other because fundamental incompatibilities between them are nonexistent. Table 2-4 attempts to illustrate the continuum of the rationales behind the view that TCE and NES could both contribute to understanding and solving the problem of opportunism. Similarly to Williamson (1993) and Batenburg et al. (2003), this study holds the view that there is no theoretical reason to view TCE and NES as mutually exclusive theories. It might be worth highlighting that this proposition on its own does not contain any judgements on whether TCE and NES are workable in the context of the construction industry. In addition, this proposition does not state how TCE and NES might complement each other in any industrial contexts including the construction industry.
Social network analysis (SNA) is an analytical tool for measuring social relationships (Larsen, 2011). SNA has been used in management research to provide an indication of information flow, effective communication, and collaboration between people, groups, organisations, computers, and other information processing entities (Ruan et al., 2013). In this perspective, actors are viewed as nodes which are linked directly or indirectly to each other. SNA uses indicating concepts such as level of interconnection in a network (known as density in SNA terminology), the number of relations a specific actor is involved with (known as degree in SNA terminology), and the level of centrality of an actor to explore the networks, usually quantitatively.

### Table 2.4: Different rationales behind the view of coexistence of TCE and NES.

<table>
<thead>
<tr>
<th>Ref.</th>
<th>How NES relationship with TCE is viewed</th>
<th>Main management contribution</th>
<th>Spectrum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cheah et al. (2007)</td>
<td>Generally theories, including TCE and NES, originating from distinct schools of thought can be combined.</td>
<td>Illustrated the need for contextualising theories which originated from the western countries to Chinese work settings.</td>
<td>Type A</td>
</tr>
<tr>
<td>Buskens et al. (2003b)</td>
<td>Used NES and TCE as its theoretical foundations to both conceptualise the research rationale and to build the research hypotheses. However, any clear discussion to show why such links between two theories could be valid does not exist.</td>
<td>Dyadic and network embeddedness influence the supplier selection decision in the IT industry</td>
<td></td>
</tr>
<tr>
<td>Batenburg et al. (2003)</td>
<td>Having explored the fundamental foundations of TCE and ES, the study holds the view that they could be integrated.</td>
<td>Role of dyadic embeddedness together with transaction characteristics on the ex ante management of contracts in the IT industry</td>
<td>Type B</td>
</tr>
</tbody>
</table>

**2.5.3.2 NES and Social Network Analysis**

Social network analysis (SNA) is an analytical tool for measuring social relationships (Larsen, 2011). SNA has been used in management research to provide an indication of information flow, effective communication, and collaboration between people, groups, organisations, computers, and other information processing entities (Ruan et al., 2013). In this perspective, actors are viewed as nodes which are linked directly or indirectly to each other. SNA uses indicating concepts such as level of interconnection in a network (known as density in SNA terminology), the number of relations a specific actor is involved with (known as degree in SNA terminology), and the level of centrality of an actor to explore the networks, usually quantitatively.
SNA has been adopted to address various project management issues. Table 2-5, adopted from Ruan et al. (2013), shows the diversity of the studies adopting SNA in the three selected journals of Construction Management and Economics, Journal of Construction Engineering and Management, and Engineering, Construction and Architectural Management between 2002 and 2012.

<table>
<thead>
<tr>
<th>No</th>
<th>Ref.</th>
<th>Research field</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pryke (2004)</td>
<td>Understanding coalitions in projects</td>
</tr>
<tr>
<td>2</td>
<td>Styhre et al. (2004)</td>
<td>Organisational learning</td>
</tr>
<tr>
<td>3</td>
<td>Pryke (2005)</td>
<td>Project governance</td>
</tr>
<tr>
<td>4</td>
<td>Sandhu and Helo (2006)</td>
<td>Project success</td>
</tr>
<tr>
<td>5</td>
<td>Chinowsky et al. (2008)</td>
<td>Communication</td>
</tr>
<tr>
<td>6</td>
<td>Styhre (2008)</td>
<td>Knowledge management</td>
</tr>
<tr>
<td>7</td>
<td>Davis and Walker (2009)</td>
<td>Project performance</td>
</tr>
<tr>
<td>8</td>
<td>Chinowsky et al. (2009)</td>
<td>Knowledge management</td>
</tr>
<tr>
<td>9</td>
<td>Comet (2009)</td>
<td>The construction industry’s performance</td>
</tr>
<tr>
<td>10</td>
<td>Styhre and Gluch (2010)</td>
<td>Knowledge management</td>
</tr>
<tr>
<td>12</td>
<td>Park et al. (2011)</td>
<td>Inter-firm collaboration</td>
</tr>
<tr>
<td>13</td>
<td>Chowdhury et al. (2011)</td>
<td>Structure of public private partnership</td>
</tr>
<tr>
<td>14</td>
<td>Larsen (2011)</td>
<td>Innovation</td>
</tr>
<tr>
<td>15</td>
<td>Wambcke and Hsiang (2012)</td>
<td>Identification of key subcontractors</td>
</tr>
<tr>
<td>16</td>
<td>Ruan et al. (2012)</td>
<td>Knowledge management</td>
</tr>
<tr>
<td>17</td>
<td>Alsamadani et al. (2013)</td>
<td>Communication</td>
</tr>
</tbody>
</table>

Table 2-5: SNA studies in Construction Management, based on Ruan et al. (2013).

Although SNA in itself provides a set of methods, it is based on a social theoretical perspective emphasising that the relationships play an important role in any project. In other words, SNA was introduced based on the criticism of neoclassical economics theories (e.g. TCE) in which the relationships between economic actors are not taken into account (Gordon and Mccann, 2000). In addition, using Granovetter’s (1985) language, the relationships perspective in
SNA studies deviates from the ‘oversocialised’ conception of economic actors; in contrast with the oversocialised perspectives, SNA is based on the assumption that the actors’ behaviours are heavily affected by the network relations and actors are not ‘atomised decision makers’. Therefore, as suggested by Granovetter (1990), similarly to NES, social network analysis is placed between the over and under-socialised conceptions of economic behaviour.

Advocates of SNA commonly use the following reasons initially mentioned by Nohria and Eccles (1992, p.4) as the main reasons to take a network perspective:

- “All organisations are social networks and therefore need to be analysed in terms of networks of relationships.
- Organisations operate in environments comprising networks of other organisations.
- Difficulty in seeing overall patterns of relationships by looking at one organisation due to multiple, complex, overlapping webs of relationships.
- Actions of actors in organisations can best be explained in terms of their position within networks of relationships.
- The comparative analysis of organisations must take into account their network characteristics.”

None of the main reasons mentioned above are inconsistent with the new economic sociology (NES) assumptions. But interestingly, there is not much available within the literature adopting the SNA method to draw on the new economic sociological approach as consolidated by Granovetter (1985). For example, amongst the studies outlined in Table 2-5, none of them used NES as their theoretical foundations although there are citations of Granovetter (1985) to support the relationship based approach within them. Granovetter explains this while he is emphasising the role of networks in understanding the relationships. Granovetter (1990, p.15) discusses that “there really is no way to remain faithful to the fundamental insights of sociology without paying attention to networks of social relationships”. However, he does not find himself an advocate of SNA in understanding the economic relations. He criticises the SNA approach for being preoccupied with the mechanics of networks (Granovetter, 2005). SNA usually uses the structure of networks to collect quantitative data about the questions in
hand. However, Granovetter (1990) argues that socially constructed notions such as norms, trust, power, and control cannot be sufficiently explored in the mechanic perspective which dominates in SNA. This is in line with the criticism of Ruan et al. (2013).

Similarly to Granovetter (2005 and 1990), this study holds the view that the notion of networks is the cornerstone in considering the role of relationships in economic behaviours. However, as the study is interested in the conception of the inter-firm opportunism between practitioners involved in the construction industry, it does not reduce any of the socially constructed notions of opportunism, relations, trust, and norms to quantifiable concepts. Therefore, in this study, the SNA perspective is not incorporated.

2.5.4 NES in construction management literature

The literature on NES in the context of construction management is relatively limited. Table 2-6 shows an overview of studies published up to August 2014 in the Journal of Construction Management and Economics (CME) which have referenced Granovetter (1985). As pointed out by Pike et al. (2000), studies usually deal with NES by reference to Granovetter (1985). However, clearly, a study may be indirectly influenced by NES without any direct citation to Granovetter (1985). However, clearly, it is difficult, if not impossible to track those studies.

<table>
<thead>
<tr>
<th>Ref.</th>
<th>How does it use Granovetter (1985) study?</th>
<th>Research focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wong et al. (2000)</td>
<td>Used Granovetter (1985) in its literature review to support the study’s viewpoint on the importance of trust.</td>
<td>Trust</td>
</tr>
<tr>
<td>Kale and Arditi (2001)</td>
<td>Used NES as its theoretical foundation, and evaluated the influence of the quality of the relationships between the general contractors and their subcontractors on their economic performance.</td>
<td>Contractor-subcontractor relationships</td>
</tr>
<tr>
<td>Ref.</td>
<td>How does it use Granovetter (1985) study?</td>
<td>Research focus</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>Greenwood (2001)</td>
<td>Used Granovetter’s (1985) take on over- and under-socialised conceptions of economic actors to back up its discussion and conclusion.</td>
<td>Contractor-subcontractor relationships</td>
</tr>
<tr>
<td>Phua (2004)</td>
<td>Used social identity theory as its theoretical foundation. However, used NES in its literature review to support the research proposition on the importance of relationships in one’s economic behaviour.</td>
<td>Cooperation</td>
</tr>
<tr>
<td>Fu et al. (2006)</td>
<td>Used Granovetter (1985) in its literature review to discuss different takes on network formation.</td>
<td>Learning patterns in the networks</td>
</tr>
<tr>
<td>Phua (2006)</td>
<td>Used Granovetter (1985) and some other theoretical works to formulate hypotheses which are tested quantitatively. Overall, their research results suggest a positive role of institutional factors in construction firms’ performance.</td>
<td>Construction firm performance</td>
</tr>
<tr>
<td>Cheah et al. (2007)</td>
<td>Used NES as one of the western theories</td>
<td>Strategic management</td>
</tr>
<tr>
<td>Castro et al. (2009)</td>
<td>Used Granovetter (1985) to propose a theoretical model showing with whom alliances are formed. The model was tested by SNA, and the role of past alliances and membership to the same business association/group were confirmed</td>
<td>Project coalition</td>
</tr>
<tr>
<td>Roehrich and Lewis (2010)</td>
<td>Used Granovetter’s (1985) study to back up its literature review on the notion of trust.</td>
<td>Governance</td>
</tr>
<tr>
<td>Bernete et al. (2010)</td>
<td>Used Granovetter (1985) to review the models of inter-organisation governance</td>
<td>Knowledge management</td>
</tr>
<tr>
<td>Larsen (2011)</td>
<td>Comapred and contrasted Granovetter’s (1985) conception of the nature of networks (especially weak networks) with other network-related theories.</td>
<td>Innovation</td>
</tr>
<tr>
<td>Ruan et al. (2012)</td>
<td>Used SNA. However, used Granovetter (1985) in its literature review to discuss that there is more order in inter-firm relations than predicted by economic models.</td>
<td>Knowledge management</td>
</tr>
<tr>
<td>Ling and Tran (2012)</td>
<td>Used Granovetter (1985) to support the study’s proposition on the importance of interpersonal relations in economic behaviour. The paper used relational contracting as conceptualised by Macneil.</td>
<td>Interpersonal relations in public sector</td>
</tr>
</tbody>
</table>
As can be seen in Table 2-6, in the context of construction management, a limited number of studies place NES as their core theoretical foundation. In addition, most of the studies which referred to NES do it in order to place emphasis on the importance of the relationships in economic exchanges. Calling attention to the social issues in understanding economic behaviour is one of the achievements of NES (Granovetter, 2000). However, considering the recent general agreements on the importance of ‘good’ relationships in economic transactions, this achievement is no longer specific to NES. In other words, any other relationship-oriented perspective on economic exchanges (e.g. relational contracting) includes emphasis on the importance of relationships. Yet, the distinctive point of NES is its conceptualisation of learning and control mechanisms through which social embeddedness governs an economic relationship. However, there is not much material available focusing specifically on these mechanisms.

The lack of studies on NES in the context of construction management could be seen on at least two levels. First, there is a lack of studies concerned with how learning and control mechanisms work in the context of construction management. In other words, there has been limited analysis showing the impact of including ‘learning’ and ‘control’ mechanisms as conceptualised by NES in the occurrence of inter-firm opportunism. Such studies could be helpful for normative studies based on NES.

<table>
<thead>
<tr>
<th>Ref.</th>
<th>How does it use Granovetter (1985) study?</th>
<th>Research focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phua (2013)</td>
<td>Only used Granovetter (1985) to explain the notion of ‘embeddedness’.</td>
<td>Project performance</td>
</tr>
<tr>
<td>Fernie and Tennant (2013)</td>
<td>Used Granovetter (1985) to support their research conclusion about the importance of supply chain.</td>
<td>Supply chain management</td>
</tr>
<tr>
<td>Tansey et al. (2014)</td>
<td>Used Granovetter (1985) in review of the schools of thought in Porter’s typology of strategic management.</td>
<td>Construction companies response strategy during recession</td>
</tr>
</tbody>
</table>

Table 2-6: Publications in CME journal up to Aug 2014 which referenced Granovetter (1985).
Second, at an explanatory level, in the context of construction management, there is a lack of studies exploring the view of practitioners on the learning and control mechanisms as conceptualised by NES. Such studies could contribute to the understanding of the perception of practitioners on the power of embeddedness. Considering the research aim of this study, this is part of the research gap identified in relation to the problem of inter-firm opportunism. The research gap in the current study is explained in the following section.

2.6 The research gap

In relation to the problem of opportunism in economic relations, both transaction cost economics (TCE) theory and new economic sociology (NES) could be viewed as two-limb theories. First, the theories respond to the question of “What increases the risk of opportunism in economic relations?” by providing conceptual frameworks. Second, on the basis of their conceptualisations, they answer the question of “How can economic relations be governed most appropriately regarding the problem of opportunism?”.

Regarding the first question, TCE provides a conceptual framework that emphasises the transactions’ contingency factors (i.e. asset specificity, uncertainty, and frequency) and their associated human behaviours in explanation of the occurrence of opportunism. Then, regarding the second question, TCE suggests appropriate contractual governance modes to govern the economic relations. From a different viewpoint, NES responds to the first question by providing a conceptual framework that emphasises the past and future contacts through network and dyadic relations. Then, regarding the second question, NES suggests consideration of learning and control mechanisms to govern the economic relations. This chapter argues that how inter-firm relationships are governed from inter-firm opportunism has a lot to do with how the pattern of inter-firm opportunism is conceptualised.

In relation to the problem of inter-firm opportunism, the construction management literature could benefit from TCE and NES in any or both of the two above-mentioned questions. However, as shown earlier, most of the studies are concerned with the second question. It is argued in this chapter that generally
there is not much available concerning the pattern of inter-firm opportunism in the construction industry. More specifically, there is not much available on how this pattern is conceptualised by practitioners in the construction industry. Such a study could contribute to the understanding of why practitioners do what they do in their inter-firm relations. This study aims to contribute to filling this research gap. Therefore, one research question in the current study is: ‘How do practitioners involved in inter-firm relationships in the construction industry view the patterns of inter-firm opportunism?’ However, answering this question requires an understanding of what they mean by inter-firm opportunism. Therefore, its prerequisite question is: ‘How do practitioners involved in inter-firm relationships in the construction industry construct the notion of inter-firm opportunism?’

Understanding the practitioners’ conceptualisations of inter-firm opportunism will assist in understanding why they formulate their governance strategies in certain ways. In addition, at another level, such understandings could provide a basis for insights on why some normative governance strategies are accepted by practitioners in the sector and some are not. The next following chapter will discuss how the recent methodological advances in management research both recognise the legitimacy of these research questions and also provide research strategies to answer them.

As discussed earlier, in the construction projects, governance occur in two dimensions. The vertical dimension refers to the management of relationships between the client and all parties who are in direct contractual relations with the client. The second dimension is horizontal, which concerns the management of relations between first tier contractors and their suppliers (Winch, 2006). Therefore, the above-mentioned research gap could be tackled in any or both of the dimensions of governance. Considering the differences in the nature of contractual relations in these two dimensions (Eccles, 1981; Thompson et al., 1998; Winch, 2006; Bygballe et al., 2010), this study limits its scope to the relations between the client and its suppliers. It must be noted that accepting that differences exist between these two dimensions in practice does not imply any judgement on the desirability of such differences.
In addition to highlighting a research gap in relation to the problem of opportunism, the review of the literature in this chapter provided some research footholds such as transactions’ contingency factors and shadow of the past and future for the early stages of the research. How research footholds assist a research journey is discussed later in the methodology chapter.

2.7 Main studies in the current literature review

Figure 2-7 illustrates the leading studies in this chapter’s literature review. In fact, Figure 2-7 shows the works by which the initial literature review in this study is framed. By doing so, it clarifies the conceptual research footholds which assist the researcher in its research journey. In Figure 2-7, the lines show direct links/references between the studies as indicated in the studies while the dotted lines refer to associations conceptualised by the researcher.
Figure 2-7: The main studies used in the literature review in chapter two.
2.8 Chapter summary

The problem of opportunism attracts the attention of scholars from different academic disciplines. Transaction cost economics (TCE) theory is one of the prominent theories in this subject area. Originating from economics, TCE places emphasis on the frequency, transaction-related assets, and uncertainty inherent in an exchange as the most important transaction characteristics involved in the occurrence of opportunistic behaviour. Then, the theory suggests an appropriate contractual governance mode for each set of transaction characteristics.

New economic sociology (NES) is another prominent theory on the subject of opportunism in economic relations. Originating from sociology, NES attempts to bridge sociology and economics in solving the problem of opportunism. In conceptualisation of the problem, NES places emphasis on the role of relationships in economic behaviours. Subsequently, the theory attempts to contribute to solving the problem of opportunism mainly through network and dyadic relations between economic actors. Consequently, the theory suggests ‘control’ and ‘learning’ strategies to solve the problem.

This chapter analytically reviewed TCE and NES (respectively in section 2.3 and 2.5) to find out the status of literature on the problem of inter-firm opportunism. Through this review it is apparent that the question regarding the reduction of the risk of inter-firm opportunism has a lot to do with how its pattern is conceptualised. In addition, the chapter critically reviewed how construction management literature has used TCE and NES respectively in sections 2.3.6 and 2.5.4, and argued that although the construction management literature has benefited from these two theories both at normative and explanatory level, there is not much available on how the pattern of inter-firm opportunism is conceptualised by practitioners involved in the construction industry. The chapter discussed this research gap in section 2.6.

This chapter attempted to fulfil the research objectives regarding the status of literature generally on inter-firm opportunism, and specifically in construction management.
Chapter 3 Research methodology

3.1 Chapter brief

Previous chapters highlighted that the study’s aim is to provide a conceptual framework of the patterns of inter-firm opportunism in the construction industry from the point of view of the practitioners involved in the sector. However, providing a framework of people’s perceptions does not fit within the positivist worldview that aims to discover the contextless truth, to investigate cause-and-effect relationships, and to place emphasis on measurements. Instead, the study believes that people construct their views of the world based on their own perceptions, and there are multiple realities about a phenomenon. This study attempts to see the patterns of inter-firm opportunism in the construction industry from the point of view of practitioners involved in the sector. In fact, the study holds a social constructionist worldview.

This study was guided by a grounded theory research strategy, and more specifically Charmaz’s (2003 and 2006) stance on grounded theory. To collect rich qualitative data, the study used semi-structured interviews.

3.1.1 Chapter’s goal

This chapter discusses the methodological aspects of the study. The overall goal of this chapter is to introduce and justify the methodological design of the study. To achieve this goal, the following objectives are set:

• To introduce the research philosophical position of the study
• To discuss Charmazian grounded theory as the research strategy
• To justify the choice of Charmazian grounded theory as the research strategy
• To justify the use of semi-structured interviews as the method of data collection
• To discuss the evaluation of a qualitative research holding a social constructionist worldview
• To justify the structural organisation of this thesis
3.2 Structure of the chapter

This chapter is composed of six main parts and in each part one of the methodological aspects of the study is discussed.

Section 3.3 discusses the philosophical position of the research. In doing so, first a brief overview of the ontological and epistemological positions put forward by research methodologists in the context of management research are provided respectively in sections 3.3.1 and 3.3.2. Then, the link between ontological and epistemological assumptions is discussed (section 3.3.3). Finally, section 3.3.5 determines the philosophical position of this study. In addition, it discusses how the study’s research position was formed and how it influences the study’s view on the nature of inter-firm opportunism.

Section 3.4 discusses why this research has an inductive approach to the problem of inter-firm opportunism.

Section 3.5 provides a very brief overview of research strategies available within inductive qualitative studies. It must be noted that it is neither possible nor desirable to review all the research designs available in this chapter.

This study used grounded theory (GT) as a guiding research strategy. Therefore, section 3.6 first discusses grounded theory in detail, including its basic elements and different views on it. Then, GT practices are discussed. As the research was guided specifically by Charmaz’s (2003 and 2006) stance on it, the discussion of GT practice in this section is dominated by the Charmazian view (section 3.6.3). Subsequently, the section justifies the choice of grounded theory as its research strategy and more specifically the Charmazian grounded theory. In addition, it explains why semi-structured interviews were employed in this study.

Section 3.7 establishes the quality criteria for the study considering its research worldview and its inductive design.

Section 3.8 discusses how grounded theory studies are usually reported, and explains the rationale behind the way this study is presented as it is.
Research Methodology

Research methodology is one of the terms used frequently in academic writings. However, as highlighted by Saunders et al. (2009), in many studies the terms ‘research method’ and ‘research methodology’ are used interchangeably, “perhaps just using methodology as a more verbose way of saying method” (Saunders et al., 2009, p.3).

Methodology, similar to dermatology, psychology, and so on, has the suffix of ‘logy’ derived from the Greek word ‘logos’ which means ‘knowledge, ‘information’, ‘theory’ (Johnson and Duberley, 2000). Similar to dermatology which is concerned with research and treatments related to skin (derma is the Greek word for skin), research methodology is the body of knowledge concerned with how research should be undertaken (Johnson and Duberley, 2000; Saunders et al., 2009).

However, even amongst the works with an informed choice of the word methodology, there is no consensus on what constitutes methodology. For example, while Gobo (2008) suggests that ethnography is a methodology, Stanley (2013, p. 26) share her understanding of the term as follows: (emphasis added) “… We see ‘method’ as techniques or specific sets of research practices, such as surveys, interviews, ethnography, and the like. ‘Methodology’, however, is a ‘perspective’ or very broad theoretically informed framework, such as symbolic interactionism or functionalism within sociology, and which may or may not specify its own particular ‘appropriate’ research method/s or techniques/s.”

To avoid falling into the trap of a debate only about the labels, this study prefers to reserve the term methodology for decisions/knowledge concerned with how research should be carried out. Therefore, it avoids using ‘research methodology’ as a label for any particular research strategy (such as grounded theory). That is why, in this study, similarly to Saunders et al. (2009), grounded theory is considered as a research strategy.

Before going any further, it might be worth highlighting that there are a wide variety of terms employed by authors to refer to and to discuss the research methodological issues. For example, what Creswell (2007) refers to by ‘research
design’ is different from what Saunders et al. (2009) refer to by the term. This is partly because social research methodology as a field of enquiry is itself developing. This is evident from the changes occurring in new editions of research methodology books (e.g. Guba and Lincoln, 2005). In addition, as some research methodologists believe that certain approaches are more workable in their own disciplines (e.g. management, nursing, and so on), depending on their subjects of study, their categories are different. However, what is most important in any particular piece of research is not the labels attached but whether the methodological concerns are addressed fully. In this study, for the sake of clarity, terms are defined before their usage and an attempt is made to avoid using terms interchangeably without prior notification.

3.3 Philosophical assumptions

According to the Chambers 20th Century dictionary, research can be defined as a “systematic investigation towards increasing the sum of knowledge”. If the research is meant to contribute to the body of knowledge, then one basic question would be “what is a legitimate contribution to knowledge?”. Such a question leads to questions about the nature of knowledge, and claims made about knowledge. That is why any serious research in the social sciences quickly runs into philosophical issues in ontology and epistemology. The ontological and epistemological positions taken in each study shape its research worldview.

3.3.1 Ontology

Ontology refers to the philosophy with respect to the nature of reality (Saunders et al., 2009; Easterby-Smith et al., 2012). Ontological questions are concerned with the objectivism and subjectivism of phenomena (Bryman, 2008). Objectivism indicates that a phenomenon exists in reality, whereas subjectivism holds the view that a phenomenon is created by people (Guba and Lincoln, 2005). In the context of social research, ontological questions are concerned with the ontological status of social entities.

As pointed out by Easterby-Smith et al. (2002), the ontological positions put forward by philosophers could be divided into four different categories, namely traditional realism, representationalism, relativism, and nominalism. The
difference between all these ontological beliefs is based on their answer to whether or not the world has a ‘real’ existence outside of human experience (objectivist view), and whether such real existence is accessible (Guba and Lincoln, 2005). It should be noted that the boundary between any of these ontological assumptions is blurred and is constantly shifting over time (Guba and Lincoln, 2005).

Traditional realism holds the view that there is a ‘real’ world ‘out there’, and the scientists can access the truth through observations that have a direct correspondence to the phenomenon under study (Easterby-Smith et al., 2002). Traditional realism views observation as unproblematic. So, scientists should only collect data, and then facts “speak for themselves” (Sayer, 1984, p. 45). However, as the subject matter of social science is people rather than physical objects, traditional realism correctly has never been at the foreground of social science research (Easterby-Smith et al., 2002).

Representationalism goes a stage further than traditional realism, and holds the view that there is a ‘real’ world ‘out there’ but it is not always possible to access it directly. Therefore, in this context, scientists should make sure that the research results are an accurate reflection of reality (Easterby-Smith et al., 2002).

In sharp contrast with the first two positions, relativism holds the view that different observers have different viewpoints. Therefore, truth is relative to one’s viewpoint, and it is only possible to talk about truth by acknowledging that it is relative to the viewpoint of the observer (Johnson and Duberley, 2000; Easterby-Smith et al., 2002).

Nominalism is another ontological view in the philosophy of social science. Nominalism holds the view that reality is constructed by social actors’ minds. In other words, social entities have no prior independent existence, and they receive their reality from the labels and names attached by people based on their experiences (Easterby-Smith et al., 2002). It assumes that there is no truth and no universal concept out of the minds of social actors (Johnson and Duberley, 2000; Guba and Lincoln, 2005). In this context, researchers intend to interpret the meanings constructed by social actors.
3.3.2 Epistemology

Epistemology is concerned with what should be considered as valid knowledge in a particular field of study (Johnson and Duberley, 2000; Saunders et al., 2009). It studies the criteria by which one could say what constitutes knowledge and who can be a knower. Different epistemological views maintain “a general set of assumptions about the best ways of inquiring into the nature of the world” (Easterby-Smith et al., 2002, p. 31).

Easterby-Smith et al. (2002) suggest that management studies could embrace three different epistemological views, namely positivism, relativism (and its more recent variant of critical realism), and social constructionism. This is in line with Saunders et al. (2009) and Alvesson and Sköldberg (2009).

This section discusses these epistemological views in chronological order. The section gives the most space to social constructionism since this study holds a social constructionist view on the study of inter-firm opportunism.

3.3.2.1 Positivism

Positivism holds the view that reality could be achieved through experiments which test the hypotheses, and the job of a researcher is to discover the timeless reality which exists independently of the observer (Easterby-Smith et al., 2002). As highlighted by Saunders et al. (2009), in this viewpoint similar to the natural sciences, researchers are working with observable social entities, and are detached as much as possible from data.

3.3.2.2 Social constructionism

Before discussing social constructionism, it must be noted that in the debate on philosophy of social sciences, social constructionism (e.g. in Easterby-Smith et al., 2002) and social constructivism (e.g. in Guba and Lincoln, 2005) are usually used interchangeably (Bryman, 2008; Andrews, 2012).

Social constructionism is an epistemological point of view which is associated with postmodernism (Alvesson and Sköldberg, 2009; Andrews, 2012). Originally, the term postmodernism was used in the subject area of fine arts, film, dance, and
so on. However, it has gradually spread into other academic subject areas such as epistemology. While in general, the term postmodernism might refer only to the current period of time and its social changes, in the epistemological discussions, it refers to a particular stance on the philosophy of knowledge. Postmodernist epistemology rejects the positivist view on the possibility of developing generalisable answers from objective standpoints to questions (Johnson and Duberley, 2000; Jeon, 2004).

Social constructionism places emphasis on the difference between studies dealing with objects (such as natural sciences) and studies dealing with people (such as social sciences) (Saunders et al., 2009). It views humans as social actors in social research (Saunders et al., 2009) and its underlying belief regarding ontology is that there is no pre-existing reality, and people, including researchers, each construct their view of the world based on their own perceptions (Easterby-Smith et al., 2012). In other words, social actors construct social entities (nominalist ontological view). Therefore, in the context of social constructionism, it is important to study socially constructed realities (Alvesson and Sköldberg, 2009).

Social constructionist researchers aim to make sense of how the world functions by understanding the socially constructed realities (Easterby-Smith et al., 2002). Therefore, they attempt to see the world from the point of view of their research subjects. That is why researchers’ own subjectivity and constructs about what is being studied cannot be avoided (Saunders et al., 2009). Consequently, social researchers are seen as part of the research process (Easterby-Smith et al., 2012). In this position, social researchers are subjectively and interactively linked in the inquiry process (Annells, 1996).

The book of Peter Berger and Thomas Luckmann in 1966 entitled ‘The Social Construction of Reality’ is usually viewed as a pioneering work in bringing the social constructionism into the discussion of epistemological positions in the social sciences (Alvesson and Sköldberg, 2009). Since then, various authors have placed emphasis on and discussed different aspects of the position, and social constructionism has become more multifaceted as a result. For example, Gergen (1999) emphasised on the taken for granted role of language in the construction of realities.
Social constructionism, naturally, has received some critiques. Authors have countered some of these critiques by shifting the aim of research in social sciences. In fact, they highlighted that in social constructivist studies, the aim is not to find out the nature of a social phenomenon, but rather to find out how a certain phenomenon is constructed by people (Easterby-Smith et al., 2012). In addition, authors have countered some of the critiques by the development of social constructionism as a position. For example, Gergen and Gergen (2004) responded to a criticism regarding difficulties in considering some social elements (such as power) in the context of social constructionism. Furthermore, even among its proponents, social constructionist studies are criticised for being descriptive and for their lack of theorising. For example, Alvesson and Sköldberg (2009) argue that some studies do not show how the constructed realities function, and fail to theorise the relationships between the constructed realities. However, despite the critiques, social constructionism has spread to most areas of the social sciences (Alvesson and Sköldberg, 2009).

### 3.3.2.3 Relativism

Relativism and its more recent variant of critical realism is seen as a counterweight to social constructionism (Alvesson and Sköldberg, 2009). As pointed out by Sayer (2010), critical realism originated from the ideas of the philosopher Roy Bhaskar in the 1970s.

Critical realism holds the view that there is a reality but not easy to apprehend. Similar to positivism, in this epistemological viewpoint, the job of researchers is to understand the reality which exists independently of the observer (Saunders et al., 2009; Sayer, 2010). In fact, it is similar to positivism in its view of the commonality between subject matters in natural science and social science. However, critical realism acknowledges the difficulty of reaching reality. Therefore, to achieve the most accurate understanding of reality, it suggests the use of multiple tools and methods to triangulate the results (Easterby-Smith et al., 2002). In fact, critical realism holds the view that what people see is only part of the picture which is viewed from a particular perspective. Critical realism views both positivism and social constructionism as being too superficial. It provides a
ground for critiques of social constructionism for imprecise and ambiguous research outcomes (Alvesson and Sköldberg, 2009).

Until the first half of the 20th century, social sciences had been dominated by positivism (Charmaz, 2006; Alvesson and Sköldberg, 2009). The dominance of the positivist view was so powerful that ‘the’ scientific method was used to refer to the positivist quantitative methods. However, nowadays the sophistication and the diversity of studies carried out based on the non-positivist views show that extreme positivism is no longer the mainstream worldview in social sciences.

Construction management research (CMR) is a multi-disciplinary body of enquiry which sits between the natural sciences and social sciences (Love et al., 2002b). Therefore, studies might deal with either or both of its natural or social science aspect. Considering the dominance of positivism in social sciences till the second half of the 20th century, the positivist worldview used to be ‘the’ accepted worldview in CMR. However, the debate and discussions surrounding the valid research worldviews in CMR is no longer new. Sherratt (2012) suggests that the Construction Management and Economics journal was host to the origins of this methodological debate in the mid 1990s when Seymour et al. (1997) argued that a scientific foundation was no longer applicable to a discipline where the main focus of study is people. Since then, non-positivist studies have gradually found their way into CMR, although they may not yet have surpassed the positivist views (Sherratt, 2012).

### 3.3.3 Link between ontology and epistemology

As is clear from the discussion of epistemological positions, each of them refers to one of the ontological views, and that is why Annells (1996) maintains that the ontological and epistemological questions are interrelated. Table 3-1 shows the link between the epistemological and ontological views in natural sciences and social sciences.
### Table 3-1: Ontologies and epistemologies in science and social science (Source: Easterby-Smith et al., 2002).

<table>
<thead>
<tr>
<th>Ontology of science</th>
<th>Traditional Realism</th>
<th>Internal Realism</th>
<th>Relativism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Truth</td>
<td>is established by correspondence between observations and phenomena.</td>
<td>is determined through verification of predictions.</td>
<td>requires consensus between different viewpoints.</td>
</tr>
<tr>
<td>Facts</td>
<td>are concrete</td>
<td>are concrete, but cannot be accessed directly.</td>
<td>depend on viewpoint of observer.</td>
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<tr>
<th>Epistemology of science</th>
<th>Positivism</th>
<th>Relativism</th>
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<tr>
<th>Epistemology of social science</th>
<th>Positivism</th>
<th>Relativism</th>
<th>Social Constructionism</th>
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### 3.3.4 Pragmatic worldview

So far, this section attempts to shed light on how research worldviews are formed on the basis of epistemological and ontological assumptions. However, as Saunders et al. (2009, p.109) highlighted, “it is unavoidable that the debate on ontology and epistemology… has a competitive ring”, and by ‘a competitive ring’ they meant pragmatism. They refer to pragmatism as a perspective which avoids the commitment to any single epistemological position. Therefore, it avoids the debate about the nature of reality and the nature of knowledge (Saunders et al., 2009).

Pragmatism argues that both observable phenomena and subjective meanings can provide acceptable knowledge dependent upon the research question (Tashakkori and Teddlie, 1998). Therefore, the advocates of this worldview do not hold scrupulously to any single view of knowledge and reality (Easterby-Smith et al.,
Pragmatism places emphasis on the research question and uses all available methods to explore the research subject (Saunders et al., 2009).

### 3.3.5 The selected philosophical position

This study uses the belief system grounded in social constructionism. As discussed earlier (section 3.3.3), this epistemological view is linked to the ontological assumption which believes that humans create their social constructs. In this viewpoint, researchers’ job is to see the world from the points of view of the research subjects, and to do this, the social researcher has to subjectively interact with data.

It should be clarified that the research’s philosophical position for this study was not selected a priori and merely applied to the research problem. Instead, the research problem and the initial literature review relevant to the research problem led to the study of research worldviews available in the context of social sciences. Then, the choice of research worldview was determined based on the nature of the research subject.

The notion of ‘inter-firm opportunism’ as the core component of the research subject does not fit well within positivism. This is because the notion of opportunistic behaviour cannot be defined universally. For example, it is expected that behaviour which is described as opportunistic by a client in one sector in a certain context may not be seen as such somewhere else. This happens because people involved in the construction industry individually and collectively construct their concepts of opportunism.

To tackle this incompatibility, at least two different approaches could be considered. The first approach is to reduce the attributes of opportunistic behaviour and to link them to a concept which is less abstract and ideally quantifiable, and then to investigate the second measurable concept instead of the notion of opportunistic behaviour itself. Such an approach is the result of commitment to positivism and while it may be fruitful on its own, it raises problems. Firstly, it loses some rich and interesting aspects exist in the concept of ‘inter-firm opportunism’ as a whole. Secondly, instead of studying a socially
constructed notion, it studies ‘objects’ which are not proven to be part of the socially constructed notion of opportunism.

For example, in a study of inter-firm opportunism in the electricity industry, Niesten and Jolink (2012) took this approach. They drew upon transaction cost economics theory, and used the “official decisions of the Dutch and French electricity regulators on dispute resolutions and on enforcements of the electricity laws and regulations to determine when acts of opportunistic behaviour occurred and in which transactions” (Niesten and Jolink, 2012, p. 1034). Clearly, they reduced the notion of opportunist behaviour to the quantifiable concept of dispute, and then based on their data analysis of official dispute resolution cases, they claimed that “no acts of opportunistic behaviour occurred when the context aligned the incentives between the contracting parties” (Niesten and Jolink, 2012, p.1031). Such a study assumes that opportunistic behaviour only happens when there is a dispute between parties. This assumption does not necessarily contribute to the understanding of all aspects of inter-firm opportunism, as it holds the view that there is no opportunistic behaviour if there is no dispute.

To deal with subjectivity in the nature of opportunism, the second approach is to accept this subjectivity, and subscribe the research to a philosophical position, which not only does not disapprove of this ambiguity, but also embraces the recognition of this ambiguity. This study chose the second approach and for this reason social constructionism is selected.

As mentioned earlier, any research worldview has implications on study methods and tools. However, this does not mean these implications are only limited to how a study answers its research questions. In fact, the research’s philosophical worldview influences the formation and legitimacy of research questions (Annells, 1996; Alvesson and Sköldberg, 2009).

The literature review in this study highlights the lack of material concerning what practitioners in the construction industry mean by inter-firm opportunism, and how they develop its patterns. This study attempts to contribute to filling this research gap. However, considering the lack of such a study on the problem of opportunism as a ‘research gap’ implies that filling such a gap constitutes a contribution to knowledge. This is on its own an epistemological issue. These
research questions are not legitimate in a positivist view because they assume opportunism as an objective reality. In contrast, these research questions assume that the concept of opportunism is subjective and constructed by people based on their experiences. In contrast with positivism, social constructionism accepts different constructs of a social issue (e.g. opportunism). That is why Creswell (2007) discusses that philosophical assumptions cannot be separated from the whole procedure of research. However, this challenges the common structural flow of theses in which usually the ‘research methodology’ chapter is followed by the ‘literature review’ chapter, as if a researcher only needs to draw on the research methodological options available to help filling the research gap identified earlier in the literature review chapter (for a different presentation of thesis, see Sherratt, 2012).

This study acknowledges that the formation of the research questions were not possible without believing in social constructionism. However, similar to most theses, in this study the research methodology chapter is presented after the literature review, although the study admits that the knowledge of research methodology feeds the formation of research questions, aim, and objectives.

### 3.4 Methodological implications of social constructionism

As mentioned earlier in subsection 3.3.2, epistemology provides sets of criteria about the best ways of inquiry about the world. Therefore, each of the epistemological positions has implications on how research should be carried out (Saunders et al., 2009). Table 3-2, adopted from Easterby-Smith et al. (2002), shows the research implications of different epistemological positions within social sciences.
As discussed earlier, research’s philosophical worldviews have implications on research practice. Research in the context of social constructivism is usually inductive (Table 3-2). However, this study, similar to Saunders et al. (2009), holds the view that selection of research practice based only on the implications of the research’s worldview could be misleading and result in ill-informed research design. Therefore, the following sub-section discusses why this study is inductive.

### 3.4.1 The inductive approach of the study

In general, there are two major research approaches: deductive and inductive (Easterby-Smith et al., 2002). However, these approaches could be used concurrently in a single study (i.e. abductive) (Thomas, 2004; Saunders et al., 2012).

Deductive research involves development of research hypotheses (or a hypothesis) indicating causality relationships between objects and then design of a research strategy to test the hypothesis (Saunders et al., 2012). Therefore, in this approach a theory is usually developed (for example from the literature) prior to data collection, and then it is tested through rigorous structured research procedure. The main purpose in deductive research is to discover a law-like relationship between concepts.

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<table>
<thead>
<tr>
<th>Elements of Methods</th>
<th>Positivism</th>
<th>Relativism</th>
<th>Social Constructionism</th>
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<tbody>
<tr>
<td>Aims</td>
<td>Discovery</td>
<td>Exposure</td>
<td>Invention</td>
</tr>
<tr>
<td>Starting Points</td>
<td>Hypotheses</td>
<td>Suppositions</td>
<td>Meanings</td>
</tr>
<tr>
<td>Designs</td>
<td>Experiment</td>
<td>Triangulation</td>
<td>Reflexivity</td>
</tr>
<tr>
<td>Techniques</td>
<td>Measurement</td>
<td>Survey</td>
<td>Conversation</td>
</tr>
<tr>
<td>Analysis/interpretation</td>
<td>Verification/ falsification</td>
<td>Probability</td>
<td>Sense-making</td>
</tr>
<tr>
<td>Outcomes</td>
<td>Causality</td>
<td>Correlation</td>
<td>Understanding</td>
</tr>
</tbody>
</table>

Table 3-2: Methodological implications of different epistemologies in social sciences. Source: Easterby-Smith et al. (2002).
Although in deductive research it is possible to use qualitative data (discussed later in 3.6.5.3), the concepts need to be operationalised to enable quantitative measurement. To operationalise a concept, researchers need to reduce the attributes of a concept to clear measurable elements. This refers to reductionism, which holds the view that to understand a problem it is better to reduce it to the simplest possible elements.

Another important component of deductive research refers to the generalisability of the research findings. Hence, deductive studies are concerned with the sample size and the context to which the sample belongs. In addition, reliability of data is another important concern in deductive research. Therefore, deductive researchers are concerned with the replicability of the research (Gill and Johnson, 2010). Table 3-3 (adopted from Saunders et al., 2009) shows the main characteristics of deductive research.

In contrast to the deductive approach, the main purpose of inductive research is to “get a feel of what was going on” (Saunders et al., 2009, p. 126). Therefore, inductive researchers first collect data and then formulate conceptual theories on the basis of data analysis. As inductive studies attempt to understand what is going on, they should gain an understanding of the meanings people attach to their experiences.

The inductive approach is a response to criticisms on cause-and-effect orientation that exist in deductive research. While the deductive approach results in understanding the relationships between the variables, it does not allow researchers to understand the way in which humans interpret these variables, and generally their social world. Such an understanding is the main strength of inductive research (Saunders et al., 2009). In addition, inductive research solves the problem of pre-defined concepts that exists in deductive research. In deductive studies, researchers would only examine the relationships between pre-defined concepts. Therefore, their approach does not allow an understanding of alternative explanations about what is going on (Easterby-Smith et al., 2002; Bryman, 2008; Saunders et al., 2009). Table 3-3 shows the main characteristics of the deductive and inductive approaches in a comparative way.
Deductive and inductive approaches have different purposes. Deductive research intends to contribute to knowledge by discovery of a causality relationship, which is believed to be the contextless truth. In fact, its basis is similar to the positivist worldview and would be of benefit if such a worldview is held. In contrast, inductive research intends to contribute to knowledge by explaining people’s understanding of events. As its basis is similar to social constructionism, it is usually associated with this worldview.

This study is an inductive research because of the nature of research questions. This study is interested in how practitioners in the construction industry view inter-firm opportunism, and how they view its patterns. Therefore, it needs to select a research approach which allows the researcher to understand meanings practitioners attach to inter-firm opportunism in the construction industry, and is thus an inductive study.

The inductive approach assists the research in getting a feel of the research context. In addition, it allows the researcher to interact with the data to gain an understanding of how inter-firm opportunism is constructed in the construction industry.

It might be worth emphasising that the choice of inductive approach in this research does not mean that deductive studies could not contribute to the problem.

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**Table 3-3: Main characteristics of deductive and inductive approaches to research, Source: Saunders et al. (2009).**

<table>
<thead>
<tr>
<th>Deduction emphasises</th>
<th>Induction emphasises</th>
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<tbody>
<tr>
<td>scientific principles</td>
<td>gaining an understanding of the meanings humans attach to events</td>
</tr>
<tr>
<td>moving from theory to data</td>
<td>a close understanding of the research context</td>
</tr>
<tr>
<td>the need to explain causal relationships between variables</td>
<td>the collection of qualitative data</td>
</tr>
<tr>
<td>the collection of quantitative data</td>
<td>a more flexible structure to permit changes of research emphasis as the research progresses</td>
</tr>
<tr>
<td>the application of controls to ensure validity of data</td>
<td>a realisation that the researcher is part of the research process</td>
</tr>
<tr>
<td>the operationalisation of concepts to ensure clarity of definition</td>
<td>less concern with the need to generalise</td>
</tr>
<tr>
<td>a highly structured approach</td>
<td></td>
</tr>
<tr>
<td>researcher independence of what is being researched</td>
<td></td>
</tr>
<tr>
<td>the necessity to select samples of sufficient size in order to generalise conclusions</td>
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of inter-firm opportunism. In fact, the choice of inductive approach has been dependent upon the research questions, which are the result of both literature review and the research worldview.

### 3.5 Research strategy

Research strategies link the study’s philosophical assumptions and research approach to the research practice in order to answer the research questions (Bryman and Bell, 2011). As clarified by Saunders et al. (2009), choice of research strategy is made on the basis of the research’s philosophical viewpoints, research questions, the extent of existing knowledge, and practical issues such as time and resources available.

Table 3-4 (adopted from Creswell, 2007) provides an overview of the research strategies available for inductive studies.

It is worth mentioning again that there is no consensus on terms referring to these categories. For example, Creswell (2007) refers to them as ‘research approaches’, Esterby-Smith et al., (20012) call them as ‘research designs’, and Saunders et al. (2009) refer to them as ‘research strategies’. In this study, for the sake of consistency, they are labelled research strategies. In addition, as highlighted by Creswell (2007) and Saunders et al. (2009), they could be mixed with each other depending on the nature of the research questions.
This research used grounded theory as a guiding strategy. The next sections discuss grounded theory in detail and introduce and justify the particular version of grounded theory which guided this study.

### 3.6 Grounded theory

Grounded theory (GT) is a research strategy first introduced in 1967 by two sociologists, Barney G. Glaser (1930) and Anselm Strauss (1916-1996) (Bryant, 2002). This approach helps social researchers to construct theories from qualitative data by using systematic set of procedures. The GT strategy welcomes qualitative studies which aim to understand more about a subject area, without initiating the research by a specific question (Auerbach and Silverstein, 2003).

In the following subsections, first section 3.6.1 discusses the basic elements of grounded theory, and then section 3.6.2 provides a comparison of well-referred stances on grounded theory. This research is guided by Charmaz’s (2003 and
2006) stance on grounded theory. Consequently, section 3.6.3 provides details on how actually grounded theory research could be carried out with an emphasis on the ‘Charmazian’ stance. Finally, section 3.6.5 discusses why grounded theory in general and Charmazian stance in specific were selected in this study.

3.6.1 Spirit of grounded theory

Not only is there no single agreed-upon definition of grounded theory but also what GT should be is contested (Charmaz, 2003). Constructing a theory systematically and based upon data without a preconceived theory or hypothesis is the spirit of most definitions of grounded theory (Hunter and Kelly, 2008). Clarke (2003) maintains that distinctive characteristics of this strategy are first simultaneous data collection and data analysis, and second its method of sampling (will be discussed later).

The term ‘grounded’ in this approach is used to show that the theory is driven by the data. To avoid any confusion, it might be worth clarifying that in this study grounded theory (GT) refers to the research strategy of grounded theory and not a theory which is grounded in data.

In grounded theory, researchers admit that they do not know enough about a phenomenon to formulate a specific research question in which all the relevant concepts are considered (Auerbach and Silverstein, 2003). That is why they use GT to facilitate the emergence of new concepts.

3.6.2 Different stances on grounded theory

The introduction of grounded theory as a structured and systematic research approach is attributed to sociologists Barney Glaser and Anselm Strauss (1967) through the publication of the book entitled ‘The Discovery of Grounded Theory’ which is based on their successful collaboration during their studies of dying in hospitals (Charmaz, 2006). Prior to this, theory testing research with quantitative methods had been the mainstream research attitude in social sciences (Charmaz, 2003). This was partly because of the belief that the great men in sociology such as Weber, Marx, and Veblen have constructed many theories which lasted for many years and the contemporary social researchers only needed to modify and
reformulate their theories with findings gained through verification (Bryant, 2002). In addition, the unsystematic qualitative methods prior to the time of publishing their book, did not allow the mainstream researchers to trust anything except sophisticated quantitative methods (Glaser and Strauss, 1967; Bryant, 2002). That is why Charmaz (2003, p.249) argues that “grounded theory served at the front of the qualitative revolution”. In fact, prior to publication of Glaser and Strauss (1967) book, because of the hegemony of quantitative research, limited rich qualitative contributions available in the form of ethnographic research had been marginalised (Charmaz, 2003). Glaser and Strauss (1967) challenged the mainstream approach by introducing a strategy which reassures a systematic and rigorous theory generating research process.

In addition, to make sure that the theory is driven by data and not the researcher’s preconceptions, Glaser and Strauss (1967) advise postponement of bringing ideas from the literature until very last stages of theory building. The emergence of grounded theory in the 1960s challenged the following assumptions (Charmaz, 2003 and 2006):

- the superiority of quantitative methods over qualitative methods
- the belief that qualitative methods cannot be systematic
- the belief that qualitative methods cannot generate theories
- the argument that qualitative methods only can produce descriptive outcomes
- the separation of the data collection and data analysis stage

It seems that Strauss and Glaser conceptualisations of the approach have partly evolved in conflicting directions since 1967 (Bryant, 2002). In 1990, Strauss with his more recent co-author Juliet Corbin published their book on grounded theory entitled ‘Basics of Qualitative Research’ in which they provide a systematic procedure for GT with a prescriptive flavour. Creswell (2005) refers to their stance on GT as ‘systematic’ type of grounded theory. In addition, Strauss and Corbin (1990) highlight that there may be a requirement for a theoretical statement or a research question at the beginning of the research. Therefore, in their stance, as long as the researcher does not start the research with a preconceived hypothesis, grounded theory is applicable. Since the publication of ‘Basics of Qualitative Research’, Glaser has written extensive critiques of Strauss
and Corbin’s (1990) stance of GT. He believes that their stance places too much emphasis on procedures and not enough on avoiding preconceptions. Therefore, Glaser (2002) claims that the view of Strauss and Corbin (1990) on grounded theory does not allow a theory emerge from data. It might be worth mentioning that the difference between the Glaser (2002) and Strauss and Corbin (1990) approach is not mainly on the research philosophical assumptions but on the practice of the research (Bryant, 2002).

Since the introduction of GT by Glaser and Strauss in 1960s, for about thirty years there was not any substantive critique on the philosophical assumptions of GT (Bryant, 2002). However, since 2000, there have been developments on this aspect of GT. Kathy Charmaz is one of the social researchers who have written extensively on grounded theory and moved GT into a constructivist direction. Although she had been supervised by late Anselm Strauss at the University of California (Puddephatt, 2006), she challenges the views of both Glaser and Strauss (1967) and Strauss and Corbin (1990). Her chapter in Denzin and Lincoln (2003) first introduced her constructivist stance on GT, and then in 2006 her book, entitled ‘Constructing Grounded Theory’ developed her view further on GT.

It might be worth highlighting that prior to Charmaz (2003 and 2006), critiques such as Bryant (2002 and 2003) had placed emphasis on the need to make GT compatible with non-positivist assumptions. However, as pointed out by Creswell (2007), the start of constructivist view on GT is commonly known with Charmaz (2003 and 2006) developments of the field.

As argued by Charmaz (2003), both Glaser and Strauss (1967) and Strauss and Corbin (1990) to some extent hold the objectivist account of reality as their GT guidelines attempt to minimise the subjectivity of the researcher. Statements such as ‘data does not lie’ and ‘the reality of data’ (Strauss and Corbin, 1990, p. 85) all imply the belief that there is a reality outside of the researcher’s mind which will be uncovered by the research process (Bryant, 2002; Charmaz, 2003). Charmaz (2003 and 2006) coined the word ‘constructivist grounded theory’ which holds the view that knowledge is created on the basis of the researcher’s interaction.
with the research subjects. That is why instead of ‘data collection’ she usually uses the phrase ‘data construction’.

Charmaz’s (2003 and 2006) approach to grounded theory is considerably flexible; she argues that the research in the framework of grounded theory does not necessarily have to hold constructionist assumptions (Charmaz, 2003). In fact, she argues that grounded theory essentials ought to offer flexible strategies applicable to wider research worldviews; she believes that applicability and usefulness are the criteria for selecting her stance on grounded theory. Table 3-5 compares the views of Glaser and Strauss (1967), Strauss and Corbin (1990), and Charmaz (2003 and 2006).

It might be worth pointing out that not all the research methodology books on grounded theory highlight the philosophical position to which their GT strategy is committed. For example in Auerbach and Silverstein book published in 2003, a GT research process is presented without placing emphasis on its philosophical stance. In fact, they assume that their instruction regarding the GT research process could be applicable to all non-positivist research worldviews.
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<tbody>
<tr>
<td><strong>Features</strong></td>
<td><strong>Key works</strong></td>
<td><strong>Inductive/deductive</strong></td>
<td><strong>Systematic methods</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inductive; all three approaches aim to generate theories.</td>
<td>• All three approaches placed emphasis on the systematic methods of collecting and analysing data. However, Strauss and Corbin stance provides more systematic instruction on how to do GT. • Theoretical sampling and constant comparative data analysis play an important role in their systematic approach to research practice. • Data analysis stage happens alongside the data collection stage.</td>
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<td></td>
<td></td>
<td>Making sure that theory is ‘emerging’ and not ‘forcing’</td>
<td>Instruction-oriented</td>
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<td></td>
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<td></td>
<td>Interaction between the researcher and data. Making GT as flexible as possible</td>
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<td></td>
<td></td>
<td>Both of the approaches aim to limit the intrusion of subjectivity of the researcher into the research. They offer strong advice to make sure the researcher stay separate from the data.</td>
<td>Disapproval of too much emphasis on limiting the subjectivity of the researcher; reality is not independent of the researcher.</td>
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<td>Existence of external objective reality. Possibility of a neutral observer.</td>
<td>Existence of objective external reality. Attempts to limit the intrusion of the subjectivity of the researcher.</td>
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<td></td>
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<td></td>
<td>Social constructivism</td>
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</tr>
<tr>
<td><strong>Features</strong></td>
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<td></td>
<td></td>
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<tr>
<td><strong>Terminology</strong></td>
<td>coding, constant comparative analysis theoretical sampling</td>
<td>3 levels of coding: open, axial, and selective coding theoretical sampling saturation</td>
<td>2 levels of coding: initial and focussed coding, theoretical sampling, comparative analysis saturation</td>
</tr>
<tr>
<td><strong>Bringing ideas from the literature?</strong></td>
<td>Conducting the literature review after developing an independent analysis, delaying the literature review to avoid being biased</td>
<td>the research might be driven by a research question</td>
<td>There is no problem in having ideas about the literature around the subject area. The researcher can use these ideas from the literature as a vantage point.</td>
</tr>
<tr>
<td><strong>Work style</strong></td>
<td>A high level of abstraction and dense writing style, not accessible for junior students, not prescriptive.</td>
<td>Wide audience, very process oriented</td>
<td>Fairly straightforward, accessible writing style</td>
</tr>
</tbody>
</table>

Table 3-5: Three dominant stances on grounded theory\(^1\).

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\(^1\) Earlier version of this table was presented in British Academy of Management conference in 2013 by the author.
3.6.3 GT Research Process (Charmazian stance)

Before going further, it should be noted that Kathy Charmaz is not the only research methodologist who develops how constructivist research could/should be carried out in GT. As an example, Clarke (2003) provides research procedures committed to anti-positivism within GT. However, arguably, Charmaz’s research procedure on constructivist GT is more detailed, general, and accessible.

3.6.3.1 Where does the journey start?

As suggested by Charmaz (2006), it is worth considering conducting research in the context of grounded theory as a journey. There is no common understanding between GT scholars as to where this journey starts. In Glaser and Strauss (1967) and Strauss and Corbin, (1990), there is a tendency to start the research journey from the data collection rather than the literature. This is usually to make sure that researchers are not locked into any preconceived theories and assumptions and theories are constructed based on data.

Undoubtedly, the generation of theories based on data is the essential element of GT, but one question is whether getting locked to and being affected by preconceived theories only happens because of the literature review. In other words, to be open to new concepts, do researchers necessarily need to have no clues about the literature on the research subject? And more generally, is the researchers’ own subjectivity limited to the literature on the research area in hand? Charmaz (2006) argues that researchers bring their own background assumptions and disciplinary perspectives to the research. Charmaz (2006) referred to these assumptions and perspectives as ‘sensitising concepts’. The influence of the sensitising concepts starts at the very early stages of shaping the research questions. Then, their influence continues by sensitising the researchers to ask particular kinds of questions. The role of the researchers’ assumptions and interpretations may also continue in data construction phase.

Not only does Charmaz (2006) admit the influence of the sensitising concepts in one’s research process, but she also considers them as vantage points. This is because sensitising concepts give loose frameworks to the researchers at the early stages of research. However, all the point is to use these concepts as departure
points and to be open to the data. Therefore, if a particular sensitising concept proves to be irrelevant, then in the context of GT, researchers must leave it and accept the concepts that emerge from the data.

To summarise, Charmaz (2006) admits the potential positive role of literature review at early stages of the research process. This is consistent with Auerbach and Silverstein (2003) who consider the literature review as the first step in conducting grounded theory research. It must be noted that in contrast with the hypothesis-testing research, the literature review in GT research is not carried out to formulate specific questions; in GT research, a literature review can help the researchers to locate the research area (Auerbach and Silverstein, 2003).

3.6.3.2 Data construction

Before going any further, it must be noted that in the context of social constructionism, to write on research data accurately, one may prefer to use the phrase data construction rather than data collection. This is because, as mentioned earlier, social constructionism acknowledges the role of researchers in whatever stands as data. That is why Charmaz (2003 and 2006) uses the phrase ‘data construction’. However, this is not followed by all social constructionist studies. Generally, similar to Charmaz (2003 and 2006), this study believes that it is not possible to collect any qualitative data in an objective way. More specifically, as in this study data refer to semi-structured interview data, the study acknowledges that the researcher’s analyses/interpretations were, even if hidden, involved in interviews, and consequently the interview data. However, for the sake of convenience, ‘data collection’ and ‘data construction’ are used interchangeably.

Conducting grounded theory research is not possible without rich data. Rich data are detailed, focused, and full of thick descriptions (Charmaz, 2006). The Charmazian GT research process is applicable to any kind of rich qualitative data collected from archival resources, interviews, field notes, and so on (Charmaz, 2006). In this research, data are constructed through semi-structured interviews.
3.6.3.2.1 Interview as the method of data construction

The interview is one of the common methods of data construction in social research (Hammersley, 2003; Bryman, 2008). Some authors used the term ‘interview society’ to highlight the popularity of interview in contemporary research (Atkinson and Coffey, 2002; Hammersley, 2003). This popularity is usually because of the flexibility and capability of interviews in collecting rich data. The interviews could be categorised as follows (Bryman, 2008; Saunders et al., 2009):

• Structured interviews
• Semi-structured interviews
• Unstructured interviews

While the structured interviews are usually employed in quantitative studies, semi-structured interviews and unstructured interviews are used in qualitative research, hence they are termed qualitative interviews (Bryman, 2008).

In contrast with the structured interviews in which researchers have clearly specified sets of interview questions, in semi-structured interviews, researchers have only flexible lists of issues/questions to be addressed (Bryman, 2008). Semi-structured interviews are employed when the research’s main focus is to learn about the experiences of other people and their understanding of a phenomenon (Saunders et al., 2009).

There are criticisms of viewing the interview data as reality. Hammersley (2003) categorises these critiques into two levels. At the first level, critiques are about ‘how do we know that the interviewee is telling the truth?’ or ‘people say something but behave in another way’. The second level is concerned with the capability of interviews. The second level of critiques highlights that any interview, similar to everyday accounts, involves reconstruction and representation of an event (Atkinson and Coffey, 2002; Hammersley, 2003). Therefore, the outcome is not the same as the original event. This limitation on the capacity of interview data is discussed in more theoretical detail later in section 3.6.4.
Considering the limitations of relying on interview data in research, Hammersley (2003) places emphasis on two issues; first, the research worldview should be consistent with the limitations of the interview data, and the second issue refers to recognition of these limitations, both during the research process and in the research conclusion.

3.6.3.3 Data analysis

3.6.3.3.1 Coding, categorising, and memo-writing

Grounded theory provides a systematic process for analysing textual data. As discussed earlier, in GT, the data analysis stage starts as soon as some data are collected.

Regardless of the data collection tool, any qualitative study entails analysis of texts which are treated as data (Auerbach and Silverstein, 2003). However, in this subsection, data mainly refers to the interview transcripts.

The first analytical step in the GT research journey starts with coding (Charmaz, 2003). Generally, coding refers to “naming segments of data with a label that simultaneously categorises, summarises, and accounts for each piece of data” (Charmaz, 2006, p. 43). In grounded theory, codes are not preconceived; rather they are created by interacting with data in an emergent process. Each code refers to a segment(s) of data and shows what that segment is about. Codes suggest an ‘analytic handle’ for development of ideas in interpreting the data (Charmaz, 2006).

The idea of coding, which is also known as thematic coding, in qualitative data analysis is not specific to GT, and other research strategies such as Interpretative Phenomenological Analysis use coding to organise text and discover the patterns within the text. However, the coding process in each strategy differs from one to the other.

In Charmaz’s stance (2003 and 2006), the coding process involves at least two levels: the initial coding (open coding) and the focussed coding. In initial coding, a researcher labels short segments of data by concise terms which stick closely to the data. Charmaz (2006) explains that in open coding a researcher might label
data word by word, line by line, or segment by segment. However, she suggests that one line is usually an appropriate size of data to be presented by an initial code although each line may not include one complete sentence. Initial coding is open ended. The openness of initial coding facilitates the emergence of new ideas and its closeness to data leads researchers to label data with what exactly it is with, rather than preconceptions. To keep initial codes open, Charmaz (2006) provides the following practical advice:

- Speed and spontaneity help to have a fresh view on data in initial coding
- Remain open to new concepts
- Keep the initial codes precise
- Use action language in initial codes

The second level of coding is known as focussed coding, in which a larger segment of data is labelled with conceptual terms (Charmaz, 2006). Focussed coding refers to “using the most significant and/or frequent earlier codes to sift through large amounts of data. Focussed coding requires decisions about which initial codes make the most analytic sense to categorise your data incisively and completely” (Charmaz, 2006, p. 57).

Figure 3-1 shows a sample of initial and focussed coding undertaken by Charmaz (2006). The move from initial coding to focussed coding is not necessarily a linear one; should a new idea emerge, researchers might come back to their initial codes to make sure what the data are about. Then, researchers organise the focussed codes by synthesising and categorising them. Each category usually has some subcategories with specific properties. In Strauss and Corbin (1990) stance on GT, there is another level of coding which is called ‘axial coding. Axial codes specify the properties of sub-categories and relate them to categories. However, Charmaz does not use axial coding as a formal step. Instead, she follows the lead in data to develop subcategories and then link them with the categories.

In Charmaz’s method, researchers regularly write analytical notes known as memos. In memos, researchers explore the relationships between codes, categories, and so on. As explained by Charmaz (2006), memos are steps between coding and the first draft of a paper. Interestingly, to facilitate fresh views, she
advises researchers to use informal and unofficial language in their memo-writings. While in early memos, researchers may only reflect on characteristics of categories, in more advanced memos, they capture patterns in their data. At the last stages of the research, memos create substances for the final draft of the paper/thesis and researchers will use sorting, diagramming and integrating techniques to make sense of their abstract theoretical memos and to present their research in a comprehensible way.
3.6.3.3.2 Theoretical sampling

In most social research, it is not practically possible to study all the members of the population whom the research concerns. Therefore, researchers need to make decisions on a sample of the population they wish to study (the sample). In
Charmazian GT, similar to most of the other strategies, researchers start with an initial understanding of the research sample. However, after the initial sampling, this is the concept of theoretical sampling which directs decisions related to sampling (Charmaz, 2006). As highlighted by Clarke (2003), theoretical sampling is common to all major stances of GT discussed earlier.

Theoretical sampling is a purposive sampling in which the process of data construction is directed by the theoretical concerns that have emerged in the process of data analysis (Glaser and Strauss, 1967). The need for elaboration of such emerging concerns guides the direction of sampling. In the early stages of data analysis, the categories of the focussed codes may suggest potential patterns specific to certain experiences of the research participants. However, as the data are thin, any conclusion is insufficiently supported and consequently premature. Therefore, researchers are advised to choose more research participants among the group within which the category emerged. This is not possible without simultaneous data collection and analysis (Charmaz, 2003 and 2006).

Theoretical sampling facilitates the collection of focussed data and allows researchers to avoid wasting of resources with irrelevant data (Charmaz, 2006). Through theoretical sampling, the research process includes the observation of some experiences specific to certain kinds of research participants, formation of some potential theoretical patterns, and then verification with similar research participants.

In GT research, because of theoretical sampling, researchers go back and forth between the data and their theoretical conjectures. That is why Charmaz (2006, p. 102) argues that “the particular form of reasoning invoked in grounded theory makes it an abductive method, because grounded theory includes reasoning about experience for making theoretical conjectures and then checking them through further experience”. However, Hood (2006, cited in Charmaz 2006), prefers to avoid the term ‘theory testing’ in the data analysis in GT and mentions that “I would not say we are exactly testing theory, depending what you mean by testing, but we are testing our hunches” (Charmaz, 2006, p. 104). Whatever label is used to describe the reasoning method in GT, it is clear that GT is a theory-building research strategy that does not aim to test ‘theories’ from the ‘literature’.
In contrast with the sampling strategies in many other research strategies, theoretical sampling in Charmazian GT does not intend to facilitate the generalisability of the research results. In fact, constructivist research does not aim for generalisability at all. In contrast, this strategy of sampling intends to develop the theoretical categories built in the research process. Theoretical sampling assists researchers to fit their emerging conjectures with the data (Clark, 2003; Charmaz, 2006).

3.6.3.3 Constant comparative method

The constant comparative method is common to all the stances on GT (Creswell, 2005). To conduct a research guided by grounded theory strategy, researchers need to constantly compare incidents in one set of data to other incidents, codes to other codes, codes to categories, and categories to other categories (Charmaz, 2006). This method assists stimulation of thinking about concepts to give meaning to them. In addition, comparison of sets of data with each other, facilitates theoretical samplings. As highlighted by Strauss and Corbin (1990), this constant comparison enables the researchers to ensure that theory is grounded in data.

3.6.3.4 When is it right to stop sampling? Saturation

In grounded theory, researchers stop data collection when the categories are saturated (Bryman, 2008). Saturation refers to the stage at which gathering fresher data does not lead to any more new theoretical insights. As GT places emphasis on theoretical analysis, Charmaz (2003 and 2006) highlights that hearing the same story again and again does not necessarily show that the research reaches theoretical saturation; researchers can claim saturation when they can no longer thicken the properties of the categories. However, data saturation is a subjective decision (Hunter and Kelly, 2008).

3.6.4 Symbolic interactionism

Generally, social constructionism’s intellectual heritage stems partly from symbolic interactionism (Saunders et al., 2009; Bryman and Bell, 2011). In
addition, key premises of symbolic interactionism are regarded as central to
Charmazian grounded theory (Charmaz, 2006).

Symbolic interactionism (SI) is a label for an approach to the study of human
group life and human conducts (Blumer, 1969). It is based on intellectual
contributions of notable authors such as George Herbert Mead (1863-1931).
However, in 1969, Blumer’s contribution to the approach formulates its position
and premises explicitly (Jeon, 2004).

From Blumer’s (1969, p. 2) point of view, symbolic interactionism rests on the
following three premises:

• “Human beings act toward things on the basis of the meaning that the things
  have for them
• The meaning of such things is derived from, or arises out of, the social
  interaction that one has with one’s fellows.
• These meanings are handled in, and modified through, an interpretive process
  used by the person in dealing with the things he encounters.”

While the first premise is widely acceptable by scholars, the second premise
which refers to the source of meaning shows the distinctive feature of SI. Such a
distinctive feature is central to social constructivism.

Blumer (1969) argues that three major views on sources of meaning could be
identified amongst philosophical approaches. The first views meaning as being
intrinsic to the thing that has it. The second views meaning as something brought
to the thing from the mind of the person because of psychical power. However,
symbolic interactionism’s view on the source of meaning is different from these
two stances. SI believes that meaning arises “from the way in which other persons
act towards the person with regard to the thing” (Blumer, 1969, p.4). Therefore,
meanings are shaped in the process of interaction between people. This is the
intellectual heritage of SI for social constructionism.

The third premise of symbolic interactionism further differentiates its
conceptualisation of the source of meaning. The third premise plays an important
role in Charmaz’s stance on GT. According to the third premise, persons interpret
the meaning derived by interactions before using it to conduct an action (Blumer,
Therefore, meanings derived from interaction with others go through an interpretive process in which the person interacts with him/herself. In such interaction, considering the situation, the person handles, checks, and selects the meaning. This interaction of a person with him/herself is called ‘self-interaction’ in SI.

To explore the notion of self-interaction, Blumer (1969) uses Mead’s (1934) construct of self. Mead (1934) conceptualises the notion of ‘self’ as constantly changing. According to Mead (1934), the ‘self’ consists of ‘I’ and ‘me’. In his point of view, ‘I’ is the natural and spontaneous part of ‘self’ but ‘me’ is the part of ‘self’ which sees ‘self’ from the point of view of others. In fact, ‘me’ attempts to see ‘self’ as an external object. The self-interaction is between ‘I’ and ‘me’.

Annells (1996) used the concept of symbolic interactionism to discuss how a researcher conducting an interview may influence the data. According to Blumer (1969, p. 71), “ordinarily, human beings respond to one another, as in carrying on a conversation, by interpreting one another’s actions or remarks and then reacting on the basis of the interpretations. Responses, consequently, are not made directly to the stimulation, but follow, rather upon interpretation; further they are likely to be different in nature from the stimulating acts, being essentially adjustment to these acts”. In fact, as highlighted by Annells (1996), there is a self-interaction between the person and him/herself in relation to any interview question. Therefore, as believed by the social constructionist view of GT, whatever stands as data in social research is constructed by individuals, and the researchers may have their own roles in the data construction.

In an interview about opportunism, the interviewee both interprets the researcher’s questions and the notion of opportunism through a self-interpretation process. Then, the answer is interpreted by the interviewer, and the next question is asked based on all these interpretations. Therefore, the researcher is not separate from the method and consequently the data. Although some data construction methods may not directly involve the researcher (e.g. using archival methods), the data analysis involves the researcher.
3.6.5  Justification of Charmazian GT as a research strategy

3.6.5.1  Why grounded theory?

To discuss why grounded theory has been chosen as a guiding strategy for this research, it is important to justify the choices within the study’s timeframe. This study is concerned with inter-firm opportunism in the context of the construction industry. The study started with a literature review which led to an understanding that there is little available on how inter-firm opportunism and its patterns are perceived by practitioners involved in the sector. In fact, the literature review provided an area of study, some conceptual footholds, and some sensitising concepts but not an explanatory theory. One approach to tackle the situation is to borrow a theory (if available) from other subject areas and test it in the context of the construction industry. Creswell (2005) refers to this approach as borrowing a theory ‘off the shelf’. However, such an approach does not provide any deep understanding of the perceptions of people who are actually in the construction industry. The other approach to tackle the problem is to construct a theory which is grounded in data, reflecting perceptions of practitioners who are actually involved in the construction industry. Theoretically, the second approach could lead to an explanation which fits the context better and is sensitive to individuals in the context (Glaser and Strauss, 1967). Therefore, it may represent the complexities of the context better (Creswell, 2005 and 2007). That is why the second approach was selected, which aims to construct an explanatory theory grounded in data from practitioners involved in the construction industry to understand their views on inter-firm opportunism and its patterns. To do so, a research strategy was required which:

• welcomes inductive studies that aim to understand more about a subject area, without initiating the research by a specific question
• provides a systematic and rigorous procedure required for theory building

As highlighted by Creswell (2007) and other research methodologists, these criteria are the distinctive characteristics of GT. Grounded theory has some features which facilitate theory construction in a systematic way. Theoretical sampling, as one of the important GT elements common in all its stances,
facilitates the collection of focussed data and allows the researchers to avoid wasting of resources with irrelevant data (Charmaz, 2006). In addition, coding and memo-writing both stimulate interaction with data to find out what is going on in a systematic way (Charmaz, 2003). The constant comparison strategy is another element of GT which facilitates rigour in the research process (Creswell, 2007). In fact, by comparing data sets with each other constantly, grounded theory provides a self-correcting feature which helps researchers to stay close to the data at all times (Glaser and Strauss, 1967; Charmaz, 2006).

### 3.6.5.2 Why Charmazian grounded theory?

As clarified earlier, this research is guided by the Charmazian stance to GT. This is because of both her philosophical stance on GT and her GT research process.

In terms of the philosophical stance, as discussed earlier, some of the principles behind GT formulated by Glaser and Strauss (1967) are in tune with the positivist orthodoxy of the time (Bryant, 2002), and Strauss and Corbin’s (1990) developments on the field are more concerned with clear systematic procedures without much change in its philosophical assumptions (Bryant, 2002; Creswell, 2005). In contrast, Charmaz’s (2003 and 2006) developments on the field mainly refer to the philosophical assumptions underpinning the research practice. Charmazian GT holds the view that social actors construct social entities. It acknowledges the role of the researcher in the re-construction of data. This is absolutely compatible with the research worldview of the current study. This study believes that practitioners working in the construction industry construct individually and collectively the notion of inter-firm opportunism and its patterns. In addition, this study acknowledges that what is treated as data is not what is perceived in the construction industry. Rather, it is the re-construction of that in which both the researcher and the research participants were involved. The absence of such an acknowledgement leads either to failure to engage self-reflection or to incompatible philosophical assumptions.

In addition, in terms of research process, Charmazian GT views having knowledge of the literature concerning the subject area in hand as a vantage point (Charmaz, 2003 and 2006). There is rich literature on decreasing inter-firm opportunism in the context of the construction industry due to the long history of
both the problem and the industry. The researcher believes that the review of the relevant literature provided both an appropriate starting point for the research and in addition, at the data analysis stage, relevant literature assisted the researcher in finding the leads in the data.

### 3.6.5.3 Why interview as method of data construction?

Considering the result of the literature review and the inductive nature of this study, it was easy to establish that the study could not be quantitative. This subsection provides a brief overview of what quantitative and qualitative methods refer to, and justifies why semi-structured interviews were selected as the main data construction tool.

In social sciences, two major methods have been used by researchers to collect data: quantitative and qualitative methods. Quantitative methods are used to collect quantitative data and qualitative methods are suitable for qualitative data. Researchers can use these methods separately or simultaneously in a study (Saunders et al., 2009).

Quantitative data deals with quantities. Quantitative methods are usually based on a positivist worldview. In contrast, qualitative data are based on non-positivist research worldviews. They assist researchers to locate themselves in the world of the research participants. Qualitative data include field notes, interviews, conversation, and so on, all including some texts which are treated as data (Auerbach and Silverstein, 2003).

This study holds the view that quantitative data lacks the effective descriptive tool to study human constructs about a social issue such as inter-firm opportunism. In contrast, qualitative data are more appropriate to address meanings and perspectives of humans (Creswell, 2007). Therefore, after the formation of the research questions, it was decided to use qualitative data.

This research employed semi-structured interviews to collect rich data on participants’ experiences of inter-firm opportunism. In other words, the interviews included both pre-defined open-ended questions in addition to questions which arise naturally during the conversation. Pre-defined open-ended questions assist the researcher to add insights to the issues highlighted by the theoretical sampling.
In addition, semi-structured interviews allow the researcher to raise questions if required to familiarise itself with the context.

In this study, twenty interviews were conducted. The details of the data construction process are discussed later in Chapter 4. In this research, the initial sample included people who have work experience in the UK as construction lawyers, construction consultants (quantity surveyors/designers), or construction contractors. The choice was based on the idea that these three groups have probably experienced opportunistic behaviour in inter-firm relations in the construction industry. However, later it was decided to include the view of practitioners working in construction development firms to the study.

This study conducted a combination of convenience sampling, snowball sampling, and theoretical sampling techniques. In other words, in this research, firstly interviews were conducted with accessible practitioners in the UK whose experiences in the construction industry were considered relevant (convenience sampling). Then, the researcher requested some interviewees to introduce their colleagues with similar experiences for further data construction based on the need to thicken specific data (theoretical sampling in the context of snowball sampling). The study sampling process is discussed later in Chapter 4.

So far, this chapter has discussed the different methodological issues in this study. By way of summary, Figure 3-2 provides an overview of the research methodological characteristics. Easterby-Smith et al. (2012) use the metaphor of a tree trunk to illustrate different methodological aspects in a study, and their idea has been used here. As can be seen in figure 3-2, the outer ring represents the methods and techniques adopted to collect data. This outer ring is the most obvious feature of a research project. Following this metaphor, the outer ring in this study consists of semi-structured interviews. However, the outer rings depend on the inner rings. The central ring refers to the philosophical assumptions held by the research.
Evaluation of qualitative research

Evaluation of research is not a straightforward process (Flick, 2009). This is because each set of quality criteria has some underlying philosophical assumptions (Healy and Perry, 2000; Gill and Johnson, 2010). To make a sound judgement about a research study, it is important to use quality criteria which are consistent with the research worldview (Gill and Johnson, 2010).

Subjectivity, interpretation, and context are inherent in qualitative research (Auerbach and Silverstein, 2003). Consequently, authors in the field of research methodology place emphasis on the issue of ‘appropriateness’ in evaluating qualitative research (Auerbach and Silverstein, 2003; Denzin and Lincoln, 2003; Bryman, 2008; Flick, 2009). The rationale behind such emphasis is that qualitative research and quantitative research usually belong to two different research worldviews. Therefore, they need two different sets of quality criteria. However, limiting the categorisation of research quality criteria to quantitative and qualitative presupposes that all qualitative research studies are carried out within the same research worldview. This is the approach taken by Auerbach and Silverstein (2003) towards quality criteria in qualitative research. They proposed the same research quality criteria for all qualitative studies as if all qualitative works follow the same research worldview. However, more detailed works
concerned with the methodological aspect of research evaluation usually differentiate between research criteria which suit constructivist research and realist research (e.g. Healy and Perry, 2000; Bryman, 2008; Gill and Johnson, 2010).

Gill and Johnson (2010) consider ‘trustworthiness’ as a set of quality criteria for studies in the context of realism and ‘authenticity’ as a set of quality criteria for the works in the context of constructivism.

3.7.1 Evaluating constructivist research

According to Bryman (2008), authenticity of a constructivist research includes three criteria as follows:

• Credibility: This is about the thickness of data constructed about a phenomenon to make sure that the data reflect all the multiple realities of the phenomenon under investigation
• Transferability: Context plays an important role in qualitative research. To allow a research audience to judge the transferability of the research, Bryman (2008) proposes the need for rich accounts of context in qualitative research so that others can make judgements about the possibility of transferring the research outcome to different contexts.
• Confirmability: This is about making it apparent that the researcher did it best to limit his/her preconceptions.

In this research, it has been tried to meet all these criteria as much as possible. However, there is not any touchstone for some of them. For example, in terms of the credibility, the researcher attempted to collect rich data and continue data collection till data saturation. In terms of transferability, the study attempted to provide relevant information on the context of the data. By doing so, a reader could make judgements about the possibility of transferring the study’s outcome to his/her context. Finally, in terms of confirmability, for example, the researcher attempted to leave her research footholds whenever they were proved to be irrelevant.
3.8 Presenting a grounded theory research

Writing and presenting a qualitative study are meant to bring the entire study together (Creswell, 2007). In terms of structural format, quantitative studies are usually organised in the standard format of introduction, literature review, methods, results and discussion (Creswell, 2007). This format matches what usually occurs in deductive, positivist, and quantitative research. However, this standard format may or may not be capable of presenting a qualitative study (Creswell, 2007). This is because qualitative studies follow research worldviews fundamentally different from the positivist view to which most quantitative studies subscribe.

In addition, even within qualitative studies, there are different research strategies, and each aims to facilitate research process in distinct ways and under its own epistemological assumptions. Hence, qualitative studies cannot be characterised as one single type (Creswell, 2007) and it is therefore unsurprising to view writing structures as a range to suit all research strategies (Creswell, 2007). In other words, a structure of report which suits for instance ethnography research may or may not suit a grounded theory study.

Creswell (2007) conducted a review of grounded theory studies in the form of journal articles to identify general characteristics of a report on a GT study. In terms of overall organisation of the writing, he highlighted the following issues regarding GT studies:

• Broad research questions
• The initial literature review neither provides key concepts nor suggests hypotheses. Instead, the literature review in GT research determines a rationale for the research by highlighting a gap in the existing studies.
• The findings section includes segments of actual data in the form of quotes to help the reader with the judgement about how well the theory is grounded in the data
• The writers usually include references from the literature to show outside support for the theoretical model.
• The final discussion section discusses the relationship of the theory to other existing studies, and includes the implications of the study for future research and practice.
• Use of visual diagram describing the result in the form of a mini-framework, theory, and so on.

As highlighted earlier, in classic GT introduced by Glaser and Strauss (1967), the review of literature is postponed until the data have been analysed. This is to ensure that the resulting theory is grounded in the data and not coloured by preconceived theories in the existing literature. However, in more recent accounts on grounded theory, it is accepted that a study may commence with a literature review (Strauss and Corbin, 1990; Charmaz, 2006). Regardless of the specific types of grounded theory, to maintain the spirit of GT research, one should attempt to use the existing literature as sensitising concepts at most and leave them if the data do not support them (Charmaz, 2006). This is why as highlighted above by Creswell (2007), the literature review before data analysis in GT studies is used to highlight the research rationale, and not to formulate research hypotheses.

Generally, in any kind of research, it is necessary to relate the research findings to relevant existing literature (Eisenhardt, 2002). However, in grounded theory study, the role of existing literature after formulating the research findings is to a certain extent different. This is because, as highlighted by Charmaz (2006), in any grounded theory research, the study usually ‘travels’ to ‘new substantive terrains’. Therefore, as highlighted by Charmaz (2006), in any GT study, visiting/revisiting the literature after clarification of findings serves the following purposes:

• To locate the work within the relevant literature
• To show the connections between the outcome of the study and earlier studies
• To highlights the points of convergence and divergence

Only by serving the above-mentioned purposes, can the literature review at the final stages of GT research clarify the study’s contributions. It must be noted that such a review of literature is usually very focussed as it does not intend to clarify a context or identify a research gap.
3.8.1 Selected approach in presentation of this thesis

This research started with a literature review of theoretical works concerned with the problem of inter-firm opportunism. In fact, such a literature review took place before the selection of grounded theory as the research strategy. This initial literature review was presented in Chapter 2. As discussed earlier, this initial review of transaction cost economics theory (TCE) and new economic sociology (NES) highlighted a research gap within the context of the construction industry. In addition, it provided the researcher with some sensitising concepts.

An inherent characteristic of grounded theory is to systematically build a theory which is driven by data. Chapter 5 provides an overview of the ‘building theory’ process. As mentioned earlier, within GT research, studies usually travel to unexpected subjects. In this study, the data analysis took the study to the subject of power perceptions in economic transactions. The concept of power was not considered relevant in the initial stages of the research. Therefore, the initial literature review presented earlier in chapter two did not include literature concerning power relations in economic transactions. In fact, highlighting the concept of power in the discussion of inter-firm relations was one of the contributions of this study. Chapter 5 shows how the power-related concepts were grounded in the data.

As suggested by Charmaz (2003 and 2006), this study revisited the literature after formulating its research findings. The purpose for consulting the existing literature after the data analysis was first to locate the study findings within the existing literature and second to identify and discuss the points of convergence and divergence. Achieving the second purpose was relatively straightforward. However, serving the first purpose (i.e. locating the study findings) was not easy. This is because the literature on the concept of power is rich. Ultimately, the researcher realised that a discussion of how the notion of power is conceptualised in the literature generally and in economic relations more specifically could feed the discussion of findings in terms of terminology. More importantly, such a discussion could crystallise the view of power arising from the data analysis in this research. Therefore, a decision was made to provide a brief review of the power literature relevant to the research findings after the data analysis section.
(Chapter 5) and before the discussion of findings (Chapter 7). Although such a decision may lead to unconventional organisation of a thesis, it has the following advantages:

- It feeds the discussion of findings (Chapter 7)
- It presents the research as it was conducted in practice. Therefore, it contributes to the transparency of the study
- It maintains the grounded theory spirit of the study

It might be worth noting that having a brief literature review chapter after the data analysis and before the discussion of findings in the presentation of a thesis is not common practice, but is by no means nonexistent (for a similar thesis presentation, see Dunn, 2011).

In this study, the literature concerned with the concept of power in economic relations is reviewed briefly in chapter 6, and then chapter 7 discusses the research findings, highlights the points of convergence and divergence to the literature regarding each research finding, and explains the links between the research findings.

### 3.9 Chapter summary

This study is concerned with how inter-firm opportunism and its patterns are constructed by practitioners involved in the construction industry. The study holds the view that people construct their view of inter-firm opportunism based on their experiences. The study attempts to provide an explanatory theory on practitioners’ views on the subject, based on data collected from them. The study was guided by a grounded theory research strategy and more specifically Charmaz’s (2003 and 2006) stance on it. To collect reach data, semi-structured interviews were employed.

This chapter introduced and justified the methodological foundations of the study. It provided a brief analytical overview of the major research worldviews (section 3.3), and justified a social constructionist worldview of the study (section 3.3.5). Then, an analytical overview of grounded theory (GT) strategy was provided (section 3.6), and the use of GT in general and the specific stance on it which
guided the research were justified (section 3.6.5). In addition, the chapter justified semi-structured interviews as the method of data collection (section 3.6.5.3). Subsequently, the quality criteria for the current study were discussed (section 3.7). Finally, the chapter discussed how GT studies are usually reported, and explained the rationale behind the selected manner of presentation in this thesis (section 3.8).
Chapter 4  Data collection process

4.1  Chapter brief

In grounded theory (GT), the data construction phase happens alongside the data analysis phase. In fact, theoretical sampling links these two phases to each other. Furthermore, in constructivist GT (e.g. Charmaz, 2003), acknowledging the role of researchers in data construction, the boundary between the two phases is virtually nonexistent. Therefore, it is not easy to separate the data construction process from the data analysis process in this study. However, this section only provides an overview of interviews procedures while it confirms the reality that there were some levels of data analysis involved in both the selection of interviewees and the conduct of the interviews. The former is because of theoretical sampling, which is central to grounded theory, and the latter is because of symbolic interactionism. Both were discussed earlier in detail in section 3.6.

The study acknowledges the role of the researcher in the data construction, and emphasises that the name of the chapter as data collection does not intend to imply that the data were objectively collected.

Data in this study refers to the interview transcripts. Overall, twenty semi-structured interviews were carried out in the UK to collect rich qualitative data. The study employed theoretical sampling in the context of convenience and snowball sampling.

4.1.1  Chapter’s goal

The overall goal of this chapter is to explain how the research data were collected and prepared for analytical analysis. To achieve this goal in this chapter, the following objectives are set:

- To introduce the research sample characteristics
- To present the design of semi-structured interviews
- To discuss the process of interviews
- To explain the process of interview transcriptions
4.2 Structure of the chapter

This chapter is composed of four main parts. First, section 4.3 discusses how the study employed theoretical sampling in the context of convenience and snowball sampling. In addition, it provides an overview of the profile of the research participants. Second, section 4.4 describes the interview procedure. Subsequently, section 4.5 discusses how the interview questions were prepared. Finally, section 4.6 explains the interview transcription process.

4.3 Research sample

In most social research, it is not possible to study all the members of the population to whom the research pertains. That is why researchers need to decide on a sample of the population (the sample) (Saunders et al., 2009). As discussed earlier (section 3.6.3.3.2), grounded theory (GT) uses the concept of theoretical sampling (Bryant, 2002; Charmaz, 2006).

In grounded theory, similar to most other research strategies, researchers need to start the study with an initial understanding of the research sample. At the stage of research design, it was decided that the initial research sample was practitioners who have work experience in the UK as construction lawyers, construction consultants, or construction contractors. This decision was made on the basis of the research unit of analysis which is the inter-firm relationships between the construction projects’ clients and their first tier contractors.

The decision regarding the inclusion of construction lawyers in the study was based on the idea that ultimately if any opportunistic behaviour and conflicts cannot be managed by parties, they would follow formal dispute resolution routes, and consequently, construction lawyers will be involved in solving the problem of inter-firm opportunism. In addition, construction lawyers play an important role in the early stages of the project by setting up contractual relations between firms with the purpose of governance of the relationships. Hence, it was decided to include construction lawyers in the research informants.
The decision regarding the inclusion of construction consultants in the study was based on the idea that they are usually representative of the clients in construction projects (Hughes et al., 2007).

At the time of research design, it was decided not to include the construction clients. The decision was based on two reasons. First, it was assumed that the construction clients were usually one-off clients. Therefore, they may not have enough experience of inter-firm relations in construction projects. Second, it was assumed that consultants are the clients’ representatives, and their idea will reflect how the clients perceive the issue of opportunism. However, the decision was changed later on in the research process. This is because the first two interviews with construction lawyers show that clients are not exclusively following the advice of their consultants, nor are they following their advice in full. In many cases, clients are in relationships with their principal contractors, and their inter-firm relations are shaped based on their own interactions. The conjecture about the importance of including clients in the research sample was supported in the third interview, conducted with a construction consultant. Therefore, it was decided that the points of view of construction clients could help with constructing a richer picture, and it was planned to carry out interviews with the construction clients as well. In addition, it was decided that the construction clients who were experienced in construction industry could provide more useful information. To make sure that the construction clients participating in the study had adequate experience of inter-firm relations in construction projects, it was decided to interview habitual clients of the sector. In doing so, two interviews were conducted with practitioners working in property development firms. The decision on including the property developers in the research sample could not be possible without theoretical sampling and simultaneous data collection and analysis.

As discussed earlier, in grounded theory research, theoretical sampling directs who would be the next interviewee. Therefore, the fact that in this study only two out of twenty interviewees were working in construction development companies was the result of theoretical sampling. In addition, it might be worth mentioning that the number of interviewees was not pre-defined; rather after twenty interviews, data collection was stopped because the researcher felt that the data
analysis has reached the saturation stage. The concept of saturation in grounded theory studies was explained earlier in section 3.6.3.4.

In addition, in GT studies, theoretical sampling directs what questions should be asked. In this study, during data analysis, the researcher made some conjectures. To ensure the validity of these conjectures in the construction industry, sometimes it was required to interview practitioners with specific experiences. For instance, this was the case when conjectures were made about the role of volume of contractors available for a particular project in boycott power of the clients. To check such a conjecture, it was helpful to interview informants who had experience of working in industries with a limited number of potential contractors available for each project. Therefore, interviews were conducted with professionals involved in the energy sector and heritage projects. Checking the conjectures in this way was not possible without the concept of theoretical sampling. In addition, to check the conjectures, sometimes it was required to collect more elaborate data. Therefore, in the interviews that followed, an attempt was made to ask questions that explore the conjectures in detail. Again, this was not possible without the concept of theoretical sampling.

It should be noted that theoretical sampling and the constant comparative method of data analysis help each other in checking the conjectures emerging during data analysis.

Overall, the study conducted a combination of convenience sampling, snowball sampling and theoretical sampling techniques. Convenience sampling refers to selecting a sample in a manner convenient to the researcher (O'Leary, 2004). Snowball sampling involves building a sample through referrals (O'Leary, 2004). This technique is particularly helpful when population under study is not easily accessible. In this study, theoretical sampling led the sampling process but snowball and convenient sampling dictates the possibility of conducting an interview with a potential interviewee.

In this research, firstly accessible professionals who possessed the criteria mentioned in the initial sampling were interviewed (convenience sampling). The first two interviews were conducted only on the basis of convenience sampling. Initially, to include theoretical sampling as soon as possible, it had been planned
to conduct only one interview solely on the basis of convenience sampling. However, because of practical issues, it was not possible to make an appointment with the second interviewee after some analysis on the first set of data. Therefore, the first two interviews (ID 1 and ID 2) did not follow the theoretical sampling guidance. Then on the basis of the analysis of an interview, it was decided who would be interviewed next, and what type of questions needed to be asked (theoretical sampling). The researcher asked the interviewees to introduce professionals working in the construction industry who possessed some characteristics that are of research interest (snowball sampling). However, based on the guidance of theoretical sampling, most relevant research informants were selected from introduced people.

4.3.1 Research participants

Research participants numbered 20, who each had more than 11 years of experience in the construction industry. At the time of the interviews, 3 of the research participants were working as construction lawyers, 7 were working as construction contractors, 8 were working as construction consultants, and 2 were working in property development firms. However, it should be noted that some of them had been working in other roles previously. All research participants were recruited in the UK. Table 4-1 provides some information on the research participants. For the purpose of research ethics, the interviewees’ names are replaced with an ID number.
<table>
<thead>
<tr>
<th>ID</th>
<th>Type of involvement</th>
<th>Type of interview</th>
<th>Position</th>
<th>Sampling methods</th>
<th>Place of interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Construction law firm</td>
<td>Face to face</td>
<td>Associate, lawyer</td>
<td>Convenience sampling</td>
<td>Interviewee’s office</td>
</tr>
<tr>
<td>2</td>
<td>Construction law firm</td>
<td>Face to face</td>
<td>Associate, lawyer,</td>
<td>Convenience sampling</td>
<td>Interviewee’s company</td>
</tr>
<tr>
<td>3</td>
<td>Construction consultancy firm</td>
<td>Face to face</td>
<td>Associate director</td>
<td>Theoretical sampling, snowball and convenience sampling</td>
<td>Interviewee’s office</td>
</tr>
<tr>
<td>4</td>
<td>Construction law firm</td>
<td>Face to face</td>
<td>Director, lawyer,</td>
<td>Theoretical sampling, snowball and convenience sampling</td>
<td>Interviewee’s company</td>
</tr>
<tr>
<td>5</td>
<td>Consulting engineer company</td>
<td>Face to face</td>
<td>Senior manager</td>
<td>Theoretical sampling, snowball and convenience sampling</td>
<td>Interviewee’s company</td>
</tr>
<tr>
<td>6</td>
<td>Property development company</td>
<td>Face to face</td>
<td>Design director</td>
<td>Theoretical sampling, snowball and convenience sampling</td>
<td>Interviewee’s company</td>
</tr>
<tr>
<td>7</td>
<td>Construction consultancy firm</td>
<td>Face to face</td>
<td>Area director</td>
<td>Theoretical sampling, snowball and convenience sampling</td>
<td>Interviewee’s company</td>
</tr>
<tr>
<td>8</td>
<td>Construction consultancy firm</td>
<td>Face to face</td>
<td>Associate Director</td>
<td>Theoretical sampling, snowball and convenience sampling</td>
<td>Interviewee’s company</td>
</tr>
<tr>
<td>9</td>
<td>Consultancy construction firm</td>
<td>Phone interview</td>
<td>Senior consultant</td>
<td>Theoretical sampling, snowball and convenience sampling</td>
<td>NA</td>
</tr>
<tr>
<td>10</td>
<td>Engineering and consultancy firm</td>
<td>Face to face</td>
<td>Senior consultant</td>
<td>Theoretical sampling, snowball and convenience sampling</td>
<td>Company’s temporary office in their construction site</td>
</tr>
<tr>
<td>ID</td>
<td>Type of involvement</td>
<td>Type of interview</td>
<td>Position</td>
<td>Sampling methods</td>
<td>Place of interview</td>
</tr>
<tr>
<td>----</td>
<td>--------------------------</td>
<td>-------------------</td>
<td>-----------------</td>
<td>------------------------------------------------------</td>
<td>-------------------------------------------------------------</td>
</tr>
<tr>
<td>11</td>
<td>Consulting engineer company</td>
<td>Face to face</td>
<td>Associate director</td>
<td>Theoretical sampling, snowball and convenience sampling</td>
<td>Interviewee’s Company</td>
</tr>
<tr>
<td>12</td>
<td>Contractor company</td>
<td>Face to face</td>
<td>Managing director</td>
<td>Theoretical sampling, snowball and convenience sampling</td>
<td>Company’s temporary office in their construction site</td>
</tr>
<tr>
<td>13</td>
<td>Construction and civil engineering firm</td>
<td>Face to face</td>
<td>Area director</td>
<td>Theoretical sampling, snowball and convenience sampling</td>
<td>Public place</td>
</tr>
<tr>
<td>14</td>
<td>Contractor company</td>
<td>Face to face</td>
<td>Project director</td>
<td>Theoretical sampling, snowball and convenience sampling</td>
<td>Company’s temporary office in their construction site</td>
</tr>
<tr>
<td>15</td>
<td>Construction company</td>
<td>Face to face</td>
<td>Director</td>
<td>Theoretical sampling, snowball and convenience sampling</td>
<td>Interviewee’s office</td>
</tr>
<tr>
<td>16</td>
<td>Engineering and consultancy firm</td>
<td>Face to face</td>
<td>Senior consultant</td>
<td>Theoretical sampling, snowball and convenience sampling</td>
<td>Interviewee’s office</td>
</tr>
<tr>
<td>17</td>
<td>Construction company</td>
<td>Face to face</td>
<td>Area director</td>
<td>Theoretical sampling, snowball and convenience sampling</td>
<td>Interviewee’s office</td>
</tr>
<tr>
<td>18</td>
<td>Contractor company</td>
<td>Face to face</td>
<td>Senior manager</td>
<td>Theoretical sampling, snowball and convenience sampling</td>
<td>Interviewee’s office</td>
</tr>
<tr>
<td>19</td>
<td>Contractor company</td>
<td>Face to face</td>
<td>Senior manager</td>
<td>Theoretical sampling, snowball and convenience sampling</td>
<td>Interviewee’s office</td>
</tr>
</tbody>
</table>
As can be seen in Table 4-1, it is preferred to use ‘type of involvement’ instead of, for example, ‘type of company’. This is because ‘type of involvement’ intends to clarify the role of the interviewee’s affiliated firm in projects in which the interviewee is/was involved. In certain cases (e.g. ID 12), the interviewees’ firms have very broad objects such as ‘infrastructure group’, showing that the firm can potentially be involved in different roles (e.g. contractor role, consultant role, and so on). Therefore, in these cases in Table 4-1, instead of the official type of the firms, the specific relevant roles of the companies are reflected.

All the research informants had more than 11 years of work experience. Table 4-2 provides some information on their professional backgrounds.
<table>
<thead>
<tr>
<th>ID</th>
<th>Work experience</th>
<th>Information on his/her professional background</th>
</tr>
</thead>
</table>
| 1  | 28 years        | * Initially worked as quantity surveyor for 8 years. Then did a few law degrees and entered into the construction law industry, at the time of interview, it was about 20 years that he had been working as a construction lawyer  
* Works both in residential and engineering projects  
* Works in the contentious part of the team which deals with dispute resolution |
| 2  | 15 years        | * Always worked as a construction lawyer but in different law firms  
* Mainly involved in commercial and residential construction projects  
* Works in the contentious part of the team which deals with dispute resolution |
| 3  | 11 years        | * Quantity surveyor  
* Works in the cost management team for construction clients  
* Mainly worked in construction projects in the education sector, such as colleges, university, and schools. In addition, she had some work experience in the cost management team of construction projects in heritage and conservation projects |
| 4  | 19 years        | * Always worked as a construction lawyer  
* An expert in alliance projects  
* Mainly worked in designing the contractual set ups  
* Mainly involved in legal aspects of construction and maintenance of infrastructure projects, especially in the energy sector |
| 5  | 20 years        | * Holds a civil engineering degree  
* Always worked in consulting firms, and mainly involved in energy projects |
| 6  | 19 years        | * Holds a civil engineering degree and a project management degree  
* Experience of working in construction firms before moving to development firms  
* At the time of interview, he was more involved in residential projects, but he used to work in industrial and commercial projects |
<table>
<thead>
<tr>
<th>ID</th>
<th>Work experience</th>
<th>Information on his/her professional background</th>
</tr>
</thead>
</table>
| 7  | 25 years       | * Architect  
* 25 years of work experience in heritage building. Her work in the last 15 years has been more about fund management of heritage projects  
* She is involved in projects for which the clients are trusts, foundations, churches, and so on, but not any private sector organisations |
| 8  | 18 years       | * Holds a civil engineering degree  
* The first 8 years of his work experience were in the utilities sector, and the next 10 years were in the commercial and residential sectors |
| 9  | 30 years       | * Holds a civil engineering degree  
* In the first 10 years of his career in the construction sector, he used to work in construction companies, and was involved in highway projects. He then started working in consultancy firms from 20 years ago. |
| 10 | 20 years       | * Holds a civil engineering degree and an MBA degree  
* Used to work in the contractor side of waste management projects for 14 years, and then started working in a consultancy firm |
| 11 | 25 years       | * Holds a civil engineering degree  
* Was always involved in oil and gas industries. Has experience of working in international projects in Qatar, Russia, Azerbaijan, and so on (for a British company)  
* Used to work in the contractor side, and then recently moved to a contracting consultancy company |
| 12 | 14 years       | * Holds a civil engineering degree and an MBA  
* Always worked in EPC contracts, and always worked in the contractor side  
* Has experience of working in the most expensive waste management plants in the EU |
| 13 | 30 years       | * Holds a civil engineering degree  
* Has work experience in highways, water, airport construction projects |
| 14 | 25 years       | * Architect by degree but always worked in the contractor side  
* Mainly involved in commercial and residential projects  
* Always worked in the north of the UK |
| 15 | 25 years       | * Quantity surveyor  
* Always worked in the contractor side and in large-scale residential projects |
<table>
<thead>
<tr>
<th>ID</th>
<th>Work experience</th>
<th>Information on his/her professional background</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>15 years</td>
<td>* PhD in civil engineering</td>
</tr>
<tr>
<td></td>
<td></td>
<td>* Used to work in power plants, and since ten years ago, has been working in energy from waste (EFW) plants</td>
</tr>
<tr>
<td>17</td>
<td>15 years</td>
<td>* Civil engineer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>* He was mostly involved in the construction of hotels, tower blocks, commercial and residential projects</td>
</tr>
<tr>
<td></td>
<td></td>
<td>* In the last 5 years, he was involved in projects both in and outside of the UK</td>
</tr>
<tr>
<td>18</td>
<td>25 years</td>
<td>* Process engineer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>* He was always involved in energy projects. During the last 10 years, he was involved in waste management projects</td>
</tr>
<tr>
<td>19</td>
<td>30 years</td>
<td>* Quantity surveyor</td>
</tr>
<tr>
<td></td>
<td></td>
<td>* Always worked in the contractor side in different projects, and in the last 15 years, he was only involved in commercial projects</td>
</tr>
<tr>
<td>20</td>
<td>31 years</td>
<td>* Holds an economics degree</td>
</tr>
<tr>
<td></td>
<td></td>
<td>* Used to work in the contractor side, but in the last 15 years, he has been working in construction development firms.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>* He was always involved in luxurious residential projects either in London or Manchester.</td>
</tr>
</tbody>
</table>

Table 4-2: Professional profiles of the research participants.
4.4 Interview procedures

Prospective participants were contacted by email. Each research participant was sent a two-page letter that included the following aspects:

- Brief description of the study
- Discussion of how data will be treated in terms of confidentiality
- Discussion of practical issues such as estimation of the length of the interview

This letter was entitled ‘Participant information sheet’ and is presented in Appendix A. The research information sheet was changed slightly as the study proceeded. This is because the questions, research title, and so on had not been predefined.

In addition to the research information sheet, each research participant was sent a ‘research consent form’ which dealt with the ethics of the research in relation to their participation. The research informant consent form is presented in Appendix B. The content of the research consent form was approved by the University of Manchester Research Ethics Committee (Appendix C). By means of the research consent form, research participants confirmed that they gave permission for audio-recording of the session and use of anonymised quotes.

When prospective interviewees showed interest in research participation, usually an appointment was made for an interview. Out of 20 interviews, 18 were conducted in the participants’ work places (either their company conference room, or the interviewee’s office), one of the interviews was carried out in a mutually convenient place, and one of them was conducted over the telephone. Generally, in this research, the face-to-face interview method was preferred. This is because it is usually easier to receive extended and richer responses this way (Gillham, 2005). However, because of practical issues, one of the interviews was conducted over the telephone.

Each interview started with a brief review of the scope and purpose of the study, and then the confidentiality of the research data was discussed. The researcher explained to the interviewees that all their identifying information would be
removed from their interview transcripts, and confidentiality and anonymity would be guaranteed. Although the issues regarding the confidentiality of the research had been discussed in the consent forms in detail, it was also decided to provide some verbal assurance. In addition, the participants were asked if they required the transcripts of their recordings to be checked. All research participants but one declined. After a participant had signed the consent form, audio-recording commenced. In addition, an attempt was made to use some comments and/or questions prior to the interview as icebreakers to aid the flow of the conversation. However, this was not always possible.

4.5 Interview questions

Each of the twenty research participants were asked some predefined open-ended questions in addition to questions that had arisen naturally during the conversation. Interviews took between 45 to 90 minutes to complete.

To contribute to the smooth flow of the conversation and to encourage the research participants to express their actual views, during the interviews, the researcher intended to present herself as someone who was eager to learn from the research participants.

To make sure that all the research concerns were covered, the researcher prepared an ‘interview guide’ for herself before each interview, consisting of the most important areas of interest. However, because of the semi-structured nature of the interview, the order and the exact content of the interview questions were shaped only by the flow of the conversation (Bryman, 2008). Table 4-3 shows the interview guide prepared for the research informant ID 9. It should be noted that interview guides were only necessary to assist the researcher in remembering all the questions or areas of interest which had been planned to explore. Therefore, they have an informal style.

As shown in Table 4-3, after an introduction to the study, the research informant ID 9 was asked about his background, and types of projects with which he was involved. Generally, answers to these questions give some contextual information to the researcher. Then, the interviewee was asked the main broad questions with which the research is concerned. After that, the research informant was asked
questions checking the conjectures emerging in the analysis of previous sets of data.

Prior to this interview, codes related to inappropriate contractual settings had been formed. However, at the time, data related to this subcategory were too thin and insufficient. Therefore, some questions in relation to the role of contracts were added to the interview guide to check the conjectures.

In addition, through analysis of data, the researcher noticed that consultants tend to talk about the contractors as if they are in a separate world. Prior to this interview, the researcher had been aware that ID 9 had experience of working in contracting companies before moving to the consultant side. Therefore, a question related to the influence of such experience in his current role was added to check the conjectures.

Furthermore, analysis of previous sets of data had provided a lead on the concept of power allocation. Therefore, the researcher planned to check whether there was any potential in such a lead.
| Introduction | * Greet the interviewee and introduce myself and the research field.  
* Ask participant’s permission for audio recording  
* Briefly explain the process of the interview and confidentiality of their personal information |
| --- | --- |
| Background | * What is your background in the construction sector?  
* What sort of construction projects have you been involved in? |
| Main Questions | * Have you ever experienced opportunistic behaviour from other firms involved in your project? What was it like? When you say opportunistic behaviour, what do you mean by that?  
* Is there any pattern in occurrence of opportunistic behaviour? I mean, when do they usually happen? In your point of view, what sorts of things give rise to the occurrence of opportunistic behaviour? |
| Questions to check conjectures emerging in the data analysis | * Are there any project characteristics which make the situation more vulnerable to opportunism?  
* Do you think your projects are different in any sense from other construction projects in relation to opportunistic behaviour between firms?  
* How do you see the influence of the contracts on the problem of opportunistic behaviour?  
* How is power allocation in your industry?  
* Does your company tend to boycott a contractor for future projects if it shows opportunistic behaviour?  
* Does the fact that you used to work on the contractor side make things different in your understanding of contractors’ behaviour? |
| Closure | * Close the interview by thanking the participant for his/her time and ask whether there is anything he/she would like to add. |

Table 4-3: Interview guide prepared for research informant ID 9.
4.6 Interview transcribing

To make the interview data available in textual format, all 20 interviews were transcribed word-by-word. Then, all the identifying information was removed from the interview transcripts as was promised to the interviewees beforehand.

To reduce the errors in the transcripts, an attempt was made to maximise the recording quality as far as possible, flag ambiguity in the interview transcripts, use a consistent notation system and cross check the transcript with its audio file at least once.

4.7 Chapter summary

This study conducted a combination of convenience sampling, snowball sampling and theoretical sampling methods. Prospective interviewees were contacted via email, and were provided information about the subject of the research and the nature of the interviews. In addition, prior to the interviews, ethical issues such as data confidentiality were discussed. The data were collected through twenty semi-structured interviews. All interviews were transcribed word-by-word to provide textual data for the study in the format required by grounded theory.
Chapter 5  Data analysis and findings

5.1  Chapter brief

This study followed Charmaz’s (2006) guidelines on data analysis in a constructivist grounded theory. Two levels of coding were conducted, namely open coding and focussed coding. Then, by following the leads in the data, organising and sorting them, theoretical categories were constructed in relation to the research questions. During this process, the researcher regularly wrote memos exploring the relationships between codes and categories on a conceptual level.

The process of data analysis led to the construction of five categories, namely: ‘construct of inter-firm opportunism’, ‘inappropriate contractual settings’, ‘contractors’ expert power’, ‘contractors’ post-contract power’, and ‘shadow of the past and the future’. The first category of findings (i.e. the construct of inter-firm opportunism) is a response to how practitioners in the construction industry construct inter-firm opportunism, and the remaining categories of findings are related to the construct of the patterns of inter-firm opportunism in the construction industry.

This chapter provides an overview of the data analysis process, and explains the study’s categories of findings.

5.1.1  Chapter’s goal

The chapter can be summarised under an overall goal and measurable objectives. The overall goal of this chapter is to explain the research findings and the measurable objectives of this chapter are as follows:

• To discuss the data analysis process in this study
• To explain the research findings regarding the construct of inter-firm opportunism
• To explain the research findings regarding the construct of patterns of inter-firm opportunism
5.2 Structure of the chapter

In section 5.3, the chapter provides an overview of the data analysis process in this study. It includes a description of the data analysis from open coding to the construction of theoretical categories. In addition, it includes the list of focused codes and theoretical categories constructed in this study.

The data analysis led to the construction of five categories of findings. Each of the next five sections (i.e. sections 5.4 to 5.8) explains one of the categories of findings.

5.3 Overview of the data analysis process

The data analysis stage in this research followed Charmaz’s (2006) guidelines on grounded theory. It involved two levels of coding (i.e. open coding and focused coding) and construction of categories of findings. The move from open coding to focused coding and then the construction of the categories was not linear. Instead, it involved going back and forth between the data and the codes.

The researcher stopped collecting data after the 20th interview as she felt that categories of findings were saturated. As explained by Charmaz (2003 and 2006) and other research methodologists, in grounded theory researchers stop data collection when the categories of findings are saturated. Saturation refers to the situation that collecting fresh data does not lead to fresh theoretical insights in relation to the questions in hand. In this study the data collected in the interview number 20 did not lead to new theoretical insights in relation to the research aim and only repeat the same issues in relation to the inter-firm opportunism. It might be worth emphasising that the decision about data saturation is a subjective one.

It might be worth mentioning that codes were not pre-conceived; rather they were constructed by interaction with the data.

5.3.1 Open coding

The first analytical step for each set of the data was open coding. As discussed earlier, in Charmaz (2006, p. 43), open coding (also known as initial coding) refers to naming each segment of data with a label that “simultaneously
categorises, summarises, and accounts for each segment of the data”. Charmaz (2006) suggests that at the open coding stage, each line of data could usually have its own code.

In this research, in the open coding stage, each line of the data was labelled with a code. Sometimes, the researcher used the research participants’ terms as codes to preserve the participants’ meaning. This usually happened when the participants used innovative terms or they used specific terms common in their own professional context. These types of codes are called ‘in-vivo’ codes in grounded theory (Charmaz, 2006). However, in-vivo codes are treated the same as normal codes in the data analysis.

For open coding (similar to focused coding), the researcher used both software (NVivo 9) and ‘by hand’ (the manual method) coding.

NVivo 9 is a qualitative data analysis software package produced by QSR International. NVivo is helpful software for analysing textual data. As all the interviews were transcribed word by word, the amount of data was so large that coding, sorting, and managing them manually were not easy. In addition, NVivo allows more convenience of access as all the documents are kept in one place and they could be linked easily. For instance, finding all the segments of the data coded with a particular label could be very laborious and time consuming in the manual way - something which could be done in NVivo instantly. For these reasons, it was decided to use NVivo software. One of the interesting features in NVivo 9 is the ‘memo’. The researcher used this tool as one of the software writing spaces to reflect on the data. The memos in NVivo are particularly helpful as they can be coded. Therefore, they could be treated as data, and searching through them is easier than the manual notes on the data.

In this study, the manual way of coding was conducted in certain cases. This is because the coding process involved going back and forth between the data and codes; for example, sometimes when new analytical codes emerged, the researcher was not sure if that code could lead to any fruitful conceptualisation. In these cases, before collecting further data, the researcher usually went back to previous sets of data and started looking for further cases referring to/implying the ‘not-sure’ code. In these situations, the researcher found the manual way more
straight forwards, and therefore to avoid adding to the mess inherent in inductive coding, the researcher used the manual way in these cases. When coding was conducted in the manual way, the data transcripts were printed out with wider margins to give the researcher enough space to write the codes.

Figure 5-1 shows an example of an interview excerpt in which the data are in the right side and the researcher’s open codes for each line are in the left side.

![Figure 5-1: Example of open coding.](image)

### 5.3.2 Focussed coding

As discussed earlier, in Charmaz’s (2006) guidelines on grounded theory, the second level of coding is called focussed coding. Focussed codes usually label larger segments of data. In addition, they are usually more conceptual and more significant/frequent in the data. Similar to open coding, at this stage both NVivo and the manual method were used.

The process of coding involved a learning process. At least three technical learning points could be highlighted.

First, initially, in the analysis of the data, in the focussed coding stage the researcher tended to label all the data with new codes. This led to the construct of too many codes, some of which were not closely related to the research questions, with some others referring to similar concepts. For example, the analysis of the first set of data resulted in focussed codes such as ‘tight contracts’, ‘conservative
contracts’, and ‘risk-averse contracts’. These codes all refer to more or less the same concept. This imposed a process to sift out the relevant focussed codes, and then limit the codes to those that were truly different from each other. However, after the first few sets of data analysis, the researcher began conducting focussed coding only for segments of the data that were perceived as significant/frequently highlighted. In doing so, two simple questions were helpful: ‘Does it answer the research questions?’ and ‘Is it relevant to the research unit of analysis (i.e. inter-firm relations between the client and its first tier of suppliers)?’. In addition, an attempt was made to construct new focussed codes if the previous codes could not convey the meaning.

Second, similar to the problem of irrelevant focussed codes, the research experienced difficulty with many open codes which could not be fit within the research questions. Charmaz (2006) suggests line-by-line open coding to allow/inspire the development of new leads and ideas. However, in some cases this leads to many codes which do not serve the research purpose. These irrelevant codes are dangerous as they could lead the research to areas not included in the research scope. Moreover, they could distract from the research focus. To solve the problem, while it was decided to continue with line-by-line coding, all the irrelevant codes were labelled with ‘out of scope’, which was itself another code.

Third, this technical learning point refers to commitment to use only one piece of software to store and explore the data. As the researcher was not familiar with NVivo at the early stages of the data analysis, both Microsoft Office Word, NVivo, and in some cases a hard copy of the textual data were used. Searching through texts and codes could have been much easier if all the data and codes had been stored in NVivo. This is especially important because of the ‘coding query’ tool in NVivo. This query tool allows researchers to investigate the patterns within their codes through sophisticated options. For example, it allows searching for the place where two specific codes co-occur in the data. Clearly, such a search can be conducted in Microsoft Office Word as well. However, it takes much more time. This learning point was achieved only during the final stages of the data analysis, so, it was not helpful for the researcher in the current study.
Table 5-1 shows the focussed codes constructed in the data analysis. As shown in the table, most of the codes are in the form of gerunds. This is because, as highlighted by Charmaz (2006) and Glaser and Strauss (1967), coding with gerunds helps researchers keep the process in the words and stick to the data.
<table>
<thead>
<tr>
<th>No</th>
<th>Focussed codes</th>
<th>No</th>
<th>Focussed codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>affecting the relationships</td>
<td>27</td>
<td>information asymmetry</td>
</tr>
<tr>
<td>2</td>
<td>asset specificity</td>
<td>28</td>
<td>limited construct of opportunism</td>
</tr>
<tr>
<td>3</td>
<td>being desperate</td>
<td>29</td>
<td>market power</td>
</tr>
<tr>
<td>4</td>
<td>being flexible</td>
<td>30</td>
<td>mid-way abandoning</td>
</tr>
<tr>
<td>5</td>
<td>being suspicious</td>
<td>31</td>
<td>misrepresenting data</td>
</tr>
<tr>
<td>6</td>
<td>calculative attitude to contacts</td>
<td>32</td>
<td>mutual benefits</td>
</tr>
<tr>
<td>7</td>
<td>carefree approach to opportunism</td>
<td>33</td>
<td>negative past contacts</td>
</tr>
<tr>
<td>8</td>
<td>clients pre-contract power</td>
<td>34</td>
<td>no boycott practice</td>
</tr>
<tr>
<td>9</td>
<td>cognitive process</td>
<td>35</td>
<td>poor relationships</td>
</tr>
<tr>
<td>10</td>
<td>continuum</td>
<td>36</td>
<td>post-contract</td>
</tr>
<tr>
<td>11</td>
<td>contract loopholes</td>
<td>37</td>
<td>power dynamics</td>
</tr>
<tr>
<td>12</td>
<td>contractors power</td>
<td>38</td>
<td>pushing risks</td>
</tr>
<tr>
<td>13</td>
<td>fair terms</td>
<td>39</td>
<td>reasonable profit</td>
</tr>
<tr>
<td>14</td>
<td>favourable contractual terms</td>
<td>40</td>
<td>shaping the contractual relationships</td>
</tr>
<tr>
<td>15</td>
<td>sensing the opportunism</td>
<td>41</td>
<td>pre/post contract</td>
</tr>
<tr>
<td>16</td>
<td>feeling win-lose relationships</td>
<td>42</td>
<td>making issues out of small disagreements</td>
</tr>
<tr>
<td>17</td>
<td>filtering the information</td>
<td>43</td>
<td>thinking short term</td>
</tr>
<tr>
<td>18</td>
<td>focussing on individuals</td>
<td>44</td>
<td>timing</td>
</tr>
<tr>
<td>19</td>
<td>focussing on projects</td>
<td>45</td>
<td>tolerating opportunism</td>
</tr>
<tr>
<td>20</td>
<td>future jobs</td>
<td>46</td>
<td>too small margin</td>
</tr>
<tr>
<td>21</td>
<td>game changer</td>
<td>47</td>
<td>trade-off</td>
</tr>
<tr>
<td>22</td>
<td>imbalanced power</td>
<td>48</td>
<td>turning points</td>
</tr>
<tr>
<td>23</td>
<td>inappropriate form of contracts</td>
<td>49</td>
<td>unassessed risks</td>
</tr>
<tr>
<td>24</td>
<td>inclusive construct of opportunism</td>
<td>50</td>
<td>uncertainty</td>
</tr>
<tr>
<td>25</td>
<td>incompleteness of contracts</td>
<td>51</td>
<td>unpriced risks</td>
</tr>
<tr>
<td>26</td>
<td>individual past contacts</td>
<td>52</td>
<td>win-lose objectives</td>
</tr>
</tbody>
</table>

Table 5-1: The study’s focussed codes.
5.3.3 Categories and subcategories

While open codes are very much attached to the data, in focussed coding the researcher is able to zoom out to increase the abstract level of analysis. However, both open codes and focussed codes provided the researcher with leads to pursue. These leads were crucial in the development of theoretical categories.

The researcher attempted to link focussed codes, sort them, and write regularly on the relationships between them. Throughout this iterative process, categories of findings emerged. By means of this process, the fractured data were reassembled at an abstract level into subcategories and categories, which play the main roles in depicting the conceptual answers to the research questions.

The subcategories in this study, similar to the guidelines of Charmaz (2006) do a similar job to ‘axial codes’ in Strauss and Corbin (1990). However, as highlighted by Charmaz (2006, p. 61), in contrast with axial codes in Strauss and Corbin (1990), there is no need to “apply a set of scientific terms to make links between subcategories visible”. Instead, the links between the subcategories reflect how the researcher made sense of the data.

In this study focussed coding was conducted for each set of data after the open coding, but ultimate construction of categories and subcategories happened at the very last stages of the data analysis when the researcher had clear idea about what was going on in the data. Figure 5-2 shows the process of data analysis in this study.

![Figure 5-2: The non-linear process of data analysis in this study.](image)
The non-linear process of data analysis in this study ultimately led to the construct of 5 categories, namely: ‘construct of inter-firm opportunism’, ‘inappropriate contractual settings’, ‘shadow of the past and the future, ‘contractors’ expert power’, and ‘contractors’ post-contract power’. Each of the categories includes some subcategories which refer to particular properties of the category. Table 5-2 shows the main categories and their subcategories. The first category of the findings (i.e. the construct of inter-firm opportunism) is a response to how practitioners in the construction industry construct inter-firm opportunism, and the remaining categories of the findings are related to the construct of opportunism’s patterns.

It might be worth explaining that in this study, there was no fixed order between construction of categories and subcategories. For instance, while the subcategories in the category of the ‘construct of inter-firm opportunism’ emerged independently, in another case (the category of ‘inappropriate contractual settings’), first the category was developed, and then the researcher divided the findings into two subcategories to frame the research findings.
<table>
<thead>
<tr>
<th>Category</th>
<th>Category I. Construct of inter-firm opportunism</th>
<th>Category II. Inappropriate contractual settings</th>
<th>Category III. Contractors’ expert power</th>
<th>Category IV. Contractors’ post-contract power</th>
<th>Category V. Shadow of the past and the future</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3. Cost-benefit trade-off</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5-2: Categories and subcategories constructed from the data.
As discussed earlier, categories and subcategories were constructed on the basis of focussed codes. Table 5-3 shows the focussed codes which assist the construction of each subcategory.

<table>
<thead>
<tr>
<th>Subcategory</th>
<th>Focussed codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variations in conceptions</td>
<td>limited construct of opportunism</td>
</tr>
<tr>
<td></td>
<td>inclusive construct of opportunism</td>
</tr>
<tr>
<td></td>
<td>carefree approach to opportunism</td>
</tr>
<tr>
<td>Feeling of win-lose relationship</td>
<td>win-lose objectives</td>
</tr>
<tr>
<td></td>
<td>feeling win-lose relationships</td>
</tr>
<tr>
<td></td>
<td>mutual benefits</td>
</tr>
<tr>
<td></td>
<td>focussing on projects</td>
</tr>
<tr>
<td></td>
<td>making issues out of small disagreements</td>
</tr>
<tr>
<td></td>
<td>continuum</td>
</tr>
<tr>
<td></td>
<td>cognitive process</td>
</tr>
<tr>
<td></td>
<td>sensing opportunism</td>
</tr>
<tr>
<td></td>
<td>conflicting objectives</td>
</tr>
<tr>
<td>Cost-benefit trade-off</td>
<td>cognitive process</td>
</tr>
<tr>
<td></td>
<td>tolerating</td>
</tr>
<tr>
<td></td>
<td>opportunism</td>
</tr>
<tr>
<td></td>
<td>trade-off</td>
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<td></td>
<td>small</td>
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<td></td>
<td>disagreements</td>
</tr>
<tr>
<td></td>
<td>continuum</td>
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<tr>
<td></td>
<td>focussing on projects</td>
</tr>
<tr>
<td></td>
<td>projects</td>
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<tr>
<td>Clients’ early bargaining power</td>
<td>clients pre-contract power</td>
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<tr>
<td></td>
<td>market power</td>
</tr>
<tr>
<td></td>
<td>imbalanced power</td>
</tr>
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<td></td>
<td>shaping the contractual relationships</td>
</tr>
<tr>
<td></td>
<td>affecting the relationships</td>
</tr>
<tr>
<td>Vicious circle in contractual settings</td>
<td>pre/post contract situations</td>
</tr>
<tr>
<td></td>
<td>turning points</td>
</tr>
<tr>
<td></td>
<td>pushing risks</td>
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<tr>
<td></td>
<td>unpriced risks</td>
</tr>
<tr>
<td></td>
<td>uncertainty</td>
</tr>
<tr>
<td></td>
<td>thinking short term</td>
</tr>
<tr>
<td>Contractors control of information</td>
<td>win-lose objectives</td>
</tr>
<tr>
<td></td>
<td>filtering the information</td>
</tr>
<tr>
<td></td>
<td>misrepresenting data</td>
</tr>
<tr>
<td></td>
<td>information asymmetry</td>
</tr>
<tr>
<td>Subcategory</td>
<td>Focussed codes</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>-----------------------------------------------------</td>
</tr>
<tr>
<td>Misperceived opportunism</td>
<td>information asymmetry</td>
</tr>
<tr>
<td></td>
<td>poor relationships</td>
</tr>
<tr>
<td></td>
<td>being suspicious</td>
</tr>
<tr>
<td>Power originating from asset specificity</td>
<td>information asymmetry</td>
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<tr>
<td></td>
<td>post-contract</td>
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<tr>
<td></td>
<td>mid-way abandoning</td>
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<tr>
<td></td>
<td>asset specificity</td>
</tr>
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<td></td>
<td>contractors power</td>
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<td>Role of contracts in contractors’ power</td>
<td>post-contract</td>
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<td></td>
<td>game changer</td>
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<td></td>
<td>timing</td>
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<td></td>
<td>turning points</td>
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<td></td>
<td>power dynamics</td>
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<tr>
<td>Future jobs</td>
<td>focussing on projects</td>
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</tr>
<tr>
<td></td>
<td>calculative attitude to contacts</td>
</tr>
<tr>
<td></td>
<td>being desperate</td>
</tr>
<tr>
<td>Prior experiences</td>
<td>individual past contacts</td>
</tr>
<tr>
<td></td>
<td>negative past contacts</td>
</tr>
<tr>
<td></td>
<td>focussing on individuals</td>
</tr>
<tr>
<td></td>
<td>no boycott practice</td>
</tr>
</tbody>
</table>

Table 5-3: Focussed codes in each subcategory.

In the following sections, each of the categories and subcategories are explained. For each subcategory of findings, some relevant interview excerpts were selected to demonstrate what the subcategory refers to. However, before moving to the next section, it is important to highlight three issues:

First, the presentation of interview excerpts in the following sections does not claim to represent the contextless *truth* regarding each of the conceptual categories. This is because the study believes that the research participants conceptualise inter-firm opportunism and its patterns based on their experiences. Therefore, there is no universal and contextless truth concerning the concept. Instead, there are *multiple realities* regarding the problem of inter-firm opportunism and its patterns constructed by people (the epistemological view of the study is discussed earlier in section 3.3.5).
Second, the presentation of interview excerpts cannot claim to represent objectively the realities constructed by the research informants. This is because the research informants reconstructed their conceptions of the subject matter through a self-interaction with themselves in the interviews. Both the stimuli (e.g. interview questions) and the results of these self-interactions (e.g. the interview responses) are to a great extent conveyed through language, which is one of the most symbolic systems. The research acknowledges that the reconstruction of a reality is not necessarily the same as the initial construct thereof. The process of reconstruction of meaning is discussed through symbolic interactionism earlier in section 3.6.4.

Third, the construction of categories of findings is the result of the researcher’s interaction with the data. In other words, the relevant and significant sections of the data do not stand out on their own; rather they are highlighted by the researcher. Therefore, there are elements of the researcher’s subjectivity involved in this interaction process.

5.4 Category one: the construct of inter-firm opportunism

As mentioned earlier (section 1.4), in this study, the first research question concerns how practitioners in the construction industry construct the concept of opportunism in inter-firm relations. The research findings related to this question are presented in the category of ‘the construct of inter-firm opportunism’. This category has three subcategories, each of which are presented in the following three sections.

5.4.1 Subcategory: variations in conceptions

In this study, the research informants were asked about what they meant by inter-firm opportunism. Some of the examples which could illustrate their constructs of the term are shown as follows:

Interviewee ID 8 was an associate director in a construction consultancy firm. He had about 18 years’ work experience, and had spent his entire career in consultancy side of the construction industry. He recounted an example of opportunistic behaviour as follows:
“There was an element of scope missing within the project that no client or contractor had been contracted to deliver. The contractor knew that there was a missing scope but he did not flag it to us until it went to the point when they [client] had to give it to them [contractor] to fix. So, the client had to give it to the contractor to fix it as the client did not have any choice to deal with it. When the contractor’s proposal came in, they said this is the amount for me to fix it, you can’t go anywhere else, because I’m the only one who has all the knowledge … and there was no contract mechanism in that case for early warnings. So, the client could not blame the contractor!”

Clearly, interviewee ID 8 is referring to the opportunist margin and the *ex-post* transaction costs discussed in section 2.3.3.

The interview excerpt which is shown below is related to interviewee ID 6. In total, he had 19 years’ work experience in the construction industry. He used to work in construction companies (contractor side) but at the time of interview, it was about 10 years that he had been working in a property development firm (client side). He recounted an example similar to what was mentioned by interviewee ID 8. However, he assessed the behaviours differently. The example is about the time when he used to work in a construction company (contractor side).

“We [contractor] picked out an error on tender documents, on the bill of quantities allocating quantity of a work item, steel work connection details, almost 10 times more than what was required. Not disclosing that mistake with the client made us much more competitive on price in comparison to whoever had just allocated a cost towards that certain item… You may call it opportunistic behaviour or you may not. If we pick a fault in tender documents by spending time reviewing all the details or having better knowledge on technical details are we obliged to inform the client to make it common knowledge for
every party bidding for that job? I would say it’s a reward for our efforts and if it gives me competitive advantages why shouldn’t I take it? I am aware that this practically changed the ground of bidding as people [other bidders] didn’t bid for exactly the same item, although it seemed like that for the client. They thought they were comparing apple to apple but in fact they weren’t. That’s part of the game and I may not think that’s necessarily an opportunistic approach. You called it opportunistic behaviour and I keep using it but the more I talk about it I feel less negative about this concept!! Actually now I feel it is OK!”

Interviewee ID 13 had 30 years’ work experience in the engineering and construction companies (contractor side). He had been working in constructing companies for his entire career. His view of inter-firm opportunism shown below is to some extent different from the last two examples.

“In some cases, you are exactly doing the contract! In the past and still sometimes now, a lot of work is competitively tendered. In fact, most work is competitively tendered. There are tender requirements and people tender for the tender and use the contract for recovery of money. Now, new contracts are less tight but still you should play the game. Now we’ve got a contract at the moment with X local authority … It’s an NEC, option three, cost reimbursable with a target, we priced for what they wanted from us. There were some unknown scopes. We gave them early warnings about the unknown items, just as the contract required; nothing more though! However, we are aware that it takes time for the client to digest all the unknown works, but it’s their job to do that! We are not there to help them with their business! And we are happy with that as we are late, and it’s giving us some time to catch up with work. This certainly disadvantaged the local
As shown in the data, practitioners’ perceptions of inter-firm opportunism vary significantly in the construction industry, and could be viewed as a continuum. At one extreme end of the continuum, practitioners view inter-firm opportunism as a course of behaviour which is against the norms of co-operation. In contrast, at the other side of the continuum, practitioners view inter-firm opportunism only as courses of behaviour in which explicit terms of the contract are not honoured. Somewhere within this continuum, another approach (for example interview excerpt ID 6) exists in which parties do not involve themselves with whether or not a particular behaviour should be viewed as opportunism. In this view, they focus on who benefits from the situation.

5.4.2 Subcategory: feeling of win-lose relationship

The concept of ‘feeling of win-lose relationship’ in inter-firm opportunism emerged repeatedly in the data. The research informants indicated that they usually felt that they were in a win-lose relationship when their business partner behaved opportunistically.

Below is an excerpt from interviewee ID 2. He was a construction lawyer with about 15 years’ work experience.

“When I am talking about opportunistic mode of behaviour, it does not mean that they are formally fighting each other. It’s just they are not truly collaborating, it is in one way or another, a win and lose relationship.”

The above data are especially interesting because the interviewee was a construction lawyer who by profession more involved in contractual terms and conditions rather than the nature of relationships.

Below is another interview excerpt related to interviewee ID 19. He started his career in the construction industry as a contractor’s site manager 30 years ago. Then, during the last 15 years, he has been working in two construction
companies as a director. During those same years, he was involved in commercial projects from the principal contractor side.

“Opportunistic behaviours are about cases when their solutions for everyday work issues aren’t based on mutual benefits … you can smell out opportunism in construction projects.”

When he was asked how he understands it, he mentioned:

I believe opportunism refers to situations when the other party always wants to win. For people who have been in construction a while, it is easy to spot opportunism. It doesn’t take a rocket scientist to understand it! You can feel it. You may refer to contracts later to clarify the positions, but that is for later"

Logically, a win-lose relationship is meaningful when there are incompatibilities between parties’ objectives. For instance, the research informant ID 7 stated that:

“When I’m talking about opportunistic relationships, it doesn’t necessarily end up with a court case; that would be a failure. By opportunistic behaviour, I mean when the project is not the first priority of people, when they look for a bigger chunk of money than what they have agreed on … what I mean by opportunistic behaviour depends on the kind of contract, but generally I would say, when people are not working for the same end, it means they are taking advantage of opportunities … Sometimes, they only follow their own benefits!”

Interviewee ID 9 highlighted the same views:

“It’s when you behave non-cooperatively, to benefit your own company! They may not break the contract, but they stretch
Interestingly, the research informants distinguished between the situations in which goals are related and the cases where goals are independent. In the former case, when one of the parties pursues its objectives, the other party will be affected. But when goals are independent, parties might pursue their own goals without any effects on the other party. An example of such goal independency between the parties was given by one of the research informants working in a consultancy firm; his example refers to a case in which their contractor company managed to develop an innovative, cost-effective solution to one of their requirements after the contract was awarded under a lump sum method of payment. As the new solution offered by the contractor met the expected specifications of them, it was accepted by the client. In this case, the advantage seeking of the contractor had no effect on the interests of the client, and they (consultant and the client) did not find it opportunistic.

Overall, regardless of how inclusive the research informants view inter-firm opportunism, they placed emphasis on the feeling of win-lose relationships as being central to their conceptions of inter-firm opportunism. In fact, they associated inter-firm opportunism with how they assessed the role of the other party’s behaviour in their own achievements. If they judged that the other party’s behaviour disadvantages them but favours their partner, they felt they were in a win-lose relationship. Interestingly, research informants place emphasis on the sensing of inter-firm opportunism rather than its deducing through detailed calculation.

5.4.3 **Subcategory: cost-benefit trade-off**

Research informants emphasised that to react to the risk of inter-firm opportunism, parties consider the costs involved in reducing the risk of opportunism through governance methods and the benefits expected as the result of such governance methods.

For instance, a cost-benefit trade-off in relation to the problem of inter-firm opportunism is highlighted by interviewee ID 11. He had more than 25 years’
work experience in the oil and gas industries. At the time of the interview, he was working in a construction contracting consultancy company. However, he used to work on the contractor side and had been involved in oil and gas projects in Qatar, the United Arab Emirates, Russia, and Azerbaijan. He talked about his experience of tolerating opportunistic behaviour by the client firm when he was working in a contractor company involved in a petrochemical plant project. The project was an engineering, procurement, and construction (EPC) contract with a lump sum method of payment. He believed that at some point in the project, they (contractor) were in significant financial difficulty because of an increase in the global price of steel which resulted in unexpectedly higher costs for the contractor. Because of this financial difficulty, the contractor was behind schedule, and the project was expected to be late. He mentioned that:

“... we were working on small disagreements we had with them [the client], but effectively the project was on hold. The client was absolutely aware of the fact that with the new price of steel, we were no longer interested in the project... In fact, the new price put us in a financially bad situation.... But they were not accepting that it was out of our control, and fair enough, contractually, they did not have any liability whatsoever in relation to the case!”

After some time, the global price of the plant product had increased by thirty percent and it was expected by the market experts to stay at that price for the near future. This increase in the project outcome made the client more interested to start using the project as soon as possible. Therefore, the client decided to compromise to a significant extent on delay liquidation damage and pay a certain amount for the changes in the price of steel. In fact, the new global price of the plant outcome made it worthwhile for the client to pay more money but get the petrochemical complex working sooner.

While interviewee ID 11’s experience of cost-benefit trade-off refers to significant decisions in the project, such a cost-benefit trade-off also exists at smaller scales. For example interviewee ID 13, with 30 years’ work experience in the construction industry, expressed his view as:
“Opportunistic behaviour, similar to all other kinds of behaviour, is not a black and white thing. It is something you do as a contractor to maintain your margin and the client does not like it. It could be simple things that the client is not bothered about but it could stretch to the point that puts the relationship in decline, and even it could go to the extreme point which deteriorate the relationships by formal dispute resolutions process. As a contractor, I guess that is the worst case.”

As is discussed by the interviewee ID 13, the result of the cost-benefit trade-off regarding the problem of inter-firm opportunism could depend on the nature of the opportunistic behaviour. If the opportunistic behaviour is perceived to be insignificant, the other party may decide to tolerate. However, if the opportunistic behaviour is perceived to be significant, the other party may decide to follow strategies to reduce/solve the problem.

In addition, the data show that in such a cost-benefit trade off, cost and benefit are not limited to the project costs and benefits. In fact, sometimes the firms’ costs and benefits are considered rather than only the costs involved in potential opportunistic behaviour and benefits in reducing/eliminating the risk of inter-firm opportunism.

The research data showed that the cost-benefit trade-off in the choices of governance is not always in favour of reducing risk of inter-firm opportunism. The data include examples where tolerating inter-firm opportunism was perceived to be less expensive than sacrificing the benefits. For instance, interview ID 20’s experience of a residential project indicated such a trade-off. The residential project was an upmarket house in the south of Manchester with a value of four million pounds. Interviewee ID 20 was involved in the project from the developer side. The property development firm had pre-sold the house. Therefore, the firm was interested in delivering the project on time to withdraw its fund, which was a sizeable proportion of the project fund. So, from the developer’s point of view, considering the significance of the opportunity cost and their commitment to the end user, on-time delivery of the project was so important that
they did not want to risk project time. Interviewee ID 20 explained that they chose to use a cost-plus contract with some clauses concerning the approvals at each stage of the project. He believed that the choice of guaranteed maximum price (GMP) could have decreased the risk of inter-firm opportunism. However, they assumed that GMP might lead to longer project time as the contractor might spend too much time on reducing the costs in order to increase its benefit from the savings. In this case, the amount of saving expected from more efficient mode of governance was insignificant comparing to the benefits. Therefore, the development firm decided not to choose the most transaction-cost economising governance mode because of the expected benefits. In fact, in the cost-benefit trade-off, the ultimate cost of reducing the risk of inter-firm opportunism was perceived to be more than the ultimate benefits of such a reduction.

5.5 Category two: inappropriate contractual settings

As mentioned earlier (section 1.4), in this study, the second research question concerned how practitioners involved in the construction industry view the patterns of inter-firm opportunism. Categories two to five constructed from the data collectively answer to this question.

‘Inappropriate contractual settings’ is a category of findings emerging in the data analysis. It consists of two subcategories; namely ‘clients’ early bargaining power’ and ‘vicious circle in contractual settings’.

5.5.1 Subcategory: clients’ early bargaining power

Clients’ early bargaining power was repeatedly emphasised by the research informants. They asserted that at the early stages of a project, clients have a great power to shape the contractual settings.

Interviewee ID 3 was working in a construction consultancy firm. She mentioned that:

“… work’s coming from the clients, and they have the power in the market! Especially, before the contract, the contractor’s main objective is to get the job.”
Interviewee ID 2 was a construction lawyer with about 15 years’ work experience. He had been mainly involved in commercial and residential construction projects. He shared his views of clients’ bargaining power as below:

“… employers are to blame for this, a contractor in this very difficult market may be buying the work, agreeing to do the work for less than it’s actually costing or for very little potential profit. I think you have to recognise that as an employer you run the risk that they [contractors] are going to try and claw some money back one way or another, and that’s going to be through claims or any other opportunistic behaviour…. sometimes clients are only interested in the short term [picture], they say we will screw them [contractors] down on price if problems arise later, we will deal with it some way later. Some [clients] think like that, some [clients] operate like that, and it is not good in the bigger picture! Developers tend to do that because they know that they have the market power; they can be quite ruthless.”

Research informant ID 8 was an associate director in a construction consultancy firm with about 18 years’ work experience in construction consultancy. Similarly, he highlights the clients’ bargaining power in the construction industry.

“If you want to screw the contractors for every last penny all the time, and do not give them any opportunity to make a reasonable profit, sometimes they will have no choice but to find ways to be opportunistic... in construction [sector], clients usually have the power. Especially, in a bad economic situation, you can hardly see contractors walk away and say “not interested! There is nothing in it for us”, when a client approaches them with a project, they accept it, but if there is no chance for them to make a reasonable profit, you should expect them to look for every single opportunity to behave opportunistically.”
As is shown above in the sections of the data, research informants perceive that in setting up the contracts in the construction industry, the power relation between a client and its contractors is in favour of the clients. This might be the result of different issues such as environmental situations (e.g. the economic market situation), or the construction industry’s characteristics of being client-led.

5.5.2 Subcategory: Vicious circle in contractual settings

The data presented in the previous section showed that in the construction industry, clients have significant power in setting up the contractual relations. This section refers to a subcategory of findings which shows how such power sometimes ultimately leads to the occurrence of inter-firm opportunism in the construction industry- something that is not intended by clients when they exert their power inappropriately at the early stages of the project.

The research informants expressed that in some cases, clients attempt to exploit the market and use their bargaining power to shape contracts in their own favour. The research informants indicated that too much risk and small margins for contractors may be usual in these cases. The data show that practitioners in the construction industry believe that such cases could lead to the emergence of inter-firm opportunism.

Interviewee ID 7 is one of the interviewees who placed emphasis on cases in which clients attempt to use their power to form so-called favourable contractual settings for themselves. She believed that such settings were ultimately costly for the clients. At the time of the interview, she was involved in a project from the consultant side. The project’s client was one of the local authorities that had its own legal team. To avoid uncertainties in the costs, the client was interested in fixed price contracts. She explained that:

“... the local authority doesn’t want a target cost, they want a fixed cost contract so they tried and converted the target cost contract to the fixed cost contract, which is an abuse of the contractual form. .. So, what they are saying is because the target cost has a pain-gain share, we wrote it into our version of it, which is 100% pain to the contractor and 100% gain to
the local authority…it was meant to be a partnership because of the pain-gain share, and now because of the way the local authority is abusing the contractual form there is no partnership with XX [the contractor], instead it is all being priced very protectively! It is all because the client and its legal team are very risk averse! … as a consultant with more than 20 years of experience, I know that it is not working and the costs are very, very difficult. It all starts from the fact that the local authority have misunderstood the project and insisted on an inappropriate form of contract.”

Interviewee ID 7 then discussed that such contractual settings would influence the relationships, and consequently, inter-firm opportunism would likely occur:

“…the project will start in a week or two, and the contractor will be on site for the next two years, and I am sure that the relationships will be clouded and coloured by all of that inappropriate choice of contract … and it will cost the client but they don’t see that now…. Clearly, the contractor will not be able to make a reasonable profit with the current contract. So, they will find another route to maintain their costs!”

An interesting issue is that the interviewee ID 7 is working as the consultant of the client for that specific project, but as a consultant they were not able to convince the client to form a more appropriate contractual relation.

“… I mean we have warned them formally, we’ve explained what they’re doing, we’ve explained that it’s not in their best interests, etc., but they are not able to think strategically and join the pieces of the jigsaw up, they think in this way they are avoiding all the construction, financial and legal risks.”.

The links between ‘clients’ early bargaining power’, ‘inappropriate contractual settings’ and its property that works as a vicious circle is highlighted in other sets
of the data. For example, Interviewee ID 3 who was working in a construction consultancy firm mentioned that:

“Some of the opportunistic tendencies that you get are a result of the contract. Uninformed clients who have no understanding of contracts tend to place so much unnecessary emphasis on rigid contracts. The contractor might want to adopt a collaborative approach but if the client is using say JCT when there are lots of unknowns in the project, cooperation is not going to happen because there will be lots of changes and alterations in the project, and then after all those pressures on the contractor at the early stages of the project, he will use it as an opportunity to make some money.”

Similarly, interviewee ID 1 highlighted the market power of the clients in the construction industry, and its potential role in making adversarial relationships. He was a construction lawyer with more than 20 years’ work experience in construction law firms.

“I think if you look at as I said earlier the market at the moment, work is limited outside London. So it’s a very competitive market, so if you were a developer you could push the risk to the contractor, you could also get a very keen price because contractors need the work. So, you know, I think there is sort of some evidence, to say in those situations relationships are in a combative mood. We could come on to how the contract operates but as a developer you’ve already created a situation where you know one party is taking so much of the risk, that he’s looking for opportunities to either maintain the level of risk he’s taking, maintain his cost base…. so I think there is the dynamic that exists regardless of things happening during the project.”

The vicious circle, which sometimes happened in the inter-firm relations, was highlighted by research informants from the client side as well. For example,
interviewee ID 20 was working in a construction development company mainly involved in residential projects. He had more than 30 years’ work experience, and for the first 15 years of his career, he worked in construction firms (contractor side). He mentioned that:

“We usually prefer to transfer the risks to contractors. Our solicitors do it easily through a couple of contractual clauses.... We are usually explicit in our contracts about the accuracy of shop drawings, subsurface conditions, ground conditions, etc., etc. We usually don’t take any risks, liability, whatsoever, about these things.”

When he was asked about the justification behind their tendency of transferring risks to the contractors, interviewee ID 20 replied that:

“We do not want to be involved in the construction phase; that is why we outsource the construction phase of our projects... When we ask for the price, in fact, we tell them “Mr. Contractor, assess the risks and price them, and do not look for more cash later on!” It is part of professionalism.”

When he was asked if the risks were usually priced appropriately, he maintained that:

“I used to work in construction companies [contractor side]. So, I have seen so many of them who do not read the contract documents properly before bidding. ... But then it is risk; it may or may not happen. They think that they will sort it out somehow through claims if the risk happens. In this way, they start opportunism.”

It is clear from the above excerpts that interviewee ID 20 acknowledges that in some cases risks are allocated to contractors without being thoroughly assessed. In addition, one can argue that interviewee ID 20 makes an association between the allocation of these unassessed risks to the contractors and the inter-firm
opportunism. However, he was confidently view the pattern as normal and fixed by saying that “It is part of professionalism”.

Similar to interviewee ID 20, Interviewee ID 15 referred to common practice of allocation of risks to contractors in the construction industry. However, in contrast with him, interviewee ID 15 held the view that such method of risk allocation is problematic. At the time of the interview, interviewee ID 15 was involved in a large-scale residential construction project from the contractor side. They had difficulties at the site regarding a non-native invasive species of plant (Japanese knotweed) which can damage buildings and hard surfaces if it is not managed/destroyed effectively. Their initial construction contract with the client had transferred most of the unforeseen costs to the contractor. However, it did not include a clause concerning specifically these plants. He explained that:

“It took us so much time to convince the client to pay the costs regarding the management of the Japanese knotweed problem. It did not cost a lot but as the client was not an informed one, he was trying to make us liable for the costs. ... They [the client] claimed that we did not identify it in a timely manner. True, we didn’t. But even the owner had not identified it! They [owner] could have included it in their negotiation when they were buying the land!...They were trying to refer to contract disclaimer clauses to make us pay for the costs of destroying the plant. ... You know, it was absolutely unfair. It took so much time to make them understand that it was not possible, and obviously, it delayed the project! I guess if you ask them, they would tell you that we were opportunistic!”

When interviewee ID 15 was asked about the assessment and pricing of risk before preparing the bid, he replied:

“You cannot include all the risks from the beginning! If you do, you can’t win any bid!”
5.6 Category three: contractors’ expert power

The third category of findings emerging from the data is ‘contractors’ expert power’. The research data show that the contractors usually possess higher levels of technical knowledge in comparison with the clients/consultants in the construction industry. In the excerpt below, research informant ID 18 talked about the general expert power of contractors in relation to the clients/consultants in the projects.

“In our type of projects [waste management projects, civil construction projects], the relationship between the client and the contractor is much more dominated by technical considerations than let’s say commercial projects like building a tower block, and usually the clients have a relatively knowledgeable in-house technical team or they appoint a good consultant. Having said that, in my 25 years’ experience of working on the contractor side, I have not seen even one single project that the client or its consultant has a better knowledge of the technical issues than the contractors. Experienced consultants know that but inexperienced clients tend to misunderstand the case!”

Similarly, Interviewee ID 14, who was working in a construction firm (contractor side), held the view that:

“We tend to deal with technical issues more often than consultants. So, obviously we know the technical side of work much better than them.”

The higher level of technical knowledge and capabilities held by the contractors in comparison with the clients/consultants could be explained as one of the reasons behind the projects being outsourced. The data show that in pre-contract stages, clients and consultants feel less concerned about the progress and success of projects when they are dealing with experienced and knowledgeable
contractors. However contractors’ expert power plays different roles in post-contract phases.

The category of ‘contractors’ expert power’ has two main properties, each of which constructs a subcategory, namely ‘control of information’ and ‘misperceived opportunism’. Each of these two subcategories is explained in the two following sections.

5.6.1 Subcategory: control of information

The research informants highlighted that when there is a high level of difference in terms of technical knowledge between the contractors and the clients (or its consultants), inter-firm opportunism is more likely. The research informants tend to place emphasis on the fact that it is easier to control the information flow and/or to misrepresent the information when there is a higher level of difference in technical knowledge.

Regarding the problem of opportunism and the contractors’ expert power, interviewee ID 20 mentioned that:

“It’s a typical problem, you sign a contract, and then when technical problems happen, contractors tend to suggest to you what suits them, not what suits the project!”

5.6.2 Subcategory: misperceived opportunism

In post-contract stages, clients might incorrectly perceive inter-firm opportunism due to the knowledge asymmetry exist in the client-contractor relationship. Some of the research informants placed emphasis on the misconception of opportunistic behaviour arising from the expertise of contractors. In fact, in these cases, no opportunistic behaviour occurs, but the other parties (i.e. client and/or consultant) may be suspicious of opportunism.

Below is an interview excerpt related to research informant ID 10. He had more than 30 years’ work experience in the construction industry. At the time of the interview, he was working in a consultancy firm:
“Quite often in a contract, the contractor will be obliged to achieve a certain specification for the plant but how he goes about achieving that is up to him. He will be told to design a plant that has to achieve a certain level of performance and to last for 20-30 years and be designed in such a way that the client can operate and maintain it properly. So quite a lot of disagreement points will exist around how the contractor has designed to achieve a lifespan of 20-30 years. The client will want it to be built out of 2 metre thick concrete walls and pipework with a huge amount of additional tolerance in the thickness of the materials and the contractor will want to use a cost-effective solution. … Clients are not necessarily familiar enough with the technical aspects of the work. So, they will easily be suspicious that the contractor is an opportunistic one. Consultants should clarify things. However, it is sometimes blurred if the contractor’s way of doing things meets the specifications in the long run. … That’s where most clients interpret the contract slightly differently to the contractor and you have to bring them together to agree on what’s right.”

5.7 Category four: contractors’ post-contract power

5.7.1 Subcategory: Power originating from asset specificity

Contractors’ power in post-contract stages was repeatedly highlighted by the research informants. Below is an interview excerpt from research informant ID 16. He was a senior consultant, and at the time of the interview, he was mainly involved in a waste management project.

“Quite often once you get into a contract like with a big process contractor, the contractor can feel that he’s in quite a strong position because the client normally needs it, whatever it is. … Once you've started it, once you've started a process plant, there aren't many people that would come and help you
finish it if the main contractor walked away. So if you jumped in, if you entered into a contract with contractor X and part way through it, relationships fell apart completely and you terminated the contract, if you then tried to find someone to come finish it off, it would then be very difficult, they wouldn't offer you very good guarantees, you would probably pay a lot of money for it and in many cases they might just say no because they wouldn't be able to get the parts that contractor X might have under licence. That is why the contractor can feel that he has enough power to do things in his own way. The client always has the money which is the biggest stick of all, but the contractor is quite aware that you have to go through it with him, come hell or high water! This gives quite a lot of power to the contractor!"

In fact, interviewee ID 16 highlighted the problem of asset specificity discussed in transaction cost economics theory. Research informants tend to associate asset specificity with contractor’s power. Because of this type of power, contractors could behave opportunistically and the clients feel that they need to be more flexible as the continuity of the relationship is important for them. Similarly, research informant ID 8 highlights the contractors’ power during the projects:

“In projects, it is practically too expensive to change a contractor in the middle of the project, so as a consultant, we always make sure that does not happen. In the middle of the project, it is easy, very easy for clients to get to the point where they do not have any other choices, and in these cases the contractors can price their work much more expensively because that certain contractor is the one who has all the knowledge about what is going on in the project!”

5.7.2 Subcategory: Role of contracts in contractors’ power

The Research informants placed emphasis on the role of contracts in power dynamics within the parties involved in the project. Especially when they were
talking about the contractors’ power, they tended to divide the project time into
the period before and after contract formation. For instance, research informants
ID 13 talked about the power dynamics and inter-firm opportunism as below:

“I do not believe that opportunistic behaviour is something
only from the contractor. All parties do that. Typical examples
of opportunistic behaviour from each side are different
though, and the timing of them is different. They have different
kinds of power during the project.”

Research informant ID 3 talked about the role of a contract in the dynamics of
power between parties involved in a project:

“Early stages of projects are like dating, you can dump him
easily, but later on, when you sign up to a contract, it’s like
marriage- it costs you so much to break up!”

Interviewee ID 6 was working in a construction developing firm. However, he
had experience of working in the contractor side as well. Below is an interview
excerpt with him:

“I believe after winning a bid and throughout the project, the
contractor has more chance to materialise the opportunities
than the client, as he has more control on the job and
normally the client has more stake to lose if he decides to
enter a serious dispute with the contractor, suspends the job,
delays the project, takes litigation action and so on, there is a
lot for them [clients] to lose.”

5.8 Category five: shadow of the past and the future

As mentioned earlier in section 2.6, the initial review of the literature concerning
the governance of inter-firm relations provided conceptual footholds, including
the shadow of the past and the future. However, the constructs of the practitioners
concerning the role of these two concepts in inter-firm relations were unexpectedly different. This section presents the data related to these two concepts.

5.8.1 Shadow of the future

The research informants placed emphasis on the role of future dyadic relations between a client and its contractor on the occurrence of inter-firm opportunism. Interviewee ID 2 was a construction lawyer. He placed emphasis on the role of potential future jobs both in the collaborative behaviour of contractors and the bargaining power of clients.

“I think when people know that they will work with each other again, I think they’re going to have a more collaborative relationship. And even when there are legitimate disputes they’re more likely to resolve those disputes without going down formal dispute resolution procedures. I work with a contractor who owed about over half a million pounds, they didn’t bother with formal dispute resolution proceedings, they didn’t even bother chasing the money the client potentially owed them because they didn’t want to damage the relationship going forward. They knew that they would do future projects with that client, and it’s worth doing the future project rather than chasing the money.”

He justified the cooperative behaviour when there is a shared future as follows:

“If you never think as a contractor that you are going to get work from this employer again, you might as well obviously want to do a good a job, but say if you know you are never going to get any work then you are going to want to get the best price for the job or the most out of it. That probably converts thinking from the start that if things start to go wrong, which you know they all too frequently do in some way or another, it’s costing more so you want your money back or
some more money, you're not going to hesitate to put in claims and give in notices under the contract which may lead to the relationship becoming difficult."

Regarding the role of future jobs in the negotiation power, he mentioned that:

“When you're a one-off client, you're always going to have difficulties. It means you have less negotiation power, and the other party has more chance for opportunistic behaviour.”

Interviewee ID 14 was working in a construction company (contractor side). In response to a question regarding the role of future jobs, he mentioned that:

“The value of keeping a relationship varies from time to time, industry to industry. From my experience, I could say contractors generally place more value on keeping the relationships, but again it may refer to their market power in the current situation in this country.”

Then, he used an example from his experience regarding the role of future jobs in the occurrence of opportunism. The example refers to the time when he was involved in a multi-story commercial building project in early 2009, when there was a significant decline in the construction sector due to the worldwide recession. He described the situation as:

“There were not many construction projects available in the north-west market. … Practically, our activities were reduced to only one multi-storey office building. We knew that the developer had a big plot of land, and it was still financially viable for them [client] to start a new project.”

He explained their decision regarding their collaborative behaviour as follows:

“In that project we were very flexible with them as we were hoping to get our next job from them. We helped them a lot in different technical things. I personally talked to our site
As shown in the data, interview ID 14 placed value on the potential job with his client because of an assessment of future. Similarly, interviewee ID 7 explained the role of future jobs as:

“I think it is similar to other professional business relationships, when parties figure out that there is more in it for them to keep the relationship for future projects, they tend to solve their problem more collaboratively; surely they don’t want to make the relationships adversarial… It is costly and frustrating to handle opportunistic relations. … If parties understand that there is less benefit for them in it because there are future projects on the horizon, they don’t involve themselves in costly and annoying adversarial relations!”

Similar to previous interviewees, interviewee ID 7 highlighted the role of forward-thinking in consideration of the value of shadow of the future.

5.8.2 Shadow of the past

While the research participants generally constructed an important role for ‘shadow of the future’ in their inter-firm relations, they did not construct such a role for their past experiences. This difference was unexpected as both shadow of the past and the future were borrowed from the literature drawing on new economic sociology (discussed earlier in 0), and the logic of their importance/unimportance was perceived to be the same. This sub-section provides data related to the shadow of the past.

Interviewee ID 16 was a senior consultant. Ha had been involved in heavily technical projects such as power plants and Energy from Waste (EFW) plants. In response to a question regarding the shadow of the past, he explained that:

“It would have to be something quite significant for us to exclude someone [from the tender list]. their track record
would have to be quite bad. I think the general view is that if the relationship is quite bad on project A, between two parties, it may be that the same parties enter into another contract and it works really well, it just, most of the time it depends on who you’ve actually got running the project and we work with some contractors and they’re on a number of projects, the relationship on one is really good, okay they might argue a bit but it’s not very serious, but on another they’re arguing all the time and they’re finding it very difficult to find common ground. It really depends on who you’ve got.”

As discussed in section 2.5.2, in literature concerning the new economic sociology (NES), the role of shadow of the past arises from the ‘learning’ and ‘boycott’ power of the economic actors. However, as shown in the data interviewee ID 16 holds the view that such learning is not possible as the inter-firm behaviour is context-related and consequently an inter-firm relation in one project cannot play a significant role in prediction of their future behaviour in other projects. Logically, if parties cannot rely on their prediction regarding the behaviour of their partners based on the shadow of the past, it follows that they cannot hold boycott power based on their past experiences.

Interviewee ID 11 holds a similar view. He compares opportunism in inter-firm relations in two distinct petrochemical plant projects in which he had been involved. For both projects, the client firm and the contractor firm were the same. In addition, both projects were contracted as EPC with a lump sum method of payment. He mentioned that:

“The first project was awful. Every day, we had an issue. It was always late and ultimately over budget… A month or two after the delivery of the first project, we finished negotiations for the second project… The second project was okay. Obviously, there were problems but people had a collaborative approach. I would say they were looking for fair solutions.”
When he was asked about the reasons behind such differences he explained that:

“I am not too sure. The project was different, and people were different… The management team in the client side was changed. I guess their project manager was retired as well. … They asked us not to use the same project manager for the second project, and we did so… I think it was a helpful decision.”

He explained the role of ‘shadow of the past’ based on his experiences as follows:

“I think each of our projects is unique; each one is different from the other one. So, if things don’t go well in a project between two companies, you can’t expect the same in another project between them… In project B [the second project], the front people were changed. So, the new people did not feel any personal problems with each other because of the earlier project.”

Interestingly, interviewee ID 11 highlighted the strategy of changing the personnel to avoid the shadow of the past being influential. Some other research participants also highlighted such an experience. This might suggest that through this strategy, firms attempt to make sure that conflicts are not seen as being personal in nature.

Interview ID 6 was working in a construction development firm. Similarly to the previous two interviewees, he did not construct an important role for the shadow of the past. He explained his construct of the concept as:

“It [shadow of the past] will form part of our decision making process obviously. If they [potential contractors] were able to deliver a project within the scope of the contract on previous occasions, this would give them a positive point. But then again you can’t rely much on these things.”
When he was asked if they receive information on the contractors from other consultants and/or developers before awarding a contract to a potential contractor, he said:

“Yes we do receive information or in some cases we ask for this information from other clients specifically at the pre-qualification stage. If we receive negative feedback about their reliability or quality of work we will be hesitant to include them within the tender list but receiving negative comments because of disagreements over the financial side of the contract does not necessarily exclude them from our tender list. Based on my experience, because of the complexity of each project, you cannot be certain what the real story behind that sort of disagreement was; sometimes, each side blames the other one. The contract can still be awarded in spite of those comments. That’s the same on their track record, I would say.”

While the data suggested that the shadow of the future plays some role in current inter-firm relations, the data do not suggest the same role for the shadow of the past. In fact, the research informants tend to believe that past experiences with the other party do not indicate the other party’s behaviour in future projects. Consequently, they construct that past experiences with the other party do not play a determining role in the type of behaviour shown towards that party.

5.9 Chapter summary

This study followed Charmaz’s (2006) guidelines on data analysis. Overall, five categories of findings were constructed from the data, namely: ‘construct of inter-firm opportunism’, ‘inappropriate contractual settings’, ‘contractors’ expert power’, ‘contractors’ post-contract power’, and ‘shadow of the past and the future’. The chapter described the data analysis process in this study and explained the categories of findings.
Chapter 6  Foundations of inter-firm power literature

6.1  Chapter brief

An inherent characteristic of grounded theory research is being driven by data. Within GT research strategies, research methodologists (e.g. Charmaz, 2006) suggest revisiting the existing literature after the formulation of research findings. Such references to the literature assist researchers to locate their theory grounded in the data within the existing literature.

In this research, the data analysis showed that power perceptions play an important role in the construct of the inter-firm opportunism patterns. Therefore, to locate the study’s findings, it was important to refer to the literature concerning the concept of power in economic relations. The exploration of the literature on the concept of power in this chapter contributes to the research in two ways: First, it provides the research with terminologies in the subject area. Second, it crystallises the study’s view of power arising from the data analysis.

This chapter analytically reviews the foundations in literature concerning the concept of power in economic relations.

6.1.1  Chapter’s goal

The chapter can be summarised under an overall goal and measurable objectives. The overall goal of this chapter is to provide a review of the foundations in literature concerned with power in economic relations. To achieve this goal, the measurable objectives of this chapter are as follows:

• To review the properties and sources of power in economic relations
• To review how the concept of power itself is conceptualised in the literature
6.2 Structure of the chapter

As shown earlier in Chapter 5, the study’s findings highlighted the role of power perceptions in practitioners’ constructs on inter-firm opportunism. Therefore, this chapter reviews the foundations in the literature concerning the concept of power in economic relations. By doing so, the chapter feeds the discussion of findings (in Chapter 7) by providing the terminologies, and by crystallising the study’s view of power that is grounded in the data analysis. To do this, the chapter is composed of three main parts.

First, section 6.3 provides an overview of the properties of the concept of power highlighted in the management literature.

Second, section 6.4 reviews one of the most dominant categorisations of power in the management literature. This section is important as it familiarises the study with the terminologies usually used in the management context in power literature.

Power, similar to any other social concept, could be approached from different epistemological positions. Therefore, section 6.5 provides an overview of some of the major views on how power as a social phenomenon could/should be conceptualised. This section is important as it crystallises the study’s view of power grounded in the data.

6.3 Power in economic relations

Power refers to the ability of one individual, group, organisation or group of organisations to control or influence another individual, group, and so on (Loosemore, 1999; Maloni and Benton, 2000). As highlighted by Gaski, (1984) power in relationships implies the existence of dependency between the actors. In inter-firm relations, power could be defined as the ability of one firm to influence the intentions and actions of another firm (Maloni and Benton, 2000).

As is clear from the definitions, power is a potential influence. An actor’s power is usually associated with its maximum possible influence although it may not choose to exert all of its influence (French and Raven, 1959). In addition, there is
a difference between someone’s capacity to exert influence and the capacity which is perceived by the other one in the relationship (Loosemore, 1999).

Power is perceived to be an omnipresent notion (French and Raven, 1959; Maloni and Benton, 2000). Cox (2001a) suggests that power is at the heart of all inter-firm relationships. Theoretically, power structures could be more complex in construction projects than in some other industries. To a certain extent, this is because in contrast with in-house projects, in construction projects there are numerous inter-firm relationships (Walker and Newcombe, 2000).

Power is not attached to social units; rather it is a characteristic of social relations (Handley and Benton, 2012). For example, an individual who has power over someone in certain circumstances may or may not hold power over another person in similar circumstances, or even the same person in other circumstances. In addition, in reality both of the social actors usually hold some degree of power. That is why, in some more specific definitions, power is perceived as the asymmetrical influence on behaviour between two social units (Walker and Newcombe, 2000).

Literature concerned with power structures and influences has its origins in the social and political sciences (Maloni and Benton, 2000), but it has not been limited to these branches of knowledge. For example, in the general management subject area, the phenomenon of power has received relatively considerable academic attention (Walker and Newcombe, 2000). However, in the context of construction management, power’s sources, structures and influences on inter-firm relations are not greatly explored (Walker and Newcombe, 2000).

6.3.1 Influence strategies

Influence strategies refer to the methods through which power may be mediated. In economic relations, influence strategies include a wide range of methods from simple friendly discussions to judiciary reference. Frazier and Sheth (1985) provided a list of possible influence strategies in the context of marketing. Table 6-1 is based on Frazier and Sheth’s (1985) list, but with relevant examples from the research data.
<table>
<thead>
<tr>
<th>Influence strategies</th>
<th>Descriptions (from Frazier and Sheth, 1985)/ Examples from the research data</th>
</tr>
</thead>
</table>
| **Indirect influence strategies** | **Description:**  
In this influence strategy, information on general business issues is transferred, but the power source leaves it to the power target to make conclusions. In addition, no specific action is directly requested. An indirect influence strategy could occur through information exchange and/or control. In addition, the power source may choose to provide examples similar to the one under discussion.  
**Examples:** a contractor may provide examples of good relationships it had with its former clients because of their regular meetings |
| **Direct, unmediated strategies** | **Description:**  
In this influence strategy, consequences of the acceptance or rejection of the influence are mentioned, but the consequences are on the basis of a response from the environment, and not on the mediation of the power source. This type of influence could happen through recommendations, warnings, and so on.  
**Examples:**  
In a lump-sum contract, a consultant with experience of similar projects in the area may make recommendations to the project contractor, who had not had experience of working in the UK regarding the use of workforce in the unionised areas. |
| **Reward and punishment strategies** | **Description:**  
In this influence strategy, rewards or punishments are directly given to the other party. No corresponding action is asked in return. Reward and punishments could be economic or non-economic.  
**Examples:**  
The data did not include examples of economic rewards/punishment without any corresponding action being asked in return. However, data included examples of non-economic reward and punishments in which the power source did not ask for any corresponding action in return.  
An example of non-economic reward: a development firm explain its contractor’s performance/lack of competence to another developer. |
**Table 6-1: Influence strategies. Adapted from Frazier and Sheth (1985).**

<table>
<thead>
<tr>
<th>Influence strategies</th>
<th>Description:</th>
<th>Examples:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct unweighted strategy or request</td>
<td>In this influence strategy, the source communicates its desires and wishes with the other party. However, consequences of acceptance or rejection are not mentioned or implied.</td>
<td>A contractor requested for an access route through the other plot of its developer. It was not a problem for the developer, and it made things easier for the contractor.</td>
</tr>
<tr>
<td>Direct mediated strategies</td>
<td>A specific action is requested, and consequences of acceptance/rejection of the request are clarified based on the mediation of the source of power. This influence strategy includes personal plea, promise, threat, and legalistic reference.</td>
<td>Most of the examples in the data belong to this strategy of influence. Examples of monitory promises/compensations and legalistic references were common in the data.</td>
</tr>
</tbody>
</table>

### 6.4 Sources of power

In 1959, French and Raven categorised the most common and important sources of power into five bases, each of which gives rise to one type of power; namely reward, coercive, legitimate, referent, and expert power. Since then, it has been the dominant categorisation of power in the literature concerning the subject in the context of management (e.g. Loosemore, 1999; Maloni and Benton, 2000; Lu and Hao, 2013).

Reward power refers to the perception of the target of power that the source has the ability to mediate rewards for it. The more the magnitude of the reward is perceived by the target, the stronger the reward power is perceived.

Coercive power refers to the perception of the target of power that the source has the ability to mediate punishments for it. Similar to reward power, the strength of coercive power is in direct relation to the perceived magnitude of punishment. However, the conceptual differentiating line between coercive and reward power
is blurred. This is because in practice it is common for actors to withhold a reward to influence the behaviour of the other party. Then, it is not easy to say if it is an exerted coercive power or the non-occurrence of a reward. French and Raven (1959) themselves pointed out that distinguishing between these two types of power could be difficult. However, they hold the view that the differentiation is a psychological one in a sense that the reward power results in something positive while coercive power, if exerted, will result in something negative.

Legitimate power is the third power type in French and Raven’s (1959) categorisation. Legitimate power is based on the perception of one party that the other party has a legitimate right to prescribe its behaviour. Legitimate power has been categorised into legitimate power and legal legitimate power in some studies (e.g. Maloni and Benton, 2000; Handley and Benton 2012). In this more detailed categorisation, legitimate power only refers to the perception of natural right to influence the other party, and the legal legitimate power refers to the perception of the target that the source retains judiciary rights. The legal legitimate power usually arises from the contract (Maloni and Benton, 2000; Handley and Benton 2012).

The fourth type of power in French and Raven (1959) is referent power, which occurs when the target perceives value in identification with the source. Referent power is sometimes called prestige power (Walker and Newcombe, 2000).

The last type of power in French and Raven’s (1959) categorisation is expert (or information) power, which is based on the perception of the target that the source has access to some knowledge and skills that are desired by the target. In expert power, the target believes that the knowledge and competencies of the source could lead them to the most appropriate decisions (Maloni, 1997).

It must be noted that expert power is different from information control. Expert power is usually perceived by the target through an internal process of identification whereas information control refers to the intended mediation from the source and usually involves a reward/punishment power source. For example, in the context of the construction industry, a client’s consultant might construct expert power for a contractor because of its successful experiences in delivery of a similar project. Therefore, believing the contractor’s knowledge will lead to the
most appropriate decisions, the consultant and consequently its client may yield control.

In Table 6-2, Maloni and Benton (2000) provided examples from the context of the automobile industry for each type of power.

<table>
<thead>
<tr>
<th>Power Base</th>
<th>Description</th>
<th>Automotive Industry Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reward</td>
<td>Source retains ability to mediate rewards to target.</td>
<td>Manufacturer awards additional business to supplier.</td>
</tr>
<tr>
<td>Coercive</td>
<td>Source holds ability to mediate punishment to target.</td>
<td>Manufacturer cancels business with supplier.</td>
</tr>
<tr>
<td>Expert</td>
<td>Source has access to knowledge and skills desired by target.</td>
<td>Supplier desires participation with Honda’s BP program.</td>
</tr>
<tr>
<td>Referent</td>
<td>Target values identification with source.</td>
<td>Supplier desires association with Chrysler’s Extended Enterprise.</td>
</tr>
<tr>
<td>Legitimate</td>
<td>Target believes source retains natural right to influence.</td>
<td>Supplier views itself as direct subsidiary of manufacturer.</td>
</tr>
<tr>
<td>Legal Legitimate</td>
<td>Source retains judiciary right to influence target.</td>
<td>Supplier and manufacturer maintain a formal sales contract.</td>
</tr>
</tbody>
</table>

Table 6-2: Different types of power with examples from the automotive industry. Source: Maloni and Benton (2000).

As highlighted by French and Raven (1959) and Handley and Benton (2012), in a relationship between two actors, there is usually more than one type of power collectively influencing the behaviour of parties.

To simplify the study of power, some researchers rely on the dichotomisation of different power types into categories such as formal/informal power (e.g. Loosemore, 1999), contingent/non-contingent (e.g. John, 1984), positive/non-positive (e.g. Walker and Newcombe, 2000). In the study of power, this dichotomisation of power types is particularly helpful in a sense that to some extent it solves the difficulty of the existence of more than one type of power in a given behaviour. However, as highlighted by Maloni (1997), perception plays an important role in any categorisation of power sources and influence strategies.

In general management, one of the common categorisations of power is mediated/non-mediated power (e.g. Maloni and Benton, 2000; Handley and
Benton, 2012). Mediated power refers to the cases in which there is an explicit attempt by the power source to influence the behaviour of the target. In fact, in relationships affected by mediated power, the source uses rewards, punishments, legal sources, and so on to gain compliance from the power target. In contrast, in non-mediated power through an internal process of identification, the target power feels keen to comply (Handley and Benton, 2012). In fact, non-mediated power is more positive and relational in orientation (Benton and Maloni, 2005). In the literature, expert, referent and legitimate powers are usually viewed as non-mediated power, and reward, coercive, and legal legitimate power as mediated power (Maloni and Benton, 2000; Handley and Benton, 2012).

The previous chapter presented a category of findings named ‘contractors’ post-contract power’. This form of power has the characteristics of mediated power because the power source (the contractor or the client) uses legal sources (here, mainly the contract) to gain compliance from the power target.

### 6.5 Power within different epistemological views

There are various levels at which power has been used in the literature. Some scholars used the concept of power consistent with the relaxed and casual everyday use of the term. On another level, theorists from branches of knowledge such as sociology, political sciences, and philosophy explore the concept of power itself. As mentioned by Clegg (1989), at this level, the concept of power is one of the most contested notions.

So far, as explored by Clegg (1989), conceptualisation of power could be classified into three main types: First, the causality (classic) approach which is central to Dahl’s (1957) conceptualisation based on the works of Thomas Hobbes (1588-1679) and David Hume (1711-1776); Second, the structuration approach that emerged from Lukes (1974); Third, the post-structuralism view that emerged from Foucault (1977).

#### 6.5.1 Causality approach to the concept of power

An analytical approach to the notion of power originates from the 17th century from Thomas Hobbes as his forebears approached the phenomenon of power from
ethical or religious stances (Clegg, 1989). His approach was formulated by contemporary authors such as Dahl (1915-2014) and is usually regarded as the causality approach (or classic approach) to the phenomenon of power (Lukes, 1974; Clegg, 1989). In the causality approach, “A has power over B to the extent that he can get B to do something that B would not otherwise do” (Dahl, 1957, p. 202). In this view, agents are viewed as intentional beings, the process of power exertion is viewed mechanically, and the result of power exertion is viewed in terms of motion (Clegg, 1989).

In very classic works (e.g. Hobbes’ works) belonging to the first group, power is viewed as being identical to cause (Dahl, 1957; Clegg, 1989). Viewing the phenomenon of power as a cause-effect model involves considering a reason, an intention, or a belief as a cause, and then the action as the effect. Basically, as cause and effect are not separable in this view, a cause-and-effect conceptualisation of power could be problematic (Clegg, 1989). Although viewing power and its consequences in a cause-and-effect language might be consistent with relaxed and casual language used by people every day, it has epistemological problems.

Dahl (1957) acknowledges that the cause-and-effect view of power introduces epistemological flaws to its conceptualisation. That is why, he mentions that “attempts to define power could push us into some messy epistemological problems” (Dahl, 1957, p. 203). Therefore, he adds that “I shall therefore, quite deliberately steer clear of the possible identity of power with cause” (p. 203). However, Dahl’s conceptualisation of power keeps elements of the intentional agent model, cause-and-effect relation, and motion as a result of the power exertion process, although he acknowledges the epistemological problem of viewing power as a cause (Clegg, 1989).

In addition to the epistemological problem in the cause-and-effect view of power, such a view does not allow full exploration of the phenomenon as it limits the concept in at least three ways to a more empiricist and positivist tradition of enquiry (Lukes, 1974). First, in Dahl’s (1957) view of power, the exercise of power is central to understanding the existence of the phenomenon. That is why according to Dahl (1957), the one who wins the decision making is the one who
has more power. Therefore, his construct of power does not explain cases in which power is not exercised but only perceived. Second, in Dahl (1957), there is an emphasis on concrete and observable behaviour as a result of power exertion. That is why power of A over B is viewed as a *behaviour* which does not occur otherwise (Dahl, 1957, p. 203). Consequently, his construct of power does not explain how the phenomenon changes the intention of social actors. Third, in Dahl (1957), there is an attempt towards a calculative approach on the outcome of power. That is why Dahl (1957, p. 203) mentions that “the *amount* of an actor’s power can be represented by a probability statement”.

### 6.5.2 Structuration approach to the concept of power

Lukes (1974) criticised Dahl (1957) for holding a positivist view of power that only includes a narrow view of the phenomenon. He introduced three dimensions for the phenomenon of power. According to him, the first dimension of exertion of power refers to success in decision making. The second dimension involves the ability to control the agenda of debate, and the last dimension in Lukes’ (1974) model refers to the ability of the power source to shape the wishes and desires of others. In fact, the third dimension is what he called the ‘radical’ view of power.

While in Dahl (1957), overt conflicts indicate the existence of power exertion, in Lukes (1974), latent conflicts could indicate the existence of power exertion as well. To differentiate between what social actors really desired before power was exercised, Lukes (1974) coined the word ‘real interests’.

Although, Lukes (1974) judged the causality approach to power as a positivist view of the phenomenon, he has not positioned his own epistemological view explicitly in the study of power through its three dimensions. However, as suggested by Clegg (1989), his takes on the phenomenon of power could fit within a critical realist worldview.

### 6.5.3 Post-structuralism view of power

In both the causality approach and Lukes’ (1974) approach, what should be viewed as power is given. They both hold the view that there is such a fixed notion as power, and as scholars they attempt to explore this phenomenon.
However, power, similar to all other social phenomena, could be viewed through the worldview of social constructionism. Holding a social constructionism worldview, power is a socially constructed notion. Therefore, its meaning is not given but rather is constructed by social actors involved in a social context.

The post-structuralism view of power has its roots in post-modern epistemology. In post-structuralism view, power is approached through social constructionism. Foucault (1977) and Clegg (1989) are two pioneers of exploring power from post-structuralism (Potts, 1999). They view power as a socially constructed notion. Therefore, in their conceptualisation, power is not something possessed by someone; rather it is constructed during an interaction. Social constructionism was discussed earlier in detail in section 3.3.2.2.

In Foucault (1977), there is an emphasis on the notion of ‘discourse’. Generally, social constructionism posits a significant relationship between social phenomena and language. The role of language in social constructionism was discussed earlier in section 3.6.4.

6.5.4 **Constructionist view of power in this study**

This study holds the view that Dahl’s (1957) conceptualisation of power represents only part of the phenomenon of power constructed by practitioners in the construction industry. For instance, when contractors believe that clients have significant bargaining power at the early stages of a project, there is not necessarily any decision-making negotiation. In fact, in this power-affected relation, power may be perceived only because it has removed negotiations about some forms of contracts from the agenda. That is why in this study, reference to the concept of power is not from the point of view of Dahl (1957). There are numerous examples of incompatibility between what the research informants refer to as power and what strictly could be applied to the causality model of power. In this study, power is viewed as a socially constructed notion. Therefore, it does not have a fixed meaning, but rather it is constructed by people based on their interactions and experiences. This view of power is in line with the general epistemological position of the study discussed in section 3.3.5, and by the Charmazian view of grounded theory (2003 and 2006) discussed earlier in section 3.6.2.
This study holds the view that what is perceived as power in one context could be different in another context. However, in reality, the study is limited in understanding the contextual elements influencing the construct of power. This limitation exists in the study of any socially constructed notions such as opportunism.

6.6 Chapter summary

In this study, the data analysis revealed the importance of power perceptions in the constructs of practitioners on the patterns of inter-firm opportunism. Therefore, this chapter was set out to provide a focussed review of the foundations of the literature on the concept of power in economic relations. By doing so, the chapter provided the terminologies usually used in the management literature concerned with the subject of power in economic relations. In addition, the chapter crystallised the study’s epistemological view on power.

This chapter reviewed the main characteristics of the concept of power in economic relations and the main tools through which power is usually exerted (section 6.3). In addition, it critically reviewed the most dominant categorisation of power in economic relations (section 6.4). Finally, the chapter highlighted that power, similar to other social concepts, could be approached from different epistemological views. In a positivist view to power, there is an emphasis on concrete and observable behaviour as a result of power exertion. In addition, in this view of the phenomenon of power, there is an attempt towards quantitative analysis of the outcome of power. In contrast, in a constructionist view on power, what should be viewed as power is not given. Instead, power is viewed as a socially constructed phenomenon. It was shown in the chapter that the study’s view of power grounded in the data is a constructionist one.
Chapter 7 Discussion of findings

7.1 Chapter brief

Holding a social constructionist view, the study sought to provide a conceptual framework for the patterns of inter-firm opportunism in the construction industry from the points of view of practitioners involved in the sector. In doing so, the study first attempted to examine the construct of inter-firm opportunism in the construction industry, followed by an examination of the construct of the patterns of inter-firm opportunism in the sector between clients and their first tier suppliers.

Overall, regarding the first construct, analysis of the data revealed considerable variations in the conceptions of inter-firm opportunism. An attempt was made to categorise these conceptions into three relatively straightforward groups; namely limited, inclusive, and carefree constructs. Each of these groups of constructs views the concept of inter-firm opportunism differently. However, regardless of the differences in their constructs, the data analysis revealed that the feeling of a win-lose relationship is central to the construct of inter-firm opportunism. In addition, in response to the risk of inter-firm opportunism, practitioners involved in setting up contractual relations usually conduct a casual cost-benefit trade-off between costs and benefits associated with reducing the risk of inter-firm opportunism.

Regarding the second construct, the data analysis revealed that the bargaining power of clients in the construction industry in the pre-contract phase may lead to inappropriate contractual settings which negatively affect the relationships. If this situation intertwines with the contractors’ power in the post-contract phase, it could lead to inter-firm opportunism. In addition, the data analysis indicated that contractors’ expert power and potential future jobs both influence the risk of inter-firm opportunism.

This chapter attempts to discuss the research findings in relation to the construct of inter-firm opportunism and its patterns. In addition, the chapter attempts to connect the research findings with the existing literature to highlight the points of convergence and divergence.
7.1.1 Chapter’s goal

The overall goal of this chapter is to discuss the findings of the study. To achieve this goal the chapter’s objectives are as follows:

- To discuss the category of findings in relation to the construct of inter-firm opportunism in the construction industry
- To evaluate the research findings regarding the construct of inter-firm opportunism against the existing literature
- To discuss the categories of findings on the construct of patterns in inter-firm opportunism
- To evaluate the categories of findings in relation to the inter-firm opportunism patterns against the existing literature
- To provide a conceptual framework of the patterns of inter-firm opportunism by correlating the related categories of findings
- To compare the study’s conceptual framework with the existing literature
7.2 Structure of the chapter

This chapter discusses the research findings regarding two questions. First: How do practitioners involved in the construction industry develop the notion of inter-firm opportunism? Second: How do practitioners involved in the construction industry view the patterns of inter-firm opportunism?

Regarding the first research question, analysis of the data led to the construct of a category of findings named ‘construct of inter-firm opportunism’. As explained earlier in chapter 5, in this category, ‘variations in conceptions’, ‘feeling of a win-lose relationship’ and the casual ‘cost-benefit trade-off’ are the three subcategories of research findings that respond to the first research question. Each of these subcategories of findings is discussed separately in this chapter in sections 7.3.1, 7.3.2, and 7.3.3 respectively. As each of these subcategories contributes independently to the understanding of the social construct of inter-firm opportunism, an attempt is made to evaluate each of them separately with the existing literature and highlight their points of convergence and divergence with the extant literature. As the literature concerned with the problem of opportunism is dominated by TCE conceptualisation of the problem (Wathne and Heide, 2000; Wang et al., 2013), in discussion of each of these subcategories of findings, an attempt is made to evaluate how TCE views the study’s arguments regarding the construct of inter-firm opportunism. In the case of differences between the study’s arguments and the TCE’s views regarding the concept of inter-firm opportunism, the section will attempt to clarify where the differences emerged. It might be worth clarifying that TCE was extensively discussed in chapter two. Therefore, in this section, TCE itself is not discussed and only the reasons behind the differences are explored. Finally, in relation to the first research question, by way of summary, section 7.3.4 provides an outline of the construct of inter-firm opportunism.

Regarding the second research question, analysis of the data led to the construct of four categories of findings, namely ‘inappropriate contractual settings’, ‘contractors’ expert power’, ‘contractors’ post-contract power’, and ‘shadow of the past and the future’. These categories of findings collectively answer the second research question. Each of these categories of findings is discussed
separately in this chapter in subsections 7.4.1, 7.4.2, 7.4.3, and 7.4.4 respectively. Then, section 7.4.5 correlates them with each other and depicts the dynamics between them during a project. By doing so, section 7.4.5 provides a conceptual framework of the patterns of inter-firm opportunism. Finally, section 7.4.6 highlights the distinctive elements of the study’s conceptual framework.

It might be worth highlighting that the structural flow of this chapter is in line with how categories of data were presented in section 5.3.3.

7.3 The construct of inter-firm opportunism

As mentioned earlier, one of the research objectives was to examine the social construct of inter-firm opportunism in the construction industry between clients and their first tier suppliers. The category of ‘the construct of inter-firm opportunism’ fulfils this objective through its three subcategories, namely ‘variations in conceptions’, ‘feeling of win-lose relationship’, and ‘cost-benefit trade-off’.

7.3.1 Variations in conceptions

According to the Longman Dictionary of Contemporary English, classifying a course of behaviour as opportunistic on its own implies disapproval of that particular behaviour. All the research informants associate such disapproval with the term ‘opportunism’. Therefore, their judgements on whether or not they disapprove of certain behaviour play an important role in whether or not they perceive it as opportunistic.

Analysis of the data revealed considerable variations between the constructs of inter-firm opportunism; considerable variations exist in terms of how inclusive their conceptions of opportunism are. The study identified three different broad constructs of inter-firm opportunism in the construction industry. In this study they are named as follows:

- Limited construct of opportunism
- Inclusive construct of opportunism
- Carefree approach to opportunism
The limited construct of opportunism views inter-firm opportunism as a course of behaviour which disadvantages the other party by failure to honour explicit contractual/agreement terms. This approach does not disapprove of advantage-seeking behaviour that does not violate the explicit terms, even if it is against the general norms of co-operation or the logic of the terms of contract. In such a view, taking advantage of asset specificity (discussed earlier in section 2.3.3.1) when changes arise in projects is not classified as opportunistic behaviour because it does not breach the explicit contractual terms, and therefore, there is no disapproval of its occurrence. The limited construct of inter-firm opportunism was more evident within the contractor group.

This study identifies an inclusive construct of inter-firm opportunism in the construction industry in which the explicit contracts are not central in the assessment of a course of behaviour. Instead, there is an emphasis on norms of co-operation and project success.

Some behaviours which are included in the inclusive construct are not considered opportunistic in the limited construct. Below, some of the examples of behaviours viewed as opportunistic by the inclusive construct but not by the limited construct are outlined:

- Not revealing the mistakes made by the client or its consultants in the tender documents
- Not flagging the missing scope of the job as soon as it is recognised when there are no early warning requirements in the contract
- Asking for a higher price for changes emerging during the project in lump sum contracts
- Treating unknown scope of work in an NEC3 contract based on the early warning requirements of the contract but in such a way that the client cannot handle it easily, so as to receive some more time

In addition to the limited and inclusive constructs of inter-firm opportunism, this study identifies another view on inter-firm opportunism which is named the ‘carefree approach’. In this approach, parties do not involve themselves with whether or not a particular behaviour should be viewed as opportunistic. In fact,
they believe that the examples mentioned above could benefit or disadvantage them depending on the parties to which they belong. In this approach, parties attempt to reduce such behaviours to avoid being disadvantaged if the behaviours come from the other party. In addition, if opportunities arise to engage in such behaviours, they will consider how feasible and beneficial the opportunities are, and then decide how to react to them. However, they were not sure whether or not they disapproved of these courses of behaviour. Interestingly, such an approach was evident within the research informants who had experiences in both the client side (as consultant or developer) and the contractor side.

It might be worth mentioning that in all the mentioned-above three constructs, practitioners believe that they expect at least some levels of opportunistic behaviour in inter-firm relations in the sector and they attempt to be prepared for negotiations if opportunism materialises.

The explanatory and social constructionist view of this study embraces these different constructs as multiple realities regarding the concept of inter-firm opportunism. In fact, the explanatory nature of this research indicates that there has been no intention to answer ‘how should inter-firm opportunism be seen?’ In other words, it does not intend to be normative.

In addition, the social constructionist view of this study embraces the reality that there is no one truth concerning inter-firm opportunism. In other words, the study’s philosophical position embraces that there is no one answer in the form ‘inter-firm opportunism is …’ to the research question.

7.3.1.1 Literature on the concept of opportunism

7.3.1.1.1 Points of convergence: general view of opportunism

Literature concerned with the issue of opportunism (e.g. Wathne and Heide, 2000; Ting et al., 2007; Wang and Yang, 2013) usually makes use of Williamson (1975 and 1985) and Macneil (1980) in order to provide a basis to conceptualise the term.

According to Williamson (1975, p. 6) opportunism is “self-interest seeking with guile”. Later, Williamson (1985, p. 47) describes guile as “lying, stealing,
cheating, and calculated efforts to mislead, distort, disguise or otherwise confuse”. In Williamson’s view (1975 and 1985), what distinguishes opportunism from normal self-interest seeking behaviour inherent in the nature of economic actor is the concept of guile (John, 1984; Wathne and Heide, 2000). As highlighted by Ghoshal and Moran (1996), in Williamson’s view (1975 and 1985), self-interest seeking behaviour is constrained by obedience and faithfulness to promises. Although in Williamson’s (1975 and 1985) conception of opportunism, adherence to general norms such as trustfulness is considered, the central element is failure to honour a contract (Wathne and Heide, 2000). That is why Williamson’s (1975 and 1985) view of the concept is sometimes referred to as ‘blatant opportunism’ (Wathne and Heide, 2000). In fact, the blatant view of opportunism does not cover social contracts, unwritten rules, informal agreements, and generally less formal governance methods. John (1984, p. 278) pointed out that based on Williamson’s (1975 and 1985) view, examples of opportunistic behaviour are those such as “withholding or distorting information and shirking or failing to fulfil promises or obligations”; for example hard bargaining is not classified as opportunism unless it violates previous promises and agreements.

As discussed earlier (section 2.3.5) in Macneil’s (1973) conception of inter-firm relations, the notions of relationships and social context are emphasised. Consequently, his conceptualisation of opportunistic behaviour does not only include contracts. Instead, according to him, classifying a given behaviour as opportunistic requires an assessment against “the principles of the relation in which it occurs” (Macneil, 1980, p.1024). As an example, when flexibility is a norm in a relationship, refusing to adapt to changing circumstances could be considered as opportunistic behaviour. Such a conceptualisation of opportunism makes it applicable to relational contracts as well as classical and neo-classical contracts (discussed in section 2.3.5). In relational contracts, the relations are governed by shared and often implicit norms. Therefore, it will not suffice to assess them with written contractual promises.

The limited construct of inter-firm opportunism, identified in this study, holds some similarities with the blatant opportunism conceptualised by Williamson (1975 and 1985). However, it does not necessarily include trustworthiness as
blatant opportunism does. In contrast, the inclusive construct of inter-firm opportunism, identified in this study, holds some similarities with Macneil’s (1980) construct of opportunism. However, it does not necessarily hold in relational contracts.

7.3.1.1.2 Points of divergence: variations

The problem of opportunism is central to transaction cost economics (TCE) theory. This is because TCE attempts to minimise the transaction cost in which opportunism plays an important role (discussed earlier in section 2.3). However, exploring the notion of opportunism is not central in TCE theory (Donaldson, 1990; Ghoshal and Moran, 1996). Instead, when opportunism occurs and how it could be minimised are the concerns for TCE theory. To serve the requirements of the theory, Williamson (1975 and 1985) provides a relatively clear but abstract definition of opportunism which works as an umbrella term in TCE theory. In fact, as pointed out by Donaldson (1990), TCE does not include the complexities in the notion of opportunistic behaviour. However, Williamson (1985) recognises the potential complexities involved in opportunism as a behavioural concept and suggests that “non-calculative orientation may help to unpack the issue” (Williamson, 1985, p. 406).

As discussed earlier in section 2.3.6, transaction cost economics theory is a two-limb theory. The explanatory part of the theory describes how opportunism arises in economic transactions, holding the assumptions made by the theory including the abstract and simplified definition of the concept of opportunism. The theory then, in its normative part, suggests how transaction costs can be decreased through an appropriate contractual governance mode. However, it must be noted that the theory still holds its assumptions and definitions. In other words, the theory suggests an efficient way of governing a transaction from the problem of opportunism, while it holds certain assumptions, including the simplified conception of opportunism (Donaldson, 1990; Ghoshal and Moran, 1996).

The cornerstone on using the normative part of the TCE theory is an agreement on the theory’s definitions and assumptions (Ghoshal and Moran, 1996). Therefore, it is important to know what sorts of behaviour are intended to be decreased. In fact, one question on the use of TCE as a normative theory is ‘What
could be classified as opportunistic behaviour in each context?’. In marketing context, this has been the concern of Wathne and Heide, (2000). In their well-cited paper, they have listed examples of opportunistic behaviour in the context of marketing. Other authors tackle the question in different ways. For example, Jones et al. (1997, p. 917) preferred to define the concept of behavioural uncertainty as “unexpected variance in performance and understandings”, to avoid an unclear concept of opportunism. However, in the context of the construction industry, the problem was not tackled effectively. Table 7-1 shows how some of the studies conceptualise inter-firm opportunism in the context of the construction industry. Clearly, the table is not meant to be exhaustive but it shows different ways of responding to and reflecting on the question.
Methodologically, inductive studies on inter-firm opportunism could bring fresh insights, grounded in data, into the concept. When an inductive study is based on data related to the context of the construction industry, it provides insights into the concept in the construction sector. Holding a socially constructionist position allows exploring how people involved in the construction sector build the notion of opportunism. Furthermore, a social constructionism position does not believe that all people in the construction industry should construct a similar notion of inter-firm opportunism. Grounded in the social constructionist position, this study sought to provide insights into the views of practitioners involved in the

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<table>
<thead>
<tr>
<th>Ref.</th>
<th>Main concern of the research</th>
<th>Approach to the question of “to what does opportunism refer?”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boukendour (2007)</td>
<td>Preventing post-contractual opportunism</td>
<td>The paper attempts to contribute to prevention of the problem of post-contractual opportunism in the construction industry but opportunism is not defined. However, in clarifying the context of the study, it is written that: “If it was costless to write comprehensive contracts there would be no reason for an opportunistic strategy to occur and in the event that this would occur, a court would clearly determine whether one of the parties had been in breach of contract and could easily impose an appropriate penalty.” (Boukendour, 2007, p. 723)</td>
</tr>
<tr>
<td>Lo et al. (2007)</td>
<td>Opportunistic bidding behaviour</td>
<td>The paper explores the problem of bidding prices that are too low, in which the contractors attempt to increase their margin by making claims or cutting corners to lower the costs. The paper defined such behaviour as ‘opportunistic bidding behaviour’ and explored the concept through system dynamics and a questionnaire.</td>
</tr>
<tr>
<td>Laan et al. (2011)</td>
<td>Reducing opportunism through procurement strategies</td>
<td>The paper does not define opportunistic behaviour and treat it as general knowledge. However, from the content of the research, arguably, one could interpret that the term is used as non-collaborative or non-cooperative behaviour.</td>
</tr>
</tbody>
</table>

Table 7-1: How is inter-firm opportunism conceptualised in the context of the construction industry?
construction industry on inter-firm opportunism. Therefore, it did not intend to answer the following questions:

- “What should be viewed as inter-firm opportunism?”
- “What is inter-firm opportunism?”
- “What is inter-firm opportunism in the construction industry?”

Instead, the study attempted to contribute to the answer of “How do people in the construction industry construct inter-firm opportunism?” The difference between this question and the question of “What is opportunism in the construction industry?” refers to the socially constructivist view of the study. Such a view embraces the variations on the constructs of opportunism as reality.

The study argues that there are variations in the constructs of inter-firm opportunism in the construction industry. This could have practical implications as practitioners involved in a construction project may have different understandings of inter-firm opportunism. Such differences could lead to problems as one party might blame the other for opportunism while the other party assumes that they are playing the game.

### 7.3.2 Feeling of Win-lose relationships

Regardless of how inclusive the research informants view inter-firm opportunism, they place emphasis on the feeling of win-lose relationships as being central to their constructs of inter-firm opportunism. This subcategory of findings highlights two issues: First, win-lose relationships are central to practitioners’ construct of inter-firm opportunism. Second, they understand the win-lose nature of their relationships through feeling rather than detailed calculations.

In addition, the data analysis revealed that the research informants associate a win-lose relationship with conflicting goals in an inter-firm relation; when the other party follows its own conflicting goals, they feel that they are in a win-lose relationship.
7.3.2.1 Literature on win-lose relationship

7.3.2.1.1 Points of convergence: importance of win-win relationships

The extant literature places emphasis on the importance of ‘win-win’ relationships in collaborative inter-firm relations (Larson, 1997; Beach et al., 2005; Meng, 2010; Ling et al., 2014). More specifically, the construction management literature places emphasis on the importance of win-win relationships in the subject areas of partnering (e.g. Chan et al., 2004; Beach et al., 2005; Chen and Chen, 2007), supply chain management (e.g. Meng, 2010 and 2012), and conflict management (e.g. Cheung and Chuah, 1999; Murtoaro and Kujala, 2007). For example, Chan et al. (2004) identified ‘commitment to a win-win attitude’ as one of the five most important critical success factors of partnering in the construction industry. Furthermore, Xue et al. (2007) maintain that the win-lose attitude is one of the problematic issues leading the construction industry to fragmentation and high levels of conflict and disputes. Arguably, the literature places emphasis on avoiding win-lose relationships in building collaborative inter-firm relations. This emphasis in the literature on avoiding a win-lose attitude in inter-firm relations is in line with the findings of this study.

In the literature, concepts such as ‘common goals’, ‘mutual benefits’, and ‘cooperative goals’ are usually linked with the concept of ‘win-win attitudes’ (Beach et al., 2005; Meng, 2010; Ling et al., 2014). In contrast, ‘win-lose’ relations are usually linked with ‘conflicting goals’. The link between ‘win-lose’ relations and ‘conflicting goals’ in the literature is in line with the findings of this study.

Generally, ‘common goals’ is one of the widely highlighted concepts in reducing opportunistic behaviour (Chan et al, 2003a; Turner, 2004; Wong et al., 2005). Wang and Yang (2013) conducted a thorough literature review on studies with ‘opportunism’ or ‘opportunistic behaviour’ as the keywords. They maintain that the result of the literature review shows that ‘goal congruence’ plays the most important role in reducing opportunistic behaviour in inter-firm relations. Their study is important as they did not limit their literature review to any particular industry.
Wong et al. (2005) argue that when parties perceive competing goals between each other, they are tempted to pursue their self-interests opportunistically. This is because in the case of competing goals, parties assume that “when they swim, others sink, and vice versa” (Dreu, 2007, p. 628). This is the case in which win-lose relationships usually occur. In fact, when parties hold competing goals, their achievements are negatively correlated. In contrast, when parties’ goals are related to each other cooperatively, the goal achievements between the parties are positively correlated (Wong et al., 2005). In Dreu’s (2007, p.628) language, in cases with cooperative goals, parties assume that “they swim or sink together, and they benefit from each other’s performance”. In addition to these two situations, Wong et al. (2005) identify another case in which parties hold independent goals. In this case, goal achievements are perceived to be unrelated to each other. The last situation is in line with the example of independent goals highlighted in the data (explained earlier in section 5.4.2). However, it must be noted that competing goals do not necessarily lead to opportunistic behaviour. As pointed out by Rossetti and Choi (2008), parties’ capabilities in enforcing the contract through monitoring and penalties play an important role in reducing opportunism in cases of goals incongruence. In addition, the morals and values of parties are important in keeping the promises. This is in line with the argument of TCE theory (Williamson, 1975); parties should find it both feasible and beneficial to behave opportunistically.

7.3.2.1.2 Points of divergence: cognitive understanding of shared benefits

Although the literature places great emphasis on the role of win-lose attitudes and competing goals in inter-firm opportunism (Li et al., 2001; Chen and Chen, 2007; Meng, 2010), how these concepts are perceived has not attracted much attention in the context of construction project management literature. In other words, there is not much available on how win-win relationships are perceived or how goal congruence is perceived by practitioners involved in the inter-firm relations in the construction industry.

This study argues that practitioners rely on their ‘understandings’ and ‘feelings’ of win-lose relationships rather than detailed cost-benefit calculations. This is in
line with the position of Wong et al. (2005) on how economic partners assess their relationships. The current study suggests that the cognitive understandings of practitioners in the construction industry about win-lose relationships and goal incongruence play an important role in whether or not a course of behaviour is perceived as being opportunistic. Such cognitive understandings have not been emphasised in the context of construction management research. However, the cognitive understanding of common objectives and win-win relationships have received some academic attention in other subject areas, such as applied psychology (e.g. Wong et al., 2005; Dreu, 2007), general management (e.g. Tsai and Ghoshal, 1998), and marketing (e.g. Wang et al., 2013).

In the subject area of applied psychology, Dreu (2007) argues that common objectives themselves are not enough for collaborative relationships. In fact, there are the ‘perceived’ common objectives which lead to collaborative relationships. In other words, these are the conceptions of people about whether benefits are mutual, which consequently encourage them to behave collaboratively or vice versa, opportunistically (Dreu, 2007). Wong et al. (2005) emphasise that there should be a cognitive understanding of mutual benefits if the common objectives set up formally are meant to be effective. In addition, they argue that shared visions and shared values might facilitate such cognitive understandings.

Coming from a different branch of knowledge than applied psychology, Tsai and Ghoshal (1998) emphasise the cognitive understanding of common objectives in the field of management. The late Ghoshal (1948-2004), with his co-authors, wrote extensively in a series of wide-ranging essays on how humans’ decision making includes far broader issues than abstract economic advantage seeking. Therefore, his writings usually criticise any management theory that focuses too much on economic drivers and exclude non-economic issues (e.g Ghoshal and Moran, 1996; Nahapiet and Ghoshal, 1997). Tsai and Ghoshal (1998) realised the importance of the cognitive understanding of common objectives in reducing opportunism. Nahapiet and Ghoshal (1997) and Tsai and Ghoshal (1998) placed emphasis on what they termed ‘social capitals’ in reducing opportunism and increasing performance. One of the main dimensions of social capital is its cognitive dimension, through which shared values and objectives are understood.
Tsai and Ghoshal (1998) argued that such a cognitive understanding is essential in collaborative business relations.

In the context of marketing, Wang et al. (2013) draw on the conceptualisation of Tsai and Ghoshal (1998) and quantitatively test their conceptualisation. Wang et al. (2013) show that the cognitive understandings of mutual benefits interact with other transaction-related characteristics, and could potentially reduce inter-firm opportunism.

This subcategory of findings contributes towards a better understanding of practitioners’ constructs of inter-firm opportunism in the construction industry by placing emphasis on the role of their cognitive understanding of the relationships and the goals congruence/incongruence with their economic partners. However, the argument of this study gives rise to other questions concerned with the process of such cognitive understanding as well as factors facilitating that in the construction industry. It might be worth clarifying that these questions are not included in the scope of the current research. In fact, the research was not designed to answer these questions as they arose on the basis of the findings of the current research.

### 7.3.3 Cost-benefit trade-off

The data analysis demonstrated that in response to the risk of inter-firm opportunism through setting up contractual governance, practitioners usually conduct a casual cost-benefit trade-off. This trade-off is based on the cost and benefit associated with any possible contractual governance settings. However, such a cost-benefit trade-off is a casual one, in which both costs and benefits are considered in their broadest meanings. The data analysis revealed that in such a cost-benefit trade-off, the cost refers to all costs associated with setting up a governance structure, even if they are materialised outside the scope of the project. Similarly, the benefit refers to all benefits associated with a reduction in the risk of inter-firm opportunism, even if they are materialised outside the scope of the project. For example, in some cases, even the firm’s ultimate benefit is considered in such a cost-benefit trade-off.
Although the practitioners placed great emphasis on the importance of potential costs involved in inter-firm opportunism, in response to the risk of inter-firm opportunism through contractual settings, they conduct a cost-benefit trade-off between the expected benefits of a particular form of an inter-firm relation and its costs, including the costs of inter-firm opportunism. In fact, their main concerns were to increase the firms’ benefit and not to decrease the costs of inter-firm opportunism. Interestingly, the cost-benefit trade-off in the choices of governance is not always in favour of reducing inter-firm opportunism. The data include examples where tolerating opportunism was perceived to be less expensive than sacrificing the benefits.

7.3.3.1 Literature on cost-benefit trade-off in opportunism

7.3.3.1.1 Points of convergence: unit of analysis

Transaction cost economics (TCE) theory attempts to economise the transaction cost inherent in each transaction. To do this, the theory relies heavily on the comparison of transaction costs in different forms of governance modes. Therefore, the unit of analysis is a ‘transaction’. Williamson (1981, p.552) mentioned that a transaction occurs whenever “a good or service is transferred across a technologically separable interface”. Later, he defines transaction as an ultimate unit of activity which must contain principles of conflict, mutuality, and order (Williamson, 2002). Considering this abstract and narrow definition of ‘transaction’, each inter-firm relationship in a given construction project may include numerous transactions.

The data analysis in this study revealed that parties tend to view the risk of inter-firm opportunism for the whole series of transactions involved in a given inter-firm relationship. In fact, in practice, it is neither possible nor desirable to formulate a contractual governance structure for each of the transactions involved in a project.

The difference between the emphasis on ‘a transaction’ as a unit of analysis in TCE and what happens in practice is one of the widely criticised points of TCE (Foss and Klein, 2010). The emphasis on ‘a transaction’ as the unit of analysis in
TCE implies that exchanges could be viewed as isolated transactions. This could be problematic for at least two reasons.

Firstly, TCE’s view suggests that to economise the transaction cost in an exchange, one should economise each transaction (Argyres and Liebeskind, 1999). However, this is not the case in reality because in many cases, transactions are linked to each other. Therefore, emphasis on efficiency in one transaction may not contribute to the efficiency of the whole project. In fact, viewing transactions in an isolated manner is not practically possible in cases where exchange of the product/service include numerous parts and stages. In other words, when the ‘process’ nature of an exchange is important, the TCE’s focus on ‘transaction’ as the unit of analysis becomes problematic.

Secondly, the extent to which firms are familiar with each of the governance modes influences the administration costs involved in TC for any new transactions (Argyres and Liebeskind, 1999). Therefore, TC in each transaction is not independent of other transactions with which a firm will be involved. Argyres and Liebeskind (1999) term this historical dependency ‘governance inseparability’.

Williamson (1996) admits that the narrow and abstract assumption of transaction in TCE is not always practical, although it might be a necessity for sophistication of the theory.

TCE-related studies in the context of the construction management literature tend to consider the unit of analysis as projects even if they do not discuss the conceptual difference between the notions of ‘transaction’ and ‘project’ (e.g. Winch, 2001 and 2006; Chang and Ive, 2007a).

7.3.3.1.2 Points of divergence: cost-benefit trade-off

As mentioned earlier (section 7.3.3.), the data analysis highlighted that in response to the risk of inter-firm opportunism through setting up contractual governance, parties conduct a casual cost-benefit trade-off. This trade-off is based on the cost and benefit associated with any possible contractual governance settings. In some cases, even the firms’ ultimate cost and benefits are considered in this trade-off. In other words, while firms take into account the costs of inter-
firm opportunism, they do not make decisions solely on the basis of governance costs. This might appear inconsistent with the transaction cost economics theory, because TCE does not include such a trade-off in reducing the cost of inter-firm opportunism.

TCE theory was reviewed comprehensively earlier in section 2.3. Therefore, there is no intention to review the theory again here. In contrast, only the reasons behind such an apparent inconsistency will be covered.

In TCE, the emphasis on transaction cost is due to the theory’s assumptions. TCE theory assumes that the production cost is more easily comprehensible. In addition, TCE theory assumes that the production cost is independent of the governance modes (Turner and Simister, 2001). These assumptions have been criticised by some academics on two levels:

First, TCE theory has received criticism on the assumption that the production cost could be viewed independently of the transaction cost. In the context of project management literature, Turner and Simister (2001) argue that different contractual settings influence not only transaction costs but also the production cost (project cost). Contractual settings could influence the project out-turn cost by virtue of the different incentives they create for the contractor. Therefore, limiting the question of selecting the appropriate contractual setting to the governance cost could be partial. In fact, Turner and Simister (2001) emphasise that it would be easy to fall into the trap of viewing the question of contractual setting only as a question of governance costs and omitting the issue of production cost. Koskela and Ballard (2006, p.157) use the same line of reasoning and argue that “it is hardly possible to isolate transaction costs completely from production costs, as assumed in transaction cost economics”. This is in line with the findings of Sha (2011).

Second, TCE’s focus on the transaction costs to set up governance modes economising transactions has also received criticism on another level. Blois (1990) argues that the objective of any firm is profit maximisation rather than economising its transaction costs. He maintains that approaching the question of inter-firm relations with the profit maximisation view could lead to explanations that are more applicable to reality than the transaction cost view. Blois (1990)
suggests that in reality, firms look beyond transaction costs and determine the potential benefits in each inter-firm relation. This is in line with John (1984).

Interestingly, TCE theory does place emphasis on a cost-benefit trade-off. However, its trade-off is only between the costs of governance modes such as monitoring, enforcement, negotiation, and drafting a contract and the benefits of the governance modes, which is seen as reduced opportunism. Therefore, it does not include the costs and benefits which might occur in a broader scope. As highlighted by Foss and Klein (2010), Williamson (1996) replies indirectly to this criticism, and suggested that the efficient solution to economic relations should consider the feasibility and the net gains of the relationships.

It must be noted that the argument of the study in relation to the cost-benefit trade-off is not incompatible with TCE theory itself. Instead, the research argument places emphasis on the assumptions of TCE theory. In fact, the study highlights that in some cases, the background assumptions may not be working. As highlighted by Hill (1990), for normative use of any theory, it is vital to recognise and accept the assumptions on which the theory is based; TCE is no exception. The data analysis revealed that the assumption that other costs (such as opportunity cost highlighted in the data in section 5.4.3) will be the same under different governance modes may not be applicable to all the cases.

7.3.4 Outline of the construct of inter-firm opportunism

During the previous sections, the research placed emphasis on three elements in the construct of inter-firm opportunism in the construction industry.

First, the research argues that there is no one single view on inter-firm opportunism. This could have both theoretical and practical implications. Its theoretical implication criticises the assumption that inter-firm opportunism is understood by everyone in the same way. Practically, it suggests that in any given inter-firm relations, practitioners might have different understandings of opportunism when they promise each other to avoid it.

Second, the research argues that ‘feeling of win-lose’ plays an important role in judging opportunistic behaviour in the construction industry. The study places emphasis that practitioners in the construction industry ‘feel’ a win-lose inter-firm
relationship rather than figure it out on the basis of strict cost-benefit calculations. The research suggests that a cognitive understanding of one party’s following of conflicting objectives contributes to feeling a win-lose relationship.

The last element revealed in the data analysis refers to a cost-benefit trade-off that happens in decisions regarding setting up the contractual governance modes. The study argues that practitioners involved in inter-firm relations in the construction industry tend to be more concerned with the firms’/projects’ costs and benefits rather than the governance modes’ costs and benefits; they conduct a cost-benefit trade-off in which their unit of analysis is not necessarily a single transaction. Instead, they tend to consider the whole series of transactions they have with their economic partner in a given inter-firm relation as a unit of analysis.

The study replied to its first research question, formulated as ‘How do practitioners involved in the construction industry develop the notion of inter-firm opportunism?’ by the three elements of opportunism construct revealed in the data analysis.

### 7.4 The construct of inter-firm opportunism patterns

As mentioned earlier, one of the research objectives was to examine the social construct of the patterns of inter-firm opportunism in the construction industry. Four categories of findings which collectively fulfil this objective are discussed in the following sections.

Similar to the first category of findings, each of the categories constructed from the data consists of some subcategories. In this section, to discuss the research findings, subcategories are discussed separately if they were able to contribute to the answering of the research question independently. However, in cases where the researcher perceived an essential link between the subcategories, they are purposely discussed with each other and under one heading. In fact, by discussing them together, an attempt is made to explore the links and interaction between them.

This section, similar to the discussion of the construct of opportunism (section 7.3), will attempt to evaluate the discussions with the existing literature. However,
as the categories of findings of patterns of inter-firm opportunism contribute collectively to the answering of the second research question, the differentiating points of the study’s conceptual response to its second question are not discussed separately. Instead, they are all discussed together later in section 7.4.6.

7.4.1 Bargaining power, inappropriate contractual settings, a vicious circle

The data analysis revealed that clients in the construction industry possess bargaining power at the early stages of the projects. This bargaining power arises from intense competition between the contractors to get a job.

The data analysis showed that construction clients may exert their bargaining power to exploit the market by forming contractual settings which are perceived to be in their own favour. If this happens, there is usually an overemphasis on price when the risks are not appropriately identified and/or allocated and uncertainties are not admitted.

The data analysis demonstrated that practitioners involved in inter-firm relations in the construction industry believe that the inappropriate contractual settings shaped as a result of clients’ bargaining power influence inter-firm relations negatively, and lead to inter-firm opportunism. In fact, clients tend to shift their initial bargaining power to legal and contractual power; however, in some cases this happens inappropriately. Therefore, instead of governing the relationships efficiently, it could lead to opportunistic behaviour.

7.4.1.1 Clients bargaining power and mediated power

The data analysis suggested that in the construction industry, in the early stages of the projects, clients have considerable bargaining power. In the literature concerned with negotiation and bargaining power (e.g. Hickson et al., 1971; Coff, 1999), being capable of acting independently, having access to key information, replacement costs to the firm, and existing costs from the negotiation are generally known as the main determinants of bargaining power. Considering these determinants of bargaining power, the claim of the research informants with regard to the construction industry is not surprising. Before signing a contract, logically, the only reason a client may have to stick to a potential contractor is the
lack of availability of contractors capable of delivering the project within the desired criteria. While in highly technical projects this might be a problem, in construction projects such as commercial and residential projects, it is not the client’s concern. Even in relatively heavily technical projects, such as energy from waste (EFW) plants and petrochemical plants, the data show that the clients do not feel overly concerned in terms of the availability of the contractors. Therefore, they have the freedom to move from one contractor to another in the project conception stage. By contrast, the data show that for contractors, the opportunity cost of missing out on a potential project is significant. Clearly, the relative bargaining power between client and contractor changes in different economic environments.

The research informants believe that the clients tend to exert their bargaining power to shape favourable contractual settings. Viewing this research finding through the lens of power literature, one could argue that in fact the clients attempt to convert their bargaining power into mediated power. As discussed earlier in section 6.4, mediated power refers to the cases in which there is an explicit attempt by the power source (here, the client) to influence the behaviour of the power target (here, the contractor) (Maloni and Benton, 2000). Legal sources and contractual settings are main tools though which mediated power is exerted (Handley and Benton, 2012).

Associating the power arising from contract with the concept of mediated power particularly facilitates understating the belief of the research informants that such power influences relationships negatively. This is because although the influence of different types of power on the inter-firm relations is not explored in detail in the construction industry, there is a wealth of power research examining such influence in the context of marketing, distribution channels, and supply chain management (e.g. Maloni and Benton, 2000; Benton and Maloni, 2005; Handley and Benton, 2012; Nyaga et al., 2013).

In power research in the marketing context, there is generally a consensus that coercive power and legal legitimate power negatively influence inter-firm relations (e.g. Brown et al., 1996; Maloni and Benton, 2000; Benton and Maloni, 2005; Handley and Benton, 2012). However, the findings on reward power on
inter-firm relations are to a certain extent mixed. For example while Handley and Benton (2012) conclude that reward power is positively linked to opportunism, Maloni and Benton’s (2000) study was not conclusive about reward power. This inconsistency in the findings concerning reward power may be to a certain extent due to how reward power is conceptualised in each of the studies. For example, in the study of Handley and Benton (2012), reward power is conceptualised more as referring to a contract for any reward, so it has more of the characteristics of mediated power. In the study of Maloni and Benton (2000), however, there is not such an explicit reference to a contract, so it could have some elements of referent power.

Table 7-2 shows some of the numerous studies supporting the negative influence of mediated power on inter-firm relations.
Boyle and Dwyer, 1995

The relationship between power, bureaucracy, influence and performance
Marketing. Industrial product distribution channel

Coercive power may put the power advantage at risk.

Brown et al., 1996

Power and relationship commitment
Marketing. Farm equipment

Use of mediated power is negatively associated with commitment of the power target in the relationship. In contrast, use of non-mediated power is positively linked with the commitment of the power target.

Maloni and Benton, 2000

Mediated/non-mediated power influence on the supply chain
Marketing. Automobile industry

Coercive and legal powers harm the nature of buyer-supplier relationships. In contrast, referent, legitimate, and expert power retain a beneficial effect on the buyer-supplier relationship. Their research data were not conclusive about the role of reward power.

Benton and Maloni, 2005.

The relationship between power-affected relationships and supplier satisfaction
Marketing. Automobile industry

Positive effect of non-mediated sources on the buyer-supplier relationships. Coercive power and legal legitimate power retain a significant negative effect on buyer-supplier relationships. Reward power does not strongly influence the buyer-supplier relationship. The study argues that effective power management could considerably influence the supplier satisfaction.

Handley and Benton, 2012

Opportunism in outsourcing relationships
Marketing. Business outsourcing

Buyer reliance on mediated power is positively associated with the seller’s opportunistic behaviour and in contrast, buyer reliance on non-mediated power is positively linked with collaborative relationships.

Table 7-2: Research findings on the role of mediated power in inter-firm relationships.

As can be seen in Table 7-2, all the studies were carried out in the context of distribution channels. This is to some extent because of the lack of detailed studies of mediated power in the construction industry. However, it must be noted that, considering the fundamental differences between manufacturing industries and the construction industry, the presentation of Table 7-2 does not intend to implant the research findings from one context into another. Instead, it intends to show that the belief of the research informants
concerning the negative influence of power arising from the contract in inter-firm relations is in line with the research findings in other industries.

7.4.1.2 Mediated power and inappropriate contractual settings

Thus far, it has been discussed that the research informants believe clients hold considerable bargaining power in the early stages of the project, and they tend to convert their bargaining power into mediated power. In addition, it was discussed that the research informants associate such mediated power with negative relationships. This section discusses the occurrence of inter-firm opportunism when clients’ mediated power refers to inappropriate forms of contractual relations.

The data analysis demonstrated that practitioners involved in inter-firm relations in the construction industry hold the view that there is a tendency to transfer too much risk to the contractors when the risks are not appropriately assessed and priced. They believe that in some cases, even the risks are beyond the control of the contractors. They emphasise that this tendency makes the contractual settings inappropriate and eventually leads to inter-firm opportunism.

The connection between inappropriate contractual settings and the problem of opportunism is in line with transaction cost economics (TCE) theory (Williamson, 1975 and 1979). As discussed in detail earlier in section 2.3.3, TCE theory argues that contract price, pre-contract transaction costs, and post-contract transaction costs should receive attention in order to economise transactions. TCE highlights the post-contract transaction costs that could arise when, in projects with high levels of asset specificity and/or high levels of uncertainty, too much attention is placed on the price advantages in setting up the inter-firm relations (Williamson, 1975 and 1979). The current research finding regarding the connection between the emphases on price, while the risk and uncertainties are not explored, and opportunism is in line with TCE theory.

The problem of so-called favourable contracts has received academic attention beyond the subject of TCE theory. Zaghloul and Hartman (2003) approach the problem of one-sided contracts through the issue of disclaimer clauses. Disclaimer clauses attempt to transfer one party’s risk to another party by
contractual terms. Zaghloul and Hartman (2003) argue that usually through disclaimer clauses the client’s liability is transferred to its contractor, and the problem arises when the contractors do not have any means to control the risk and have not added a contingency to the bid price against the risk. They argue that disclaimer clauses tend to negatively influence both the bid competition and the inter-firm relations. Semple et al., (1994), Zaghloul and Hartman (2003), and Hartman (2000) all hold the view that disclaimer clauses could lead to win-lose relations, disputes, and adversarial relationships.

Overall, the research findings in this category demonstrated that the mediated power has negative effects on inter-firm relations, but this is the inappropriate form of contractual settings which gives rise to inter-firm opportunism in power-affected relations. It must be noted that the research does not suggest that practitioners in the construction industry perceive any direct relationship between inter-firm opportunism and mediated power. Instead, it suggests that they construct a link between mediated power and negative properties in inter-firm relations, and then when inappropriate forms of contractual settings are involved, they perceive a link to opportunism. This could be justified by the power literature. As mentioned earlier, mediated power is associated with negative buyer-supplier relationships in the literature (Maloni and Benton, 2000; Benton and Maloni, 2005; Handley and Benton, 2012; Nyaga et al., 2013). However, power by nature attempts to force the target to comply with its wishes. Therefore, logically, it is reasonable that there is a positive relationship between power and compliance, although the compliance may or may not be based on willingness or internal agreement with the action (Maloni, 1997). Therefore, mediated power does not necessarily lead to opportunism.

7.4.2 Contractors’ expert power

The research findings demonstrate that contractors usually possess a higher level of knowledge about the technical issues of the project. While this is evident for one-off clients of the construction industry, it is interesting that research informants commonly place emphasis on higher technical knowledge of contractors rather than of clients/consultants regardless of project types. The data analysis revealed that the knowledge asymmetry in the relationship between
contractor and client (or its consultant) could play different roles in the post-contract stages. In this category, two different roles of expert power are discussed.

### 7.4.2.1 Control of information

The data analysis revealed that practitioners in the construction industry perceive that the inter-firm relations are prone to post-contract inter-firm opportunism when there is a higher level of information asymmetry. This is because, logically, in cases with high information asymmetry, it is easier for the contractor to benefit from misrepresenting, hiding, or controlling information.

Unforeseen technical issues are common in construction projects because of the bounded rationality of human beings. The research informants believe that in solving these technical issues in post-contract stages, the technical expertise of contractors is crucial. However, contractors can behave opportunistically by suggesting technical solutions that are more beneficial to them.

Higher risk of post-contract opportunism in relationships with a high level of information asymmetry is in line with the transaction cost economics (TCE) theory. Williamson (1991 and 2002) places emphasis on the role of information asymmetry in occurrence of opportunism, and consequently, the generation of transaction cost. Drawing on TCE logics, Li et al. (2012) discuss that in the post-contract stage, the information asymmetry generates costs such as monitoring the performance of the contractor, costs of decisions related to change, information cost, and so on. Logically, all these costs are higher when the contractors know significantly more about the technical issues. Therefore, the study’s finding regarding the potential role of contractors’ expert power in inter-firm opportunism could be supported by TCE.

In relation to the role of contractors’ expert power, Lu and Hao (2013) reached a similar conclusion through a fundamentally different research design. They used quantitative data, and argued that knowledge asymmetry between clients and contractors in the construction industry influences their relationships negatively. They argued that when there is a lower level of information asymmetry between clients and contractors, there is a reduced monitoring cost for the client, and therefore higher costs of hiding opportunist behaviour for the contractor.
7.4.2.2 Misperceived opportunism

Regarding the problem of inter-firm opportunism, the data analysis revealed another role of knowledge asymmetry in technical issues. The research informants believe that in response to the unforeseen technical issues, in some cases, clients misperceive the behaviour of contractors as opportunistic. This is because clients and their consultants do not necessarily possess the required technical knowledge to evaluate the decisions/suggestions of contractors for every technical issues arising during the project. As highlighted by Stein (1982), misperceptions could influence the relationships negatively, as they usually give rise to conflicts. Logically, effective communication can solve the misperceptions. However, effective communication is not always easy or indeed possible in inter-firm relations. The potential misperception of inter-firm opportunism and expert power is in line with the theoretical findings of Ireland and Webb (2007).

7.4.3 Contractors’ post-contract mediated power

The data analysis revealed that practitioners in the construction industry tend to associate an important connection between the contractors’ power in the post-contract stage and inter-firm opportunism. The data analysis highlighted two elements in the contractors’ post-contract mediated power through two subcategories of findings, namely: ‘power originating from asset specificity’ and ‘role of contract in contractors’ power’. In fact, the first sub-category discusses the source of contractors’ mediated power in projects, and the second sub-category discusses the timing in the occurrence of such power.

7.4.3.1 Power originating from asset specificity

The data analysis revealed that practitioners in the construction industry associate change of contractors before project completion to a significant cost. They believe that this switching cost gives the contractor a significant margin for opportunistic behaviour.

The data analysis demonstrated that in each project there are investments conducted specifically for the project. The contractors cannot usually use these investments for other projects, and the clients cannot benefit fully from these
investments before project completion. If a client decides to change its contractor before project completion, it needs to bear the costs of these specific investments in addition to costs involved in redoing some tasks and renegotiation with the new contractors. The data suggested that clients and their consultants do their best to avoid such costs. Contractors are aware of this situation. Consequently, they are aware of the power they have to conduct advantage-seeking behaviours in an opportunistic manner.

The research informants highlight different issues involved in the contractor’s switching costs. Table 7-3 shows some of the costly elements in contractor switching costs highlighted by the research informants involved in major projects such as petrochemical plants, energy from waste (EFW) plants, and combined heat and power (CHP) plants.

<table>
<thead>
<tr>
<th>Cost</th>
<th>Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costs regarding the licence of plants</td>
<td>Data include examples of costs regarding the plant’s licence. For instance, one of the projects was a petrochemical plant. For that specific type of project at the time, there were only two licensors. The design contractor had an agreement with one of the licensors and was complying with its requirements. Some of the other potential contractors tend to use the other licensor. In case of changing the contractor, the client has to either find a contractor that can work with the current licensor or accept the costs incurred because of rearrangements in such a way that the project could comply with the other licensor. Both ways could be very expensive for the client.</td>
</tr>
<tr>
<td>Cost</td>
<td>Context</td>
</tr>
<tr>
<td>--------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Re-doing the designs</td>
<td>Cost of redoing design is repeatedly highlighted in the data as part of the switching costs. For instance, one of the projects was a petrochemical project under an EPC contract. The project plant capacity was the most ambitious project of its type in the world. The contractor had already scaled up its available design to meet the required specifications. Change of contractor meant re-designing as the current design was only compatible with the technology of the current contractor.</td>
</tr>
<tr>
<td>Spare parts</td>
<td>Availability of spare parts with other contractors has been highlighted as one of the main concerns in changing the contractors. In highly technical plants, sometimes the whole project needs to be under the technology of one contractor. In other words, practically, it is not possible to mix and match technologies from different providers.</td>
</tr>
<tr>
<td>Intangible costs</td>
<td>The data placed emphasis on the intangible costs specific to each case. For instance, one of the projects includes waste management facilities in a unionised area. The project contractor had made an agreement over local recruitments with the union. At some point, the workers walked out in protest at jobs being awarded to staff from other parts of the country. At the time of the interview, there were negotiations going on between the contractor and the related union. The research informants involved in this project was working in the project leader firm (contractor side). Amongst other prohibitive costs, he highlighted that legally they do not need to become involved in the conflict except to facilitate the talks between the union and the contractor. However, if they wished to change the contractor when the project is only partially finished, they would have legal responsibility with the union due to the agreement if the new contractor does not want to partake in the same agreement.</td>
</tr>
</tbody>
</table>
Human assets

<table>
<thead>
<tr>
<th>Cost</th>
<th>Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costs related to human expertise were highlighted as one of the important costs in substituting contractors. For instance, the data related to the petrochemical project include examples of such costs. The contractor was based in the UK and the project was in the Middle East. Great costs were involved in resourcing the practitioner from the contractor firm working on the site. The research informant involved in this project mentioned that he was shifting from another project of the contractor to this project mainly because the contractor needed someone with a better understanding of business culture in the Middle East. Such resource investments need to be redone again if the contractor is to be changed.</td>
<td></td>
</tr>
</tbody>
</table>

Table 7-3: Examples of costs involved in contractors’ switching cost.

Clearly, there are different costs involved in the switching costs. However, even in small residential projects, there are usually prohibitive costs involved in substituting the contractor. The data analysis revealed that practitioners involved in the inter-firm relations in the construction industry associate such cost with the contractor power. Contractors could potentially use such power to make the clients comply with their requests.

The costs involved in project specific assets are in line with the argument of transaction cost economics. As discussed earlier (section 2.3), Williamson (1975) argues that in transactions with high levels of asset specificity, there are higher risks of opportunism. This is in line with the construct of practitioners in the construction industry concerning the occurrence of opportunism.

As discussed by Winch (2006), in construction projects, there are significant costs involved in investigating what is done and what is yet to be done. In addition, switching cost involves redoing tasks that have already been done. Furthermore, new contractors will charge more as they are uncertain about the quality of the
work done (Winch, 2006). The examples provided in Table 7-3 are in line with Winch’s (2006) argument.

7.4.3.2 Role of contract in contractors’ power

The previous section discussed that practitioners place emphasis on the association between the contractors’ power and the risk of inter-firm opportunism. In addition, it provided examples from the data including sources of such cost. Another point revealed in the data analysis regarding the contractors’ mediated power concerns the time at which such power arises.

The data analysis revealed that practitioners view the contract formation as the point from which the contractors’ power arises. This is in line with Williamson’s (1985 and 1988) conceptualisation of contract formation when asset specificity is involved. In transactions with high levels of asset specificity, Williamson (1985 and 1988) refers to contract formation as a fundamental transformation. He discusses that “the fundamental transformation has reference to a situation where, by reason of asset specificity, an *ex ante* large-numbers bidding competition is transformed into what, in effect, is a bilateral trading relation thereafter” (Williamson, 1988, p. 574).

7.4.4 Shadow of the past and the future

As discussed earlier (in section 2.6), the initial review of the literature concerning the problem of inter-firm opportunism provided some conceptual footholds including the shadow of the past and the future. The relationship-based approach of new economic sociology (NES) which led to construct of the shadow of the past and the future as the research footholds is discussed in detail earlier in section 0. However, this section provides a brief overview of the concept of shadow of past and future again before discussing the related research results.

Generally, the shadow of the past refers to the past contacts with the other party, and the shadow of the future refers to expected likelihood that partners will have contact with each other in the future (Batenburg et al., 2003; Kamann et al., 2006; Ruuska et al., 2011). The importance of shadow of the past and the future in the discussion of governance of inter-firm relations is based on the idea that every
economic transaction happens in a social network of ties and contacts, in which the economic actors are connected to each other through relationships; these ties and contacts could play an important role in the behaviour of economic actors in an economic transaction. As discussed in detail earlier (section 0), new economic sociology (NES) conceptualised the ‘firm’s embeddedness’ as the level of ties and contacts a firm has with its economic partners as well as its contacts with third parties (Granovetter, 1985; Batenburg et al., 2003). NES argues that inter-firm opportunism has much to do with the level of a firm’s embeddedness, and shows that higher levels of embeddedness lead to lower levels of opportunism (Granovetter, 1985).

The fundamental insight of the studies suggesting consideration of the shadow of the past and/or the future in governance of the inter-firm relations is that in the case of a high level of firm’s embeddedness, inter-firm opportunism is lower when the shadow of the past and/or the future is stronger (Heide and Miner, 1992; Batenburg et al., 2003). Studies in the context of NES explain the role of the shadow of the past and the future by an actor’s learning from the partner’s behaviour and an actor’s boycott power for future transactions (Granovetter, 1985; Batenburg et al., 2003; Kamann et al., 2006).

As highlighted by Granovetter (1985), firms’ embeddedness could refer to a very broad range of involvement of economic actors in dyadic or network relations, including personal relations, institutional relations, and economic relations. Therefore, shadow of the past and the future could be seen in a very broad range of past and future contacts, including economic/non-economic relations, dyadic/network relations, organisational/individual relations, and so on. Considering the scope of this research, the conceptual foothold of the shadow of the past and the future was limited to the economic relations only.

### 7.4.4.1 Shadow of the future

The data analysis revealed that practitioners at the strategic level of firms tend to consider the likelihood of future economic relations with their current economic partners in their decisions regarding inter-firm conflicts. In other words, practitioners tend to consider the chance of having future projects with their current business partners in their inter-firm decisions and behaviours. Therefore,
they do not consider inter-firm relations in each project in isolation. However, the data suggested that the perceived value of potential future projects depends on the different issues, including the probability that future project relations will occur, the expected level of benefits in future projects, the market situation, the firm’s need for future jobs, and so on. Therefore, practitioners tend to refer to a casual cost-benefit consideration in their decisions about the shadow of the future. If they perceive the potential benefits of future jobs to be worth the compromises and flexibilities in the current relationships, then the shadow of the future will influence their inter-firm relations. Logically, this could give some negotiation power to the other parties if they are aware of the perceived value of the expected future jobs.

7.4.4.2 Shadow of the past

In contrast with the shadow of the future, the data analysis revealed that the practitioners do not tend to place significant value on the prior experiences with the other party in determining inter-firm behaviours in future transactions. In other words, they do not construct a large shadow for the past projects in relation to firms’ behaviour in future projects.

The data analysis demonstrated that practitioners believe construction projects are unique and therefore opportunistic behaviour occurring in one project may not be representative of the firm’s attitude/behaviour in other projects. They explain this by placing emphasis on the reality that construction projects are inherently unique, and the team members are not usually the same in different projects. In addition, in case of negative dyadic experiences between two firms prior to a project, practitioners in higher managerial levels, concerned with inter-firm relations, tend to arrange the project team members in such a way that individuals with prior non-cooperative relations do not work with each other in future projects. This could suggest that practitioners construct some negative influence for the shadow of the prior negative experiences when they are at the individual level.

Overall, the research findings regarding the concept of shadow of the past and the future have three main aspects. First, they argue that the practitioners involved in the inter-firm relations in the construction industry tend to consider the expected
future experiences in their current inter-firm relations. Second, the research findings suggest some levels of cost-benefit trade-off in consideration of shadow of the future. Third, practitioners construct considerably less value for the shadow of the past in comparison with the shadow of the future. In addition, it seems that shadow of the past receives some attention from the practitioners mostly when the negative prior experience is at the individual level.

The difference in the constructs of practitioners between the shadow of the past and the future was to a certain extent unexpected. This is because in the NES literature, the past and future contacts influence inter-firm opportunism and consequently the governance of relationships by the same logic (Granovetter, 1985; Batenburg et al., 2003). Therefore, based on the NES literature, theoretically, the future and past projects seem to have the same role in the construct of practitioners. This incompatibility will be compared with relevant studies in the next section.

### 7.4.4.3 Literature on the shadow of the past/future

The concept of shadows of the past and future and the theoretical logic behind its importance in the governance of inter-firm relations were discussed in detail earlier in section 0. This sub-section only refers to the existing literature in relation to the study’s findings regarding the shadow of the past and of the future.

As discussed earlier, the data analysis revealed that practitioners conduct a casual cost-benefit trade-off in deciding on the influence of expected future jobs on current inter-firm relations. In other words, they do not include the shadow of the future into the consideration because of the social norms, friendly relationships and so on. This is in line with Granovetter’s (1985) conceptualisation of firm’s embeddedness in new economic sociology (NES).

It might be worth mentioning that not all studies concerned with the shadow of the future originated from NES. For example, Heide and Miner (1992) and Parkhe (1993) used the concept of shadow of the future in the subject study of game theory. Similarly, they place emphasis on the calculative approach towards inclusion of the shadow of the future from economic actors. However, there are some normative studies that suggest the concept of the shadow of the future for
governance of inter-firm relations without consideration of economic motivations of parties. For example, Ruuska et al. (2011) claim that shadow of the past and the future have an impact on governance of any single project. Therefore, they suggest that both a practical and theoretical shift towards networks and relationship-based governance. They justify their view by claiming that these forms of governance will emphasise self-regulation. However, the data analysis in this study revealed that their view could be problematic if economic actors do not perceive sufficient economic motivations to avoid inter-firm opportunism under the shadow of the future. In other words, what if economic actors do not construct the shadow of the future sufficiently large to govern the inter-firm relation? In fact, using Granovetter’s (1985) language, Ruuska et al.’s (2011) view on shadow of the future is oversocialised.

As discussed earlier, another point revealed in the data analysis refers to the difference in the practitioner’s construct of shadow of the future and shadow of the past. As pointed out by Poppo et al. (2008), there are a limited number of empirical studies comparing the role of shadow of the past and the future, from which mixed findings emerge. Poppo et al. (2008) compared the shadow of the past with the shadow of future in a mixed methods study. Their research findings show in the context of manufacturing industries, that shadow of the future receives considerably more attention in practice than shadow of the past. Similarly, Welling and Kamann (2003) reached similar results through a game theory experiment. However, Batenburg et al. (2003) argue that the shadow of the past and the future both receive considerable attention in the IT industries in relation to the governance of inter-firm relations.

Kamann et al. (2006) argue that in practice in inter-firm relations, shadow of the past has different implications depending on whether the prior experience happened at the individual level or at the organisational level. They suggest that this difference might justify the mixed findings of studies concerned with the shadow of the past. Through a quantitative study, Kamann et al. (2006) argue that the shadow of the past receives considerably more attention if the prior experience happens at the individual level rather than the organisation level. This is in line with the data in this study. As discussed earlier, practitioners tend to avoid the consequences of the shadow of the past in inter-firm relations by project
teams which do not have negative prior experiences. In line with that, Maurer (2010) suggests a supportive role for the shadow of the past at the individual level in inter-firm relations in the development of trust.

The research finding in relation to perceiving less importance in prior experiences than future contacts regarding the problem of opportunism leads to another question concerned with the reasons behind this difference. While a limited number of studies (e.g. Welling and Kamann, 2003; Poppo et al., 2008) quantitatively reached similar findings, there is not much available on ‘why’ practitioners do not construct much value in the shadow of the past. It might be worth clarifying that an answer to such a question is not within the scope of this study, and the research design of this study is more appropriate to explore what is going on rather than why it is going on in a particular way.

### 7.4.5 A conceptual framework of inter-firm opportunism patterns

The previous sections discussed separately the four categories of findings involved in the construct of opportunism patterns in inter-firm relations, as shown in Table 7-4. By doing so, the study fulfilled its research objective to examine the social construct of inter-firm opportunism in the construction industry between clients and their suppliers. This section discusses the links and dynamics between the categories of findings. By doing so, the study provides a conceptual framework of the construct of inter-firm opportunism patterns. In fact, this conceptual framework is the theory grounded in the data. The way the four categories of findings interact with each other during a project plays an important role in understanding of the occurrence of inter-firm opportunism from the point of view of practitioners involved in the construction industry. In fact, the dynamics of power during a project is the core element of the research conceptual framework of inter-firm opportunism occurrence.

<table>
<thead>
<tr>
<th>Inappropriate contractual settings</th>
<th>Contractors’ expert power</th>
<th>Contractors’ post-contract mediated power</th>
<th>Shadow of the future</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sections 7.4.1.1 and 7.4.1.2</td>
<td>Sections 7.4.2.1 and 7.4.2.2</td>
<td>Sections 7.4.3.1 and 7.4.3.2</td>
<td>Section 7.4.4.1</td>
</tr>
</tbody>
</table>
As mentioned earlier in section 7.4.1, practitioners construct that clients have significant bargaining power in the construction industry in the pre-contract phase. Therefore, they have an important role in forming the contractual relations. Practitioners construct that clients tend to convert their bargaining power into mediated power which is based on the contract settings. This is perceived to influence their inter-firm relationships negatively.

While seeking to gain efficiencies through their bargaining power, clients may place emphasis on price and attempt to push risks and uncertainties onto the contractors. This is not troublesome on its own regarding the problem of inter-firm opportunism. The problem starts when inappropriate and incomplete contracts are involved.

Contracts inevitably tend to be incomplete due to the bounded rationality inherent in human beings (Williamson, 1975). In addition, in practice, many contractors tend not to identify/assess the risks or at least they tend not to reflect their risk-related elements in their bidding offer. A combination of contract incompleteness and clients’ bargaining power could result in contracts that are designed to be in favour of the clients but in reality lead to inter-firm opportunism. In these contracts, there is too much emphasis on the price whereas risks and uncertainties do not receive enough attention. Practitioners associate these inappropriate contractual settings with the problem of inter-firm opportunism (Figure 7-1).

It should be noted that links between concepts in Figure 7-1 should be read as connections rather than linear cause-and-effect relations. In fact, in Figure 7-1, the researcher depicts the associations constructed by practitioners in the construction industries.
Figure 7-1: Construct of inter-firm opportunism’s occurrence. Part 1/3.
Contract formation is perceived as a crucial point in the power dynamics between client and contractors. In the post-contract phase, project asset specificity gives rise to contractors’ switching costs, which in turn give rise to contractors’ mediated power. In inter-firm relationships affected by clients’ bargaining power and then their mediated power, it is perceived that, in the post-contract phase, contractors can influence the relationships by their mediated power originating from asset specificity. In addition, practitioners hold the view that contractors can take advantage of their expert power and its consequent information asymmetry to control the information flow in an opportunistic manner (Figure 7-2).
Figure 7-2: Construct of inter-firm opportunism’s occurrence. Part 2/3.
The data analysis revealed that not all possible sources of power are involved in the occurrence of inter-firm opportunism. For example, as discussed earlier in section 7.4.4.1, practitioners hold the view that the shadow of future jobs could affect the clients’ bargaining power. In addition, through a cost-benefit trade-off, the contractors may prefer to avoid opportunism when there are potentials for future jobs (Figure 7-3).

In addition, the study highlighted that contractors’ expert power in inter-firm relations could lead to misperception of opportunism. Logically, it may not be easy to correct such misperceptions when inter-firm relations are poor.

As mentioned in the literature review chapter (section 2.6), the research had borrowed a conceptual foothold as ‘the shadow of past jobs’ from the existing literature in its initial literature review (before interaction with the data). However, the data analysis revealed that the practitioners do not construct considerable value on the shadow of past jobs. This is because they hold the view that each construction project is unique and especially if the project team changes, the shadow of past jobs is not strong enough to have any significant effect on the risk of inter-firm opportunism.

It must be noted that while each category of findings provides some insights regarding different parts of inter-firm opportunism, only with the links and dynamics between them is a conceptual response to the research question possible. In fact, focussing only on some parts of inter-firm power could lead to an image which is partial and even misleading. Therefore, the research responds to its research question of ‘How do practitioners involved in the construction industry view the patterns of inter-firm opportunism?’ through the whole image, which is indeed the study’s explanatory theory grounded in the data. It is worth placing emphasis that while in positivist stance on grounded theory the study’s outcome is usually a theory with cause-and-effect relations, with the constructionist view, a grounded theory study could lead to explanatory
frameworks including links and associations between the concepts (Charmaz, 2006).
Figure 7-3: Construct of inter-firm opportunism occurrence. Part 3/3
7.4.6  Distinctive aspects of the study’s conceptual framework

In the previous section (section 7.4.5), the study provided a conceptual framework on the construct of inter-firm opportunism patterns in the construction industry. In this framework, the construct of inter-firm opportunism patterns was explained through the dynamics of power as explained in the research data.

Earlier, through the discussion of four categories of findings, different parts of this conceptual image were explained. In addition, in the discussion of each category of findings, the relevant existing literature was used to show the points of convergence and divergence in relation to each part. However, the study responds to its research question of ‘How do practitioners involved in the construction industry view the patterns of inter-firm opportunism?’ through the whole framework as its explanatory theory grounded in the data. This is why the previous section explained the framework as a whole which works as a connector between the categories of findings. This section compares the relevant existing literature with the study’s conceptual framework as a whole.

The study’s conceptual framework of inter-firm opportunism patterns has certain distinctive aspects. First, it attempts to explain inter-firm opportunism and its patterns as social constructs. Second, it uses a power perspective to explain the inter-firm opportunism patterns. Third, it encompasses concepts explainable by TCE theory as well as concepts explainable by power perspectives. In this section, these distinctive aspects of the study’s conceptual framework are highlighted through comparison with relevant studies. It might be worth highlighting that these distinctive aspects are the result of both the design of the study and the journey in the research analysis.

7.4.6.1  Constructionist view

The study’s constructionist view on patterns of inter-firm opportunism is one of its distinctive aspects. Ontologically, this research holds the view that humans create their constructs of opportunism and opportunism patterns. In this study, the researcher’s job was to see the world from the point of view of the research subjects, and to do this, the researcher acknowledges the subjectivity involved in interaction with the data. The justification behind the philosophical position of the
research was discussed earlier in section 3.3.5. This aspect of the study’s conceptual framework is the result of the research design.

The constructionist view of this study is not simply a label; rather it gives meaning and legitimacy to both the research questions and the research results.

**7.4.6.2 Power perspectives in inter-firm relations**

The study’s power perspective is one of the core aspects of its conceptual framework. As mentioned earlier, the concept of power has not received much attention in the construction management literature (Walker and Newcombe, 2000; Harty, 2005). The study’s framework grounded in the data places emphasis on the *dynamics* of power in inter-firm relations during the project in relation to the problem of inter-firm opportunism. In addition, it views power as a *socially constructed notion*.

**7.4.6.2.1 Episodic VS Non-episodic and Static VS Dynamic view of power**

In this study, the data analysis revealed that power balance is not always perceived to be in favour of one party during a project. While practitioners construct considerable client power before contract formation, they perceive noticeable contractor power after contract formation. In other words, the sources and nature of power vary in different stages of projects. Therefore, an episodic view on power could limit its understanding to power types existing at a particular stage. An episodic view of power could be more problematic in normative studies using the concept of power to highlight the most appropriate forms of contractual relations. This is because the contractual relations are set up at the very early stages of projects with specific power relations. However, these power relations may change during the project while the contracts usually remain the same. Therefore, having an episodic view on power balance could potentially lead to inappropriate contracts which are not suited to the remaining stages of the projects.

In addition, the research findings place emphasis on the dynamics of power. In other words, different sources of power influence each other as well as the occurrence of inter-firm opportunism. A static view of power could be limiting as
it implies that the source of power in situation A does not have much to do with how power arises in situation B. Similar to an episodic view, a static view on power could be more problematic in normative studies using the power balance to formulate appropriate contractual settings between firms.

For example, as shown in Figure 7-4, Cox (2001a) introduced a ‘power matrix’ to facilitate decision makings with regard to procurement strategies. While in any of their possible four power positions, both pre- and post-contractual power types are included (non-episodic view), the influence of power types on each other is not included. In fact, in Cox (2001a), power sources are viewed more independently.

![Power Matrix Diagram](image)

Figure 7-4: Power matrix. Source: Cox, (2001a).

Table 7-5 shows some of the studies used the concept of power in the context of project management. In Table 7-5, similarities with the current study are shown with tick marks. It might be worth emphasising that there were elements of the researcher’s subjectivity in the way they are categorised.
<table>
<thead>
<tr>
<th>Study</th>
<th>Research concern</th>
<th>Static/dynamic view episodic/non-episodic</th>
<th>Context</th>
<th>Research design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nam and Tatum (1997)</td>
<td>Innovation</td>
<td>Static &amp; non-episodic</td>
<td></td>
<td>Construction</td>
</tr>
<tr>
<td>Power and responsibility</td>
<td></td>
<td>Dynamic &amp; non-episodic</td>
<td>✓</td>
<td>Case study</td>
</tr>
<tr>
<td>Positive use of power</td>
<td></td>
<td>Dynamic &amp; non-episodic</td>
<td>✓</td>
<td>Case study</td>
</tr>
<tr>
<td>Cox (2001a)</td>
<td>Procurement</td>
<td>Static &amp; non-episodic</td>
<td></td>
<td>General</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Conceptual</td>
</tr>
<tr>
<td>Lonsdale (2001)</td>
<td>Inter-firm opportunism</td>
<td>Dynamic &amp; non-episodic</td>
<td>✓</td>
<td>General</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Conceptual</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Case study</td>
</tr>
<tr>
<td>Loosemore and Lam (2004)</td>
<td>Opportunism in Health and safety</td>
<td>Dynamic &amp; non-episodic</td>
<td>✓</td>
<td>Construction</td>
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<td>Survey</td>
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<tr>
<td>Chang and Ive (2007a, 2007b)</td>
<td>Hold-up problem</td>
<td>Dynamic &amp; non-episodic</td>
<td>✓</td>
<td>Theory testing/ case study</td>
</tr>
</tbody>
</table>
It might be worth noting that considering power as dynamic and non-episodic in inter-firm relations does not necessarily include discussion of power types (e.g. Loosemore, 1999).

Chang and Ive (2007a and 2007b) are two of the studies in the construction industry which use the concept of power in a non-episodic and dynamic view. In fact, Chang and Ive (2007a and 2007b) share interesting similarities with research findings of the current study. First, they highlighted the role of dynamics of power in client-contractor relationships in the construction industry. Second, they conceptualised power in pre- and post-contract forms in which the power relation is in favour of the client in the pre-contract stage, and then in the post-contract stage, the contractor could use its post-contract power arising from asset specificity to balance the power relations. They called this dynamic a ‘reversal of bargaining power’. These similarities are interesting, as Chang and Ive (2007a and 2007b) and the current studies have fundamental differences especially in terms of the research designs. In Chang and Ive (2007a), the study “aims to bring this line of inquiry [TCE] forward by putting forth a model to explain the reversal of bargaining power between client and contractor between the pre-contract and post-contract stages” (Chang and Ive, 2007a, p. 845). Therefore, they used both the power concepts and TCE-related concepts and through a mathematical model showed that TCE could explain the hold-up problem in the construction industry. Then, they used case studies to show the existence of their prediction in practice.
In contrast, the power dynamics depicted in this study are a result of an attempt to show how practitioners perceive the opportunism patterns. It might be worth mentioning that the role of expert power, and shadow of the future, and the construct of opportunism itself are other differences between the two studies.

**7.4.6.2.2 Constructionist conceptualisation of power**

In this study, as discussed earlier in section 6.5.4, power is viewed as a socially constructed notion. This is both consistent with the study’s general epistemological view and the way power is conceptualised in the data.

It may be difficult to judge whether or not a study uses the concept of power in a constructionist view when its philosophical view is not explicitly clarified. That is why Table 7-5 avoided including the paper’s positions in its comparison. However, one can describe the way power is conceptualised in some studies, based on their concerns, terminology, methodology, and so on. For example, Loosemore (1999) is concerned with *measuring* power. He claimed that organisational power “is measured by the extent to which one person induces a particular type of behaviour in another person” (Loosemore, 1999, p. 700). However, they acknowledged that it is not possible to measure power accurately because of methodological difficulties. Consequently, instead they attempted to measure the flow of communication between people as a ‘measurable and *reliable indicator* of their relative power’ (Loosemore, 1999, p. 700). It could be suggested that epistemologically, Loosemore (1999) leans more towards realism, and its conceptualisation of its ‘reliable’ indicator of power is more in line with Dahl (1957). Clearly, in Loosemore (1999), the meaning of power is given and the job of the researcher is to measure it. It must be noted that attempting to measure relative power cannot be the only reason for this argument. For example, Lu and Hao (2013) is another study which attempted to measure some types of power but differently from Loosemore (1999), they rely on how practitioners *perceive* the other party’s power as the measure of power constructed in an inter-firm relationship.
7.4.6.3 Power perspectives and TCE in one picture

The involvement of TCE and power perspectives in explaining the inter-firm opportunism patterns constructed by practitioners is one of the distinctive aspects of this research. There is a limited number of studies that encompass insights from both TCE and power perspectives. This could be because TCE, as a neoclassical theory, is preoccupied with the role of transaction characteristics in the occurrence of opportunism. Therefore, it provides a framework in which the relationship-based notions are not considered in explaining opportunism.

7.5 Chapter summary

The chapter attempted to discuss the study’s findings in relation to its two research questions concerning first, how inter-firm opportunism is perceived by practitioners involved in the construction industry, and second how they construct the patterns of inter-firm opportunism.

In response to the first research question, the research highlights that there is no one single view on inter-firm opportunism. Instead, practitioners’ perceptions about inter-firm opportunism could be viewed as a continuum. On one extreme side of the continuum, practitioners view inter-firm opportunism as a course of behaviour which is against the norms of co-operation. In contrast, on the other side of the continuum, practitioners view inter-firm opportunism only as courses of behaviour in which explicit terms of a contract are not honoured. Somewhere within this continuum, another approach exists in which parties do not involve themselves in whether or not a particular behaviour should be viewed as opportunism. In this view, they focus on who benefits from the situation. In addition, the research argues that the ‘feeling of win-lose relationships’ plays an important role in judging opportunistic behaviour in the construction industry. In fact, the study emphasises that practitioners in the construction industry ‘feel’ a win-lose inter-firm relationship rather than figuring it out on the basis of strict cost-benefit calculations. Finally, regarding the first research question, it is argued that in response to the risk of inter-firm opportunism, practitioners tend to conduct a cost-benefit trade-off between the costs associated with the opportunism and benefits in reducing the risk of inter-firm opportunism.
In response to the second research question, the study provides a conceptual framework which places emphasis on the dynamics of power relations in pre- and post-contract stages. This conceptual framework shows that by forming a contract, clients convert their pre-contract bargaining power to mediated power. In addition, in order to take advantage of their bargaining power, clients may set up inappropriate contractual relations which negatively affect the inter-firm relations. If this situation intertwines with the contractors’ power in the post-contract phase, it could lead to inter-firm opportunism. In addition, the study’s conceptual framework discusses that contractors’ expert power and potential future jobs both influence the inter-firm relationship.
Chapter 8 Conclusion

8.1 Structure of the chapter

This concluding chapter is composed of six main parts.

Section 8.2 reviews the contextual subject area within which the research was carried out, the rationale behind the research, and the necessity of the study. Then, it recapitulates the research questions and the research objectives.

Section 8.3 summarises the research design within which the research was carried out. Then, it summarises the research findings with respect to each of the research questions.

Section 8.4 explains how the whole research was pulled together by reviewing the flow of the thesis.

Section 8.5 outlines the contributions of the research to knowledge.

Section 8.6 highlights the limitations of the research which includes limitations inherent in the methodological design of the study, and limitations occurring in the practice of the study.

Finally, section 8.7 explains what is now needed based on both the contributions of this study and its limitations.

8.2 Review of the research context

The construction industry has been identified with fragmentation, adversarial relationships, opportunism, and high rates of disputes (Latham, 1994; Rahman and Kumaraswamy, 2002; Love et al., 2002a; Lu et al., 2014). These problems in the sector have negative implications on performance, overall satisfaction of parties involved in the sector, and so on (Rahman and Kumaraswamy, 2002; Li et al., 2012). Therefore, there has been a call for the improvement of inter-firm relations in the sector (Cox and Thompson, 1997; Love et al., 2002a). There is a general agreement in the literature that it is possible to reduce the relationships’ problems in the sector by formulating more appropriate governance strategies.
Therefore, the concept of governance has become one of the major themes of the relevant literature (Sanderson, 2012).

To contribute to the governance strategies which solve the problem of inter-firm opportunism, the construction management literature has borrowed theoretical frameworks from other branches of knowledge such as economics and sociology. Transaction cost economics (TCE) theory and relation-based approaches (such as new economic sociology- NES) are two prominent theoretical works in this area. Reviewing TCE and NES, the study argues that the differences in their suggestion of governance strategy exist because of the differences in the way they conceptualise the patterns of opportunism in economic relations. In other words, depending on how patterns of inter-firm opportunism are viewed, different governance strategies may be formulated. Therefore, the study argues that conceptualisation of the pattern of inter-firm opportunism has a lot to do with how formulation of the appropriate governance is approached, and consequently with solving the relationship problems.

The review of the construction management literature concerning TCE and NES demonstrated that these theoretical works were used both at both normative and explanatory levels. However, little is known about the concept of inter-firm opportunism itself and how it materialises within the construction industry. This is despite the reality that the construction management literature generally highlights inter-firm opportunism as one of the main sources of problems in inter-firm relations in the sector (Boukendour, 2007; Lu et al., 2014). The study suggested that to some extent this is because of the historical dominance of positivist attitudes in the construction management literature, which is not capable of inductive research on subjective and less quantifiable matters. Therefore, this study set out to contribute to filling this research gap.

This study was designed to provide insights on how practitioners in the construction industry conceptualise the pattern of inter-firm opportunism. Such insight extends the knowledge of how they approach governance strategies, and generally why they do what they do. Therefore, the overall aim of the study was to provide a conceptual framework of the patterns of inter-firm opportunism in
the construction industry from the points of view of the practitioners involved in the sector.

To this end, the following objectives were developed:

1. To review analytically the theoretical literature concerned with the problem of inter-firm opportunism

2. To review critically the construction management literature concerned with the problem of inter-firm opportunism

3. To examine the social construct of inter-firm opportunism in the construction industry between clients and their suppliers by analysing the interview data

4. To examine the social construct of the patterns of inter-firm opportunism in the construction industry between clients and their suppliers by analysing the interview data

5. To correlate the findings from the data analysis to construct a conceptual framework

6. To identify the limitations of the research and propose directions for further research

Table 8-1 shows the place each of the objectives was fulfilled.

<table>
<thead>
<tr>
<th>Objective</th>
<th>Chapter</th>
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<tr>
<td>Objective No. 1</td>
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<td>Objective No. 2</td>
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<td>Objective No. 3</td>
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<td>Objective No. 4</td>
<td>Chapters 5 &amp; 7</td>
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<td>Objective No. 5</td>
<td>Chapter 7</td>
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<td>Objective No. 6</td>
<td>Chapters 3 &amp; 7</td>
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Table 8-1: The research objectives and their relevant chapters.

By fulfilling the research aim and objectives, the research sought to answer the following two research questions:
1. How do practitioners involved in the construction industry develop the notion of inter-firm opportunism?

2. How do practitioners involved in the construction industry view the patterns of inter-firm opportunism?

8.3 Study’s response to its research questions

To achieve the research aim, the study limits its unit of analysis to inter-firm relationships between the projects’ clients and their first tier suppliers. This is because in practice there are fundamental differences in inter-firm relations between clients and their first tier suppliers and those between principal contractors and their subcontractors (Eccles, 1981; Winch, 2001). Holding a constructivist view, the study was guided by Charmaz’s (2003 and 2006) stance on grounded theory. To respond to its research questions, twenty semi-structured interviews were carried out in the UK, and the interview data were analysed according to grounded theory’s guidance.

Below, the study’s response to its research questions is summarised.

**How do practitioners involved in the construction industry develop the notion of inter-firm opportunism?**

The study argues that there are considerable variations between the constructs of inter-firm opportunism. These variations exist in terms of how inclusive practitioners’ conceptions of opportunism are. It was shown that some behaviours included in the inclusive construct are not considered opportunistic within its limited construct of the concept. The explanatory and social constructionist view of this study embraces these different constructs as multiple realities regarding the concept of inter-firm opportunism.

The study maintains that win-lose relationships are central to practitioners’ construct of inter-firm opportunism and they understand the win-lose nature of their relationships through feeling rather than by detailed calculations.

Furthermore, this study revealed that parties tend to view the risk of inter-firm opportunism for the whole series of transactions involved in a given inter-firm relationship. Therefore, in response to the risk of inter-firm opportunism in the
construction industry, the whole project is usually considered rather than simply a limited focus on a single transaction. In addition, in response to the risk of inter-firm opportunism through setting up contractual governance, parties usually conduct a casual cost-benefit trade-off. This trade-off is based on the cost and benefit associated with any possible contractual governance settings. Therefore, while firms take into account the costs of inter-firm opportunism, they do not make decisions solely on the basis of governance costs.

**How do practitioners involved in the construction industry view the patterns of inter-firm opportunism?**

In response to this research question, the study provided a conceptual framework on the construct of inter-firm opportunism patterns in the construction industry.

This study revealed that practitioners tend to perceive significant bargaining power for clients at pre-contract stages of projects. Clients may exert their bargaining power to exploit the market by forming contractual settings which are perceived to be in their own favour. If this happens, there is usually an overemphasis on price when the risks are not appropriately identified and/or allocated and uncertainties are not admitted. These inappropriate contractual governance modes influence inter-firm relations negatively. However, the dynamics of power relations change at post-contract stages. This is because practitioners in the construction industry associate the change of contractors before project completion with significant costs. They associate this switching cost with a mediated power for the contractors which could be used in an opportunistic manner.

In addition, the study’s theoretical framework highlights the influence of expert power constructed for the contractors on inter-firm opportunism. Contractors usually possess a higher level of knowledge about the technical issues of the projects. Practitioners associate this power with the risk of inter-firm opportunism. Contractors’ expert power also influences inter-firm relations in another way. When contractors deal with unforeseen technical issues, in some cases, clients misperceive the behaviour of contractors as opportunistic. This usually happens because clients and their consultants do not necessarily possess
the required technical knowledge to evaluate the decisions/suggestions of contractors for every technical issue arising during the project.

Grounded in the data, this study argues that practitioners at the strategic level of firms tend to consider the likelihood of future economic relations with their current economic partners in their decisions regarding inter-firm opportunism. The perceived value of potential future projects depends on different issues, including the probability that future project relations will occur, the expected level of benefits in future projects, the market situation, the firm’s need for future jobs, and so on. In contrast, practitioners do not tend to place significant value on prior experiences with the other party in determining inter-firm behaviours in future transactions. They justify this by placing emphasis on the reality that construction projects are inherently unique, and the team members are not usually the same across different projects.

In section 7.4, the study used the literature on the subject of power in inter-firm relations and TCE theory to discuss how the existing literature supports the research findings.

**8.4 Review of the research thesis**

Chapter 1 provided an overview of the research problem, and the research aims and objectives.

**Chapter 2** explored two prominent theories concerned with opportunism in economic relations, namely: transaction cost economics (TCE) and new economic sociology (NES). It was shown that these two theories conceptualise the occurrence of opportunism in economic relations differently, and therefore suggest different governance strategies in relation to the problem of inter-firm opportunism. In this chapter, it is shown that different conceptualisations of the pattern of opportunism lead to various governance strategies.

The chapter critically reviewed the studies concerned with inter-firm relations in the construction industry and argued that the construction management literature has benefited from TCE and NES at both normative and explanatory levels. However, there is not much available on how the pattern of inter-firm
opportunism is conceptualised by practitioners involved in the sector. Contributions to filling this research gap could provide a better understanding of why practitioners do what they do. In addition, it would facilitate the application any normative theory to the sector.

Chapter two highlighted the research rationale and clarified a research gap within which the research sits. In addition, it established some research footholds for the study. Chapter two fulfilled the first and second research objectives in this study.

Chapter 3 proposed a research design to discover how practitioners involved in the construction industry construct the notion of inter-firm opportunism and its patterns. In doing so, the chapter explained the study’s philosophical belief system grounded in social constructionism. Discussion of the research’s epistemological position explained why contributing to filling the research gap identified earlier would be a valid contribution to knowledge. In addition, such a discussion highlighted the philosophical framework within which the research is conducted. Then, the chapter discussed and justified grounded theory (GT) and more specifically Charmaz’s (2006) stance on grounded theory as its research strategy. Subsequently, the chapter explained how the study could be evaluated. Finally, the chapter discusses how GT studies are usually reported, and explained why the thesis is presented in a particular structural flow.

Chapter 4 described the data collection procedure and the research sampling method. Moreover, the chapter provided an overview of the research informants’ profiles.

Chapter 5 explained the data analysis process including the open coding, focussed coding, and construction of the theoretical categories of findings. The result of the data analysis process is five categories of findings, namely: ‘construct of inter-firm opportunism’, ‘inappropriate contractual settings’, ‘contractors’ expert power’, ‘contractors’ post-contract power’ and ‘shadow of the past and the future’. The chapter explained these categories of findings and presented some of the relevant interview excerpts for each category. Chapter 5 provided the research with potentials to fulfil its third and fourth objectives.
Chapter 6 provided a focussed review of the literature on the concept of power in economic relations. This is because the data analysis revealed that power perceptions play an important role in practitioners’ construct of patterns of inter-firm opportunism. To provide the research with terminologies in the subject of power in economic relations, the chapter provided a brief review of the concept of power in economic relations. Such a review crystallised the study’s view of power arising from the data analysis. Chapter 6 assisted the discussion of findings which was presented in the subsequent chapter.

Chapter 7 discussed the research findings in relation to the social construct of inter-firm opportunism and its patterns in the construction industry. It attempted to use the relevant literature to highlight the points of convergence and divergence in relation to each research finding. In addition, chapter 7 correlated the research findings from the data analysis to construct a conceptual framework of the construct of inter-firm opportunism in the construction industry. In fact, this conceptual framework as a whole is the research theory of the construct of inter-firm opportunism. The chapter used a visual image to explain the conceptual contribution of the research, and attempted to highlight the distinctive aspects of the study’s conceptual framework through comparison with relevant studies. Chapter 7 fulfilled objectives 3, 4 and 5 of the study.

8.5 Contribution to knowledge

First of all, regardless of the study’s theoretical framework, the research highlighted a research gap within the construction management literature and highlighted the necessity of addressing such a gap.

In addition, the study provided answers to two research questions. By doing so, it enhances the knowledge on what practitioners mean by inter-firm opportunism and how they conceptualise its patterns. In relation to the construct of inter-firm opportunism, the study argues that there are considerable variations in the conceptions of inter-firm opportunism. In other words, practitioners in the construction industry do not necessarily hold similar conception of inter-firm opportunism. However, the study argues that regardless of the differences in practitioner’s constructs, feeling of a win-lose relationship is central to the
construct of inter-firm opportunism. In addition, in response to the risk of inter-
firm opportunism, practitioners involved in setting up contractual relations
usually conduct a casual cost-benefit trade-off between costs and benefits
associated with reducing the risk of inter-firm opportunism.

Regarding the pattern of inter-firm opportunism, the study argues that the
bargaining power of clients in the construction industry in the pre-contract phase
may lead to inappropriate contractual settings which negatively affect the
relationships. If this situation intertwines with the contractors’ power in the post-
contract phase, it could lead to inter-firm opportunism.

Theoretically, in the bigger picture, a combination of a constructionist view to the
problem of inter-firm opportunism in the construction industry and a theoretical
framework which receives support from the extant literature on transaction cost
economics and power relations is unique within academia as far as the researcher
was able to establish.

8.6 Limitations of the research project

As highlighted by Saunders et al., (2009), each research project has its own
limitations; this research is no exception. Limitations in this research could be
categorised into two groups: first, limitations that were inherent in the research
design of the study, and second, limitations that occurred during the research
practice.

8.6.1 Limitations inherent in the design of the study

• This study used interview data. In interviews, similar to carrying out any form of
conversation, meanings are handled and modified through an interpretive process in
which both the interviewee and the interviewer play important roles. This problem
was explained in detail earlier (section 3.6.4), using symbolic interactionism.
Therefore, the interview data do not reflect what the interviewees have in their minds.
This limitation is inherent in most of qualitative studies and this research is no
exception, although attempts were made to reduce its effect.

• The research was carried out in the UK within a specific period of time. The study
acknowledges that the findings of this research reflect the relevant constructs in
the UK and in a specific period of time, and they may not be applicable to other contexts.

- The research limited its scope to inter-firm relationships between clients and their first tier contractors. Considering that fundamental differences exist in practice between inter-firm relations with sub-contractors, the research findings may not be applicable to inter-firm relations between principal contractors and subcontractors.

### 8.6.2 Limitations in practice of the study

Constant comparative analysis is an essential element of grounded theory research. However, in this research, not all the potentials of this strategy were materialised. This was mainly because of the problem of access to research informants. For instance, during the data analysis, to compare the sets of data with each other, the researcher was interested in conducting interviews with research informants who had experience of working in industries with a limited number of potential contractors. Although an attempt was made to arrange interviews with practitioners in the railway industry, due to practical problems, these interviews did not happen.

### 8.7 Recommendations for further research

Considering both the limitations and findings of this study, the following recommendations for further research are suggested:

- This study was limited to inter-firm relations between clients and their first tier contractors. However, the relationships with the subcontractors play an important role in the behaviours of the first tier contractors. The construct of inter-firm opportunism in relationships with the subcontractors and its interaction with the client-contractors relationship is an interesting avenue for further research.

- This study argues that practitioners understand win-lose relationships with their economic partners through feeling them rather than by strict calculations. The next question could concern the process of such understandings and the elements that facilitate and/or make difficult such understandings. This provides an
interesting avenue for further research. In addition, it could assist the industry practically to avoid misperceptions about win-lose relationships.

- The research argues that in the construction industry, practitioners do not tend to place significant value on prior experiences with the other party in determining inter-firm behaviours in future transactions. However, the study does not provide much information on the reasons behind this. Practitioners justify their comments with the uniqueness of the construction projects. It could be interesting to compare this opinion of practitioners in the construction sector with the construct of practitioners in other industries.

8.8 Recommendation for practitioners

This research did not intent to be a normative study. In other words, there has been no intention to answer how things should be. Instead, it attempted to answer the questions concerned with how things are constructed by people. However, the study’s results provide some useful insights for the practitioners.

The study shows that there is not one single understanding of inter-firm opportunism within the practitioners involved in the construction industry. Therefore, the research recommends the practitioners not to assume that all parties are sharing similar understanding of the concept of inter-firm opportunism.

In addition, the study provides a framework of the concept of inter-firm opportunism constructed collectively in the construction industries. By doing so, practitioners could have access to insights into how the concept is perceived by other parties.
References


Eriksson, P.E. (2010) 'Partnering: what is it, when should it be used, and how should it be implemented?', *Construction management and economics*, 28(9), pp. 905-917.


Granovetter, M. (2000)'A theoretical agenda for economic sociology', *Center for Culture, Organizations and Politics*. University of California Berkeley, US. Available at: https://escholarship.org/uc/item/4mk4g08q (Accessed: 30 July 2014).


contract type on communication between project owner and manager', 


Pryke, S.D. (2004) 'Analysing construction project coalitions: exploring the


construction project', *Construction Management & Economics*, 18(1), pp. 37-44.


Appendix A
Participant Information Sheet

Title of the Research
Inter-firm opportunism in the construction industries
(Working title)

What is the aim of the research?
The overall aim of the research is to find out how practitioners view inter-firm opportunism in the construction industries.

The construction sector is adversely affected by non-cooperative behaviour, opportunistic behaviour, claims and disputes. Costly governance process and policing mechanisms all derail the project resources from delivering the project success. The literature on the field of construction project management has placed emphasis on the role of better inter-firm relations. This PhD research is concerned with the role of inter-firm relations in decreasing inter-firm opportunism.

What would I be asked to do if I took part?
1. If you decide to take part, you will be asked to give your consent through the consent form attached to this email. Then, an interview will be arranged at the mutual convenient time/place.

2. The interview will be audio recorded.

3. The interview is expected to take up to an hour in which the researcher will ask about the following issues;

*. Background of the interviewee

*. Preventing the co-operation problem, opportunistic behaviour, and dispute in construction industries.

*. The influence of contracts on the behaviour of main parties involved in the projects.
4. Although the interview is expected to take less than an hour, the interviewees are free to talk as much or as little as they would like.

How is confidentiality maintained?

All data will be treated confidentially. Any identifying information with the interviews will be removed from the transcripts. Only the researcher will get access to the original recording, and all the recorded data will be destroyed after transcription. Confidentiality and anonymity will be guaranteed. The researcher will hold consent forms and transcripts in a lockable file in the University of Manchester for 5 years following completion of the study after which time they will be destroyed. The transcript of your recordings will be sent to you if require.

What happens if I do not want to take part or if I change my mind?

You do not have to take part in the interview. If you do enter, you are free to withdraw at any time without having to give a reason for withdrawing. If you wish, your data will be destroyed.

Is there any potential risk for me if I take part?

There are no anticipated risks to participants associated with the study. However if the study raises any issues, you will be able to discuss any matters further with the study supervisor Peter Fenn whose contact detail will be made available.

Will I be paid for participating in the research?

No

Where can I obtain further information if I need it?

Should you need any more information please contact me at elika.aminian@postgrad.manchester.ac.uk
Appendix B

CONSENT FORM

If you are happy to participate please complete and sign the consent form below.

Inter-firm opportunism in the construction industries (working title)

1. I confirm that I have read the attached information sheet on the above project and have had the opportunity to consider the information and ask questions and had these answered satisfactorily.

2. I understand that my participation in the study is voluntary and that I am free to withdraw at any time without giving a reason.

3. I understand that the interviews will be audio-recorded

4. I agree to the use of anonymous quotes

I agree to take part in the above project

Name of participant ___________________________ Date ___________ Signature ___________

Name of person taking consent (if different from researcher) ___________________________ Date ___________ Signature ___________

Elka Amorini
Name of researcher ___________________________ Date ___________ Signature ___________
Appendix C
Research Ethics Approval

Miss Elika Aminian
School of Mechanical, Aerospace and Civil Engineering
13th July 2012
Dear Elika

Research Ethics Committee 5 (Flagged Humanities) - Project Ref 12086

Decreasing non-cooperative behaviour in construction industries through more Appropriate forms of contracts (working title) (ref 12086)

I am writing to thank you for Lucy McLellan being able to meet with the University Ethics Committee 5 (flagged Humanities) on 18th June 2012 and for providing the requested amendments to your application. This letter formally confirms approval for the above project and that no further changes are required to the documentation submitted to the committee.

This approval is effective for a period of five years and if the project continues beyond that period it must be submitted for review. It is the Committee’s practice to warn investigators that they should not depart
from the agreed protocol without seeking the approval of the Committee, as any significant deviation could invalidate the insurance arrangements and constitute research misconduct. We also ask that any information sheet should carry a University logo or other indication of where it came from, and that, in accordance with University policy, any data carrying personal identifiers must be encrypted when not held on a university computer or kept as a hard copy in a location which is accessible only to those involved with the research.

Finally, I would be grateful if you could complete and return the attached form at the end of the project.

I hope the research goes well.

Yours sincerely

Jared Ruff
Senior Research Manager
Faculty of Humanities and Secretary to URC 5 (Flagged Humanities)
0161 275 0288

Jared.ruff@manchester.ac.uk