An exploratory study of recharging mechanisms in a Shared Service Context

By

YE LU

A Master's Thesis

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Abstract

It is claimed that the transformation of business support services through some form of ‘externalization’ mechanism such as the shared service center (SSC) model can drive down costs and enhance functionality. A key characteristic of the SSC’s rationale is its ability change by replicate the characteristics of third-party outsourcing, whilst also retaining overall management control within the boundaries of the organization. In such a market-oriented model, it should follow that a key feature of an SSC is the recharging of its costs to its customers, the business facing operational units. Yet, in offering a hybrid solution combining characteristics of market and hierarchy, it could be expected that the recharging for support services will seek to combine the tenets of both market-orientated transfer pricing with cost allocation methods traditionally associated with internal cost centers.

The motivation of this study is the increasing prevalence of the SSC model amongst large organizations in the face of a relative paucity of contemporary literature on transfer pricing and cost allocation in new organizational forms, especially the SSC model. The central theme of this study is to explore the recharging mechanisms applied by different SSCs and their organizational effects in terms of balancing market coordination between the SSC and its customers and top management control.

Three case studies were undertaken to explore how SSCs recharge the costs for the finance function as a business support services and the effects on managerial behaviors of both the SSC and business units. Drawing on theory of organizational structure, transaction cost economics (TCE) and agency theory, a conceptual framework was constructed to guide the analysis of the empirical evidence.

The findings of this study include: 1) The choice of recharging method can be either transfer pricing approach (direct recharge) or cost allocation (indirect recharge), contingent upon; the governance orientation of each organization, asset specificity and extent of transactions, uncertainty and opportunism and bounded rationality. 2) Mandating the choice of recharging mechanism given the asymmetric bargaining power between the SSC and the head office could cause agency problems within the organizations, although this could be mitigated by transparency of information, appropriate coordination mechanisms, and performance measurement based on mutually agreed budget targets. 3) Recharging mechanism is fluid over time and in one of the cases (i.e. DHL Express) it is found that the transfer pricing can be used in the first stages of SSC implementation to drive change, but on maturity there is a reversion to broad brush cost allocation to better enable overall system optimization with reduced transaction costs.

**Keywords:** shared service centers, transaction costs economics, agency theory, transfer pricing, cost allocation, case study.
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Terminology

Shared Service Centre (SSC)

“Shared service is a collaborative strategy in which a subset of existing business functions are concentrated into a new, semi-autonomous, business unit that has a management structure designed to promote efficiency and value customers of the parent corporation, like a business competing in the open market” (Bergeron, 2003).

Function-Based organization

A medium to large organization within which support activities are grouped into departments along the lines of professional disciplines such as finance, human resources, IT and procurement.

Multi-divisional organization (M-form)

An organization with several semi-autonomous divisions under the overall control of a central management board.

Cost

The amount of cash or cash equivalent paid or the fair value of other consideration given to acquire an asset at the time of its acquisition or construction (IAS 16).

Cost allocation

“To assign a whole item of cost, or of revenue to a single cost unit center, account or time period” (Eaton, 2005).

Price

The payment that given by one party to exchange for a good or service. It is normally expressed in the units of currency.

Transfer price

The price of the product transferred from one segment of an organization to another segment of the same organization (Horngren and Foster, 1987).

Divisions

A business unit within a larger organization, usually multi-divisional organization, that has a significant degree of autonomy and being responsible for developing and
marketing their own products/services, also referred as strategic business units (Eaton, 2005)

Departments

Productive or other support service units operating as a cost centers in a function-based (U-form) organization.

Recharging Process

How the SSCs recharging for the support services it provides, including the frequency of recharging, recharging targets,

Recharging method

The way the SSCs recharges for the support service it provides, either through transfer pricing approach (recharge directly) or cost allocation approach (recharge indirectly), by using actual or budgeted numbers.
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Chapter 1 Introduction

1.1 Introduction

Since the 1980s, there has been a trend for organizations to transform business support services through some form of ‘externalization’ mechanism such as the Shared Service Center (SSC) model (Ernst and Young, 2011). It is claimed that this process of unbundling support activities from divisions and then centralizing them into a semi-autonomous business unit can help to both drive down costs, improve service quality, and more generally enhance the functionality of discipline-based activities such as finance, IT, HR and procurement (Herbert and Seal, 2012). A key plank in the reconfiguration of many finance functions is the creation of an SSC both to aggregate work to achieve economies of scale and scope and to drive the process of change by introducing a sense of a market-discipline, underpinned by the SSC recharging its service activities to its customer divisions.

From a wider perspective, the SSC model could be regarded as a significant reconfiguration of a multi-divisional corporation (Sako, 2006; Helper and Sako, 2010; Gospel and Sako, 2010).

The Multi-divisional firm (MDF) as articulated by Chandler (1962) seeks to combine central control and coordination across the organization with the discipline of markets in ‘local’ business units (Williamson, 1975). The aim is to optimize operational efficiency and organizational effectiveness. In line with this thinking, the SSC is positioned as a hybrid governance model that has a market orientation, on one hand, balanced with ongoing hierarchical control on the other hand (Herbert and Seal, 2012). As a new organizational form, the SSC offers an important contribution, to the transformation of professional functions that have, hitherto, been of a role-based, bureaucratic, leaning, although the concept is still relatively new and academic research in this field is only just starting to emerge.
According to Porter's value chain (Porter, 1985), activities can be split into two groups: primary activities that directly relate to product production, service providing, sales and delivery; and secondary activities that include financial, human resources, technology and procurement activities. Secondary activities, such as finance, complements the fulfillment of primary activities. In most management accounting textbooks (e.g. Horngren and Foser, 1987; Drury, 2008; Garrison and Noreen, 2000; Kaplan and Atkinson, 2000), the costs associated with primary activities are usually direct costs which could be traced to a cost object. For example, one unit of finished goods might require one kilogram of a particular material or in the case of service requires one hour of labor. However, unlike direct costs, the costs associated with secondary activities are normally indirect and generally cannot be attributed to specific goods or services. Secondary activities are undertaken by support service departments/divisions and typically benefit multiple types of finished goods/services. For instance, financial services are provided across the organization, no matter which production line/department it benefits and its cost is usually treated as divisional overheads, or central costs. The latter can either be absorbed by the head office or be reallocated to different departments/divisions by using management accounting techniques, such as activity-based costing or a more broad-brush basis of cost allocation. In this circumstance, support service activities are framed as a cost allocation problem.

Whilst, ostensibly, just another central department, but an SSC actually operates as a semi-autonomous center within a company, the recharging of a support service should no longer be a pure cost allocation issue but alternatively, reflect a more market-based mechanism by adopting a transfer pricing strategy. However, in practice, the recharging of internal support services generally captures the characteristics of both cost allocation and transfer pricing (Scrace and McAuley, 1997).

This research will focus on the organizational context of SSCs and the finance function, in particular, to investigate the nature and practical application of recharging mechanisms to recharge the cost of support services and the behavioral implications for both the SSC and client business units. In doing this the thesis will synthesize the twin
literature of cost allocation and transfer pricing to develop a theoretical basis for exploring the functioning of recharging mechanisms implemented by SSCs in practice.\footnote{Although the transfer pricing and cost allocation could also be synthesized in the internal transactions of tangible goods, this study will focus on recharging mechanism applied in the context of support services.} The next section: 1.2, will briefly discuss cost allocation and transfer pricing issues in traditional organizations. Following that, the nature and context of the SSC within the MDF will be introduced. Section 1.3 will define the research problems and explain the purpose of this research. The chapter closes with the explanation of the structure of this thesis.

### 1.2 Cost allocation and transfer pricing in traditional organizations

Cost allocation is a pervasive topic in management accounting partly because it is driven by the need for inventory valuation as a part of statutory financial reporting, and partly because knowledge of the full cost of products/services is required to set external prices, and also to establish internal transfer prices and inventory valuations for performance evaluation via management accounts. Thus, cost allocation drives managerial behaviors (Zimmerman, 1979; Kaplan and Welam, 1974; Horngren, 1977). In addition to the notion of evaluation based on allocated costs, transfer pricing (TP) seeks to set a ‘fair’ economic price for products/services supplied internally and this should improve performance evaluation and central decisions about resource allocation between divisions. In theory, the use of market prices and market freedom enables business units to buy from outside if services/products are available at a better value. Thus, business behaviors on the part of business units and the potentially supplying units reflect market principles more closely and thus, should lead to better cost consciousness in resource consumption. Cost allocation tends to assume that business units are mandated to buy internally in the interest of the wider organization
acknowledgment of the value transferred. Cost allocation and transfer pricing approaches tend to be treated as two individual topics in teaching materials and academic research of management accounting. The next two sections will explain these two topics (i.e. cost allocation and transfer pricing) as a prelude to considering how they might both contribute to the hybrid governance structure of the SSC model.

1.2.1 Cost allocation

Cost allocation is a key topic in most management accounting textbooks (Horngren and Fosher, 1987; Drury, 2008; Garrison and Noreen, 2000; Kaplan and Johnson, 1987). Overheads and common costs are not directly associated with the production of final goods or services but rather they ensure the enablement of operations within the business such as the cost of administration. These overheads are usually assigned to a final product or service by using either the traditional or activity-based costing method (Drury, 2008). Most textbooks focus on the technical skills of performing cost allocation calculations (Garrison and Noreen, 2000; Drury, 2008) whilst academic papers link cost allocation with performance measures (Balachandran and Ramakrishnan, 1982); the concept of fairness (Chua, Mak and Hooper, 2001) and the role of agency theory in encouraging good organizational behaviors (Zimmerman, 1979).

Cost allocation is not just a necessary step needed to accurately calculate the full cost of a product for profit measurement, but it is also a tool used to fairly measure departmental or divisional performance and a “useful device for controlling and motivating managers” (Zimmerman, 1979). However, there are relatively few studies that focus on the organizational effects of cost allocation (Zimmerman, 1979; Ahmed and Scapens, 2000; Rogerson, 1997; Modell, 2002). According to such articles, costs incurred by an SSC should be shared fairly across those departments or divisions that benefit from its common services. If these costs are not directly recharged to the
customers but alternatively absorbed by the head office, i.e. treated a cost allocation issue, and thus, one might not expect the same level of cost consciousness (and therefore good behaviors) on the part of divisional managers as they will not be able to so readily appreciate the causal linkages between their demands on the SSC’s activities and the overall cost to the company. Equally, the SSC’s managers have little incentives to manage their own cost base because the division has no discretion to buy from elsewhere.

1.2.2 Transfer pricing

Transfer pricing theory developed to explain how a ‘fair’ charge could be applied to make a division value the products/services they receive from internal sources (Horngren and Foster, 1987) within an MDF (Chandler, 1962). TP is typically applied when one division transfers tangible goods to another division but is also appropriate when support services are transferred between divisions, or between a central support function, say, finance and a business facing division (Thomas, 1980).

There have been a number of conceptual transfer pricing studies conducted in the last few decades, addressing topics such as the purpose of using transfer pricing (Spicer, 1988); determinants of transfer pricing change (Boyns, Edwards and Emmaunel, 1999) ; relative benefits of applying transfer pricing (Mcaulay and Tomkins, 1992); single or dynamic transfer pricing model (Eccles, 1985) and organizational view of transfer pricing (Watson & Baumler, 1975; Meer-Kooistra, 1994; Swieringa & Waterhouse, 1982). Some researchers (e.g. Borkowski, 1990, 1992, 1997; Tang, 1992, 1980; Cravens and Shearon, 1996, Adler, 1996, Banke & Edwards, 1980) have collected empirical data and used quantitative methods such as surveys to find out the transfer pricing methods chosen by organizations in practice. After realizing the knowledge-practice gap in transfer pricing, and in response to the call for conducting research in an organizational context (Scapens, 1990, Kaplan, 1986), case studies were
undertaken by academic researchers since the 1980s (Eccles, 1985; Colbert and Spicer, 1995; Perera, McKinnon and Harrison, 2003). These studies generally focused on transfer pricing methods and linked these to 1) the administrative process; 2) behavior context and 3) transaction cost economics (Williamson, 1985).

In the wake of globalization, intra-firm transactions across national borders have increased significantly in the past 20 years. For example, intra-firm trade\(^2\) accounted for 42% of US international trade in goods in 2004 (Akram, Khan, and Holladay, 2007) and the trade between affiliated organizations in European Union and the United States accounted for 50% of total merchandise trade between these two sides in 2012 (Lakatos and Fukui, 2013). This phenomenon has focused the attention of both academic researchers and consultants on international transfer pricing (Bartelsman and Beetsma, 2003; Clausing, 2000; Baldenius, Melumad and Reichelstein, 2004; Sikka and Willmott, 2010; Rossing and Rohde, 2010). For instance, Sikka and Willmott (2010) provided evidence to show how some organizations used transfer pricing practices to avoid tax.

Although academic papers and consulting reports in transfer pricing reflect a wide range of perspectives, relatively few have provided an in-depth understanding of the actual implementation process in the organizational context. Moreover, to the best knowledge of the researcher, there are no previous studies to explore how this management accounting technique is implemented in the context of the SSC model.

Thus, the purpose of this study is to explore the recharging process for support services provided by SSCs. In order to gain an in-depth understanding of this process, cost allocation and transfer pricing issues will be discussed in the SSC context. The next section will explain the context of this research.

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\(^2\) Intra-firm transactions are the transactions between affiliates of one company or between an affiliate and the parent company account for a large amount of total trade.
1.3 The context of this research—Shared Service Centre (SSC)

Since the first shared service center (SSC) was set up in the US in 1986 (a Client Business Service of The General Electric Company), this new organizational form has been a great success (Ernst and Young, 2011) and there is a general trend nowadays to unbundle business support activities from divisions and aggregate those activities into a common shared service center within large MDF, see figure 1.1

![Shared Service Centres - New Relationships-structural characteristics](image)

Figure 1.1. Organizational structure of the SSC model (Herbert and Seal, 2012)

A report by Ernst and Young (2011) claimed that over 80% of multi-national companies had established their own SSC(s). A similar report by PriceWaterhouseCoopers (PwC) (2011) claimed that over half (59%) of the respondent organizations in their survey had increased their reliance on in-house shared service deliveries. Most of the organizations with SSCs had set up them primarily to reduce costs, although many reported that they had also benefitted from better system compliance, more effective service to customers, and the opportunity to fundamentally re-engineer administration processes and enforce
The success of the SSC model not only attracts the interests of consulting companies but also academic researchers, who have discussed the benefits and challenges of setting up SSC, the motives of setting up SSC and how to achieve success with SSC model (Meijerink and Bondarouk, 2013; Aksin and Masini, 2008; Janssen and Joha, 2006; Gospel and Sako, 2010).

As a semi-autonomous division within a company, an SSC would be expected to recharge its customer divisions for the support services they receive for several reasons. First, to demonstrate that its operational costs had been allocated fairly to business facing units and thus, were included in the full economic cost when decisions about selling prices are made. Second to reflect the actual value of the service against a benchmark market price (Lynch, 2011). Third, to evaluate properly the SSC’s performance and that of the receiving divisions within the organization. Fourth, to encourage good behaviors on the part of management in both SSC and other divisions (Deloitte, 2006) and thus, improve the efficiency and effectiveness of the overall organization (KPMG, 2007). Fifth, to provide cost information on the SSC to the top management for monitoring the performance of the SSC, especially against potential third-party BPO vendors. Finally, to set competitive prices if the SSC the capacity to provide services to external customers. (see Quinn, Cooke, and Kris, 2000; Bergeron, 2003).

Yet, there is relatively little academic research that has focused on setting prices or recharging for the support services provided by SSC (Carlsson and Schurmann, 2004; Goold, Pettier and Young, 2001). Perhaps this is not surprising as it is a difficult issue for even the most experienced organization with significant experience in SSCs (Deloitte, 2006). On the other hand, authors with a practitioner background have been more proactive in making suggestions about recharging processes in the SSC. For
example, Quinn, Cooke, and Kris (2000) defined four stages of SSC and suggested different recharging mechanisms at each stage. In the first (basic consolidation) and second (marketplace) stages, they suggested services ought to be absorbed by the head office or recharged out to simply recover fully-loaded costs based on actual activity. When the SSC reaches the third (advanced marketplace) stage, they recommended market-based pricing (using external benchmarks) and if the SSC operates as an independent business which is the final stage, the recharging mechanism should be cost plus profit. The basic recharging mechanism is associated with common cost allocation problems in management accounting while the recharging mechanisms in the advanced marketplace stage and independent business stage are relevant to transfer pricing.

Cost allocation and transfer pricing are both key topics in management accounting textbooks but are invariably addressed as separate issues. Cost allocation is argued to be highly firm-specific and it is difficult to determine general rules (Zimmerman, 1979). A majority of accounting literature especially, management accounting textbooks adopt a normative stance and focus on the discussion of technical issues with regard to cost allocation. Only a few academic researchers link cost allocation with organizational factors such as 1) why firms persist in allocating costs? (Zimmerman, 1979; Fremgen and Liao, 1981; Ramadan, 1989) and 2) behavioral effects of allocating costs (Kaplan, 1977; Horngren and Foster, 1987; Zimmerman, 1979). In terms of transfer pricing, academic scholars have previously tended to emphasize the importance of linking transfer pricing with organizational factors, although from around the 1980s, attention has been shifting towards international transfer pricing and the more specific issues of allocating ‘fair’ production costs in the computation of tax across a multi-national organization’s various local taxation domains. As a consequence, updated studies of cost allocation and transfer pricing in organizational contexts have been somewhat neglected, especially case studies that are concerned with explaining both cost allocation and transfer pricing in an individual organizational context such as the SSC. This research seeks to fill this gap in the academic literature and seek to gain an in-
depth understanding of the recharging process for support service provided by SSC. The purpose and aims of this research will be explained in the next section.

1.4 Research Purpose

The purpose of this research is to investigate the process of applying the recharging mechanisms in an SSC environment and to evaluate its effect on managerial behaviors in the customer business units and within the SSC itself. Whether the SSC has the authority to apply a recharging mechanism and which recharging mechanism is chosen depends on the level of authority delegated to the SSC and in turn, is implemented by strategy, structure and governance mechanism of the individual organization. During the recharging process, the amount recharged is linked to measurement of departmental/divisional financial performance. For example, if the service receiving divisions consume more of the SSC’s resources, they should be recharged more, therefore, the recharging process influences both the divisional performance and divisional managers’ behaviors.

This issue links the twin theories of transfer pricing and cost allocation. In the process of discovering the application process of recharging mechanism and exploring its influence on managerial behaviors, this research also connects to transaction cost economics (Williamson, 1985) and agency theory. Reviewing existing literature could help to build a theoretical framework yet, its verification and development require empirical evidence from the real-world to be valid. This enquiry will start from the integration of existing theories and then an analysis of the phenomenon observed in the empirical world, bearing in mind the identified ‘gap’ between knowledge and practice in both cost allocation and transfer pricing. The main contribution of this research is the refinement and development of existing theories of cost allocation and transfer pricing.
This research seeks to answer two questions:

1. *To what extent do SSCs charge their costs to client units? In doing so are incurred costs simply allocated on a broad-brush basis, or is a transfer pricing mechanism used to position professional support services as an internal market?*

2. *How does the choice of recharging mechanism effect management behavior in the SSC and client divisions?*

### 1.5 Thesis structure

This introductory chapter has explained the background of support services and defined the research questions within the boundaries of the research context. The next stage is to review relevant literature (Chapter 2) to provide greater depth in the background information and identify any gaps in existing literature or gaps between literature. The aim is to ensure that this research can make a theoretical contribution to the field of management accounting. As mentioned before, apart from existing literature of transfer pricing and cost allocation, this research will also refer to transaction cost economics (Williamson, 1985) and agency theory to build the conceptual framework to provide guidance for the empirical research, which will be discussed in Chapter 3. In order to answer the research questions, it is necessary to develop an appropriate methodology to guide the empirical work. Crotty (1998) defined four elements of research methodology: the epistemology informing the research, the philosophical paradigm of research, the plan of research actions, and the particular techniques that will be used. Details of these four elements will be discussed in Chapter 4, which will provide the guidance for the next research stage. Some qualitative research techniques such as interviews and documents analysis will be used for data collection, the reasoning behind each will be explained in Chapter 4. The research design and structure of the thesis is summarized in the following figure:
Chapter 5, 6 and 7 will each start with the descriptive information of the case organizations and the recharging mechanisms applied in their SSCs. The cross-case analysis and refined theory and/or framework will be discussed in Chapter 8. This thesis will end with some conclusions which will also elaborate on both the contributions and limitation of this research in Chapter 9.
Chapter 2 Literature Review of recharging mechanism

2.1 Introduction

In his book *Competitive Advantage*, Michael Porter (1985) presents a value-chain framework based on a process view of the organization. The idea is that organizations are converting inputs such as money, labor, materials, etc. into outputs which are final products or services for sale. The value of the final product or service is created and incrementally added across the value chain. Typically, there are hundreds of different sub-activities in the overall conversion process which Porter splits into two process streams: primary activities and secondary activities, as shown in Figure 2.1. Primary activities are those activities that physically produce final products, delivery services or are associated with sales, delivery and the after-sales service. Popesko (2009) argued these activities are to "satisfy external demands" (p. 92). Secondary activities, also referred to as support activities, cover financial, human resource, technology and procurement activities, etc., which create the conditions to ensure the primary activities proceed successfully and effectively (Porter and Millar, 1985). Unlike primary activities which focus on the end product and the needs of the customer, fulfilling internal customers' requirements is the first priority of secondary activities.
Figure 2.1 Porter’s value chain (1985)

There has been a significant amount of attention from both academic researchers and practicing managers directed to finding ways to maximize organizational profitability. primarily by increasing sales and/or sales margin or reducing costs. Up to around 1940s, primary activities such as the purchasing of raw materials and direct labor costs accounted for over 90% of the total cost (Glad and Becker, 1995). The focus of management accounting research at that time was to control these direct costs by reducing wastage or introducing new inventory control techniques. Since the 1940s there has been a considerable reduction of the proportion of direct costs as a percentage of total cost as many labor-intensive operations have been either automated or subcontracted to specialist third-party suppliers. Hence, the structure of an organization's total costs has become more complex and generally more ‘fixed' in nature. Nowadays, supporting service-related costs typically accounts for approximately 40% of the total costs of a manufacturing business (Popesko, 2009). To cope with these changes, the focus of both academic scholars and managers has shifted from how to further reduce manufacturing costs and customers service costs to how to: a) accurately allocate support service costs and b) lower them.

Setting up an SSC is a popular way to further reduce the cost of support service and is employed by many organizations (Ernst and Young, 2011; PwC, 2011) and this new organizational form will form the main context of this research.
As outlined in the previous chapter, the purpose of this research is to investigate the functioning of different recharging mechanisms in SSCs and how they might influence the managerial behaviors of both service purchasing units and the SSC. In order to answer the research questions, this chapter will start with the definition of business support services and consider some background knowledge of SSCs, which is discussed in section 2.2. According to the definition, an SSC, is a semi-autonomous business unit within an organization and the relationship between the SSC and other units is ‘quasi-commercial’ (Herbert and Seal, 2012). Support services are supplied by the SSC to other units within the company, including the transfer of labor costs within this process. If an SSC is treated as part of central management then its cost may be held at a corporate level. Alternatively, the SSC may allocate its costs across client divisions. Finally, if the SSC is regarded as a semi-autonomous business unit within the organization and clients have the option to buy services elsewhere or have at least some influence over the costs charged then the recharging issue becomes a transfer pricing problem. Therefore, recharging for support service provided by SSC could be either cost allocation approach or transfer pricing approach. Section 2.3 will critically review the literature of both cost allocation and transfer pricing and elaborate its connection with the recharging mechanism in an SSC. This chapter will close with a short conclusion.

2.2 The context of this research -- The Shared Service Centre (SSC)

2.2.1 Shared Service Centre (SSC)

Since the 1980s, to increase effectiveness and cut the costs of support services many organizations started to pull support service activities out of business-facing units and aggregate them into a semi-autonomous shared service center (SSC) (Quinn, Cooke and Kris, 2000; Bergeron, 2003). For example, in a traditional M-form organization divisionalized by-product (as shown in Figure 2.2), divisional accounting departments
would be unbundled and integrated into a new finance SSC. This would then provide accounting services to all the product divisions in the same organization (Sako, 2006).

Figure 2.2 The general scheme of an SSC (adapted from Sako, 2006)

Whilst there have been various examples of sharing services in business and other walks of life, the exact origin of the business support SSC model is generally accredited to Client Business Service that General Electric set up in the United States in 1986 (Quinn, Cooke and Kris, 2000). In recent years, much attention has been given to the costs and benefits of setting up so-called captive SSCs (Bergeron, 2003; Janssen and Joha, 2006; Johnson and Johnson, 2006; Quinn, Cooke and Kris, 2000). ‘Captive’ denotes that the SSC is internal compared to outsourcing from a third-party or joint-SSC/BPO ventures and that the SSC is dedicated to a single organization rather than shared between a number of entities, a form popular between public services organizations.

The SSC model captures benefits from both centralization and decentralization styles (Bergeron, 2003). It centralizes administrative functions such as finance, purchasing, human resources and IT into a geographically separated unit (Wallance, 2011), or does this virtually, through remote process control allowed by new communication
technologies (Bergeron, 2003). Such unbundling and centralization of administrative activities should help to: a) reduce the costs by benefiting from economies of scale, b) facilitate process and system standardization and c) achieve a high degree of corporate-level control (Janssen and Joha, 2006). Centralizing administrative activities into a single unit should maintain overall control by corporate management and ensure internal cooperation between the SSC and client divisions. However, strengthening the control may be at the expense of creating distance between administrators and their customers. The SSC model overcomes this by also capturing benefits from decentralization. As a separate business, the SSC enjoys a degree of autonomy under the corporation umbrella (Janssen and Joha, 2006) by having its own financial budget and bottom-line accountability together with a certain degree of the independent operation (Bergeron, 2003). With multiple customers demanding better service and lower cost, the SSC is also pressured to become more customer-oriented, as external companies providing similar services become potential competitors. SSCs put customers at the center of their operation and "successful shared service centers leaders are working very hard to create a mindset with clients in the core" (Quinn et al., 2000). The recognition of local priorities and quick responsiveness to clients’ needs enhance its flexibility and effectiveness (Schulman, Dunleavy, Harmer and Lusk, 1999). The productivity of an SSC is increased “from standardization of processes on the one hand and customized services and solutions on the other” (Sako, 2006, p. 502). Apart from the benefits from both centralization and decentralization, other factors that encourage so many multinational organizations to set up SSCs include the transparency of cost information, more access to expertise, better business performance (Johnson and Johnson, 2006; Sako, 2006; Herbert and Seal, 2012; Mareiniak, 2013. Minnaar and Vosselam, 2013) and freeing up headquarters and other divisions to focus on the firm’s core value-added activities. However, the decision to introduce an SSC into a business also implies a level of risk and can be "a critical decision" for managers (Janssen and Joha, 2006). The challenges faced by such companies include a) high starting costs for unbundling, migrating and centralizing the activities, especially when the SSC is offshore, and b) changes to employees’ mindset and working cultures (Bergeron, 2003).
2.2.2 SSC or outsourcing?

Since the introduction of the SSC, there have been discussions about the comparison with third-party business process outsourcing (BPO) (Gospel and Sako, 2010; Jassen and Joha, 2006). Especially, why large multi-national organizations should choose to set up their own ‘captive’ SSCs (keep support services in-house), instead of buying support services from the open market and from BPO experts who have the expertise and experience to achieve radical transformation of the finance function and its cost base (for comparison of the two routes see Gospel and Sako, 2010). The most prominent theoretical explanation is grounded in the transaction cost economics (TCE) perspective.

TCE can be traced back to 1937 when Coase first introduced the concept of a ‘transaction cost’ in a framework which sought to explain why firms might perform specific economic tasks (Coase, 1937). TCE has become more widely known and applied through Williamson’s expansion of the concept. He used the notion of transactions having a discernable cost to explain why economic activities are organized in a particular way (Spicer, 1988, Williamson, 1975). By breaking transactions down into each economic exchange in the market or within the organization Williamson argued that in make-or-buy decision firms could choose to mediate transactions by introducing an inter-firm or intra-firm contract (Williamson, 2008). Transaction cost is never zero (Spicer, 1988) and costs related to transactions favor either making a product in-house (hierarchy) or buying it from external providers (market). Minimizing the sum of production and transaction costs is one criterion for the head office to consider when making make-or-buy decisions. Williamson’s theory identified three characteristics of transactions which could influence a firm’s make-or-buy decision: asset specificity, the extent of transactions, and uncertainty. As suggested by TCE, support services with high asset specificity (high customized activities) would likely be kept in-house whilst more routine ones could be outsourced to the third party. Another characteristic is the extent of transactions which reflect the volume and frequency of activities. High
frequency activities would be more likely to be internalized (transformed into captive SSCs) because firms would like to benefit from economies of scale (Colbert and Spicer, 1995), although it could also be argued that BPO firms might have the expertise to better apply automation to such tasks or in the case of more programmable/lower level tasks to move the work to lower cost areas offshore.

Some academic scholars argued that the BPO and SSC approaches are not mutually exclusive, as setting up SSCs could be an intermediate step towards off-shoring outsourcing. Gospel and Sako (2010) outlined three trajectories regarding offshore outsourcing: a) outsourcing to domestic third parties first and then to overseas suppliers, b) creating captive offshore (such as setting up its own SSC), and c) directly switching from domestic division providers to foreign suppliers. Among these three trajectories, the authors argued that creating an SSC before offshore outsourcing leads to “greater retention of capabilities in-house” (Gospel and Sako, 2010). When the transaction cost of purchasing similar services in the open market is lower, the company could choose to outsource to the third party or process them in-house, i.e. setting up its own semi-autonomous SSC.

### 2.3 Recharging for support services

As a semi-autonomous management unit within an organization, it would be expected that "the costs of the services supplied will be charged back to the participating divisions" (Herbert and Seal, 2011, p.29). Such recharging enables performance measurement of the SSC and its client divisions and hence resource allocation by top management. Furthermore, there are a number of other reasons why the recharging process of support services provided by an SSC is necessary.

An SSC can be treated as “a hybrid governance model with features of both market and in-house management control” (Herbert and Seal, 2012, p.93). The SSC may face direct threats to its existence from BPO vendors or indirectly through benchmarking the cost
and quality of services against the BPO sector. Thus, for both transparency and to cover the SSC’s operating costs, various factors need to be considered when setting up an appropriate cost allocation or transfer pricing strategy. For example, the price that is charged to other divisions should reflect the actual value of the service based on market factors and may also include uplifts to include a profit element (Lynch, 2011). A research by Deloitte (2007) did a survey and laid out so identified some key objectives when implementing a recharging mechanism in an SSC. The first objective was simplicity and efficiency. Marciniak (2013) agreed with this point, arguing that the method should be understandable to both central and divisional managers as the recharging mechanism is expected to drive good behaviors and provide valuable information for organizational decisions about resource allocation. The incentive for good behaviors is also one of the objectives in Deloitte’s report. Additionally, the recharging mechanism should be fair to other divisions (Eccles, 1985). As a captive SSC is part of the organization, the recharging figure should be fair to customer divisions who cannot be expected to pay for services (or a level of service delivery) from which they have not been benefiting. The notion of establishing fairness between the SSC and the different divisions should improve inter-divisional cooperation and thus, benefit the whole organization. Two pre-conditions of fairness are accuracy (in terms of charging the correct cost/price based on the service supplied) and transparency. The recharging mechanism should be able to accurately measure divisional usage of resources and relevant information should be easy to trace.

The recharging for support services within a simple business or a large MDF organization (either function-based or multi-divisional) has traditionally been seen as a cost allocation issue. However, if support services are provided by an SSC operating as an independent business unit within the organization, then the recharging process should include a more market-like mechanism which reflects the characteristics of transfer pricing because the support services are internally transferred from one business unit to another business unit.
2.3.1 Cost allocation

2.3.1.1 Rationale of cost allocation

Cost allocation which means allocate central/joint/common costs or general overhead to department/divisions/products has existed for a very long time. Although many accounting and economic researchers argued that cost allocation is arbitrary and unnecessary (Thomas, 1969; Edwards, 1952; Dopuch, 1977), it is still widely used in practice for cost control, price setting and performance measurement. Some researchers have tried to explain why cost allocation is undertaken despite the reservations of academics (Ahmed and Scapens, 2000). For example, Zimmerman (1979) built an economic model to answer the question of why rational individuals want to allocate costs. He argued that fixed overhead allocation is like a form of a lump-sum tax which helps to reduce the scope for divisional management’s ability to spend on perquisites. Kaplan (1974) said that desirable behaviors could be induced through the recharging process.

Ramadan’s (1989) sent questionnaires to 296 UK MDF companies to explore the rationale for cost allocation practices. He found that the most important reason for recharging support service costs was to increase cost consciousness among divisional managers and that cost allocation positively influenced the financial performance of those divisions that benefit from support services because the payment for support services impacts on divisional profitability. Thus, it plays a critical role in performance measurement and internal resource allocation. By allocating central costs\(^3\), the top management can influence the behaviors of divisional managers to “take action in the best interests of the company as a whole” (p. 31). Consistent with Zimmerman’s (1979)

\(^3\) Central costs in Ramadan’s (1989) paper refers the “costs incurred at headquarters level for the benefit of two or more components of a company” (p. 31) and it is interchangeable with “common costs”, “corporate indirect costs”, “central administrative costs”, “management charge”, “management fees”, “central head office costs” and so on.
argument, Ramadan (1989) proved that cost allocation encourages optimal utilization of resources.

Demski (1981) identified three motives for cost allocation; decomposition, motivation and coordination. Amershi (1981) found that in the principal-agent setting, the demand for cost allocation is evoked.

### 2.3.1.2 Activity-based costing

Support service costs are not only driven by the final production volume or direct labor per hour but by the nature of the activity which causes it. It is believed that the use of sophisticated activity-based costing (ABC) methods help to increase the accuracy of cost calculation whilst also providing managers with insights into how they could improve the profitability and performance of the organization (Hussain and Gunasekaran, 2012). ABC first allocates support service costs to activities and then allocates those costs to the cost objects. For example, cost drivers of internal services could be: the number of orders processed; payments made/received; the number of credit v. cash customers i.e. requiring account reconciliation, etc. The rate of cost drivers is determined by the resource that the cost driver consumes in each transaction. Applying the ABC method to internal services can be time-consuming due to the amount of data that needs to be gathered and analyzed. On the positive side, it provides more accurate information about the organizational performance to the managers and it is easier for them to identify activities with scope for improvement and set a more appropriate selling price (Drury, 2008; Kaplan, 2000). In the internal SSC, ABC would enable fairer and more transparent cost allocation or recharge by transfer pricing.

### 2.3.2 Transfer pricing

Chandler (1962) described the nature of those corporations such as General Motors that had adopted the Multi-Divisional Form (MDF) whereby semi-autonomous divisions
operate within an overall framework that ensures corporate level direction, coordination and control purposes, while evaluating the performance of individual business units through return on capital employed (ROCE), or variant of that approach. A key tenet of managing such divisions and evaluating their performance is that the price of any products supplied internally should cover the cost of their supply and a fair economic reward for the supplying division. Transfer pricing theory developed to explain how receiving divisions could be charged a ‘fair’ price for inter-divisional transactions so that managers value the products provided (Horngren and Foster, 1987). Traditionally, transfer pricing is applied when one division transfers tangible goods to another division, but it is also suitable for the situation when service departments charge for the business support services they provide (Thomas, 1970). By definition, an SSC is a semi-autonomous business unit within an organization, thus the support services transferred from the SSC to service purchasing departments or divisions may also cause the transfer of costs. The recharging for support services provided by the SSC captures the characteristics of the transfer pricing theory (Scrace & Mcauley, 1997). The following sections will critically review the transfer pricing literature.

Transfer pricing has attracted significant attention from both academic researchers and managers for many decades although, it is still a problem that is considered unsolved or even unsolvable (Kozlowska-Makós, 2014). In the early days, academic research focused on finding an optimum transfer pricing method to maximize organizational profit and identifying the transfer pricing methods chosen by organizations in practice (Cravens and Shearon, 1996; Borkowski, 1997; Tang, 1992; Adler, 1996; Banke & Edwards, 1980). In the 1980s, a number of researchers (Eccles 1985) drew attention on the gap between transfer pricing theory and its application in practice, opening up a new stream of research on transfer pricing within a specific organizational context (Meer-Kooistra, 1994; Spicer, 1988; Watson and Baumler, 1975; Swieringa and Waterhouse, 1982; Eccle, 1985). In recent years, the focus of transfer pricing research has shifted to international transfer pricing because lots of organizations have expanded their business to different countries in the wake of globalization. International transfer
pricing research covers both the application processes within organizations and tax issues caused by cross-border income shifting.

This review of transfer pricing literature contains three sections: a) early research which focuses on transfer pricing methods; b) organizational theory of transfer pricing that investigates the application process of transfer pricing and its relationship with organizational strategy and corporate governance; c) international transfer pricing and tax issues.

2.3.2.1 Transfer pricing methods

Eccles (1985) reviewed transfer pricing literature and divided early transfer pricing researches into four groups: 1) economic theory, 2) mathematical programming, 3) accounting theory and 4) management theory. The principle criterion of the first three theories is to ensure the profit maximization of the whole organization. Eccles (1985) argued that these theories were restricted by their assumptions and their application in the empirical world was quite limited. Most transfer pricing researchers that applied economic theory, mathematical programming or accounting theory were keen to find the optimum transfer price which will motivate selling and buying divisional managers to choose the optimal output level which could maximize the profit of the whole organization. Conversely, management theory, see transfer pricing as related to organizational strategy and the administrative process and the main rationale for transfer pricing is not only maximizing organizational profits, but also ensuring divisional fairness. Since the focus of this research is the application process of the recharging mechanism in an SSC, which is closely linked to the organizational theory of transfer pricing, the review of this group of literature will be discussed separately in the next section. This section will start by introducing different transfer methods, critically reviewing relevant literature including survey results of transfer pricing methods chosen by organizations in practice.
There are three groups of transfer pricing methods: 1) market-based price which refers to the price of the same or similar product in an external market, 2) cost-based price which is based on variable cost, marginal cost, opportunity cost or fully loaded cost, and 3) negotiated price which is agreed by both the selling division and buying division.

2.3.2.1.1 Market-based price

A market-based transfer price should ideally be equal to the price that external organizations would charge for an identical, or closely similar, product (Adler, 1996) and it is believed to be the most appropriate transfer price if "a perfectly competitive market for the intermediate commodity exists" (Hirshleifer, 1956, p.183). Five conditions were identified by Solomons (1965), who suggested different transfer pricing methods were appropriate to different situations. If a perfectly competitive market for intermediate (mid-process) products exists and divisions are free to either purchase from or sell their products or services to, outsiders, then a market-price will be the most appropriate price for transfer between internal divisions for four reasons. First, a market-based transfer price reflects the economic value of products or services in the market. Second, the price could be used to benchmark the quality of product or service produced internally with that provided by external companies. Third, any supply surplus could be sold externally, similarly inventory shortages could be remedied by purchase from a third party (Drury, 2008). Finally, the administrative complexity of applying this method is low (Solomons, 1965) because in this situation there is no need to determine a transfer price and method internally (Eccles, 1985).

Earlier management accounting literature tended to recommend market-based pricing. For example, Cook (1955) who argued that when a division enjoys complete autonomy and there exists a visible market for intermediate products, both the selling division and buying division should accept any transactions that will increase divisional profits, either trading internally or externally because the transfer price is equal to the market price. The profits reflected by the contribution in each transaction will also increase the profits of the entire organization.
However, situations in which the application of market-based transfer price are appropriate are not common and this limits its application in practice (Eccles, 1985). First, intermediate products are the output from one production process and the input of another (Andersson and Fredriksson, 2000) and an external market for intermediate products may not always exist. Second, if a market for intermediate products exists, it is rare that the market is perfectly competitive (Collier, 2003). Indeed, based on Hirshleifer’s (1956) model, if the market is not perfectly competitive, the marginal cost of the selling division is more appropriate than the market price. Finally, aside from the existence of an external market, both divisions should be free to trade either internally or externally in this situation, because the profit of the firm will be maximized in either situation (Eccles, 1985). However, divisions tend not to enjoy complete autonomy in real life. Whether the transactions are at a mandated price (by head office) or freely negotiated between divisions then there can also be significant influences by other organizational factors such as strategy, structure, corporate governance and the administrative process (Eccles, 1985).

2.3.2.1.2 Cost-based price

Since the existence of a perfectly competitive outside market is rare, some firms may use internally generated cost information to set internal transfer prices. The cost option could be marginal cost, opportunity cost, average cost or full cost. In some cases, a lump sum or mark-up may be added to the payment to cover the fixed costs of the selling division.

Using marginal cost to establish a transfer price has been suggested by a number of influential economists. In Hirshleifer’s (1956) model, if an external market for intermediate products does not exist, the transfer price should be equal to the marginal cost of the selling division. Alles and Datar (1998) developed a model with two oligopolistic firms and found that a firm may use the cost-plus method instead of marginal cost to set their transfer prices. Göx’s (2000) verified this approach and argued that when transfer prices are not observable, the head office of each firm may use a
price which is above the marginal manufacturing costs but if transfer prices are observable, marginal costs will still be chosen. In addition to economists, some accounting researchers (e.g. Solomons, 1965; Kaplan, 1982) also suggested marginal cost should be used but from a more practical perspective (i.e. acknowledging behavioral influences) they argued that a certain amount of additional reward should be added. Solomons (1965) recommended that selling divisions should charge a marginal cost per unit plus an annual lump sum as a contribution to fixed costs. This is fair on the basis that a division that agrees to provide a product or service for the following year commits itself to that activity and hence a certain level of fixed cost. The precondition for such an approach or policy is the lack of an external market together with a significant amount of internal transactions. Kaplan (1982) arrived at the same conclusion as Solomons (1956) but he also advised that if the internal transactions do not form a significant part of turnover, the transfer price should be equal to the variable unit cost plus a fixed period fee.

Abdel-Khalik and Lusk (1974) argued that using marginal cost may cause dysfunctional behaviors. Onsi (1970) also pointed out that using a marginal-cost to set transfer pricing has limitations, such as the difficulty to identify marginal costs. He applied a mathematical programming approach and suggested an opportunity cost-based transfer pricing model. However, he argued that using opportunity cost can be difficult when there is a lack of ‘perfect’ information. This may limit its application in practice.

Eccles (1985) found some empirical evidence to suggest that firms may use the mandated full-cost method to set transfer prices although some researchers argued that this may cause problems. Anthony and Dearden (1980) recognized that the full-cost method provides no incentives for the buying division to produce final products at a level that will maximize the profits of the entire firm. Kaplan (1982) also criticized the full-cost method, saying that its only justification was simplicity.
A small number of researchers, such as Enzer (1975), recommended that ‘average cost’ is an appropriate transfer price when both the selling and buying division have all the information about costs and expected volumes.

Cost-based transfer prices are seen as appropriate when an external competitive market for intermediate products does not exist (Drury, 2008). However, some methods suggested by academic researchers have practical difficulties in the empirical world. First, some economic models include strict assumptions which are rare in the real world, such as the existence of perfect competitive market which are required in Hirshleifer’s (1956) model. Second, the assessment of marginal and opportunity cost is complex because it requires perfect information to be available to both parties, which is difficult to achieve in practice. Third, some models assume a linear production function (a function that assumes there is a linear relation between inputs and outputs) which is oversimplified compared to real situations (Abdel-khalik and Lusk, 1974). Finally, cost-based solutions assume that profit maximization is the priority of the firm and therefore ignore other possible strategic goals, such as increasing market shares. The consideration of strategy is necessary for solving transfer pricing problems (Eccles, 1985).

2.3.2.1.3 Negotiated price

The last transfer pricing method is ‘negotiated’ price. This is appropriate when the market for intermediate products is imperfect and the selling price of internal and external products are disputed, then a negotiated price may be preferable (Drury, 2008). Dean (1955) advocated negotiated prices and said that the price should be bargained between divisional managers and they are then free to look externally go outside if the price is not satisfactory. He argued that the advantage of the negotiated price is that it helps avoid arbitrariness, by which he meant that managers from different divisions could reach an agreement. Kaplan (1982) recommended negotiated market-based price as the alternative to cost-based price after considering the limitations of cost-based methods. The strength of the negotiated transfer price method is that both risks and
rewards could be shared between divisions (Anctil and Dutta, 1999). Once the price is agreed, the conflicts between different divisions might be reduced. On the other hand, the ‘haggling’ process (Baldenius, Reichelstein and Sahay, 1999) may be time-consuming and the final agreed price depends not only on the cost of products but also the negotiating skills and bargaining power of different divisions, therefore, the final price may favor those with more organizational and personal power.

2.3.2.1.4 Empirical studies on the transfer pricing method

In addition to the normative literature that seeks to find the optimal transfer pricing method based on conceptual analysis or economic and mathematical modeling, a prominent area of research is represented by empirical studies and the consideration of internal and external influencing factors. Eccles (1985) reviewed empirical research on transfer pricing before 1985 and concluded that many companies use more than one transfer pricing method. Vancil’s (1979) survey findings showed that market-based and cost-based methods were equally popular. However, the transfer price methods advocated by economists such as marginal cost, opportunity cost and the mathematical modeling method were almost absent in practice and Tang’s (1979) research produced similar results. Whilst, there were criticisms of full-cost transfer pricing, it was a popular method in practice. Both Vancil’s (1979) and Tang’s (1979) results showed that almost one-third of respondent firms chose this method although, Eccles (1985) suggested that a possible reason is that most managers actually used the full-cost plus mark-up to establish the estimated market price.

Borkowski (1996) conducted a meta-analysis of the findings of over 20 transfer pricing studies and found that cost-based and market-based transfer prices were the two main methods applied in practice. Among all the firms that use cost-based methods, most of them applied the full-cost or full-cost plus mark-up method to set transfer prices (Tang, 1977, 1992; Persen and Lessing, 1979; Yunker, 1981; Al-Eryani, 1987; Borkowski,
1990). Other surveys separated domestic transactions and international transactions such as the work of Mostafa, Sharp and Howard (1984) and Borkowski (1992). Mostafa et al. (1984) found one firm in their research which preferred the market-based method for domestic transactions but used the cost-based method more often for international transactions. However, with a large number of surveyed organizations, Borkowski’s (1992) survey showed that both domestic and multinational respondents tended to prefer the cost-based methods.

Negotiated transfer prices are not as popular in practice as economist suggest. Cravens and Shearon’s (1996) survey found that only 18% of respondents used negotiated prices. Some empirical researches (Borkowski 1990 & 1992, Tang, 1982; Yunker, 1981; Al-Eryani, Alam and Akhter, 1990) not only focused on the choice of the transfer pricing method but also sought to test the relationship between different variables and transfer pricing methods through statistical methods. Borkowski (1996) found that it is difficult to compare different studies since the contextual factors that different researchers focus on varies significantly and some of their results can, therefore, be contradictory. Although the relationship between influencing factors and transfer pricing choice could not be confirmed as being significant, previous research still provides useful references of possible influencing factors. Taxation, rates of duties and overall profit of firms are highly ranked factors in several studies (Tang, 1982; Yunker, 1981; Al-Eryani, Alam and Akhter, 1990). Other factors include the objective of transfer pricing, size of the firm and industry factors (Borkowski, 1992).

2.3.2.2 Organizational theory of transfer pricing

Watson and Baumler (1975) argued that the transfer pricing problem has to be solved in the context of the firm being a social system rather than searching for an optimal technical method. They argued that organizations which decide to make changes to their strategy or structure tend to do so in response to either technological or environmental uncertainty. They claimed that transfer pricing not only enhances the differentiation of production but also facilitates organizational integration and
governance. The mechanism that they advocated is the negotiated pricing mechanism. Watson and Balmier’s research (1975) viewed transfer pricing as involving behavioral variances such as the degree of interdependence between the selling and buying divisions and the conflict resolution process, but it did not consider the difficulties of applying negotiated pricing in practice.

Inspired by Watson and Baumler’s (1975) paper, which consider behavioral variance to inform the transfer pricing problem, a number of researchers started to view transfer pricing from the angle of organizational theories and tried to solve this problem within an organizational context. The following table (Table 2.1) summarizes transfer pricing literature that applies the organizational approach based on four classifications according to the different research methods they used.

2.3.2.2.1 Conceptual researches

Swieringa and Waterhouse (1982) used four organizational models to explore their implications for a transfer pricing context. The four models that they used were: (1) Cyert and March’s (1963) behavioral model which focuses on goals, expectations and choices of organization; (2) the garbage can model introduced by Cohen and March (1974) which not only view organization as a vehicle for solving problems and resolve conflicts but also a collection of choices; (3) Weick’s (1969, 1979) organizing model which emphasize on the continual process through interaction between individuals; (4) Williamson’s (1975) markets and hierarchies model which seek to find more efficient way for resources allocation and performance monitoring from either hierarchies or markets. Unlike traditional models, these four models suggested compared to achieving organizational control the process of devising transfer pricing procedures, rules and prices are also important. These four models suggest focusing on "activities or processes which lead to the formulation and adoption of transfer pricing rules, procedures and prices "(p. 160). During this process, the participants could share information and understand each other's situation.
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<td>Uses four organizational models: behavioral model, the garbage can model,</td>
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<td>organizing model and market &amp; hierarchy’s model to analyze a single case.</td>
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<td>Eccles (1983, 1985)</td>
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<td>Managers’ Analytic Plane (MAP)</td>
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<td>Links transfer pricing to strategy and introduces the concept of ‘fairness’</td>
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<td>Spicer (1988)</td>
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<td>Applies Ruefli’s Generalized Goal Decomposition Model and includes</td>
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<td>structural and behavioral features.</td>
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<td>Yeom, Balachandran &amp; Ronem (2000)</td>
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<td>Analyses transfer pricing in three situations: full information, pure</td>
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<td>adverse and moral hazard.</td>
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<th>Questionnaire</th>
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<td>Survey research used to investigate the relationship between transfer</td>
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<td>pricing and inter-divisional conflicts.</td>
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<th>Case Study</th>
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<td>Colbert &amp; Spicer (1995)</td>
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<td>Analyses four integrated case companies from a transaction cost perspective.</td>
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<td>Boyns, Edward &amp; Emmanuel (1998)</td>
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<td>Investigates the determinants of transfer pricing changes through time by</td>
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<td>analyzing one case through three lenses: Eccles’ (1983, 1985), Spicer’s</td>
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<td>(1988) and Emmuauer and Mehafdi’s (1994) frameworks.</td>
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<td>Van der Meer-Kooistra (1994)</td>
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<td>Builds a framework based on the frequency of internal transactions, asset</td>
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<td>specificity, information asymmetry and uncertainty.</td>
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Table 2.1 Summary of transfer pricing literature based on the organizational approaches
Eccles (1983) interviewed almost 150 managers from 13 companies and found that the key to solving transfer pricing problems is the strategy of the organization. He built a framework called the “managers’ analytic plane (MAP)” which divides organizations into four categories according to their degree of integration and diversification, as shown in Figure 2.3.

Figure 2.3 MAP and the four ‘pure’ organizational types (Eccles, 1983, p. 152)

The transfer pricing problem is argued to be precluded in collective organizations since both the degree of vertical integration and diversification is low. Market-based pricing and dual pricing⁴ are suggested to be suitable for competitive organizations which decentralize authorities and responsibility to the divisional level. Co-operative organizations mandate divisions to purchase from inside providers and the transfer price is either full-cost or cost-plus. This is the result of the vertical integration strategy. Collaborative organizations enjoy a high degree of vertical integration thus, the transfer pricing strategy is also mandated. However, the divisions all operate as independent

⁴ Dual pricing: apply both cost-based and market-based transfer pricing. The buying divisions are paying with the price based on cost while the selling division is receiving the market price. The head office will absorb the difference between these two prices (Eccles, 1985).
units within the organization, thus the full-cost method is less appropriate. Eccles (1983) argued that the mandated market-based transfer pricing strategy is more suitable for collaborative organizations. The contributions of Eccles (1983) are: 1) he put transfer pricing problems in an organizational context and linked this with organization strategy, 2) the data from his research comes from managers’ own experiences which would help enhance the implication of this research in practice, and 3) he introduced the concept of “fairness” which relates to power imbalance and inter-divisional conflicts. The characteristics of competitive, cooperative and collaborative organizations are summarized in table 2.2.

<table>
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<tr>
<th>Characteristic</th>
<th>Competitive</th>
<th>Cooperative</th>
<th>Collaborative</th>
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<tr>
<td><strong>Strategy</strong></td>
<td>Aggregate of division’s strategies</td>
<td>Total company strategy</td>
<td>Mutually defined total company business perspective</td>
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<tr>
<td><strong>Structure</strong></td>
<td>Multidivisional</td>
<td>Functional</td>
<td>Matrix</td>
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<tr>
<td><strong>Systems</strong></td>
<td>Profits. ROI compared with budget, internally and externally</td>
<td>Costs compared with budgets and history</td>
<td>Combination of costs, profit and ROI compared with budget</td>
</tr>
<tr>
<td><strong>Processes</strong></td>
<td>Bottom-up; distributive bargaining</td>
<td>Top-down; integrative bargaining</td>
<td>Iterative; mixed-mode bargaining</td>
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<tr>
<td><strong>Method of manager’s fairness evaluation</strong></td>
<td>Impartial spectator</td>
<td>Shared Fate</td>
<td>Rational trust</td>
</tr>
<tr>
<td><strong>Top management control</strong></td>
<td>Through systems on outcomes</td>
<td>Through structure on actions</td>
<td>Through processes balancing structure and systems</td>
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</table>

Table 2.2 Characteristics of competitive, cooperative and collaborative organizations (Eccles, 1983, p.153)

In a further study, Eccles (1985) expanded the concept of fairness and included this in his framework of the causes and effects of transfer pricing which is shown in Figure 2.4. Two principle determinants of transfer pricing are the strategy and administrative process. The transfer pricing strategy affects economic decisions within each division, performance of the whole organization, performance measurement and individual
manager’s feeling of fairness. He discussed three transfer pricing strategies: market price in exchange autonomy organizations; mandated full costs pricing, and mandated market-based pricing. He suggested that dual pricing, which is a hybrid of full cost and market price, could be a solution to the control problems caused by traditional transfer pricing strategies such as conflicts of objectives and feelings of unfairness.

Figure 2.4 The Causes and Effects of Transfer Pricing (Eccles, 1985, p. 7)

Following Eccles (1985), Spicer (1988) also developed an understanding of transfer pricing in an organizational context and formulated six further testable hypotheses (see Appendix 1). Spicer (1988) referred to Williamson's (1979) organizational failure framework and connected transfer pricing problems with strategy, structure and management control system. He argued that the control of internal transactions depends on the diversification strategy and the degree of organizational decentralization in decision making, as reflected in the organizational structure. His framework applied three dimensions: investment characteristics (standardized, customized or idiosyncratic); extent (or frequency and volume) of buyer activity; uncertainty and complexity. Different transfer pricing strategies are applied according to different situations. Moreover, he developed nine hypotheses to test the relationship between
strategy, structure, central control, arbitration procedures, performance measurement, conflicts and the choice of transfer pricing mechanisms.

Both Swieringa and Waterhouse (1982) and Spicer (1988) accepted Watson and Baumler’s (1975) idea that the transfer pricing problem should be solved within an organizational context and both papers applied several organizational theories, such as Cyert and March’s (1963) behavioral theory of the firm and Williamson’s (1979) organization failure framework, into their research. However, neither of them collected empirical data with which to test or verify their theories. Eccles (1983) had rich data collected from 13 different companies to build the MAP framework but the hypotheses that he proposed in 1985 need to be tested in future research.

### 2.3.2.2.2 Mathematical Modelling method

Bailey and Boe (1976) based their research on Watson and Baumler’s (1975) behavioral theory and also related it to Ruefli’s Generalized Goal Decomposition Model to solve the transfer pricing problem. They considered three typical organizational structures and behavioral issues in the modeling which are the degree of centralization, the degree of interdependence and the degree of cooperation between different divisions. This paper expanded the application of the mathematical modeling method in addressing the transfer pricing problem within hierarchical organizations. Other researchers like Yeom, Balachandran and Ronen (2000) applied mathematical modeling method and framed transfer pricing as a coordinating mechanism and discussed its role in three cases: full information; pure adverse and adverse selection; and moral hazard. They suggested using the average cost plus a mark-up as the optimal transfer price.

### 2.3.2.2.3 Survey method

Lambert (1979) developed a survey instrument to investigate the relationship between the transfer pricing mechanisms and associated conflicts between different divisions.

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5 The case used by Swieringa and Waterhouse (1982) was a hypothetical case rather than an empirical case.
within the organization. The key finding of his survey is that inter-divisional conflict increases if: a) the transfer pricing system affects buying divisions’ profits, or b) customer divisions are not permitted to purchase intermediate products or services from outside providers. The conflicts were found to be negatively related to the overall benefits of the organization of transfer pricing which means that if conflicts increase then benefits to the overall organization decrease.

Lambert’s (1979) findings suggested that conflicts within an organization should be minimized by applying a transfer price method which balances the division’s perception of other divisions’ advantages. However, conflicts which act as the by-product of competition might encourage divisions to understand and communicate with competing divisions thus, enhancing the performance of the whole organization (Tsai, 2002).

2.3.2.2.4 Case Study method

Since the 1980s, some researchers have started to used case study methods in transfer pricing inquiries (Colbert and Spicer, 1995; Boyns, Edwards and Emmaunel, 1999; Van der Meer-Kooistra, 1994). Colbert and Spicer (1995) investigated the transfer pricing process from the TCE perspective and conducted multi-case research in four vertically-integrated companies to test their theories. Asset specificity, which is one dimension of transaction cost economies, was found to have a significant impact on the transfer pricing process. As the asset specificity of internal transfers increases, it is more likely that buying divisions would choose internal providers (selling divisions within the same organization) and a “greater weight will be given to manufacturing costs in setting transfer prices” (Colbert and Spicer, 1995, p. 425). The significance of this research is that it was based on an in-depth understanding of the transfer pricing process from the empirical world and verified the relationship between asset specificity and transfer prices. However, as they mentioned, using a subjective assessment of the impact of asset specificity on internal transfers and the ignorance of other organizational factors might limit the wider application of their research.
Boyns, Edwards and Emmanuel (1999) focused on the determinants of transfer pricing change and applied three frameworks – Eccles (1983), Spicer (1988) and Emmanuel and Mehafdi (1994) – to investigate the actions taken by an iron and coal company in the 19th century. All of these three frameworks included influencing factors such as strategy, level of decentralization and interdependence between different divisions. The significant contribution of this paper is that the authors did not just confirm that these influencing factors could cause the transfer pricing policy to change but, argued that this causation could be in an alternative direction—which means the transfer pricing policy might be a determinant of the changes of these factors. Boyns, Edwards and Emmanuel (1999) argued that this is an open question and may need further research into it to find an answer. This paper reviewed three ‘modern-day’ frameworks but the empirical evidence they used is that of the actions taken by one particular company in the 19th century. The use of data from a very different historical context may limit the generalization of the findings in this research.

The contribution of Van der Meer-Kooistra (1994) was to consider the coordination of internal transactions based on seven cases. The empirical data from these seven cases enabled the author to formulate an explanatory model which explained the coordination of internal transactions and influencing factors such as frequency/size of internal transactions, asset specificity, information asymmetry between central and decentralized management and uncertainty. Van der Meer-Kooistra's research expanded both Eccles' (1983) and Spicer's (1988) work by investigating transfer pricing in an organizational context, based on empirical data. Moreover, it did not just focus on the implementation process of the transfer process but also the way that the internal transactions are coordinated.

The use of case study method in transfer pricing research enables the researcher to have a deep investigation of the practical implication of transfer pricing in the empirical world. However, the number of such studies is still limited and there have not been many studies since the 1990s.
2.3.2.3 International transfer pricing and tax

Transfer pricing is not only important in terms of resource allocation, performance measurement and behavior management within organizations, but it is also an important tax issue faced by most multinational enterprises (Ernst and Young, 2014). In the wake of globalization, lots of multinational enterprises have expanded their business to different countries with diverse tax rates (Sikka and Willmott, 2010). Many management accounting researchers started to put their research focus on international transfer pricing issues such as the arm’s length principle\(^6\), tax compliance/avoidance (Rossing and Rohde, 2010; Bartelsman and Beetsma, 2003) and income shifting; Clausing, 2000; Baldenius, Melumad and Reichelstein, 2004; Sikka and Willmott, 2010).

Cross-border transactions of intermediate goods raised the profile of transfer pricing issues. Setting the transfer price of internal transferred services and/or how to allocate overheads among relevant business units within the same group is highly subjective. Transfer pricing provides opportunities for a multinational enterprise (MNE) to shift income from high-tax countries to low-tax countries (Sikka and Willmott, 2010). The economic goal of most MNEs is to achieve as much profit as possible and thus, add value to shareholders. This could be achieved through a number of methods such as expanding the market, creating new products or increasing sales and cutting costs. Most accounting staff in MNEs treat tax as a cost to be avoided, instead of seeing it being a contribution to society (Sikka and Willmott, 2010). Cross border tax arbitrage is often used by MNEs to cut costs and thus, maximize profits. However, tax authorities in different countries, and global organizations such as the Organization for Economic Co-operation and Development (OECD), have strict guidelines on transfer pricing strategies. Moreover, their focus on reviewing and monitoring MNEs' transfer pricing

\(^6\) OECD transfer pricing guidelines require the multinational enterprises use comparable uncontrolled price for internal transfer pricing, based on external market evidence and explain how their transfer pricing strategy comply with arm’s length principle.
method has been increasing in recent years (Rossing and Rohde, 2010, Ernst and Young, 2014). The most important concept in OECD’s transfer pricing guidelines is the ‘arm’s length principle’ which means treating associated and independent enterprises equally (Hamaekers, 2001). In terms of transfer pricing, the ‘acceptable' price for tax authorities under the arm's length principle is the price that an independent enterprise would pay for the same, or similar, intermediate products or intra-group support services (OECD, 2010). According to both academic writing on transfer pricing (Drury, 2008) and the documents of tax authorities (OECD, 2010), market price is a preferred transfer price (Cools, Emmanuel and Jorissen, 2008). However, due to practical difficulties such as the non-existence of the perfect market for intermediate products, adjustments are made by MNEs to formulate a proxy value for arm's length transactions. There are other transfer pricing methods approved by the OECD, such as the cost-plus method; the transactional net-margin method; and the profit split method (OECD, 2010). Multinational enterprises could choose any of the methods but must "provide detailed documentation of how their transfer pricing strategy specifically complied with the arm's length principle" (Rossing and Rohde, 2010, p.201).

Internal transactions within MNEs could involve tangible goods, intangible assets or support services. In recent years, charges for support services or the allocation of intra-group service costs have attracted specific interests by tax authorities (Ernst & Young, 2007). The OECD’s guidelines (2010) include two specific chapters to elaborate on special considerations for intra-group services and methods of cost allocation. The support services transferred internally could be provided by either the head office of a multinational enterprise or a separate service center such as SSC. No matter who is the provider of the services, the fees for providing services should be charged (Linnenbaum and Stillhart, 2012). Tax authorities prefer MNEs to use the direct-charge method, which means recharging service purchasers for specific services with the recharging mechanism pre-agreed internally in the service level agreement (SLA). Recharging directly is convenient for tax authorities to review and audit. However, due to difficulties with applying the direct method in practice, the OECD also accepts indirect-
charge methods (such as cost allocation) as long as the MNEs can prove that cost allocation arrangements satisfy the arm’s length principle (OECD, 2010, chapter 7).

An SSC, which centralizes regional or global support service activities into an identifiable center, normally provides services to more than one customer unit within one group. According to the OECD's guidelines (2010), the service activities that an SSC provides are considered to be intra-group services because by providing these services, commercial value has been transferred from the SSC to service purchasing units. The service activities available in SSCs are also available from external service providers; for example, legal services provided by an internal SSC could also be purchased from independent law firms. At the same time, if the SSC expands its service to external customers, other independent organizations might be willing to pay for some of the general service activities that the SSC provides.

2.4 Summary

SSCs operate as semi-autonomous units within organizations and aim to capture the benefits of both markets (decentralization) and hierarchy (centralization). The main aims are to provide support services to other divisions within the organization and to ensure that the core activities which define their competitive competencies are operating smoothly and effectively. In order to explore the theoretical base of the recharging mechanism in an individual SSC, this chapter started with an explanation of the context of this research, the SSC model.

Some practitioners suggested some ways of recharging for support service provided by the SSCs (Quinn, Cooke and Kris, 2000; Bergeron, 2003). As SSC can be interpreted in different ways, either cost allocation or transfer pricing can be used to account for the service provided. Thus, the literature of both cost allocation and transfer pricing was critically reviewed in section 2.3. With regard to research on transfer pricing, there are many previous researches that have concentrated on finding an optimal transfer pricing
method or predict general trends, but little attention has to be given to explain the application process of an individual company. Although there are some studies such as Eccles (1983, 1985), Colbert and Spicer (1995) that have investigated the application of transfer pricing in an organizational context, they focused on the traditional organizational form (function-based or multi-divisional). And most of the cost allocation researches keen to answer the positive questions of why cost allocation is widely applied. Little attention has been paid to study the cost allocation process and its behavioral effects in organizational context. This research extended the research of cost allocation and transfer pricing by regarding them as two approaches of recharging mechanisms in a new organizational form – SSC model and links it to the resulting behaviors of each division within the organization.

The literature review has critically reviewed some previous researches in cost allocation and transfer pricing. Some researchers have demonstrated theoretical perspectives like TCE and agency theory in explaining cost allocation and transfer pricing in an organizational context. This study keens to investigate recharging mechanism in SSC context, thus, in order to better guide the research and help to explore the recharging mechanism in depth, the development of conceptual framework will be discussed in the next chapter.
Chapter 3 Development of conceptual framework

3.1 Introduction

Chapter 2 reviewed the generally distinct literature of transfer pricing and cost allocation. This chapter will outline some further theories that might address the gaps identified and provide a theoretical angle with which to interpret and explain empirical data.

The overall aim of this research is to provide an in-depth understanding of the recharging process of SSCs from both theoretical and practical perspectives. As explained in Chapter 2, the recharging for support service provided by SSCs appears to capture both the characteristics of cost allocation and transfer pricing (Scrace and Mcauley, 1997) and there would seem to be an opportunity to suggest how the transfer pricing and cost allocation literature might be synthesized. According to the SSC practitioner literature (Quinn et al., 2000; Bangemann, 2005; Deloitte, 2006), the recharging mechanisms could be: a) no allocation (costs incurred by SSCs are absorbed by head office with no charges to the consumption units), b) allocation of full costs incurred to service purchasing units without ‘profits’, c) recharge with a price which is either the full-cost plus a mark-up, or set by reference to the market price.

According to Hopper and Hoque (2006), theoretical triangulation involves examining the same research problem by employing different theoretical perspectives. Theoretical triangulation is suggested because it is rare that a single theory could have a monopoly on the explanation of organizational practice (Hoque, Covaleski and Goonetarne, 2013). Moreover, in management accounting research, the attention to integrating theories and empirics is generally insufficient (Modell, 2005). Integrating complementary theories can help to enhance the explanation of the empirical evidence...
of the cases. Therefore, theoretical triangulation is chosen in this research, based on theories of organizational structure, transaction cost economics and agency theory.

The research question addressed in this study is to understand at the micro level the practice of recharging mechanisms applied in SSCs. This includes 1) exploring how the SSCs charges for its support services and 2) understanding the behavioral effects resulting from the choice of recharging mechanism. To outline a conceptual framework, this chapter starts by integrating the theory of organizational structure and Williamson’s7 market and hierarchies and transaction cost economics (1975; 1985). The setting-up of an SSC could be treated as reconfiguring the multi-divisional (M-form) organization because it moves professional support service from divisions, and through standardization in the SSC and a ‘global’ ERP system, creates visibility for top management to bear down overhead costs and better allocate resources between competing business divisions. Therefore, the background information about M-form organizational will be discussed further in section 3.2. The other theory chosen is Williamson’s transaction cost economics (TCE). TCE uses the concept of transaction cost to explain how economic activities are governed in particular ways. The focus of cost and corporate governance makes TCE a potential framework to describe the functioning of recharging mechanism in SSCs. Section 3.3 will discuss TCE and its application in this research. However, both organizational structure and TCE theories only address the first research question which is about how the SSCs recharge for their support services. In terms of the organizational effects of recharging, their explanation is inadequate. Thus, agency theory is drawn on to provide a more complete explanation of the organizational effects of recharging. Section 3.4 explains why an additional theory is needed and the details of agency theory will be discussed in section 3.5. Following that, section 3.6 will outline a conceptual framework built on the integration of these three theories (organizational structure, TCE and agency theory). This chapter closes with a brief summary in section 3.7

7 Williamson (1985) acknowledged the influence of Chandler (1962) on his own thinking on TCE
3.2 Organizational structure

The SSC model could be approached from the context of it representing a reconfiguration of the M-Form organization because the relocation of business support services in specialized sites is intended to reflect characteristics from business divisions, head office, and outsourcing. In a traditional function-based organization, a vertical integration strategy is applied. Co-ordination of different production processes building up into a single product enables the top manager to exercise control over both production process and their managers. As a multi-divisional form of organization (M-form) developed to better serve multiple markets with multiple products. Chandler (1962) selected four samples Du Pont, General Motor, Jersey Standards, and Sears to explore how American firms began to be diversified and decentralized in the 1920s in his seminal work. Functions were the basis of those companies' organizational structure before the 1920s. After enjoying the dramatic increase of productivity resulting from the development of transportation and communication (Helper and Sako, 2010), both Du Pont and General Motors faced financial difficulties and with U-form, they could not react quickly to changes of environment (Hoskisson, Hill and Kim, 1993). To overcome these difficulties, Alfred Sloan, who became the president of GM since 1923, started to re-organized GM, with each division has its own functional hierarchy but at the same time under head office’s supervision. Johnson (1978) referred this as “centralized control with decentralized responsibility”. Williamson argued that the M-form of organization provided an efficient response to the perceived problem of managerial discretion (Williamson, 1970), as well as offering superior transaction cost solutions to the problem of coordinating large and diversified businesses (Hoskisson et al., 1993). The multidivisional form (M-form) structure was regarded as “the most significant organizational innovation” of the twentieth century by Williamson (1985). In Williamson’s view, the key aspect of the M-form was the uncoupling of strategic decision making from operational decision-making. Top management could focus on long-term improvement and strategy while divisions’ responsibilities are daily operation tasks (Hoskisson et al, 1993). The delegation of authority from top
management to divisional level enables decisions to be made at local level and hence to adapt to changing business environments and customer requirements instantaneously, thereby addressing the ‘slow reaction’ problem of U-form. Moreover, production factors can be coordinated more effectively at divisional level (Ronen and McKinney, 1970) and the M-form also stimulates divisional managers to improve performance because their Return of Capital Employed can be evaluated in comparison to other divisions. The M-form enables a balance between the coordination of products and market between different divisions and the control of divisional management from the head office with the overall strategic mission of the corporation.

3.2.1 Organizational structure and SSC

Within functional organization structure (U-Form), there is likely only one production function and support services are undertaken within the administrative functions or headquarters (Gospel and Sako, 2010). Within M-form organizations, support services are undertaken within individual divisions. As the business context became more dynamic through the 20th century, the problem of co-ordination of changing products and markets was exacerbated. In recent decades, some corporations have tended to concentrate on fewer aspects of the overall value chain and to unbundle non-core support activities to either third parties or reorganize activities into a captive SSC. The creation of shared services “moves away from the M-Form” (Gospel and Sako, 2010, p.1372) and changes the administrative structure of the firm. The administrative functions are unbundled from the product division and re-centralized in a semi-autonomous business unit (Sako, 2006). However, it could be argued that the process of unbundling transaction-centered support services into an SSC creates a new division under the corporate umbrella, combining the discipline of market forces, enacted through Service Level Agreements (SLAs) and the power of the management hierarchy. The SSC model is a new organizational form which seeks to present a standardized platform of business support services to allow new possibilities for the coordination
and control both of SSC itself and the wider organization. The significance of the semi-autonomous feature of SSC can be seen through the reporting lines to both divisions and the head office, compared with the alternative multi-divisional model in which each division is responsible for providing its own service support.

Gospel and Sako (2010) compared the outsourcing of the human resource services of two M-form companies (P&G and Unilever) and analyzed how corporate structure and nature of supplier market affected the choice of shared service or outsourcing and developed three paths to transforming and outsourcing business processes, as shown in figure 3.1. A company could set up its internal SSC and then outsource the management of SSC to the supplier(s) in the open market (path A) or outsource existing processes to multiple service suppliers and let the supplier take a lead on transferring process (path B). The last path is directly outsourcing to a single supplier to change business processes in one ‘big bang’. By doing this, the company could benefit significant cost reductions and efficiency saving, albeit there may be much greater risks in this pathway.

Figure 3.1 Pathways to support service transformation (Taken from Gospel and Sako, 2010, p. 1386)
3.2.2 Organizational structure and recharging for support services

In the traditional U-From organizations, most support service departments are cost centers, whose main responsibility is fulfilling administrative functions rather than generating revenue or making profits. The use of internal facilities is mandated (Eccles, 1985). The costs incurred in providing support services are regarded as “overhead” and allocated to service-receiving functions. Within M-form organizations, support services are undertaken by the function-based departments within individual divisions. The cost allocation method is similar to that in U-form organization. However, SSC is a separate division whose core competence is undertaking back-office services for other divisions. This change of organizational structure would be expected to change the basis of recharging for support services from intra-divisional cost allocation to inter-divisional transfer pricing.

The research of transfer pricing is closely related to the theory of strategy and structure because it is usually the co-product of changes in organizational structure. McAulay and Tomkins (1992) argued that the “functional necessity” of applying transfer pricing arises from the divisionalization of an organization and the fact that each division is responsible for its own cost and profits. In addition, a number of researchers analyze transfer pricing from the organizational context, determined by factors such as strategy (vertical integration and diversification), structure, strategic nature of internal transactions and management control system (Spicer, 1988; Colbert and Spicer, 1995; Eccles, 1985; Emmanuel and Mehafdi, 1994; Meer-Kooistra, 1994). Eccles (1985) argued that strategy is one of the important causes behind different choices of transfer pricing policy. Spicer (1988) agreed with this argument and further posited that transfer pricing policies are dependent on organizational strategy, structure, and dimensions of intra-firm transactions. He also concluded that whether the organization is applying cost-based or market-based transfer pricing, it is associated with the strategy adopted by the organization. Other researchers, such as Emmanuel and Mehafdi (1994) and
Meer-Kooistra (1994), also claimed that transfer pricing was determined by a range of factors including organizational strategy and structure.

Common to the studies mentioned above is the idea that transfer pricing should be studied in an organizational context and the application of transfer pricing is contingent upon a range of factors, among which organizational strategy and structure are important ones (Perera, Mckinnon and Harrison, 2003). However, Boyns et al. (1999), in their longitudinal study of an iron and coal company in the 19th century, confirmed that changes in strategy and structure could influence transfer pricing policy and further suggested that transfer pricing policy might be used to enact strategy, as ‘a result’ or ‘an instrument’ of strategic change. Perera, McKinnon and Harrison’s study (2003) agreed with this statement and suggested that transfer pricing policy may vary between these two roles in one organization over time.

According to Chandler’s (1962) theory, structure follows strategy. Based on the data collected from four countries over ten years, Caves (1980) concluded that with an increase of degree in the diversification it is more likely that an organization will adopt a divisionalized structure. The application of diversification strategy and the divisionalization process of organization lead to the need for intra-firm transactions (Vancil, 1979). The consultation between "selling and buying" divisions with regard to the functioning of rules, determines how the internal transactions work (Meer-Kooistra, 1994). The key tenet of the internal transactions policy is the transfer pricing policies chosen should be consistent with the change of organizational structure which in turn follows strategy.

Thus, recharging for support services provided by the SSC reflects the characteristics of transfer pricing within the context of organizational structure and strategy. Whether the organization is a function-based or multi-divisional, the decision to set up an SSC changes the original organizational structure. Theoretically, a change of organizational structure would be expected to have effects on the transfer pricing policies applied in the organization and thus the recharging for the support service provided by the SSC.
Therefore, as part of organizational context factors, both strategy and structure would be considered to influence the recharging mechanism applied by SSCs. Thus, the theory of organizational structure will be the first theoretical basis of the conceptual framework built for this research. However, this theory only considers the administrative structure of the firm. In order to understand how the internal transactions between SSC and its customers are governed, transaction costs economics is used as another theoretical perspective.

3.3 Transaction cost economics

The concept of “transaction cost” was first proposed in ‘The Nature of the Firm’ written by Coase in 1937. He relaxed neo-classical assumptions of perfect certainty and sought to explain the questions about ‘why a firm emerges’.

A firm will tend to expand until the costs of organizing an extra transaction within the firm become equal to the costs of carrying out the same transaction by means of an exchange on the open market or the costs of organizing in another firm” (Coast, 1937, p.395).

Williamson extended Coase’s theory and developed transaction cost economics (TCE) (Williamson, 1975; 1985; 1999). The TCE developed by Williamson is more predictive. Williamson (1975,1979) not only treats both markets and hierarchies (firms) as alternative ways to organize economic activities, and that transaction costs can be used to explain the variance between different firms about how they organize economic activities in this particular way (Colbert and Spicer, 1995; Spicer, 1988; Madhok, 2002).

TCE regards the transaction as the basic unit of analysis. Transaction costs refer to the costs incurred when a good or service is exchanged across the separable interface (Williamson, 1981) and production costs arise from organizing and managing production in-house. If the transaction costs are high, the firm will prefer to internalize production but if transaction costs are lower then, the firm will purchase the
good/service from the market. The transaction costs not only include the price of transferred good/service but also the coordination costs which are incurred during the information exchange process (Gulati & Singh, 1998).

When a firm chooses to internalize production goods/services from the external market, the costs will be imposed because of contract incompleteness. When the circumstances change unexpectedly, the pre-agreed contact might be no longer effective. The objective of decision-maker is to adapt the contact to the changing business environment and customer requirements at the least cost (Klein, 2004). However, there is a key assumption of bounded rationality in the TCE. The transactions occur with limited information (Williamson, 1986) because the amount of information processed by human mind is limited and the capacity of decision making is constrained by the amount and quality of information (Jones, 2006). Williamson (1985, p20-21) divided a transaction into three stages which are contact, contract, and control stages. Nooteboom (1993) argued that bounded rationality may affect the decision-making process at all these stages. Bounded rationality limits parties to the trade to search for suitable partners at contact stage and limits them to include all contingencies in contractual arrangements at contract stage. At control stage, the trade parties’ ability to monitor performance against the contract is limited and, as transactions become more complex, it is difficult for them to adjust the terms to the changes in business environment. The other human factor considered in TCE is opportunism which assumes that decision makers might seek self-interests ‘with guilt’ (Williamson, 1985).

TCE assumes that organizational choices are driven by the goal to achieve economic efficiency and also minimize transaction cost (Ahmed and Scapens, 2000). One of the criticisms of the TCE is that the transaction costs are difficult to measure, however, most of the empirical studies assume that the transaction costs are measurable. Buckley & Chapman (1997) argue that in practice, it is not necessary to accurately calculate the transactions costs because, in practice, decision makers use "selling costs", "financing costs" and "transaction costs" etc. to decide whether to "make or buy", they are just unaware of the existence of transaction cost theory.
Although it is difficult to accurately measure transaction costs, the trade parties could decide how to govern activities by considering the characteristics of transactions. The main characteristics of TCE are asset specificity, uncertainty, the extent of transactions (Colbert and Spicer, 1995). Asset specific measures the transferability of an asset to a different use or user (Williamson, 1985). It includes six different types: site/location specificity; physical asset specificity; human asset specificity; specific investments (include investments in research and development); brand name capital and temporal specificity. Whether the firm will do the transaction internally or externally depends on the level of asset specificity. The second characteristic is uncertainty. This normally refers to the environmental uncertainty. The volume of transactions, the business environment such as technological development and customer requirements might change thus, the adaption of contractual agreements is required. However, the adaption process itself will also increase transaction costs (Geyskens, Steenkamp & Kumar, 2006; Walker & Weber, 1984). The last characteristic is the extent or frequency of transactions. Transactions with high frequency are more likely to be undertaken within a firm. The frequency of transactions also relates to environmental uncertainty and its influence on trade parties' decisions. Repeated and high-frequency transactions with the same trade party may enhance reputation effect and help reduce behavioral uncertainty (Williamson, 2002).

TCE focuses on the relative costs and hazards of conducting transactions within alternative governance structures (Colbert and Spicer, 1995). When the governance mechanism is market, the transactions are safeguarded by formal contracts. In the hierarchy model, the firm is the governance mechanism and the transactions are internal. Each of two modes of governance has strengths and weakness. Markets are free from intervention from head office but may suffer from market failures such as information asymmetries which could cause opportunist behavior. Hierarchies use authority to ensure horizontal divisional cooperation but may have problems of slow reaction to changes and thus reduce flexibility. A diversified M-form firm could be
viewed as “a self-correcting mechanism for market failure” (Hoskisson et al., 1993) which combines features of both competition and collaboration.

3.3.1 Transaction cost economics and SSC

The TCE approach is widely used to explain firms’ ‘make or buy’ choices. But Gospel and Sako (2010) argue that the previous analysis based on TCE is mainly on ‘primary activities’. TCE could be used to explain and analyze ‘the make-or-buy decisions involved in designing and operating shared service centers (Gospel and Sako, 2010; p.1374).

TCE is a theory to help to study governance structures, as an “institutional framework within which transactions are negotiated and executed” (Williamson, 1979, p. 239). Within traditional organizations, transactions are governed by hierarchy. However, with the development of SSC, a horizontal intra-firm client-supplier relationship is created (Minnaar and Vosselman, 2013). Herbert and Seal (2012) argue that a new organizational form (the SSC) is distinct from both third-party outsourcing and traditional centralized organization and represents "hybrid practices combining a market orientation with ongoing hierarchical control" (Herbert and Seal, 2012, p.95).

Apart from ‘make-or-buy' decision and governance structure, there are some researchers who use TCE to analyze SSC from a process-oriented perspective. Minnaar and Vosselman (2013) explore the change of management control structure related to the development of SSC from TCE perspective. Based on TCE reasoning, they assumed that a change of management control structure is a choice made by a rational top manager and the decision depends on the characteristics of transactions. Based on Vosselman’s (2002) framework, they undertook a single case study with a publisher-PCM Media, Figure 3.2 shows the original framework.
Figure 3.2, Management control structure choices for service transactions

Source: Minnaar and Vosselman, 2013, p. 82

Minnaar and Vosselman (2013) assumed that the transactions of support services with different characteristics might determine different management control structure choices. The support services could be undertaken by the outsourcers with free buying and selling (SSC free b/s) or within captive SSC with the possibility to be outsourced (SSC captive b/s). Some highly specialized and recurring services might be retained within the divisions (de-concentration). They found that some of the empirical findings from the case study were inconsistent with the hypothetical framework. For example, the back-office services which are standardized should be dealt in an SSC with free buying or selling. But the case publisher chose to centralize the services within a captive SSC. This indicates that the most efficient management control structure suggested based on TCE might not be chosen by the managers in a firm. The choice of the management control structure is a consequence of managers' day-to-day interaction in the network instead of considering the transaction costs.

Notes: *b/s – buying and selling; free b/s implies also the possibility to outsource the service
In their working paper, Cooper and Herbert (2015) used three dimensions of transactions defined in TCE to answer the question that which type of financial activities are more likely to be retained or unbundled. According to the web-based survey results, they find that financial activities with high asset (human and technological) specificity are more likely to be retained while high-frequency routine activities have a high propensity to be outsourced. They found SSC is preferred when the benefits of economies of scale are larger than the transaction costs.

TCE is used by most academic researchers to analyze SSC from several perspectives: make-or-buy decisions (retained in captive SSC or outsourced), the choice of governance structure and management control structure and unbundling process. However, the focus of this thesis is the recharging process for support service provided by SSC. The next section will discuss how TCE might help to explain the recharging practices of SSC.

3.3.2 Transaction cost economies and recharging for support services

Colbert and Spicer (1995) applied TCE from the perspective of transfer pricing and emphasized three dimensions which are relevant: asset specificity, uncertainty, and extent (volume and frequency of transactions).

Among these three, the most widely used for explaining the transfer pricing method choice is asset specificity. A high level of asset specificity such as a considerable degree of customization in the product/service will increase transaction costs of purchasing products or services from markets, which will increase the possibility of keeping these transactions in captive SSCs. From the demand side, if asset specificity of customer divisions is at a high level, it is more likely for them to purchase services from SSCs since both parties are operating within the same organization thus, customized requirements are relatively easily fulfilled internally. On the other side, for SSCs, high
asset specificity or high customization of intermediate products or services means it is more likely that internal manufacturing costs rather than market referents incurred will be the "primary basis for setting transfer pricing" (Colbert and Spicer, 1995, p. 425). Most of the time, general activities such as payroll processing are repeatable and barely change over the course of years; it is easier to set the budget price for them or find a reference in the open market. However, labor usage measured in labor hours varies a lot along with highly customized tasks, therefore in this case recharging extra based on actual costs is more appropriate. Some existing SSCs recharge for general tasks and specially customized activities in different ways. As examples, the global services business of DuPont recharges fixed rates for routine activities but for special or customized services there are usually extra charges (Goold, Pettifer and Young, 2001).

Another dimension of TCE is uncertainty. This dimension is relevant to an SSC’s recharging method from two perspectives: the necessity for coordination and adaptation (Colbert and Spicer, 1995). There is a significant body of transfer pricing literature which discusses the coordination problem of internal transactions (Meer-Kooistra, 1994; Spicer, 1988; Watson and Baumler, 1975; Swieringa and Waterhouse, 1982; Eccles, 1985). The broad argument is that the transfer pricing problem should be placed within the organizational context. According to TCE, authority relations are used to ensure internal coordination between divisions or departments while in the market; coordination between different contracting parties is ensured by the price mechanism (Madhok, 2002). As mentioned before, the SSC is a hybrid of market and hierarchy modes (Herbert and Seal, 2011) because it applies both mechanisms. In terms of the relationship between the SSC and its customers, price mechanism helps ensure coordination at the divisional level. Specific price rates and clear terms in the SLA enable the customer divisions to have transparent information about their consumption and usage. The divisional manager's feeling of fairness (Eccles, 1985) lowers the possibility of opportunistic behavior. With respect to the relationship between SSC and head office, there are two possibilities. If head office dictates the SSC's recharging mechanism, then its authority must also be used to balance the interests between the
SSC and its customer divisions to ensure goal congruence and rational resource allocation. If an SSC has the right to choose its recharging method, head office may use different performance evaluation methods and reward systems of SSC to ensure the achievement of organizational goals such as profit maximization. The uncertainty of transactions also requires adaptation to preserve the relationship between divisions. Customer requirements and firms' objectives change regularly; firms have to adapt their strategies to these changes, including divisional performance measurement, reward systems and the method of recharging inter-divisional transactions at different stages in their life cycles (Jones and Hill, 1988). The market model, which is based on negotiation and contracting, may have problems of bounded rationality and time and cost consuming while the hierarchy model while enjoying common resource ownership, will encourage cooperation but may suffer from the problem of slow reflection and adaptation. There is no recognized optimal method in the transfer pricing literature. Hence, no single recharging mechanism of SSC could solve all the organizational problems once and for all. Thus, similar to Eccles’ (1985) argument for transfer pricing, the recharging mechanism of SSC should also be dynamic and adapted to the changing business environment and customers’ requirements.

The last dimension of TCE is the frequency and volume of the transactions. Benefiting from economies of scale is the most common reason for some firms to keep the transaction in-house. Thus, it is more likely for the firm to internalize transactions when the volume of the transactions is greater (Colbert and Spicer, 1995). Also, if most of the keep-in transactions are routine, it is much easier to standardize the process and thus further reduce the costs and control the quality. For multi-divisional organizations, if the number of support service activities within each division is large, the head office may prefer aggregating them in captive SSCs. In the case of general or routine tasks, the usage of resources such as working efficiency of each headcount varies little, SSCs may use fixed rate or budgeted rate for recharging. At the same time, because general tasks or large volume activities have a lower level of customization, the market price,
i.e. the price charged by outsourcing companies, would be the primary reference (Colbert and Spicer, 1995).

3.4 The need for additional theory

Integrating the theory of strategy and structure with TCE could provide a comprehensive explanation of the functioning of recharging mechanism of SSCs and the influencing factors. The choice of recharging mechanism should be aligned with the business strategy and organizational structure change. The functioning of the recharging mechanism is assumed to be influenced by the TCE factors of internal transactions. Previous theory integration of structure and TCE only answers the first part of the research question, which is about the choice of the recharging mechanism. It is inadequate to explain how the recharging process might drive better behaviors on the part of client divisions whilst also facilitating continued control by head office. To provide a more comprehensive theoretical framework for data interpretation, additional theories are needed.

Although most academic scholars tend to focus on explaining the configuration of organizational form and different strategic choice by using the concept of transaction costs (Hill, 1990), TCE could also be treated as a branch of agency theory to help explain how opportunistic behavior could be limited (Baiman, 1990). TCE constraints like bounded rationality and incomplete contracts may prevent cooperative solutions and governance better procedures which could help a firm to limit opportunistic behavior (Williamson, 1975; Baiman, 1990). It is assumed that information transparency also plays a critical role in the cooperation between SSCs and their customers. Therefore, the principle-agent model of agency theory is also useful in interpreting the data collected. The details of agency theory, including both the principle-agent model and TCE model, will be discussed in the following section.
3.5 Agency theory

Agency theory is widely used in an organizational context where one person performs the task on behalf of another person because a principal who does not have time, ability or wish to do the task themselves. The basic assumption for both principal-agent model is that individuals are all self-interested (Baiman, 1990). In this circumstance, agents have the opportunities to divert organizational resources to their personal use. The ‘agency problem’ arises when an agent’s desires conflict with those of the principal or when it is difficult or expensive for the principal to monitor an agent’s behavior (Eisenhardt, 1989). Baiman (1990) classified agency theory into three branches – the principle-agent model, the TCE model, and the Rochester model – in terms of their application in management accounting research. Because the Rochester model focuses on the capital and employment, which is less relevant to the research question of this study, only the principal-agent model and TCE will be addressing in this study. TCE model has already been discussed in the previous section, the next section will focus on the principal-agent model.

3.5.1 Principal-agent model

The basic assumptions for the principal-agent model include: individuals act in their own interests; individuals could anticipate all future contingencies; contracts are complete; each individual's actions are endogenously derived and there is information asymmetry between principal and agent (Baiman, 1990). Information asymmetry exists between agents and principals which means a principal does not know exactly what an agent has done. Agency problem could be through a lack of efforts on the part of agents (moral hazard) or the misrepresentation of the ability by agents such as that agents might claim to have certain skills which they do not have (adverse selection). Eisenhardt (1989) suggested that this problem could be solved in two ways: principals could use a budget system with formal reporting procedures to reduce information asymmetry and to monitor the behaviors of agents. Alternatively, to use outcome-based
contracts to align the interests of agents with that of principals. Oviatt (1988) examined the manager-shareholder relationship through both agency and transaction costs perspectives and argued the practical results of his research is not only to understand the relationship itself but also generate a greater understanding of organizational incentive and control.

However, there are also some criticisms of agency theory. Agency theory is criticized for its narrowness, as it ignores the existence of trust and fairness which also affects managerial behaviors (Baiman, 1990). The interdependence and corporative relationship between different divisions and the effective management from the top also played roles in solving agency problems in practice. Harris and Tizard (1994) conclude that agency theory ignores facilitative effort such as teamwork but overstates the importance of operational efforts involved in the transformation from inputs to outputs. Rather they argued that a firm is a network of inter-dependent roles and cooperation and trust plays critical roles in the process of managing the uncertainties arising from interdependence.

3.5.2 Principal-agent model and recharging for support services

Within an organization, it is possible for divisional or departmental managers to use the resources of the firm to maximize his or her own utility, which may conflict with the organization's goals. At the same time, tasks are performed by different departments and each of them has special knowledge which is unknown by others and head office (Harris, Kreibel and Raviv, 1982). This information asymmetry may induce unconstrained opportunistic behaviors (Noreen, 1988). Within a large organization, especially a multi-national organization that has different divisions around the world, the costs of directly observing and monitoring are extremely high and corporate management have to find an alternative, cost-effective ways to monitor subordinates’ behaviors and ensure goal congruence across divisions and support functions.
Cost allocation is widely used in the empirical world but was not recommended by some academic scholars, who have tended to view cost allocation as an arbitrary decision which serves no useful purpose (Thomas, 1970; Dopuch, Birnberg and Demski, 1974; and Horngren, 1977). For example, Zimmerman (1979) addressed the question of why firms persist in allocating joint costs based on economic models to justify the monitoring of subordinates’ behavior. Zimmerman extended Williamson’s tax scheme idea by arguing that allocating support service costs could help reduce subordinates’ consumption of perquisites if the allocation scheme acts as “a lump-sum tax” (Zimmerman, 1979). Support service costs are incurred by the running of head office and support service departments. Allocating these costs to operating departments directly affects departmental financial performance and reduces income that might otherwise be seen as available for divisions to spend. Thus, the allocation process could also induce departmental managers to monitor head office and support departments. Zimmerman’s research was based on two other authors’ arguments: Kaplan (1977) and Horngren (1977) who believed that the cost allocation process influences managerial behaviors. In the 1980s, Baiman (1982) argued that the costs allocated to different ‘agents’ provide head office with information about agents’ unobserved behaviors. Zimmerman’s main contribution is using an economic model to prove the necessity for organizations to allocate common costs and at the same time to link this to incentives for managers and to managerial behavior.

Allocating costs could help head office to monitor the agents’ behaviors (Zimmerman, 1979). Transfer pricing has the same objective in multi-divisional organizations. Transfer pricing is the by-product of decentralization and one of the purposes of implementing transfer pricing is to ensure divisional autonomy. However, it also plays the role of facilitating organizational integration (Watson and Baulmer, 1975). The head office could also use transfer pricing information to monitor divisional managers’ behavior, in case divisional managers pursue divisional objectives at the cost of the whole organization.
In the case of the SSC, by recharging for support services undertaken by the SSC, both customer divisions and head office could get detailed cost information. Head office could use this information to better allocate resources, while customer divisions could improve their operating efficiency by taking actions such as removing wastage. At the same time, the recharging figure will also enable customer divisions to monitor the SSC’s efficiency. This two-way monitoring relationship is helpful for the whole organization to achieve the goals of cost reduction and efficiency improvement.

Previous agency theory studies have largely focused on finding ways to minimize agency costs and there is a lack of in-depth studies on how organizations do in practice at reducing agency costs and ensuring corporation between divisions. In this research, the interpretive analysis of the cases will not only focus on the agency relationship between the SSC and its customers and also the SSC and the head office but will also investigate how the head office uses the recharging information to ensure control and coordination.

### 3.6 Conceptual Framework

Chandler (1962) identified different types of administrative structures. Williamson (1975) used transaction costs to explain how different firms organize their economic activities in particular ways. Agency theory further helps researchers to understand the behavioral aspects in organizational context. By integrating these three theories, a conceptual framework has been developed, which is presented in the following figure 3.3.
Figure 3.3, Governance aspiration framework

Setting up SSC transform the support service provision from intra-divisional to inter-divisional relationship (Herbert and Seal, 2012). But whether or not the transactions between SSC and its customer business units are actually governed by market approach or hierarchical approach is uncertain. If the relationship between SSC and its customer business units is market-based this indicates that a buyer-seller relationship exists within the organizational context and this relationship is safeguarded by the contracts. The SSC in this scenario is like the outsourcer in the open market. The ‘price’ of support services is set either by applying a cost-plus method or referring to the price of similar services available in the market. Both SSC and its customers should be free to choose a contractual partner. Transfer pricing approach of recharging mechanism is assumed to be applied with market-oriented governance, which means the costs incurred for providing support services will be directly recharged to the service-consuming business units. Direct recharging should reduce information asymmetry between a service provider and its customers because the customer could ‘feel’ the payment and raise their cost consciousness. The recharging of SSC will become part of customer business
units’ operating costs. Thus, directly recharging by using transfer pricing approach will drive customers’ good behaviors and motivate them to improve their own efficiency.

On the other extreme, when internal transactions are governed by a sole hierarchical approach, both SSC and customer business units are operating under the control of the head office. In this circumstance, SSC is essentially regarded more like a central service department, regardless its identification of a semi-autonomous business unit. Being part of the head office, the costs incurred by SSC will be absorbed by the head office without further allocation to customer divisions. Without direct recharging, the cost information is hidden for customer business units, which means there is no appreciation of costs. Because customers are not aware of their consumption of support services, they will likely feel no accountability to contribute to the cost reduction or efficiency improvement of SSC.

Hybrid approach stays between market-based and hierarchical based approach. For the SSC in this type of organization, the costs of providing supporting services is assumed to be absorbed by the headquarters before allocating to service-receiving business units by using the management accounting techniques such as Activity-Based Costing. Or in some cases, the full costs incurred in SSC will also directly recharging to its customers. The difference between hybrid and market-based approach is that the purpose of operating SSC in a hybrid organization is not to generate profits. Therefore, no mark-up or profit will be added to the recharging amount.

In this framework, the support services provided by SSC are classified into two groups: transactional and transformational services. Transactional services "deal with all the process and activities related to meeting the administrative requirements of employees" (Ulrich, 1995, p.14). Transactional services in finance are routine financial activities that require little or no judgment such as general ledger, account receivables etc. (Cooper and Herbert, 2015). Transformational activities which are non-routine or non-administrative might be classified as high value added (Sako, 2006). This type of activities might require specialized technical or professional knowledge (Cooper and
Herbert, 2015) and could be undertaken in Center of Excellence\(^8\) rather than SSC. This type of activities within finance context include financial report analysis and investment decisions etc. Whether the recharging is based on budgeted or actual number depends on the different type of services because as explained in the previous section, it is easy to standardize transactional activities and find the reference prices in the market. However, for transformational activities which might be highly specialized or customized, the recharging rate might vary largely in different cases. Therefore, the actual recharging rate is more appropriate.

3.7 Summary

This research seeks to have an in-depth understanding of the recharging process of SSCs. The research objective includes an illustration of the recharging mechanism and the behavioral effects of recharging. As mentioned at the beginning of this chapter, it is rare that one single theory has a monopoly on the explanation of organizational practice. Thus, several theories have to be integrated to build a more complete and fruitful framework to address the research questions. Three theories: the theory of organizational structure, TCE and agency theories are reviewed in this chapter and each theory is linked to the research context – SSC and its recharging mechanism.

This chapter has reviewed the organizational structure theory in section 3.2 as the setting-up of SSCs has changed the organizational structure of a traditional multi-divisional organization. As SSC is operating as a semi-autonomous business unit, the transaction between SSC and its customers has changed from hierarchical to hybrid of hierarchical and market-based. The original theoretical integration includes the theory of organizational structure and Williamson's TCE (1975). Several factors, such as asset specificity, bounded rationality, and uncertainty are assumed to influence the recharging mechanism chosen by SSCs. In terms of the behavioral effects of recharging, as the SSC provides support services on behalf of its customers, the agency

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\(^8\) A Centre of excellence combines individuals and teams who have deep knowledge and expertise (Ulrich, 1995, p.15).
problem might be raised. Principle-agent model is used to discuss how the recharging process influences the managerial behaviors of both the SSC and its customers. Based on the theory triangulation, a conceptual framework is built in section 3.6. Different governance aspirations are assumed to influence different organizations’ choice of SSC’s recharging mechanism and the recharging process would enforce the control of the head office and drive good behaviors of both the SSC and its customers. This framework will be used to analyze the empirical data of case organizations in the discussion chapter, before moving to the description of cases, the next chapter will explain research methods that applied in this research.
Chapter 4 Methodology

4.1 Introduction

Chapter 2 critically reviewed the existing literature about transfer pricing and cost allocation, while the conceptual framework to be employed was developed in Chapter 3. This chapter will explain the research methodology and method applied in this research.

It will discuss the common research paradigms in the social sciences and, more specifically, the interpretive paradigm and its application in the research of management accounting (section 4.2), as a prelude to explaining the research strategy in this inquiry (section 4.3). This will include an explanation of data collection and analysis methods and how the research findings were evaluated.

The details of the research design are explained in section 4.3, including the research approach, data collection process, and data analysis methods. Interviews with key informants are employed as the main source of empirical data along with ‘in-house’ documents providing complementary information. The evaluation of qualitative research is discussed in section 4.4. The chapter closes with a short summary in section 4.5.

4.2 Research Paradigm

Different ways of viewing the world shape different ways of researching the world.
(Crotty, 1998).

It is important to be clear of the researchers’ beliefs about the world before discussing the research methodology which guides the practical ways of doing this research. A research paradigm is a basic belief system that represents the researcher’s view of the
nature of the world, together with the researcher’s role in the world and the relationship between them (Guba and Lincoln, 1994). Normally, there are three dimensions of a chosen research paradigm: ontology, epistemology and methodology and Guba and Lincoln (1994) express these different paradigms as three fundamental questions:

1. Ontology: What is the nature of reality?

   Ontological assumptions concern the nature of reality and whether reality exists independently of the human mind, or whether it is a product of our own subjective thoughts (Chua, 1986; Hopper and Powell, 1985)

2. Epistemology: What is the relationship between the knower/researcher and what can be known?

   Epistemology assumptions consider how the knower begins to understand reality.

These first two dimensions form a researcher’s beliefs about the world. There is a natural dichotomy between two beliefs about reality: objectivism and constructivism. Those researchers who hold the worldview of objectivism believe that reality is objectively given and the researcher is independent of that reality. On the other hand, in constructivism, researchers believe that reality is constructed through human interactions and the researcher is a participant observer in the processing of finding out about reality.

3. Methodology: How can the knower find out what he/she believes can be known?

The choice of methodology is driven or influenced by his/her answer to the first two questions, ontological and epistemological assumptions (Guba and Lincoln, 1994). Methodology not only includes the method(s) that are applied by the researcher to investigate and acquire knowledge but also to the research design and the plan of research activities which will guide the researcher in collecting and analyzing data (Burrell and Morgan, 1979).
Different answers to these three fundamental questions constitute different research paradigms. There is no unified classification of research paradigms. For example, Collins and Hussey (2003) distinguish a positivistic paradigm from the phenomenological one, whilst Guba and Lincoln (1994) define four paradigm positions: positivism, post-positivism, critical theory, and constructivism. The next section will first introduce Burrell and Morgan’s framework (1979) which is frequently used in social science research followed by Laughlin’s (1995) framework which will also be discussed.

4.2.1 Burrell and Morgan’s Framework

Using two dimensions which represent the nature of social science (objectivism and subjectivism) and two approaches to society (regulation and radical change), Burrell and Morgan (1979) defined four paradigms: radical humanism, radical structuralism, interpretivism, and functionalism, see figure 4.1. Different ontological assumptions about the world and epistemological notions of knowledge determine each of four basic research paradigms. According to Burrell and Morgan’s (1979) argument, the researcher can only use one paradigm at one time because using one research paradigm means denying the assumptions of the other three. The four paradigms are explained further in sub-sections 4.2.1.1 to 4.2.1.4.
4.2.1.1 Functionalist paradigm

Functionalist researchers believe that reality is independent of the participants of the research programme and that reality exists objectively without any influence by the investigator (Guba and Lincoln, 1994). The purpose of functionalist research is to summarize knowledge “in a form of context-free generalization” (Guba and Lincoln, 1994). Researchers believe that research objects can be both observed and measured, and as such, they seek to establish a causal relationship(s) between different variables (Hopper and Powell, 1985), in order to predict phenomena (Leedy and Ormrod, 2001). Such ontological and epistemological assumptions are adapted from the natural sciences. The common research approach starts from general theories/laws and seeks to test pre-determined frameworks or hypotheses by collecting a large number of empirical observations. During the data analysis process, mathematical tools are frequently used by researchers to find the causal relationship between indicators/independent variables and effects/dependent variables (Sale, Lohfeld and Brazil, 2002). The functionalist paradigm has tended to dominate research in accounting and finance since the 1970s.
4.2.1.2 Interpretive paradigm

In contrast to Burrell and Morgan’s framework (1979), the basis of interpretive research is subjectivism. In other words, reality is socially constructed and thus, dependent on the human mind (Collis and Hussey, 2003), which in turn means that institutions only come to life because a human makes them come to life (Alvesson and Skoldberg, 2009). Researchers who use interpretive methods see themselves as participants in the research process (Creswell, 1994) as they interact with what is being researched (Guba and Lincoln, 1994). Interpretive researchers attempt to understand the human mind and people’s perception of reality in order to try and make sense of human behavior by interpreting their actions. According to Lukka and Modell (2010), the key characteristic of interpretive research is the adoption of an emic perspective, which requires a native insider (normally a participant of interpretive research) accessing the meanings under analysis. Denzin (1983) emphasized the importance of a researcher’s immersion in the phenomenon to fully understand and interpret human experience. Due to this personal involvement, interpretive researchers are usually bounded within a specific context (Collins and Hussey, 2003; Ryan, Scapens and Theobald, 1992; Hopper and Powell, 1985). Interpretivists essentially undertake research through the observation and interpretation of the participants’ language, behaviors or other actions so as to understand participants’ own perception of the phenomenon at hand (Deetz, 1996).

4.2.1.3 Radical Humanist

The assumptions of the radical humanist about the nature of social sciences are essentially the same as the interpretive paradigm. However, their assumptions about the nature of society are different. The radical humanist paradigm is associated with a considerable change in the environment and researchers concentrate on how the relaxation of social restrictions enable human development (Burrell and Morgan, 1979).
4.2.1.4 Radical Structuralist

The radical structuralist paradigm shares many of the assumptions with the functionalist paradigm about the objective nature of reality. However, the focus for those researchers that adapt radical structuralist is to study structural relationships within the context of the social world.

4.2.1.5 Criticisms about Burrell and Morgan’s Framework

Burrell and Morgan’s (1979) classification (especially the distinction between functionalist and interpretive research) has inspired many accounting researchers although, is also subject to some criticisms. The framework suggests a mutually exclusive relationship between different research paradigms which means only one research paradigm can be used at one time. Gallhöfer and Haslam (1997) argued that this restricts the communication between the followers of different research paradigms. Another important criticism is that the distinction between the objectivism and subjectivism (Ryan et al., 1992). Interpretive research could include both subjective and objective features (Chua, 1986; Lukka and Modell, 2010; Ahrens, 2008). For example, human minds are inherently subjective, but humans can create social structures that subsequently become capable of objective analysis (Ryan et al, 2002).

4.2.2 Laughlin’s middle-range thinking approach

By avoiding Burrell and Morgan’s distinction between subjectivism and objectivism, Laughlin (1995) provides an alternative framework to categorize different schools of thoughts in accounting research. This is comprised of three dimensions – theory, methodological and change.

The ‘theory’ dimension in this framework includes the view about the nature of the world (ontology) and what is knowledge and its relationship with current investigation
A high level of theory indicates an assumption about the material world which is believed to be “distinct from the observers’ projections and bias” (Laughlin, 1995, p.66). Research with a high level of theory tends to have a high level of generality. The other extreme of the theory dimension assumes that the world is a projection of human minds, hence, for this type of research, generalization is impossible. The ‘methodology’ dimension comprises the role played by the observer in the discovering process (human nature) and the level of theory in methodology itself (methodology). According to Laughlin (1995), the methodology dimension is related to theory dimension in a linear manner, which means a high level of theory will indicate a high level of methodology. For these research studies, the observer is irrelevant to the research process. If the level of methodology dimension is low, the observer is “free-thinking” (Laughlin, 1995, p.67) and heavily involved in the research process. His or her perceptual skills are regarded as a strength of the research rather than it being a limiting problem. The last dimension ‘change’ measures whether the investigation changes in accordance with the change in the phenomena being investigated (Laughlin, 1995). Researchers that believe in a high level of change assume that everything is inadequate and incomplete and thus, desire change. Researchers who choose a low level of change dimension prefer to maintain the status quo. By using the level of these three dimensions, Laughlin (1995) classified different approaches as shown in figure 4.2.

Each approach is depicted in the cell referring to its implicit theoretical and methodological chosen position with the change element marked as L, M or H (referring to low, medium and high, respectively. The empty cells are theoretical possibilities but do not currently appear to be occupied. The positioning for each approach, which is only indicative, could be justified individually (p.70).
Figure 4.2 Characteristics of Alternative Schools of Thoughts (Taken from Laughlin, 1995, p.70)

According to Laughlin (1995), accounting researchers should be more “middle-range thinking” (the central cell in figure 4.2) because accounting is not a purely technical problem and the application of accounting theory is contingent to the context. The top left cell in figure 4.2 represents positivistic research. For this kind of research, theories are well defined with hypotheses to be tested. The research is well-structured and quantitative method is applied. The conclusions about findings are tight. At the other extreme, the bottom right cell represents interactionism, pragmatism, and ethnomethodology researches. For these researches, the theories are ill-defined and there might be not generalized theory to be found. Research methodology is unstructured and qualitative, for example, based on longitudinal case studies that provide a view of change over time and include rich empirical data. But, the conclusions are likely inconclusive (Laughlin, 1995, p. 80).
The “middle-range” argues “a case for taking a mid-point on each of the three continuums” (Laughlin, 1995, p.78). In terms of theory dimension, “middle-range” maintains the idea that only “skeletal” theories in social phenomena can be found. For “high” level theory, theories are well-defined and differences are assumed away. However, accounting practices are not like scientific theories which are context-free, because they are conducted by diverse social actors. On the other hand, a “low” level of theory assumes that everything is unique and independent from each other, as such it respects the details of actual situations. “Medium” theory includes both the empirical details (from the “low” position) and the possibility of learning through theoretical insights (from the “high” position). In Laughlin’s words, “its design and use of ‘skeletal’ theories, which cannot stand on their own but need empirical ‘flesh’ to make them meaningful and complete” (p. 83). Following the assumptions about theoretical perspectives, the medium position in methodology also combines the strengths of both the “high” and “low” positions. Clear perceptual processes are adopted but, during the observing or discovering process, flexibility and diversity are still encouraged. The method is “part-constrained and part-free” (Laughlin, 1995, p. 84). With regard to “medium” position of change dimension, current situations are maintained but the researcher is open to changes if that is appropriate. The medium/medium/medium approach does not guarantee the generalization about reality but is open to its existence. It emphasizes the vital importance of empirical evidence which is essential to complete “skeletal theory”.

4.2.3 Previous research in Management Accounting

Before the 1980s, research methods such as deductive analysis and controllable laboratory experiments dominated management accounting researches (Kaplan, 1986). According to Kaplan (1986), 87% of published papers during the period from the 1920s to 1980s used these two methods. Following the suggestions in the conference "Accounting in Its Organizational Context", held at the University of California Los Angeles, in the 1980s, the direction of management accounting researchers moved from
pure theoretical analysis towards the collection of empirical data from actual organizations (Kaplan, 1986) and consequently from normative theories (concerned with what ought to happen) towards positive theories (concerned with what actually does happen) (Scapens, 1990).

Since then, functionalist research methods such as quantitative surveys have come to dominate mainstream empirical research in management accounting. Researchers have been keen to either give a “superficial view” of management accounting practices or to find “law-like regularities that are testable with empirical data sets” (Lukka, 2010). This functionalist research approach assumes that reality exists objectively and the hypothetical-deductive method (testing the hypothesis that deducted from existing theories) is therefore applied by researchers. In a functionalist paradigm, human beings themselves are also classed as objects, rather than just the external makers of social reality (Chua, 1986). Aside from these underlying assumptions about reality, positive accounting research before the 1980s also shares the basic assumption of neo-classic economic theories, including the notion that the driver of all organizational behaviors is utility maximization at the best price in the market (Scapens, 1990). Positivist theories informed by these assumptions seek to predict market-level behaviors or general trends, yet, can essentially fail to explain individual behavior and motivation (Ryan et al., 1992).

By the end of the 1960s, some management accounting researchers had started to criticize functionalist research as they believed that knowledge is historically and socially conditioned. They argued that management accounting practices are not a natural phenomenon, for which generalized rules can be found (Hopper and Powell, 1985). While that might be possible for abstract conceptualizations of economic phenomena, management accounting practices are essentially contingent on the organizational context and management accounting practice varies according to the environment, the nature of organizations and other economic factors (Hopper and Powell, 1985). Moreover, some human factors, such as the decision makers’ perspectives, behaviors, and experiences, can also have a significant influence on
practitioners’ choice of management accounting practices. When the research is context-specific and subjective factors are involved, it is better to seek insight into the inner world of the research context (Hopper and Powell, 1985).

In addition, the knowledge-practice gap in management accounting is starting to be noticed by many researchers (Eccles, 1985; Nørreklit, Nørreklit, and Israelsen, 2006; Scapens, 1990, Kaplan, 1986; Tissen and Waterhouse, 1983). However, the management accounting models and techniques suggested in academic papers and textbooks were found not to be widely used in practice (Eccles, 1985; Nørreklit et al., 2006). Indeed, Chua (1986) argued that only an abstract image of accounting is obtained if the contextual knowledge of the role and meaning of accounting numbers is missing. The realization of the practice/theory gap raised the importance of understanding management accounting practices in a real-life context (Scapens, 1990; Kaplan, 1986; Tissen and Waterhouse, 1983). Chua (1986) suggested two alternative approaches in mainstream accounting research – interpretive and critical research – with both of approaches being bounded within real-life contexts.

4.2.4 Research paradigm adopted in this study: Interpretivism

The research paradigm used in this research is essentially based on interpretivisms but, as Kakkuri-Knuuttila, Lukka and Kuoriskoski (2008) suggested, interpretive research in management accounting straddles two paradigms (interpretive and functionalist), including as they do subjective and objective features.

Interpretive research methods, such as case studies, examine a single instance of a phenomenon (Collins and Hussey, 2003). Unlike traditional mainstream management accounting research, which focuses on the answer to a ‘why’ question, interpretive research in management accounting seeks to solve the ‘how’ question by studying accounting in action (Chua, 1988). It does not seek to discover general rules but rather to understand the specific phenomenon within a particular context (Yin, 2008) and alternatively, to get a dynamic view of a particular management accounting practice.
Burrell and Morgan (1979) argued that this interpretive research is associated with subjectivism; although, there has been a continuous debate on this subjectivist base of interpretive research in management accounting (Chua, 1986; Lukka and Modell, 2010; Ahrens, 2008; Kakkuri-Knuuttila et al., 2008). From a subjectivist perspective, the interpretive research places an emphasis on providing "thick" descriptions (Geertz, 1973) which cover the details of phenomena and dependence between phenomena from the viewpoint of the participants or native insiders (Denzin, 1983). The researchers stay within the same social context as the research subjects and try to understand and analyze people's words, behaviors, and actions in this specific context through observations and communication. The holistic analysis is "shaped in interaction between people and a broad range of human and non-human aspects" (Lukka and Modell, 2010, p. 464).

However, interpretive research not only requires the adoption of an emic perspective, which is understanding from the examined subjects’ point of view, but also an etic (objective) perspective, which is from the outsiders’ point of view (Dezin, 1983; Headland, 1990; Pike, 1954; Kakkuri-Knuuttila et al., 2008). Chua (1986) argued that although the daily actions of human beings are subjectively created, in continuous interaction with others’ actions, the meanings and norms of these actions become objectively (inter-subjectively) real. The application of management accounting activities varies depending on different contexts but, in reality, companies tend to model themselves on those that are successful in their field. Thus, it is possible to find common issues in social research (Lukka and Kasanen, 1995).

In this study, the researcher does not assume there is a reality that is independent of human minds to be discovered, because individuals play a role in the construction of reality (Creswell, 2003). In terms of epistemological assumptions, the researcher believes that knowledge comes through interaction with individuals who participate in the research. These leading to a subjective position of social science. However, as explained in the previous section, although the functioning of management accounting technique is contingent on organizational factors, there is a possibility to find
generalizable aspects of social rules (Chua, 1988; Laughlin, 1995). Therefore, within the continuum of Laughlin’s framework, the researcher is at the medium ontological position where it is possible to find “Skeletal theories” (Laughlin, 1995) and in this study empirical evidence will be used to complete the theories. A medium position in theory dimension indicates that the researcher is also at the medium position of methodology dimension, which means the researcher is not completely free but partly-constrained by the external environment. The last dimension of Laughlin (1995) is change. The purpose of this research is to investigate the recharging mechanisms in a shared service context. The focus is to understand a particular practice in social structure. Although the researcher is open to the changes in the phenomenon being studied, there is no intention for the researcher to create any change.

4.3 Research strategy: qualitative research

Crotty (1998) defined four steps for research design that a researcher needs to be clear about: how epistemology informs the research, the philosophical paradigm of the research, the research strategy and the particular techniques that will be used. The previous sections elaborated the first two aspects and now the research strategy and the particular research approach to be employed will be discussed. The three possible research approaches are qualitative methods, quantitative methods and mixed methods (Creswell, 2003).

Generally, qualitative and quantitative research designs are antithetical because they are grounded in different ontological and epistemological paradigms and thus, data analysis processes involve distinct techniques (Walliman, 2005). Researchers who apply quantitative methods use numerical data to measure relevant variables and, by using a ‘hard’ (Walliman, 2005) analysis method (usually statistical calculations) to discover potential correlations and causal relationships between independent and dependent variables (Creswell, 2003). Most researchers who conduct quantitative research aim to test the hypotheses which are deduced from theoretical literature (Gill and Johnson, 2010). Alternatively, qualitative researchers collect non-numerical data
to understand people’s perception of a phenomenon and its context. The sources of qualitative data could be interviews, observations, documents, questionnaires, focus group discussions and the impressions of researchers. Types of data could include voice recordings (with or without transcriptions) of interviews, notes of meetings or other textual information (Creswell, 2003). Many qualitative research methods, such as field work and case study, require the researchers’ active participation and interaction with the research objects in the context. Unlike the hypothetical-deductive (Walliman, 2005) process of quantitative research, qualitative researchers intend to start from the nominal data (Collins and Hussey, 2003) and develop themes or create theories from the empirical evidence (Creswell, 2003).

The underlying philosophical paradigm of this research is interpretivism and the purpose of this research is to understand the recharging process in the SSC context. Denzin and Lincon (2000) argued that qualitative studies are used to understand phenomena in their natural settings and try to explain the meanings that people might attach to the phenomena. Rather than be predictive and prescriptive, qualitative research tends to be more descriptive and explanatory (Leavy, 2004). Thus, it is appropriate for understanding the application process of a particular accounting technique (recharging) in a particular context (SSC). The advantage of undertaking qualitative research is that it helps the researcher to understand how phenomena come about, how they are experienced and how they are interpreted. Nonetheless, the greatest criticism of qualitative research is that the findings in the study sample cannot be generalized to a wider population. Generalization will be discussed further in the next section 4.4.3.

In order to answer the ‘how’ questions, it is better for researchers to use an in-depth case study method (Perry, 2001) and collect data directly from the organization (Kaplan, 1986). A multiple-case study will be undertaken in this study including a detailed description and analysis of three individual case organizations. The case study method is a research technique that is popular in the social sciences as it aims to understand human beings in an organizational context, in a group setting or in a social event (Yin, 2008). The researcher conducted three case studies in SSCs to collect
primary data for this research and the details of the research process will be discussed below.

4.3.1 Case studies

Case study research is, perhaps, the oldest means used to explore and explain real-world phenomena. When a holistic perspective is required to understand the phenomena, it is arguably the best method (Baker, 2003). Yin (2008) defined the case study approach as follows:

*A case study is an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident (p.18).*

Yin (2008) defined three types of case study: explanatory, descriptive and exploratory. Especially if little is known about the phenomenon, a case study could be conducted to explore a new field and provides a useful first step in the research process to generate ideas, propositions and/or hypotheses (Ryan et al., 1992). Yin (2008) argued that although some scientists believe that case studies are only appropriate in the exploratory phase, it is possible, nevertheless, to do descriptive and explanatory case studies. Descriptive case studies focus on the description of a particular technique such as an accounting practice applied in the real world. It is most useful in terms of determining the extent of the knowledge-practice gap (Ryan et al., 1992). On the other hand, an explanatory study aims to explain the reasons for implementing particular practices in a specific case. This is useful when producing a theory because theoretical insights can be generated through a detailed investigation in the field (Thomas, 2004). Yin explained that the case study

*attempts to examine a) a contemporary phenomenon in its real-life context, especially when b) the boundaries between phenomenon and context are not clearly evident (Yin, 2008).*

The purpose of a case study is to develop a tentative explanation or hypothesis to guide further research, rather than simply to confirm or disconfirm a pre-determined
hypothesis (Leedy and Ormrod, 2001). It can be the bridge between quantitative data and further mainstream deductive research (Eisenhardt and Graebner, 2007). However, a case study is not totally inductive as it could combine both induction and deduction since some of the information is based on prior theoretical knowledge whilst the other insights come from the field research (Baker, 2003). It is possible to have research units of different scopes in a case study but the most common unit in business studies is either an organization or a business unit of a particular organization (Thomas, 2004).

Criticism of the case study method

There are several concerns about using the case study method in research. First is that undertaking a case study could be costly in terms of time and money, especially a multiple-case study (Hodkinson and Hodkinson, 2001), not only during the collection process but also when analyzing qualitative data on a large-scale (Yin, 2008). Second is that data could lack rigor (Yin, 2008). Unlike numerical testing which is objective, the subjectivity of case study research is often criticized because the researchers involved could influence the data, and be influenced by the data, in several ways, for example, by the style of the questions they ask, how they ask them and how participants answer those questions. Third, a relatively small sample size in case study may cause the case study result to be biased in terms of verification. However, this bias could be reduced through triangulation, which means the results would come from using different sources of data (Denzin, 1978). One of the most common criticisms of the case study method is that the results may not be generalizable. This is because the understanding and interpretation of the phenomenon is closely relevant to the context, therefore it is not certain whether similar results will be generated from another context. It is difficult for a case study to be ‘generally accepted’ and produce ‘law-like’ theories.

Despite there being some criticisms about case study research, it is still the preferred strategy used to understand “how” questions in social science (Yin, 2003). If the researchers can interpret and calibrate the empirical data of the case study with existing theories and across data from multiple cases, it is likely that they will still be able to
produce an authentic account of the enquiry and thus, convince the readers of the validity of the study and gain their approval for generalization (Lukka and Kasanena, 1995).

Single or Multiple cases

Case study research could comprise single case or multiple cases. Yin (2008) put forward five rationales of applying a single case study. For example, if the study aims to critically test existing theory, or investigate the same case along a timeline, a single case study will most likely be chosen. The other three reasons include: that the case is rare/unique, representative/typical or revelatory. Yin (2008) argued that a single case requires careful investigation to minimize the risk of misrepresentation which may result in a potential vulnerability in the overall research process.

For this reason, some researchers may choose to include several cases within their studies. In terms of sampling logic, researchers tend to choose multiple cases since they represent varied attributes of the population (Thomas, 2004). It is believed that including more than one case in a research enquiry, which predicts either how similar or different results will be, could provide more convincing and robust evidence. By comparing data from different situations, the researcher could defend himself/herself and argue that the findings are not idiosyncratic and thus, applicable to just one particular case (Eisenhardt, 1991). Also, doing multiple case studies could enable a researcher to expand the research question and give a broader theoretical elaboration (Eisenhardt and Graebner, 2007).

Considering the advantages and criticisms of both the single and multiple case methods, this research will apply the multiple case method. From theoretic analysis and context literature, it is believed that there is likely to be more than one recharging mechanisms in the SSC model whilst single case could provide enough information to answer the question of ‘how the particular recharging mechanisms work’ it would not enable the researcher to discover and compare how different recharging mechanisms might lead to or are influenced by, different governance mechanisms. Thus, a multiple-case study
will be undertaken in this research and this approach will be explained further in the data collection sub-section 4.3.3.

4.3.2 Access to data

A good research setting is the one that the researcher has sufficient access to the research context to establish an open relationship with participants quickly and enable data directly related to the research interests to be collected easily (Bogdan and Taylor, 1990). Patton (1990) argued that qualitative research seeks to understand the phenomenon in depth on a relatively small sample, and sometimes these samples need to be selected purposefully.

Prior to this study, the supervisors of the researcher had been undertaking research into the SSC model for over ten years. In that wider scheme of enquiry, there had appeared to be a general disjuncture between management theory and the SSC as a new, quasi-commercial, organizational form (e.g. Herbert and Seal, 2012, and Seal and Herbert, 2013). In order to investigate the views of practitioners across a number of SSCs, the supervisors had set up a series of practitioner roundtables (CIMA-Loughborough SSC forum) that had been held quarterly since 2008, in areas of the world where there are SSCs, e.g. UK, Ireland, Malaysia, Sri Lanka, and Singapore. The meetings were hosted in turn by the participating organizations and would normally last a full day, with around 20-30 SSC managers attending each meeting. Over time, a range of issues pertaining to the nature, structure, and operation of SSCs were discussed, such as the transforming process of finance function, benchmarking techniques, SLA formats, and the impact of the SSC model on the career path of management accountants. Participating SSC managers were keen to share best practice and to benchmark their approach and performance against other SSCs.

In 2013, as the researcher started her doctoral studies, the question of recharging cost from SSCs to client divisions was placed onto the agenda of the roundtable. A
surprising finding from the discussions at the meetings was that, despite the rhetoric of
the SSC model as a relatively straightforward organizational form governed by SLAs
and which recharges its costs to client units on the basis of market-based transfer prices,
in practice, there was actually a complex mix of approaches to recharging costs. Whilst,
some of the SSCs said they used quite detailed service recharge schedules, there
appeared to be little use of market-pricing. Indeed, a majority of SSC managers
preferred to employ a somewhat elementary ‘broad-brush’ cost allocation approach
(Seal and Herbert, 2013). Moreover, the researcher had expected that the choice of the
recharging method would evolve as each SSC matured, from broad-brush cost
allocation to more sophisticated transfer pricing, as suggested by Quinn et al. Yet, this
appeared not to be the case. As a result, the researcher initiated a more specific enquiry
into SSC recharging methods and approached several of the forum members to request
permission to do exploratory case studies. A number organizations accepted the
requests, but given the wider experience of SSC community and visits by the researcher
herself to SSC site e.g. Network Rail, RCUK, together with experience at the
Loughborough SSC forums, the researcher eventually chose three organizations which
she believed would both provide a sufficiently representative view of the SSC model
and the range of recharging mechanisms used in practice, and provide sufficient depth
and richness in understanding what appeared to be complex and dynamic organizational
context. Table 4. shows the broad characteristics of the three chosen case organizations
below.

In one of the CIMA-Loughborough forum meetings held in Malaysia in 2012, the
researcher discussed the recharging issue with the represents from the local SSCs of
some multinational organizations, including the VP of AMD SSC and the HR manager
of DHL GBS. It was surprising to discover that the AMD SSC recharges all its costs to
the head office of AMD and it is not clear whether there is any identifiable reallocation
to the customer divisions. This led the researcher to consider how cost consciousness
might alternatively be created and how the head office ensures the cooperation between
SSC and its customers, this makes the AMD an exploratory case of this study.
Of the three case organizations, two are large multinational private sector organizations (AMD and DHL) and the third is a UK company in the public sector (MyCSP).

Whilst, the HR manager of DHL did not know much about the details of the recharging, she kindly introduced the researcher to the CFO of the DHL Global Business Service Center (GBS), based in Malaysia. The first interview at DHL was undertaken in 2013 but despite a number of subsequent requests contact was lost with the GBS CFO. In 2015, the researcher met another senior manager of DHL’s SSC network at an SSC trade conference. Further to a visit to the Company's SSC in the Netherlands, it was apparent that the recharging mechanism applied within DHL had changed to a cost allocation basis from the transfer pricing system that had been evident in Malaysia in 2013. This evolutionary process inspired the researcher’s interest and suggested that this might be more typical case and the have significant similarity to other companies.

Table 4.1 Details of case organizations

<table>
<thead>
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<th></th>
<th>AMD</th>
<th>DHL</th>
<th>MyCSP</th>
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</thead>
<tbody>
<tr>
<td>Industry</td>
<td>Technology</td>
<td>Logistics</td>
<td>Pension Administration</td>
</tr>
<tr>
<td>Geographical scope</td>
<td>Multi-national</td>
<td>Multi-national</td>
<td>UK</td>
</tr>
<tr>
<td>History of Financial</td>
<td>Since 2002</td>
<td>Since 2006</td>
<td>Since 2010</td>
</tr>
<tr>
<td>SSCs</td>
<td>Malaysia</td>
<td>Malaysia, Netherland,</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mauritius, Costa Rica,</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Argentina, Czech Republic</td>
<td></td>
</tr>
<tr>
<td>Offshore location of</td>
<td>No recharging</td>
<td>Transfer pricing (direct</td>
<td>Cost allocation</td>
</tr>
<tr>
<td>SSC</td>
<td></td>
<td>recharge) to divisions for</td>
<td>(recharge through the</td>
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<td></td>
<td></td>
<td>transactions</td>
<td>Cabinet Office) for</td>
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<td>activities covered in</td>
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<td>core contract and</td>
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<td></td>
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<td>transfer pricing (direct</td>
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<td></td>
<td></td>
<td>recharge) for</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>additional services</td>
</tr>
<tr>
<td>Governance type</td>
<td>Hierarchical</td>
<td>Market-based</td>
<td>Hybrid (with the</td>
</tr>
<tr>
<td></td>
<td>orientation</td>
<td></td>
<td>ambition to become</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>more market-oriented)</td>
</tr>
</tbody>
</table>

Of the three case organizations, two are large multinational private sector organizations (AMD and DHL) and the third is a UK company in the public sector (MyCSP).
DHL was chosen as the main case of this study and a further series of research activities were undertaken to collect data between 2015 and 2018.

The last case chosen, MyCSP, is UK-based pension administration company that evolved out of the public sector around 2011 with a novel ownership structure comprising a private sector outsourcing specialist, the UK Government, and its employees. Following preliminary discussions with the finance controller of MyCSP in 2015, it was apparent that MyCSP applied different recharging mechanisms according to different types of services, which makes MyCSP quite representative and comparable to DHL case. Therefore, MyCSP was chosen as the third case of this study. Detailed research activities were undertaken for each case organizations will be explained in the following chapters (sub-section 5.2.3, 6.2.3, 7.2.2).

4.3.3 Data Collection

Triangulation

The logic of triangulation is that by mixing different data, investigators, theories and research methods (Denzin, 1978), complementary insights of the same phenomenon can be provided and compared, thus enhancing the validity of the research (Modell, 2009). Although some researchers equate triangulation with mixed research methods, this is not the only form of triangulation, for example, collecting data from different sources, combining different theories (Hopper and Hoque, 2006) or using different people to analyze the findings (Denzin, 1978; Patton, 1990). Indeed, Yin (1981) suggested that in order to reduce the problems that may arise from ‘within-case’ analysis, narrative writing should be organized around the topic and data should be collected from different sources such as from interviews with different respondents. Patton (1990) argued that it is a misunderstanding that data collected from different sources or research approaches might yield the same result. Indeed, inconsistency between different sources of data such as different interviewees might actually help
researchers to gain a deeper insight into the phenomenon at hand. Yin (2008) noted that although using triangulation would enhance validity, the evidence collected from different sources should provide a chain which allows the reader to trace the steps of the research – and thereby help them to determine the construct validity of the research.

Data triangulation is commonly used in case study research as researchers tend to collect data from a combination of interviews, documents and observations (Eisenhardt, 1989) and consequently this enquiry will also use data triangulation. The main source of data will from interviews with individual people and focus groups consisting of staff familiar with the related operational aspects. Internal documents will also be used to provide additional information. The other form of triangulation employed in this research is the use of theories from different disciplines such as cost allocation and transfer pricing theory from accounting, transaction cost economics from economics and the agency theory from organizational studies.

**Interview**

Interviews are one of the most important means to collect data in case study research (Yin, 2008) and this method can be used for either functionalist or interpretive research. Functionalist researchers tend to use a highly structured approach, i.e. asking structured and often more closed questions to gather information. Whereas, interpretive researchers tend to use semi-structured or unstructured interviews in order to encourage flexible responses from participants and to allow interactive clarification of answers to probe further emerging themes (Collins and Hussey, 2003). The chief assumption of a semi-structured interview is that the questions need to be adapted to the individual’s respondent’s context. Indeed, even the order in which the same questions are asked may change depending on interview context and the respondents’ reaction (Thomas, 2004). The advantage of undertaking either a semi-structured or unstructured interview is that different topics or questions may be raised during the interview which will benefit future data collection processes. However, the researchers should also pay attention to
practical problems such as how time-consuming interviews may be and therefore, fewer represents will be sampled. Other problems of interviews include information confidentiality and the lack of comparability in data collected. Moreover, stimulus equivalence should be ensured. This means the interview should be conducted in the same way for all respondents in order to reduce bias (Collins and Hussey, 2003). Another way to reduce the bias of interview data according to Eisenhardt and Graebner (2007) is to use informants from diverse perspectives, e.g. people from different hierarchical levels or different functional departments.

Interviews are the main source of data in this research and are preferred over questionnaire survey because 1) the research object is the SSC in different organizational settings instead of individual person, getting access to a large number of organizations that have an SSC is difficult for a doctoral candidate, and considering time and cost because SSCs are often relocated overseas; 2) as explained before, the purpose of the research is to understand a phenomena in context instead of, necessarily, testing deducted hypothesis, although it is possible to find "skeletal theory" (Laughlin, 1995), empirical evidence is compulsory.

The participants in the interviews included representatives from senior management wherever possible and middle management staff from SSC. Also, in order to increase the reliability of data, the representatives from either head office or other business units within the same organization were interviewed wherever possible. The details of the interviewees of the three cases are as follows:
<table>
<thead>
<tr>
<th></th>
<th>AMD</th>
<th>DHL</th>
<th>MyCSP</th>
</tr>
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<tbody>
<tr>
<td>No. of interviewees</td>
<td>10</td>
<td>8</td>
<td>2</td>
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<tr>
<td></td>
<td>(including eight</td>
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<td>(excluding informal</td>
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<td>representatives that</td>
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<td></td>
<td>participated in group</td>
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<td>relevant employees,</td>
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<td></td>
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Table 4.2 Details of interviews

The researcher visited the SSCs of all three case organizations and much effort was made to get access to both the customers of the SSCs and the top/central management team of each company. In the AMD case, the data were collected from both the SSC and the head office of the group with more detailed research activities explained in Chapter 5 (section 5.2.3). In the DHL case, both the staff from the SSCs in two countries and two customer division countries were interviewed. Moreover, as DHL is the main case in this study, there was a change of recharging mechanism, in order to precisely
describe the evolution process of its recharging mechanism, and the interviews were undertaken in 2013, 2015 and 2018. At MyCSP, the clients are central government departments and the customers (government departments, e.g. Defence, or individual workers) are very fragmented and MyCSP is now a third-party to the public sector and thus, it is difficult to access relevant personnel for an interview. However, in addition to the two interviews undertaken in 2015, another interview was undertaken with the Financial Controller in 2018 to update the situation and learn more about the developing plans. All of the interviews were transcribed by a professional typist and all the transcripts were sent back to the interviewees for their verification.

Due to conjectured knowledge-practice gap in the topic of transfer pricing, it was important that issues could be raised by participants (based on their working experience) and thus, a semi-structured interview was considered to be more appropriate and applied in this research.

**Focus Group interview**

A focus group involves the combination of both interviews and observations (Collins and Hussey, 2003) as selected participants are gathered together to discuss the research topic. The group of people chosen will be related to the researched phenomenon. By listening to other people’s opinions in the group, each participant will be encouraged to talk about their own situation and opinions. The researcher is also a participant in the discussion and the job of the researcher is to introduce the purpose of discussion, to ask open questions and ensure the discussion concentrates on pertinent questions (Collins and Hussey, 2003).

The focus group interview method was also adopted in the first case AMD. The advantages of holding this focus group meeting at the outset were that it helped the researcher explore a wide range of opinions and generate new ideas which could then be used to develop a more focused questionnaire for the one-to-one interviews (Fern,
The focus group interviews held at AMD included eight senior staff members from different financial departments such as global tax services, accounts payable and business analysis (the total number of managerial level employees in AMDGS is 45, so the sample proportion is 18%).

Holding both individual interviews and focus group meetings only occurred in the case of AMD. Interviews were recorded and transcribed. The transcripts of the interviews were also sent back to the participants for their approval afterward.

**Documents**

Documents can provide explicit data and enable researchers to obtain written evidence (Creswell, 2003). Documents may include letters, minutes of a meeting, internal reports and public documents such as annual reports of a company from an official website and newspaper articles (Yin, 2003). Documents are relatively stable, exact, provide a broad coverage and include informed opinions. However, the bias inherent within documents themselves is unknown both in internally generated and public document such as press reports, and some confidential information may be blocked to the researchers for security reasons (Yin, 2003; Creswell, 2003). Consequently, documents were only used as complementary sources of data in this research to triangulate opinions expressed in the interviews and provide background information.

The documents used in this research include the information from each organization's official website, annual reports, organizational charts, and some government documents. In DHL the researcher was given access to additional documentation, namely a copy of the service level agreement between the DHL SSC and its internal customers; the details of this contract will be explained in Chapter 6.
4.3.4 Data Analysis

The data analysis of qualitative research mainly involves the deep interpretation of collected evidence, which is usually contextual data. Eisenhardt (1989) suggested that researchers who undertake a multiple-case studies should first analyze ‘within-case’ data and then search for any cross-case patterns. Researchers should be familiar with each case as a ‘stand-alone entity’ and write up their findings for each site, although the writing may be a pure description rather than emerging insights. Creswell (2003) listed several generic steps when analyzing qualitative data. First, the data collected should be organized; this includes transcribing recorded interviews, sorting and arranging documents. Second, researchers should read through the information and get a general sense of the data. Third, segment the information into categories before labeling these categories with a term, which is also called “open coding” (Strauss & Corbin, 1990). This coding process summarizes the data (Collins and Hassey, 2003) and provides researchers with a preliminary framework of analysis. The fourth step is to describe the setting and generate themes, which are major findings of qualitative research according to Creswell (2003). This allows the researchers to be familiar with the cases and identify the different patterns of individual cases (Eisenhardt, 1989).

In order to improve the reliability and validity of case study, cross-case analysis is also essential for multiple-case research. Eisenhardt (1989, p. 540-541) stressed the importance of looking through data in divergent ways. He suggested three tactics of doing this, as outlined below:

• “One tactic is to select categories or dimensions, and then to look for within-group similarities coupled with intergroup differences.”

• “A second tactic is to select pairs of cases and then to list the similarities and differences between each pair.”

• “A third strategy is to divide the data by data source.”
This research will follow the first tactic suggested by Eisenhardt (1989) and combine it with Yin’s (2008) suggestions of “pattern matching” and “cross-case synthesis”. The researcher firstly did the “open coding” (Strauss and Corbin, 1990) and re-constructed and organized the data in each case with the aim of searching for different categories. This process enabled the researcher to give a detailed description of each case, which are presented in Chapter 5, 6 and 7. At this within case analysis stage, data analysis and data collection were interactive which helped to increase the reliability and validity of data. The preliminary results of the analysis of each case also guided the researcher to go back to the case organizations and collect subsequent information. After that, the findings across individual cases were aggregated and synthesized to probe whether there are similarities or differences between different cases. The results of cross-case synthesis which were based on empirical evidence were then compared to the conceptual framework developed from the theories in Chapter 3 (section 3.6). More detailed discussion will be presented in Chapter 8.

4.4 Research Evaluation Perspectives

4.4.1 Reliability

Reliability is one aspect of the credibility of the findings (Collins and Hussey, 2003) as it indicates whether the evidence collected is independent of the researcher (Ryan et al., 1992), that is to say, the extent to which subsequent researchers could get the same evidence and arrive at same findings if they follow the same steps of the earlier investigator (Yin, 2008). Yin (2008) also suggested that one way to approach reliability is making “as many steps as operational as possible” (p.38) as if someone is always looking over your shoulder during the research process. In this enquiry, a detailed research protocol was used, and the author's supervisors were always double check or audit the evidence and conclusion.
4.4.2 Validity

Validity is the extent in which the data and findings of the research can be considered ‘true’ and ‘accurate (Collins and Hussey, 2003; Ryan et al., 1992). The validity of interpretive research has two aspects: authenticity and plausibility. Authenticity means having a rich description which proves that the researcher has been ‘in the field’ to collect data (Parker, 2012). Lukka and Modell (2010) argued that if the explanation is on the basis of ‘emic’ understanding and rooted in an actor’s ‘life-world’, then it could be claimed as ‘thick’ explanation. This approach is based on the subjective interpretation of the phenomenon and, during this process, inconsistencies and irrationalities should not be avoided but positively sought and embraced (Lukka and Modell, 2010). Using multiple sources of data and establishing a chain of evidence could help to gain a ‘thick’ explanation (Yin, 2008). Plausibility means that the argument(s) make logical sense to the reader and relates to the assessment of the credibility of the explanation (Lukka and Modell, 2010, Parker, 2012). This process requires an ‘etic’ explanation, i.e., informed by theories. Interpretive research (especially in management accounting) is argued to straddle between both objective and subjective research paradigms (Kakkuri-knuuttila et al., 2008). The validation of interpretive research is an on-going process and in order to achieve both authenticity and plausibility which are inter-dependent, it is a challenge for researchers to balance emic and etic perspectives in the explanation (Lukka and Modell, 2010).

One practical way to increase the validity of research is by working with other investigators. In the course of this enquiry, the researcher worked within a community of other doctoral students and both staff and students in the Research Centre for Global Sourcing and Services in her business school, as well as her two supervisors. In so doing, biases caused by the personal characteristics of an individual investigator could be reduced (Ryan, et al., 1992). Moreover, another approach was also applied to increase the validity of this research, which was feeding back the researcher’s
interpretations of the evidence to the interviewees in order to improve the validity of the findings (Ryan et al., 1992). After receiving the transcripts, the interviewees of both DHL and MyCSP have sent back the transcripts again with their comments and corrections. Furthermore, the written-interpretation was also sent to the interviewees for their verification. In AMD, in spite of written interpretation, a face-to-face meeting was held with the vice president of the SSC in the middle of research (2015) to present the interim findings and solicit her opinions on the researcher’s interpretation.

### 4.4.3 Generalization

Lukka and Kasanena (1995) claimed that there are three different types of generalization rhetoric in accounting: statistical generalization, contextual generalization, and constructive generalization. In most cases, the word ‘generalization' means ‘statistical generalization'. This generalization rhetoric is respected by most of the mainstream accounting researchers, who use the mathematical/statistical method to collect results from a sample and then seek to generalize the results to a larger population. As the number of cases in one study is usually limited, the results or theory concluded from a case study could not be statistically generalized and therefore do not likely represent a larger population than the original sample (Hodkinson and Hodkinson, 2001). However, a successful case study could gain either contextual or constructive generalization by using appropriate triangulation of data: thus, the validity of the case study could be broadened. If researchers provide a "meaningful and convincing connection of the study with the real-world phenomena surrounding the case" (Lukka and Kasanena, 1995), the results could be ‘theoretically generalized’ (Ryan etc., 1992) which means expanding our understanding of theories. The purpose of a case study is not, necessarily, to test an hypothesis empirically by using a large-scale sample, but rather to generate an hypothesis that can be tested in the future (Scapens, 1990). This is the process used to contextually generalize the results. The last type is constructive generalization. The result of a constructive research approach is the solution to business problems. If the proposed solution is implemented and functions in
the real world, the credibility of the study is enhanced, and it is argued that the solution may also work in another similar organization (Lukka and Ksanena, 1995).

This research applied a case study approach to investigate the recharging mechanism(s) applied in the SSC model. Although the number of cases was limited, with the triangulation of data sources and detailed interpretation of collected data, it is believed that the results of this study could help to refine the existing theories of cost allocation and transfer pricing and provide some guidance to other SSCs in practice. This could be regarded as contextual and constructive generalization of the results of this study.

4.5 Summary

This chapter has outlined the different research paradigms that are commonly used in management accounting research and has discussed the core philosophical assumptions adopted by the researcher in this study. The chapter argues that the choice of research method should depend on the underlying philosophical assumptions and the purpose of the study. With this in mind, an interpretive approach with specific emphasis on the use of case study approach was chosen so as to provide the researcher with an in-depth understanding of recharging practice in three case organizations. In addition, the overview of case study method was presented, with the discussion of both its advantages and limitations. Furthermore, the data collection and analysis process were also described. With this discussion of research methodology and methods, the next three chapters (Chapter 5, 6 and 7) will present the recharging practice of each case organization and discuss the behavioral effects of recharging mechanism.
Chapter 5 AMD Case

5.1 Introduction

An exploratory case study of AMD was conducted to understand the application of the recharging mechanism in practice. This chapter starts by setting out background information for both the AMD group and its SSC (in section 5.2), and this is followed by the research activities undertaken for this case. Section 5.3 discusses the governance strategy of the company and SSC recharging mechanisms, including the recharging method, recharging basis and targets. As time went by, the researcher was fortunate to be allowed to interview the CFO of AMD Group to explore the head office perspective which generated some surprise findings - explained in section 5.4. The chapter closes with the discussion of the lessons learnt from the AMD approach of recharging support services.

5.2 Background information

5.2.1 Overview of AMD

Advanced Micro Devices Inc. (AMD) is a multinational company providing semiconductor processors, together with relevant support technology and services to PCs, tablets, cloud servers and other intelligent devices⁹. AMD was incorporated with $100,000 and established its headquarters in Sunnyvale, California on 1st May, 1969¹⁰, going public in 1972. Nowadays, AMD is a very large semiconductor company with a number of different production and distribution facilities around the world and net revenue of $5.38 billion (AMD, 2017). Its activities are essentially designed in the US and manufactured in Asia and sales globally. With a focus on a relatively narrow range

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⁹http://www.amd.com/en-gb/who-we-are/corporate-information
¹⁰http://www.amd.com/en-gb/who-we-are/corporate-information/history
of technology and tight control over processes, it is not surprising that the company’s structure reflects the U-form organization with tight oversight from the head office.

5.2.2 SSC of AMD group

In 2002, the corporate\textsuperscript{11} of AMD decided to apply the shared service model (SSM) and set up four Shared Services center (SSC) in the US, Malaysia, Thailand and Germany. Each SSC was responsible for providing business support services to regional customers (business units) across AMD. The motives for AMD to set up an SSC in the first place include cost reduction, standardizing processes, improving service quality, and generally increasing efficiency and effectiveness of support service so as to maximize shareholders' value. Among these, cost reduction was the most frequently mentioned by managers and hold up to be one of the most important motivation for SSCs. Initially, there were two SSCs in the Asia-Pacific region. Most of the accounting and financial activities of the Asia-Pacific region were undertaken by the center in Malaysia, while account payable activities were dealt by the center in Thailand. In 2004, the center in Malaysia took over the account payable services from the center in Thailand and then started to extend its services to internal customers outside the Asia-Pacific region. Between 2008 and 2009, the activities of the other two SSCs (US and Germany) were also transferred to the Malaysia center, and the name of the center was changed from ‘Asia Accounting and Financial Services Centre' to ‘Global Services Centre'(GSC).

The single GSC of AMD is now located in Penang, Malaysia and provides general financial and accounting service such like global payroll, global tax service and other support services to internal customers across AMD Inc. The number of employees in this GSC has increased from 13 in 2002 to over 250 in 2014. In terms of the array of services it now provides, FA1 said:

\textsuperscript{11}The interviewees refer the head office of AMD as the corporate, which is located in the United States.
We started as a transaction shop, basically doing Accounts Payable (AP), General Ledger (GL) and Fixed Assets [accounting]. Now we have moved up the value chain, we [now] do business analysis, global tax and internal audits. (7th January 2015)

Despite being a large international company, AMD is a traditional function-based organization. Its facilities are all around the world, but they are organized according to different functions. For instance, AMD has its manufacturing facilities in Taiwan, China; test and assembling facility in Suzhou, China and its Global Service Centre in Penang, Malaysia. Only the sales & marketing function is country based. Figure 5.1 shows the organizational structure of AMD Inc.

Figure 5.1. Organizational structure of AMD Inc.

The benefits of applying a function-based structure include: enhancing the control of the head office, ensuring the strategic alignment and coordination between different countries and functions (Chandler, 1962). The vision of the GSC is to provide the best ‘in-class’ services to its customers within AMD and the corporate (the head office). The
customer orientation of the GSC is only internal at this stage and according to the interviewees, there is no plan to expand its business to external customers in the foreseeable future.

According to FA1, by consolidating support service activities in the GSC and standardizing processes, the cost has been reduced by almost 10% every year. Standardization also enables different facilities of AMD to share information in the same system (there used to be 200 different systems in use in AMD). But achieving cost reduction target is not enough in itself for the GSC, FA 1 said:

Setting up a shared service center is not all about centralization; it is about moving [services from divisions] and then improving [them]. (June 2015)

The GSC regularly benchmarks its costs and service quality with the SSCs of other companies and outsourcers. Moreover, attending practitioner roundtables has also helped them to learn from other SSCs and thereby to continuously increase its service quality and efficiency.

5.2.3 Research Activities

In one of the practitioner roundtable events held in Kuala Lumpur Malaysia in 2013, the researcher got a chance to meet one of our key informants in AMD, the Vice President of AMD Global Service (FA1). She was available to talk and at the end invited the researcher to visit the Global Service Centre of AMD (GSC), which is located in Penang, Malaysia. In June 2014, the researcher visited the GSC, the finance director (FD1) firstly made a one-hour introductory presentation of the AMD group and the history of the GSC. The GSC is the only shared service center of AMD group and it provides financial, global payroll, global tax, marketing operations and HR services to internal customers across the group. Following, a one-hour group discussion was held with eight senior staff from different financial departments at the GSC. The participants explained the recharging mechanism applied by the GSC and discussed its

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12 The information of participants is presented in Appendix
effects from their respective points of view. It was surprising to find that the GSC of AMD does not recharge any of its cost directly to the internal customers because the service provided to different facilities\(^\text{13}\) are all charged to the corporate in the United States (the head office), without any further allocation. Following the exploratory discussion, the last activity undertaken on the visiting day was an interview with the vice president of the GSC (FA1) who provided further information about the recharging process. All of the interviews and discussions were recorded and transcribed by a professional typist and a copy was sent to the interviewees to check whether their views had been recorded correctly.

In January 2015, the researcher got another chance to visit Malaysia for a further meeting with FA1 and the researcher showed the interim findings to her to ensure the views and opinions expressed before had been interpreted correctly. One of the researcher’s supervisors also attended this meeting. During the meeting, FA1 gave more details about the recharging process and explained how the cost of the GSC is actually absorbed by the head office and not recharged directly to the facilities. After this surprise findings we asked to interview representatives from either the customer divisions of the GSC or the head office, FA1 was very kind to introduce the CFO of AMD Group (FA2) and arrange for a video-conference. On 22\(^\text{nd}\) April 2015, a formal interview with the CFO based in the US was held by Skype and both the researcher and one of her supervisors attended. He answered the questions about the recharging process from head office's view point.

### 5.3 Recharging Practice of AMD GSC

The GSC of AMD employed a cost-based recharging method (full cost plus an uplift to provide for local tax). The mark-up percentage depends on the tax requirements of local authorities.

\(^{13}\) ‘Facility’ is the word used on AMD official website, which is interchangeable with ‘division’ ‘center’ and ‘business units’.\[111\]
Our tax people decide upon it because they have to do what they call a functional base analysis with other companies to see where we stand. So they will give us the percentage. (FA1, June 2014)

The CFO of AMD confirmed this:

*And for Malaysian and partly US’ tax purposes; we have the plus transit mechanism that is set up in terms of how much mark-up you could have, although we’re on a tax holiday, with the tax incentives we have when we set up the organization.* (FA2, April 2015)

At the end of every month, the general ledger accountants at the GSC will perform the computation of actual expenses and they will book the entries. However, instead of recharging directly to the facilities that receive the services provided by the GSC, the GSC recharges these to the AMD head office.

*When we say chargeback, the only one is corporate. Every one charges back to the corporate. We do not charge back to the functions. The corporate are the profit-based entity. The only one who receives the revenue or owns the revenue. That is why we charge them, that will be profit, costs. There is no reason to charge function units differently.* (FD1, June 2014)

This recharging process is consistent with the function-based U-form organizational structure of AMD. Not only the GSC but all the other facilities in the AMD group are cost centers, they recharge the corporate for any expenses and costs incurred. Financial statements are prepared at a corporate level and the corporate is the only facility that generates revenue.

As shown in figure 5.2, after absorbing all the costs from the GSC, the corporate would not allocate the costs to the service purchasing facilities because it is only at corporate level that revenue is received and costs are matched. The CFO explained:

*So essentially, for example, large engineering or sales or marketing organizations that the SSC are supported, the SSC does not charge them for the services. Those costs of the SSC largely roll up to me……*

……essentially, if you look at it in the Labuan (one internal customer division), they had been provided the service by SSC and they don’t have to pay for it directly because they had their own budgets to conduct whatever engineering work they want to do. There is no direct charge back to them about how many services they
have got from SSC and how much they will get charged per transaction in dollars or a percentage basis. There’s no internal allocation that we do. (FA2, April 2015)

Figure 5.2, The recharging process of the GSC

In terms of the recharging process, the internal customers receive the services ‘for free’. Therefore, the recharging process would not directly have any effects on the managerial behaviors of the customers because they "do not feel the payment". But the constraint of internal customers’ behaviors comes in as the budget that is set for the GSC. At end of each year, the GSC has to establish the budget for the next year, which also has to achieve the cost reduction target set by the corporate head office. The corporate undertakes benchmarking all the time, directly with other companies with SSCs as well as through other consulting firms (e.g. Hackett). The CFO of AMD said the budget for the GSC every year is “fairly tight”. Setting cost reduction target is a good measure from head office’ point of view. It is the GSC’s responsibility to ensure the internal customers don’t waste the resource or over-utilize the services.
The cost reduction target that the GSC should meet every year is set by the corporate without any negotiation and argument, represented by arrow in figure 5.2. It is an “order” from the top. During the year, the corporate head office will constantly monitor the process and assess how the GSC can get to the target. When there is over or under-spending against the budget, the controllers of the GSC will need to explain the variance to the corporate. According to the interviewees, it is rare that the corporate head office would doubt or challenge the GSC's recharging figure because the recharging method has been consistently applied for many years and cost control is expected in the budgeting process. By the time the charge is made, it is too late for action.

SLA and the governance within AMD

Whilst the operation of the GSC looks to be under the direct control of the corporate, different Service Level Agreements (SLAs), according to different types of services are signed between the GSC and its customers. Detailed KPIs are included in the SLAs to assess the quality of each services. For instance, the process time for processing a trade customers’ claim is 30 days and the book should be closed on time and without any errors. There is one performance indicator called “First Pass Yield” applied in the GSC. Taking Account Payable transaction, for example, the "First Pass Yield" means every instruction comes in exactly as required and then flows through into the AP account without any manual intervention and without anybody having to follow up issues that outside of the normal processes. If there is any dissatisfaction about the service, the internal customers will feedback to the VP of the GSC or one of his/her staff. Moreover, the GSC holds quarterly meetings with the internal customers to explain how the GSC is performing. In order to quickly react to the changing business environment and customers' requirements, KPIs are reviewed quarterly by both the GSC and internal customers.

*General business needs do change from time-to-time. The obvious thing is we need to review the (SLA) to see [that] the service we were performing and also to see whether the KPIs are still intact or not. So we need to revise them according to what may have changed as well as because the service may have shifted direction. (MA2, June 2014)*
The relationship between the GSC and other facilities are mainly governed by the SLAs but at the same time very co-operative, because they have the impression of belonging to one organization due to the use of the term ‘intra-partner’ here and frequently mentioned “doing the best for the company overall”. There are spaces for negotiation if there is disagreement between the GSC and internal customers. Discussion and negotiation will continue until the new agreement is achieved and an issued SLA is signed by the VPs of all relevant parties.

_It is just that eventually, you do not treat them as a total outsider. They are part of the AMD group. That is, we would say they are still a good business partner to you._ (FD2, June 2014)

_We have to build a relationship with them because we need to understand what they are doing and how we can actually help them and create value for them. We need to treat them as intra-partner colleagues._ (FD2, June 2014)

The governance in AMD is hierarchy-based and the strategy application process is top-down. Major decisions, like the transfer pricing strategy for internal transactions, are made by the corporate (US). The application of this top-down approach to mandating decisions proves that all of the units within AMD, including the GSC, are independent business units under a corporate umbrella. The centrally controlled governance mechanism and a trust-based relationship between the GSC, its internal customers and the corporate (US) makes it possible for AMD to apply such a simple recharging mechanism, which is that all facilities charge back costs to the corporate (US). FA1 said

_We belong to one company; there is no need to put your money from your left pocket to your right pocket._ (FA1, January 2015)

The GSC does not provide services to any external customer and from the internal customers’ perspective also, they do not have the right to choose between the GSC or outside service providers. Internal customers could benchmark the service and the costs with other service providers and raise any doubt they may have but they can not switch service providers. Should the doubt scenario occur, the GSC can trace back and provide ‘fact-based information’.
There is proof of our expenses and everything is traceable and auditable. Even the calculation method is extremely stable. This has been established for many years since they have had the subsidiaries. (MF2, June 2014)

5.4 The head office perspectives

The researcher was very fortunate to get the chance to interview the CFO of the whole AMD company, which greatly enriched the data from a different perspective.

The original motivation of setting up the SSC from the CFO's point of view was to make sure there is consistency from an accounting standpoint. Standardizing the processes and centralizing to a single center ensures that the corporate gets the consistency across all the information and data on a global basis. Natural benefits flow from that such as the consistency of processes and this means that corporate strategies and policies can be implemented in a very consistent manner for employees across the world.

There are two ways for the head office to measure the success of the GSC. The first is from the cost perspective in line with reducing budget targets. The other measurement is from the quality perspective. The CFO says that he tries to go to every facility of AMD at least once a year and during his stays, he barely hears ‘bad’ complain about the services provided by the GSC. Moreover, a survey about service quality is sent to internal customers every year to check whether they are getting the service level supports that they need.

Beyond reduced cost and better services levels, a further key benefit of centralizing the information and data in the GSC is to enhance the control of the corporate and help the governance and compliance of the organization. The critical role played by the GSC in the corporate governance is reflected in three aspects. Firstly, good measurement and control of cost. By centralizing and summarizing financial data within the GSC it is
easier for the corporate to access the financial data and understand the cost structure. The CFO gave an example of this.

For example, if I want to understand in a very independent and objective manner such as from a travel standpoint, how many people are travelling by different locations and who’s travelling you know business class versus economy or the donations we are giving to different organizations and universities, I can go to the shared services organization and they will pull the data. I can get the information essentially unfiltered because by the same token, there is no vested interest for them. (FA2, April 2015)

Secondly, consistent application of new policies. Given that the GSC is the only source of data within AMD, it is easy for the corporate to identify exceptions to the policy and change things to stop non-compliance. The CFO said that the GSC helps from a governance standpoint as it has all process, information reflect to policy application happening under one roof.

Finally, during the auditing process, the GSC is independently reporting to the internal audit functions, which is also located in Malaysia. This ensures the independence policy and helps from an overall governance standpoint.

5.5 Summary

This chapter explores the recharging method applied by an SSC based on interpretive research on the GSC of AMD. Although AMD operates across the world, it is essentially fairly tightly controlled, function-based U-form organization. According to Eccles’ (1983) classification, AMD could be regarded as co-operative organization with a high level of vertical integration and a low level of diversification. For this kind of organization, the processes within the company are always top-down. According to Eccles (1983), the head office mandates divisions to purchase from inside providers and transfer pricing is either full-cost or cost-plus. The findings in AMD are consistent with the argument made by Eccles (1983) in the manner that the GSC of AMD uses the cost-based method to set the recharging amount for the support services it provides to its internal customers. The recharging number is reported to and absorbed by the head
office without further allocating to the service consuming facilities, rather than the
service purchasing centers paying directly for the services they have consumed. The
relationship between the GSC and its customers is very cooperative and there are
detailed negotiated SLAs between them. The top-down management system appears to
enable a cooperative atmosphere within the group’s departments because they are not
being set against each other on costs but they do need to care about service delivery
setting and monitoring, which they do have a direct input to.

Although there is no direct recharging from the GSC to its customers, there is still an
indirect influence from recharging on the behaviors of the GSC’s customers. With the
standardized processes and information gathered in the GSC, the behaviors of both the
GSC and its customers are monitored by the head office. Every year, the GSC is given
target cost reduction numbers from the top and they have to achieve those targets while
improving the service and meeting existing performance levels for their internal
customers. Each division will also have its own cost reduction targets and thus, will
seek better support services to make their operations to be more effective. Head office
will also be aware of the SSC’s budgeted activity/costs for each division and will be
able to monitor any variances between actual and budget spending which may arise due
to suboptimal behaviors on the part of the SSC or departments. Thus, the recharging
mechanism in AMD plays a role in the Group’s integration process to motivate bottom-
level employees to achieve overall organizational goals (Watson and Baumler, 1975;
Spicer, 1988; McAulay and Tonskins, 1992).

As the CFO revealed, so long as head office have detailed information on: 1) the SSC’s
overall cost against budget target and 2) each division’s actual use of SSC resources,
and so long as divisions have an incentive (their own cost reduction targets) to work
with the SSC to improve service delivery/quality then this constitutes an appropriate
governance strategy.
Chapter 6 DHL case

6.1 Introduction

This chapter discusses the case undertaken at DHL Express. As a large multi-national company, the SSC model has been introduced into DHL group for over 10 years now. During this period of time, the recharging mechanism applied in DHL group has changed from transfer pricing approach (direct recharge) to cost allocation approach (indirect recharge), following a change of organizational structure in 2015. This dynamic recharging mechanism make this case attractive and interesting. This chapter starts with the profile of Deutsche Post DHL group, DHL Express and the introduction of its SSCs, which is in section 6.2. Following that is the detailed description of recharging process for the financial support services provided by its SSC. Both the recharging mechanism applied before and after 2015 are discussed, together with the influence of recharging mechanism on the behaviors of both SSC and its customers. In order to triangulate the source of empirical data, the views of customer of SSC are also discussed in section 6.4. This chapter closes with a small summary.

6.2 Background information

6.2.1 Overview of DHL Express

DHL Express is part of Deutsche Post DHL group, one of the biggest postal and logistic companies in the world, with revenues of around €60 billion and well over 300,000 employees. There are two primary business lines within the group: Deutsche Post, and DHL, as shown in figure 6.1. The latter comprises three divisions with the same brand
identity; DHL Global Forwarding and Freight (GFF)\textsuperscript{14}, DHL Logistic and Supply Chain (LSC)\textsuperscript{15} and DHL Express. The latter, Express, specialized in the fast delivery of parcels across the world. Operating across 220 countries, Express was the most well-recognized business in the DHL group and by any standard, it was an exceptionally complicated business. For example, an average billable end-customer transaction was around €30, but this guaranteed delivery to almost every location on earth.

Reflecting a decentralized approach to corporate management, all four main divisions (Deutsche Post, Express, LSC and GFF) essentially operated autonomously as in a typical Chandlerian multi-divisional model (Chandler 1962). Within the primary unit of analysis, Express, there were four regional business divisions (Central Europe, Eastern Europe, America, and Asia-Pacific) and around 220 countries variously reporting into those regions. However, due to the nature of their interlocking global operations, certain aspects of DHL’s three divisions were coordinated by DHL’s Head Office (HO). For example, a common infrastructure (e.g. a large fleet of aircraft) was shared, as well as a common approach to key customers (e.g. banks with global operations). These activities were reflected in a ‘network’ fee that was levied by the head office on the turnover of all operational units. Inevitably, the work of the three divisions, plus the four regional divisions of Express and their subsidiary countries, cut across each other. In TCE terms, it was clear that although the services that DHL offered could, in principle, have been coordinated through myriad market transactions between countries and between divisions, yet the internalization of cooperative transactions supported by the overall group identity and processes, all underpinned by hierarchical coordination, offered customers both efficiency and security. In short, the global marketing image and platform of resources combined with the integrated nature of the business and local (county-level) accountability was a key source of competitive advantage.

\textsuperscript{14} Global Forwarding and Freight deals with all the slow transportation services - mainly shipping containers.

\textsuperscript{15} Logistic and Supply Chain provides warehouse facilities for customers to store goods which DHL will deliver to the end customers.
6.2.2 SSC of DHL Express

Apart from the four operating business units, the group also have a supporting unit which is called Global Business Services (GBS), providing legal, finance, HR, IT, and procurement services. The resources to provide each of those activities were disentangled from regions/countries and clustered into four operating centers, Central Europe, Eastern Europe, South America, and Asia-Pacific (comprising Africa and the Middle East).

Figure 6.1 shows the group’s structure in 2013 with the GBS depicted as oval shapes with dashed lines representing the recharging lines to front facing divisions. In addition to economies of scale, together with the opportunity to employ top experts (Herbert and Seal, 2012), the GBS operation encouraged the standardized of systems, protocols and procedures across the group. MA1 reported that costs had been reduced significantly (in the region of 10% yearly) between 2006 and 2013.

In 2015, financial services which used to be part of GBS were moved to DHL Express since Express was the only customer that purchased financial services from GBS. The finance function of the other two business units within DHL (DGFF and LSC) were outsourced to external service provider either HP or Accentua, mainly because of cost. For DHL Express, some financial activities like cash collection are considered as the core business within Express thus they are centralized and kept within regional SSC. Other functions like IT, legal tax and HR are still operated within the GBS. Since the focus of this research is the recharging mechanism applied by SSCs in the extent of financial services, the research object of this study will be financial SSC (FSSC) within DHL express instead of GBS of Deutsche Post DHL group.
Figure 6.1 Group structure and business support services before 2015

Financial activities in *DHL Express* comprised two types. 1) Transactional activities that could be organized into computerized workflows, such as in finance accounts payable. 2) Transformational activities which are higher-level and less routine, such as maintenance of the general ledger, the preparation of financial reports and management accounting activities. Different recharging approaches are applied to different types of financial activities, which will be discuss in more details in section 6.3. The next section 6.2.3 will explained the research activities undertaken for this case study in details.

**6.2.3 Research Activities**

The first field interview was with the CFO - Asia Pacific (MA1), for *Deutsch Post DHL’s* GBS in Kuala Lumpur (Malaysia) in 2013. The company’s attraction as a possible case study on SSC recharging practices had been identified by a contact at one of the CIMA-Loughborough SSC Forums. As with this and all subsequent interviews
the discussion was recorded and transcribed by a professional typist, a copy of the transcript was then sent to the interviewee to confirm that their views had been represented correctly. The insights provided by the informant (MA1) were extremely useful in guiding the literature review, unfortunately, she moved on and despite a number of requests it was not possible to connect with her successor.

During an industry SSC practitioner event in 2015, the researcher was fortunate to meet another senior finance executive at *Deutsch Post DHL* who became the key informant (MA2) in the second phase. He was the CFO of the *Centre of Excellence (CoE)*\(^{16}\), within a division specializing in the fast delivery of parcels across the world, known as *DHL Express*. Following informal interviews to understand the background and suitability of the context for the researcher’s enquiry, the first formal interview was by video-conference and lasted around one hour (with one supervisor). MA2 explained how the Group’s approach to sourcing professional support services had changed significantly since 2013 and now comprised a mix of sourcing models within a fluid approach to charging methods, as individual activities were migrated and optimized. The researcher was intrigued how this actually worked in practice and readily accepted his invitation to visit *DHL Express*’s FSSC in a central European city, Maastricht. The researcher spent two days conducting interviews, inspecting documents and generally getting a feel for the FSSC’s operation and its relationships with its client partners. Interestingly, some activities were now outsourced and the researcher was allowed to sit in on a liaison meeting with a BPO supplier. Formal interviews of around 45 to 60 minutes were held with four other finance staff as follows: 1) the CFO of the FSSC in the Western Europe Region (MA3); 2) a senior controller of the CoE (MA4); 3) the manager of the Global Pricing department (MA5), and 4) a junior controller within the CoE (MA6). Theses research activities help the researcher get insights about the recharging practices undertaken within SSC. However, all the information was provided by the employees from the SSC, which might be one-sided. The researcher

\(^{16}\) Centre of excellence is part of FSSC, which gather the specialists and do controlling, reporting and other management accounting work for the internal customers (countries) within European region.
was keen to approach either the contacts from the internal clients of SSC, which would significantly strengthen the information gathered before. Therefore, a request was sent to MA2 again in 2018, asking whether there is any change of DHL Express since 2015 and the possibility to get contact to the internal clients. It is fortunate for the researcher to reach the CFO of DHL Express UK (MA 7) and Finland (MA 8), who has used the support services from the SSC for several years. Two video-conferences were held in July 2018 and both of them were recorded. The transcripts were sent to the interviewees for their confirmation.

6.3 Recharging for support services provided by SSC in DHL Express

6.3.1 Motives for Recharging

As explained earlier, there are two types of activities undertaken within the GBS of Deutsche Post DHL: transactional and transformational. The calculation basis of transactional activities could be expressed as individual task units, for example, raising a customer’s invoice. Processes were subject to scientific work principles and ‘atomized’ into individual transactional tasks. Consequently, resources (and their cost) were largely made variable to accommodate changes in business demands – at least the scale of the SSC. In terms of transformational activities, they could only be measured at the level of the number of full-time equivalent staff employed in an activity over a month (FTE). These activities were more role- than process- based. As higher-level salaried staff were employed, the cost was largely fixed. Whilst these broad categorizations of activity profile and the consequent basis of recharge make sense from a management perspective, it should be noted that there is something of a tension in the arbitrariness of such delineation. This is because the essential rationale of the SSC model is to transform all activities into processes and, in turn, to make their cost
behavior variable, at least to individual client units. Figure 6.2 depicts the matrix arrangement of the centers v. functions together with the recharging of process streams and cognitive activities to individual countries, based indicatively on two examples from finance, payroll processes and general ledger activities respectively.

Figure 6.2 GBS Matrix Structure and Recharging Practices GBS 2006-2015

The GBS employed a transfer pricing system with activity-based recharging in pursuit of the following aims: 1) to encourage process standardization by charging extra for any system variations on the part of divisions; 2) to raise cost consciousness on the part of internal customers and thereby drive good behaviors such as adhering to input deadlines and protocols, and 3) to encourage the GBS to benchmark itself across the four centers and external third-parties (BPO and SSC) to improve both cost efficiency and service quality.

*This approach to pricing encourages us to benchmark ourselves with external parties as well as between centers. ... despite the fact that we are a captive shared service center.*

...Recently, there are more and more comparisons happening and more and more concerns and challenges raised by our clients, saying they want to get more competitive rate. We are [also] slowly compare ourselves with third parties. Though we are not [quite] at that level yet, we are slowly closing the gap. There
are lots and lots benchmarking [activities] that we have done from the quality perspective and also from the cost perspective.” (MA1, January, 2013)

The GBS operated on the basis of achieving a ‘zero profit’ each fiscal year for each function. At first sight, this might appear nonsensical, as the aim was to break-even and not actually make a profit from services. However, the use of ‘profit’ as a headline label, and a financial target, signaled to both the SSC and its clients that business support services were now a quasi-commercial operation. Any ‘loss’ would clearly signal that something had gone wrong, either in the original estimation of cost/activity, varying business activity, or inefficiencies on the part of the SSC or business units. Such negative variances would require an explanation to senior management. It was also noticeable that in the transcripts MA1 also used the term ‘prices’ rather than ‘costs’, which indicate the market orientation.

6.3.2 Finance operations and activity-based recharging 2006-2015

The FSSC recharged the costs of each activity stream, e.g. payroll, order-to-cash, etc., out to each of the 220 countries based as follows.

1) For transactional activities: Actual process volume multiplied by the actual average cost per unit per month. This was possible because the computerized workflow system recorded how long it took to process an individual transaction (e.g. a sales invoice) on average, together with the number of such transactions per country (of 220) per month.

2) For transformational activities: The actual number of FTEs employed on an activity over a month (say, preparing financial reports).

For both types of activities, the recharging basis is set out in each county’s SLA, as MA1 explained, ‘It is not one standard flat rate applied to all these. No, we do not do that.’
Whilst the operation of the recharging system and the pricing basis appears both complicated and contractual, in reality the basis of the recharges to each client country were agreed in the annual budget preparation cycle. It should also be noted that Deutsche Post DHL is an exceptionally complicated business in that its average end-customer transaction is around €30 from 220 countries to (almost literally) everywhere on earth. At the time of the first interview (2013), the number of employees of GBS for Asia-Pacific region was over 700, with expectation to increase in the following years, as new word received from business divisions. Consequently, the scale of business operations and support functions in the back office follows this scale and complexity.

This needs to cope with end-user complexity and country-specific operational prerequisites, dictated that, whatever rational/commercial logics might ordinarily be the case, there was a need for local accommodations to be made between the GBS and its clients. For example, a country may need additional checks on its purchase ledger processes (say, for local anti-money laundering legislation) or that its monthly accounts should be produced faster than average or presented in a certain format. Such variations would incur additional charges. On the other hand, the client may make suggestions to the SSC to improve its processes and/or reduce its costs.

Every month, the FSSC would calculate each customer’s actual resource consumption by service stream and compare this with the budget amount. If there was an over-run of actual cost to budget, perhaps as the result of increased work volume or client inefficiencies, the FSSC would contact the customer directly to discuss whether they would agree to absorb the over-budget amount. If there had been a new ‘alignment’ (i.e. actual volumes or costs had varied structurally, say, through the acquisition or disposal of operating units) then the budget estimates for the following months would be adjusted.
6.3.3 DHL Express’s SSC model after 2015

i) Transactional activities

By 2015, the GBS operation, was considered to be mature in that the migrated activities had been optimized in terms of process efficiencies and human behaviors had improved on the part of both the SSC and its client countries. Consequently, the scope to achieve further efficiency savings had diminished and the three, more specialized, main group divisions (Deutsche Post, LSC and GFF) chose to transfer their individual requirements to a couple of large BPO vendors. This not only disentangled those volume activities that were now effectively commoditized but promised further savings through the vendors’ larger resource base and expertise. Indicative of the ‘coordinated’ but still essentially decentralized nature of the group, DHL Express, as the largest division, presented a case to Deutsche Post DHL’s top management that it should be allowed to take responsibility for its own finance activities, on the basis of maintaining close working ties between finance operations and business units. Henceforth, finance activities are referred to as DHL Express Finance SSCs.

Due to the change of organizational structure, the recharging for the financial activities provided by FSSC was changed from transfer pricing (activity-based charging to countries) to cost allocation (charge through the regional head office). There are two reasons for this change. First, as no other divisions were involved there was not the same concern that DHL Express might be charged unfairly by the FSSC vis-à-vis the other divisions, at least for finance services. Second, it was felt that in trying to drive further improvement in the behaviors of the SSC and its clients there would likely be only diminishing efficiency returns, given the significant administration burden (transaction costs) and potential for disputes under the activity-based system.

We just do not want to have it too complicated with invoices and amounts flying around because you have [sales] billings out of (a South American country) and collections [of sales billings] out of our Central Europe center, plus some stuff [other finance activities in another European country]. Then you will get all
kinds of SLAs and charges internally. All finance costs are grouped and now [post 2015] they send just one single invoice to the country, [thereby] reducing the workflow - and it is not even an invoice, it’s a management booking! ...A few years back it was different, and it was really an ABC [Activity-based costing] model with a lot of [different] volumes and products. (MA3 – Emphasis added as per recording, August 2015)

All transactional activities are now based on annual estimates of cost, based on the time workers have spent on each activity for each country on an average FTE cost per year. Data is gathered either from self-completed time logs or generated automatically by the workflow systems. Charges are not sent direct to countries but instead to DHL Express’s own head office which then recharges individual countries, (as shown by the dashed arrows in figure 6.3) after consolidating all the costs from individual SSCs a single invoice is sent each month to each country thereby, reducing administration and making it easier for the head office of DHL Express to manage the group’s usage of business processes at the level of individual countries.

Figure 6.3, Recharging mechanism applied in DHL Express after 2015

The move from transfer pricing to cost allocation may appear as if senior management was now not so concerned about efficiency and cost savings but they argued that this
was not the case. The change in the recharging mechanism had two further aims. First, the head office of DHL Express was now the ‘big’ customer of the FSSC and had the leverage to apply pressure to reduce cost and improve service in the way that individual countries could not. Second, it gave DHL Express’ senior executives a view across the business, so that they could bear down on countries that were not so-operating in pursuing efficiency. For example, a country that happened to be performing well in its main delivery operations might not be so concerned about its use of business services (and the charges it receives).

During the course of the enquiry the researcher formed the feeling that, in line with the federal nature of the group, the divisional, regional and country managers were empowered to do what they thought was best for their business. However, there was also a feeling that the influence of senior management of DHL Express was omnipresence.

*During budget period, we of course get targets from global. They put all the numbers together globally, then they say ‘we need this much where can we save it, or there are opportunities to reduce the cost [in other ways]. That is the only guidance that we get.* (MA3, August 2015)

By being able to benchmark usage across all the centers and the countries, the head office of DHL Express could exert influence on individual countries to improve overall divisional performance.

*A country will know how many FTEs they are using, ... if they want a lower price, they should look at their processes and try to make it more efficient themselves. So then we can put less FTEs on the service and they pay less.* (MA3, 2015)

*The way that you would be able to measure your performance is during the negotiations in the budget period. This is something they agreed, so we are not challenging each other......The head of pricing or the head of controlling for Europe have the responsibility to bring efficiency to his own part. So we don’t need to challenge each other.* (MA3, May 2018)

In line with this streamlined approach, the annual budget for each country is now estimated on the basis of the FTEs required by month only. For example, if, say, France requires 15 FTEs, the recharging amount will be the number of FTEs required at the
average cost per FTE (across all the centers) plus, the SSC’s overheads such as cost of the building, electricity etc., again allocated on an FTE basis. There is also an allowance made to pay tax (around 5%) in a center’s local domain. This becomes the ‘fully loaded’ cost for France and is seen as ‘fair’ (Eccles, 1985) to all parties. MA3 said:

*We know how many FTEs we have and we know how much time we spend on each country and that’s quite straightforward. It’s a very simple model that we use now.* (MA3, August 2015)

Whilst the managers in the DHL Express division now talk about simplicity, collegiality and ‘cost’ rather than ‘prices’, the SSCs still operate under a ‘zero profit’ strategy. If actual expenditure is below the budget number after deducting any tax payments actually made to local authorities, the “profit” element will be credited back to the individual country. If the expenditure is over the budget number for a country, but within a 10% band, the “loss” will be charged back to the global head office and will be redistributed across all the countries at the end of financial year. This is perhaps a case of ‘heads you win, and tails you win’ at an individual level but it rewards individual countries that contribute to efficiency savings, while avoiding the negative effects that might arise from a ‘blame game’ culture when there is a loss overall.

The annual budget divided into months is used as the basis for recharging except where there might be a structural variation, say, greater than +/- 10% of the current year’s budget amount; in that case, the budgeted cost for the following next year will be adjusted through negotiation and signed off in the annual agreement of service procedures and performance in the SLA. Previously under activity-based-costing it would be subsequent months that were also adjusted to affect cost, and thus, behavior faster. The CFO of the FSSC in European (MA3) said: “*we do not make monthly adjustments anymore for actuals.*” Now ... *there is monthly review meeting, about the quality of service and other discussion around KPIs.*” The annual updating of the SLA formalizes and embeds improvements in the SSC’s systems and performance and thus, acts in a ratcheting manner.
**ii) Transformational activities**

The two types of activities covered; 1) rule-based control activities, such as month-end close routines which are undertaken by Centre of Excellence (CoE) or, 2) pricing and decision-support services, undertaken by Global Pricing department. A generalization might see both of these as more akin to aspects of management accounting/business partnering. However, there can be tension in ‘local’ services being performed remotely and some countries had opted to take responsibility for pricing services themselves. Another difference is that controlling and pricing services are not compared to external benchmarks.

*It is a natural effect, and that is quite important. Controlling is an activity which requires you to know the business. Therefore, external parties [BPO] are not considered, but we do compare [the FSSC] to internal costs.”* (MA2, August 2015).

Because these management accounting services used to be performed in countries, the recharge mechanism is activity-based and operated in a similar manner to how the charges for GBS were calculated up until 2015. After transferring the activities to CoE or Pricing department, the recharging for the activities will be calculated based on the usage of FTEs.

*The charge is always FTE based, so they measure the quantity of activity they do and it could grow or reduce for pricing it can go up and down, depending on the volume that they will need to treat.”* (MA2, May 2018).

Like general financial activities, the recharging number is a budget number which is adjusted once a year. The budget negotiating process start in June or August each year and the final adjusted budget number for the next year will be agreed and signed at the end of January.

Before 2017, the CoE and pricing departments directly recharged countries for their services with a monthly ‘fixed’ number and there is high transparency of information. Any variance between budget and actual costs which was treated as loss is recharged centrally. As explained by the CFO of CoE “we charge centrally to the headquarter
‘loss bucket’ which is then recharged as an overall overhead back to our individual countries”.

However, when the researcher interviewed MA2 in 2018, the activities undertaken in CoE are considered as headquarter activities. That means the costs of CoE are now part of headquarters’ overhead (referred by them as ‘network fee’) which will be allocated to each country along with the other costs of corporate membership e.g. marketing, head office services etc. Also, according to the information provided by MA2, no legal invoice will be sent to the country during the recharging process, which means the costs of CoE will not be included in the calculation of operating EBIT of each country. DHL Express views the costs of the SSC are non-controllable costs as far as the countries are concerned. But for transparency purposes, the costs of each function are listed line-by-line in management books. At the same time, each country has its own vision or target each year, if they can have support services cheaper, they will negotiate with the SSC to reduce costs.

6.3.4 SLA and Governance

As the semi-autonomous business unit within the company, although the SSC of DHL Express only provide service to internal customers and has no intention to expand to external customer e.g. to support other companies, it still enjoys a high degree of autonomy like normal division within an M-Form organization.

_We are quite free in handling the things we want to handle them. And of course, during the year we have also the monthly calls where we follow up on managing the cost and doing the things we do, we’re quite free in deciding that on our own. Head office is not interfering or looking into our books or what we are doing. We just need to explain our figures and explain the variances.” (MA3, August 2015)_

According to the interviewees, within DHL Express, there are no hard-and-fast rules that say that internal customers of SSCs have to purchase support services from SSCs. In terms of general financial services, they could choose external service providers but this decision has to be approved by higher level managers. This has not happened before but the CFO of SSC in Maastricht (MA3) expects that there will be some discussions
and the customer should have solid reasons for doing this because there will be money given out of *DHL Express* to the third party. In general, the decision whether to choose captive SSCs or external parties needs to fit the strategy of the company. In terms of transformational activities such as controlling services provided by CoE or the pricing service provided by key accounting pricing team, the *DHL Express* of each country could choose to do these tasks by themselves or ask the teams of SSCs to do that for them, according to the information provided by the representatives from the SSC.

In terms of the relationship between SSC and its internal customers, there are very detailed and well-documented SLAs between two parties. The content in the SLAs includes the parties to the agreement, scope of agreement, agreed service levels, recharging basis and other issues about service management. The most important part of the SLA is the explanation of KPIs. The SLAs that are applied within *DHL Express* have one standard framework but KPIs depend very much on local country requirements. The SLAs could be seen as seeking to achieve the combination of standardization and customization. Whilst, most of the terms in SLA have stayed the same but KPIs are updated annually. Also, KPI reports are sent to the customers on a monthly basis to provide them with updated information about delivered service quality and achieved timelines. Despite the KPIs agreed in SLAs, customer satisfaction surveys are also used to measure the performance of SSCs. For example, the bonus of the CFO of the SSC in Maastricht (MA3) is 100% variable and it is linked to the performance of the SSC and *DHL Express*.

Generally, the relationship between SSC and its customer is co-operative. As long as costs continue to reduce, and efficiency improves, the client countries will not be unduly concerned with the recharging amounts. If in some cases, individual countries have doubts, or conflict occurs between FSSCs and client countries, disputes can be escalated to higher level management on both sides, such as the head of each country to arbitrate with the head of the SSC.

*If there is a conflict, of course, the agreement I have is with the head of pricing in the countries. They need to get in contact with me. If we do not agree on that, well*
it needs to be escalated in the country probably to the head of marketing or even to the country managers and then with my boss. (MA5, August 2015)

6.4 Customer perspective

As mentioned before, the setting up of an SSC creates an intra-firm seller-buyer relationship. Within the DHL Express case, the SSCs provide supporting services to countries and send them billings either directly or through the regional head office. The previous sections explained the recharging and governance mechanism applied in DHL Express based on the information collected from the interviewees from SSCs. This subsection will discuss the recharging and governance process from customers’ perspective. This is to triangulate the source of the data and increase the internal validity of this case study.

6.4.1 Mandated decision

After the establishment of SSC, the decision to mitigate financial activities to the SSC or CoE was mandated by the regional head office. The business units of DHL Express in each country said they do not have the choice to either undertake the services within their countries or outsource to the external parties. This is inconsistent with the evidence collected from the FSSC.

*It was an order from the head office which was started many years (ago) when we were thinking how we can be more efficient, how we can do more standardization and of course then there was the cost of finance and all of other topics. (MA 8, July 2018)*

Although the initial decision to use SSC or CoE is mandated for the core services, the customers of the SSC still have the autonomy to transform more activities to SSC. The CFO of DHL Express UK (MA7) explained that if they identify good individuals in the FSSC who can do the work or know that FSSC is doing something for other countries that the UK operation could benefit from, they will approach the FSSC and ask them to take on the work. This negotiation process is just between the FSSC and countries, without any intervention from the head office.
6.4.2 SLA and performance measurement

According to the information gathered from FSSC, there are detailed SLAs signed between the countries and FSSC, covering the agreement period, agreed service level, KPI target report, recharging basis and process and change management. The FSSC and its customers have full autonomy in the process of negotiating the terms and conditions in the SLA. The head office will not take part in this process, but they will be informed when the SLAs are signed. Internal audit will check how the SLA works occasionally. However, not all of the customer will check SLAs in detail. In this case, the CFO of DHL Express Finland (MA8) takes SLAs seriously, but the CFO of UK company (MA7) only knows that the SLAs exist but he admits that he never looks at them.

In the view of the CFO of UK (MA7), if financial activities are outsourced to a third-party company, they would be nailing the outsourcers to what’s agreed in the SLA. But because SSC is an insourced service unit, the management might be more softly. The story in Finland is complete opposite. The CFO of Finland reviews (MA8) the SLA every year and tries his best to attend every meeting with the SSC.

After the SLAs are signed, there is a monthly performance call between SSC and its customers, following up the KPIs and discussing the quality of service. There is a “traffic light” system used in DHL Express for customers to evaluate the performance of SSC. MA 8 explained more about this:

"At the end the call, I will give them a traffic light. If everything’s OK, I give green and if there is something that we need to consider, then it’s yellow; and if everything went really bad, then it’s a red. And it’s a red, then they (SSC) need to also report to the global and there is some issue. (MA 8, July 2018)

Apart from monthly call, if the internal customer has any problem or find any mistake during daily operation, they could report it in the system immediately. The FSSC will reply and follow up every single query until the problem or mistake is fixed. The working relationship with FSSC is very co-operative, which is consistent with the
feedback collected from FSSC. The customer acknowledged that continuous improvement has achieved through the cooperation between SSC and countries.

6.4.3 Recharging Practice

The countries which are internal customers of FSSC receive recharging amount of each financial activity every month, which is a fixed number agreed during the budget process. The budgeted recharging amount sent to countries is not just a lump-sum number but with the details of the spending in each financial activity. In terms of this, MA8 added some comments: “So all of these lines are separate. I see the amount of what I pay for the billing then I see the amount with that I pay for the SLA, for the CoE.” The budgeted recharging amount is finalized at the end of every year between the SSC and the head office, rather than SSC and its customer.

During the daily communication and cooperation, countries have background information about the number of FTE that provide services to them and the average rate per FTE. Before the budget meeting, there is a timeframe when the countries are asked to give feedbacks and comments to the head office about the recharging amount. For some instance, countries might ask FSSC to undertake more activities or ask that they reduce the usage of FTE through automation. If there is a change like this, countries will raise this matter with the head office and head office will do the negotiation with the SSC to adjust the budget number for the next year. The two countries we spoke to admit that during the negotiation process, there is not much they are involved or could do at this moment. They have the chance to raise their concerns but what they focus more on is to control their own cost and follow the DHL Express’s global strategy.

6.5 Summary

In this chapter, the researcher discussed the recharging mechanism applied in DHL Express for both SSC and its customers’ perspective. The FSSC of DHL Express use cost-based recharging method. Before 2015, all the costs incurred in the GBS were
calculated according to different activities and directly recharged to the customers based on budgeted amount. This amount was adjusted monthly and any ‘profit’ made by the GBS was sent back to the customer divisions. After 2015, the recharging mechanism applied by the FSSC of DHL Express changed from transfer pricing (direct recharge) to cost allocation (indirect recharge), which means the costs started to recharge through the head office. The costs of the FSSC are calculated based on the number of FTEs and recharge monthly to the head office. The budget-based system is still applied but the monthly adjustment is replaced by annually review. For transformational activities (management accounting activities), the recharging mechanism has also been changed from direct recharge to indirect recharge since 2017. No matter which approach is used, as the customers of SSC are aware of the existence of costs, their behaviors are influenced, either by the internal pricing mechanism or the control of the head office.
Chapter 7 MyCSP Case

7.1 Introduction

This chapter focuses on the case undertaken at a UK-based pension administration organization MyCSP, which operates as a shared service model. MyCSP is particularly interesting from a recharging perspective because it was conceived as a captive SSC within a large scale government agency but after a privatization sale to a private equity investor, MyCSP is now operating as a fully independent business. It has a totally market outlook and seeks to make commercial profits yet, intriguingly, its management still embrace the ethos and practices of the SSC model. An innovative mutual ownership model between government, employers and the private sector investor ensures that the business tone is about mutual adjustment to achieve greater efficiency and better customer service. This chapter starts with the introduction of the background and history of this organization in section 7.2. Section 7.3 provides the details of the recharging mechanism implemented in this organization. The recharging process of MyCSP varies according to different types of services (the service covered in the core contract and additional customized services). Since it is difficult for the researcher to get access to the client of MyCSP (the Cabinet Office or central government departments), the structure of this chapter is slightly different compared to the previous two cases. The behavioral effects of recharging are discussed in section 7.4. The chapter closes with a short summary.

7.2 Background Information

7.2.1 Overview of MyCSP

My Civil Service Pension (MyCSP) is a pension mutual company\textsuperscript{17} which administers civil service pension schemes on behalf of around 250 central government

\textsuperscript{17} http://www.mycsp.co.uk/schemes/the-partnership-model.aspx
organizations such as the Department for Work and Pensions (DWP), HM Revenue and Customs (HMRC) and Ministry of Justice (MoJ). MyCSP which was founded in April 2010 along the lines of the shared service model within the DWP. As a standalone financial entity, one would expect MyCSP to be cast as a commercial third-party BPO provider, along the lines say of Serco PLC or Capita PLC. Yet, senior management still chooses to describe the company as projecting the ethos and practices of an SSC. This might appear surprising but can be explained by the company’s heritage and an innovative mutual ownership model.

Before 2010, pension services of central government organizations were provided by multiple administrators within major government departments on eleven different sites and a couple of private sector organizations around the country. In April 2010 MyCSP was formed as an SSC within DWP, providing services to DWP, the Cabinet Office and any central government organization where employees belong to the Civil Service Pensions Scheme. In February 2011, MyCSP moved out from DWP and started to be part of the Cabinet Office (Crosland and Davy, 2011). On 1st May 2012, a new financial entity was created and MyCSP Limited became a management-led buyout and the first mutual government/private sector joint venture. The UK Government own 35% of MyCSP’s shares, the private sector partner Paymaster (part of the Equiniti Group) own 40% and the remaining 25% is held in a trust for employee partners. The legacy pension administration services were provided on eleven sites in 2012 and there was an acknowledgment from the outset that there were opportunities to make substantial cost savings in infrastructure and staffing. Over time, efficiency savings have enabled the workforce to be reduced and nine sites closed with only two sites (Cheadle and Liverpool – approximately 30 miles apart) remaining by 2015.

As the venture progressed and proved successful, the Government reduced its holding

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18 The Employee partners’ stake in the Company is held in trust by MyCSP Trustee Company Ltd, known as the MyCSP Trust (information from www.MyCSO.co.uk)

19 There used to be four sites which are Newcastle, Worthing, Cheadle, and Liverpool but the Newcastle and Worthing sites were closed by 2016.
to 24% and Equiniti, now with majority control, increased to 51%, with 25% still held by employees (effective from around 2015). It is worth noting that all the employees at the time of the buyout transferred to MyCSP with protected employment rights although they were no longer civil servants in law. Thus, whilst operating as a new ownership structure, MyCSP retained the extensive administration knowledge and experience that MyCSP had gained in the public sector, but with the added advantage of bringing in new commercial and technical experience from the private sector partner (Equiniti). The new ethos for MyCSP has put customers at the heart of processes and then to grow as a commercial business with new clients and service offerings.

Currently, MyCSP provides pension administration services, injury benefits services, compensation schemes service and some consulting and training services to 250 customer organizations of MyCSP, referred as ‘employers’ by MyCSP. Also, an individual employee of MyCSP’s 250 client organizations could also access the service provided by MyCSP, referred as ‘members’. The total number of pension scheme members is 1.5 million. MyCSP is now the third largest UK pension scheme administrator and its turnover has exceeded £40 million with target yearly growth of 31%.20

7.2.2 Research Activities

In one of the practitioner roundtables (CIMA-Loughborough SSC forum) that had been held quarterly in UK, the researcher met the key informant in MyCSP, the financial controller of MyCSP (FA1). After a discussion with him, the researcher got to know that MyCSP is formed as a shared service center of the Cabinet Office. However, it is an independent company with shares controlled by the private sector. It has the commercial ambition in the future to serve as a third-party service provider. FA1 invited the researcher to visit one site of MyCSP which is located in Cheadle. In May 2015, the researcher visited the Cheadle site and interviewed the general manager of the site (FA2)

20 All background information about MyCSP came from the slides “Introducing Pricing in MyCSP” provided by the financial controller of MyCSP and the official website of MyCSP.
and FA1. There were also some informal discussions between other staff and the researcher, which were not recorded. FA2 introduced the general information of MyCSP, including the activities undertaken in MyCSP, the size of the company, its relationship with customers (employers, members, and the Cabinet Office) and its recharging mechanism. After that, FA1 has given the researcher a more detailed introduction about the recharging mechanism applied in MyCSP, based on the slides he prepared. The interviews with both FA1 and FA2 were recorded and transcribed by the professional typist. The transcripts were sent back to the interviewees for their approval and confirmation. According to the data collected from the interviews, the researcher realized that MyCSP has a seven-year contract with its only client—the Cabinet Office which will be expired in 2019. Therefore, in order to get updated information about the contract, MyCSP and its recharging mechanism, the researcher re-contact FA1 in 2018. Another skype interview was undertaken, and the transcript was also sent back to the interviewee. The limitation of this case is that the researcher does not have any access to the only client of MyCSP—the Cabinet Office, thus, the data of this case was only based on the information provided by MyCSP.

7.3 Recharging mechanism

The first and only major contract that MyCSP has is the one signed by the Cabinet Office on behalf of 250 central government organizations for 7 years in 2012. This umbrella agreement sets out the broad service agreement between 250 public sector employers which offer Government pensions and the Cabinet Office. In turn, their employees have access to the pension administration services provided by MyCSP. Although contractually the Cabinet Office is the sole client of MyCSP, setting market price tags on the pension administrative services is still necessary for MyCSP because: 1) the costs incurred by MyCSP need to be covered; 2) in some situations additional or customized services are required which are not included in the contract signed between MyCSP and the Cabinet Office and 3) with a major shareholder which is a commercial
company, MyCSP has adopted a market-orientation in its corporate culture, necessary when MyCSP starts to seek work outside the Civil Service. Hence, management is keen to talk the rhetoric of the market whilst acknowledging that for an extended period of time the company is effectively an extension of government bureaucracy. An outline of the recharging process is shown in the following figure 7.1.

![Figure 7.1. Recharging process of MyCSP](image)

There are two broad types of MyCSP services, ‘core pension services’ and ‘additional customer service’. The core pension services are set out in the contract which is agreed and signed-off between MyCSP and the Cabinet Office on behalf of the 250 employers. The contract covers general pension administration services, such as the maintenance of member records, pensioner payroll, and final award calculation. If the employer or member requires any special service that is not included in the core contract, there will be a special statement of work signed between MyCSP and the employer or member, which then works as a mini-contract for the particular piece of work. The recharging mechanism varies according to these two different service types and the next section will explain two recharging processes separately.
7.3.1 Core pension service

Contractually, the Cabinet Office is the only client of MyCSP and thus the Cabinet office is the only one who directly pays MyCSP for pension administrative services on behalf of the employers. Recharging is based on the annual budget (activity volume and price) for the services covered in the core contract. The payment from the Cabinet Office is still the main source of income for MyCSP and must thus, cover almost all the costs incurred in the provision of pension administration and pensioner payroll. The customers were inherited from the Principal Civil Service pension scheme, as were the costs. FA1 said:

*We inherited the same buildings, the same infrastructure, the same staff, everything was an inherited position. It wasn't a scientific pricing piece there. It was purely the costs to run the business.* (May 2015)

Employers sign participation agreements with the Cabinet Office to gain access to pension administrated services provided by MyCSP. These services used to be provided by the Authorized Pension Administration Centre (APAC) and the service fees were negotiated between the individual employer and APAC. After the formation of MyCSP, the service agreements signed between APAC and the employers were fed into the Cabinet Office without any change of terms and conditions. Therefore, the recharging fee of pension administrative services reflected the original one. This recharging fee varies according to different employers as the more members (employees of organizations) the employer has, the more pension charge will be. None of the employers pay MyCSP directly as the service provider but are instead paying the Cabinet Office.

The amount that the Cabinet Office pays to MyCSP does not only cover its operating costs but also has a profit element built into it. This margin depends on the value that MyCSP could provide to the government which reflects the estimation of improvement
in efficiencies during the life of the contract. After taking views from industry level and consulting advisors, profit margins were negotiated and agreed between MyCSP and the Cabinet office when the core contract was signed in 2012. Also, there is also a chance for MyCSP to make additional profits.

*If we can make additional savings from the budgeted costs, such as not filling vacancies as anticipated, hence creating a reduction in staffing costs, we will generate additional profit from the originally budgeted amount.* (FAI, September 2018)

### 7.3.2 Additional Services

Any service that is not included in the core contract will be charged as additional directly by MyCSP to the service buyer (employer/member). This service could be required by either the employer, which is the central government organization, or the member who is the employee of the government organization or even the Cabinet Office. For example, employers could be considering a proposal to make people redundant, and thereby need to ask MyCSP to calculate the effect of early retirement and redundancy payments. This is above the terms in the core contract thus another statement of work will be signed between MyCSP and the employer, which works as a mini contract. The other type of additional service that may be required by individual members is ‘pension sharing’. If one member gets a divorce, MyCSP will do the calculation of how much of the pension each party could get. Before the establishment of MyCSP, employers or member used to demand these services within the organization. Each organization used to have its own way to deal with this requirement and its particular method of calculating relevant costs. Nothing was contractual. However, MyCSP has market-orientation since it became a joint venture company in 2012, thus it is necessary for them to build a pricing model for these additional services. Before doing that, there were some tasks to be finished: 1) to understand the cost bases of eleven sites and take an assessment of the time it took to do particular tasks; 2) to formalize the service providing and recharging process and make it contractual; 3) to
develop process maps to describe services; 4) to standardize the recharging processes applied in different organizations and 5) to establish the cost of service by assessing resource time and staff grade used.

For non-core services required by the Cabinet Office, the additional charges need to be re-negotiated between MyCSP and the Cabinet Office. While the standardization work was still in process, MyCSP has developed a ‘rate card’ for additional service for the cost of staffing and has applied it very simply. The cost of activity equals to the rate times the time it takes to do a particular task and therefore MyCSP could work out the recharging price.

The rate card allows us to charge for projects and other non-core work on a time and materials basis and has the advantage of not having to negotiate the time element for each piece of work. It is broadly based on graded salary plus profit margin and is used when our own staff is being used. If we use third parties to support the delivery of a service we can use a pass-through, plus an agreed mark-up margin. (FA1, May 2015)

The ‘rate card’ can be used as a basis for negotiation but if there is a major project it could lead to a higher cost than the Cabinet Office is prepared to meet. Whilst, recharging for these non-core services might only result in a modest source of income to MyCSP, nonetheless, such income can be significant in terms of increasing overall profit if income from the core contract has covered all the fixed running costs. Hence, MyCSP may be prepared to negotiate a lower rate for such ‘marginal’ income’ to come to an acceptable price for both parties. To instigate additional services, employers or individual members (say, a statement of entitlement in a divorce case) must complete a formal request for service form for which MyCSP bills directly.

7.4 Behavioral effect of recharging mechanism

7.4.1 Governance mechanism

The governance in MyCSP is a hybrid style combining market- and hierarchy-based thinking, but this is somewhat imperfect. On one hand, there is only one client with a
stake in the business, together with the fact that almost all employees are former civil servants and likely feel aligned with their end customers who are still public sector employees. On the other hand, management propounds the customer service ethos and point to tough annual negotiations over price and performance with the Cabinet office. Moreover, the whole company lives in the shadow of the finite contractual lifespan of seven years and the need to not only renew the main contract but to acquire other pension business.

Firstly, after consolidating the operations of the different SSCs and forming MyCSP as an independent company, it has only one client now. The manager of MyCSP added:

We now only have one customer which is the Cabinet Office. Cabinet Office now technically has the client relationships for all 300 of those employers (customer organizations). We service the employers, Cabinet Office manage, instead of 300 different service level agreements, just manage one contract that’s between themselves and MyCSP for delivery to all of those 300 employers. (FA2, May 2015)

Although MyCSP now provides services to 300 employers (up from the original 250), it is only answerable to the Cabinet Office and aims to stick to the contract signed between them. Everything including the service type, the customers and the facilities are inherited from the Principal Civil Service pension scheme. Most of its customers are central government organizations but there are some exceptions. If one customer is not a government organization but is part of the Principal Civil Service pension scheme, it is still a client of MyCSP under the Cabinet Office remit. The initial contract signed between MyCSP and the Cabinet Office is for seven years which will be due to expire in April 2019 but an extension for two years and eight months has been agreed as at August 2018.

Secondly, MyCSP used to be part of the Cabinet Office (as the SSC of DWP) and although it is legally an independent firm now, it is still under the control of the Cabinet Office. The negotiating power between the Cabinet Office and MyCSP is imbalanced.

We were part of Cabinet office. The person negotiated our part was actually a senior civil servant within Cabinet Office. How independent were they really to make decisions? (FA2 May 2015)
MyCSP has no power to walk away from the negotiation. If it loses the contract with the Cabinet Office, it will have no customers, no revenue and no profit. FA1 commented:

If you are a normal private sector company and you try to have a deal with somebody, the price isn’t suitable for you, you have got the leverage to say that I’m walking away now and you will get no service. We couldn’t do that, they (Cabinet Office) have all the power over us and therefore they could drive down whatever they wanted and what we can do is only accepting it. (FA1, May 2015)

Since 1st May 2012, the investment from a private sector has been brought and in 2018, the proportion of shareholding of the private sector has increased to 51%, which makes it the controlling shareholder. Although MyCSP is dealing with a single client (the Cabinet Office), it has adopted a market-orientation in its daily operation. Firstly, it is possible for MyCSP to make “profits” although all its charging is budget based. The recharging amount to Cabinet Office which is agreed in the core contract has a profit element built into it. This recharging amount started off with the initial costs of MyCSP and assumed a level of efficiency improvement was achievable. For instance, over the contract period, MyCSP gets down to effectively half the unit price per member. If MyCSP could make additional savings from the budgeted costs, MyCSP will generate profit from the originally budgeted amount, the Cabinet Office could also benefit from this:

If the profit achieved on the core contract is more than 2% over the projected profit, any additional gain (profit) is split between Cabinet Office and MyCSP. (FA1, September 2018)

Unlike in 2012 when MyCSP was busy on the transformation of the service for Cabinet Office, MyCSP is now starting to look outside the Civil Services. For example, MyCSP continues to introduce innovation and is developing a “self-service” solution and a platform that will be more adaptable to a multi-client environment. Also, MyCSP has achieved ISO 9001 and ISO 27001 quality assurance standards, which they believe could provide some competitive advantages in future bids. All of these efforts reflect that although MyCSP is still working with a single client, it is keen to raise its profile in the wider business community.
7.4.2 Behavioural Effects

Pension scheme members used to get the pension administration service by filling and submitting an ‘internal’ request form instead of completing a commercial contract. Therefore, the members do not have the perception to pay for the services. FA1 said:

“They weren’t used to paying for the service, so then they view it as expensive when you first introduce the price. Because they haven’t done any market research as to what the price would be, it’s just a price when there never was one. Therefore, by default, it’s expensive. That’s the perception. (FA1, May 2015)

For service activities written in the core contract, the members still do not feel any payment because the agreed amount is paid by their employers to the Cabinet Office. The only concern to them is that the service should be in their way. However, in terms of an additional service required by an individual member, the perception has to be changed. There is a statement of the work signed between MyCSP and themselves, which act as a mini commercial contract. The delivery of the service provided by MyCSP needs to be paid now thus the member’s expectation of the service quality is high. The relationship between members and service providers has changed from relational to contractual thus the behaviors of members are also restricted by the terms and conditions of the contract. Ideally, the existence of payments will influence the behaviors of members since their co-operation is necessary for the successful delivery of high-quality service. But this influence on MyCSP is very weak. The possible reasons are: 1) the customers still expect a bespoke service and they do not want standardization, thus any standard service provided by MyCSP is treated as a poor service; 2) the existence of a disconnection between MyCSP and customer organizations. Customer organizations access services through the Cabinet Office and MyCSP is only answerable to the Cabinet Office for the core contract. Thus, if MyCSP intends to change a customers’ mind-sets, the communication or negotiation is not directly with the customer organizations but through the Cabinet Office. The influence of recharging on the behaviors of customer organizations relies heavily on the reactions of the Cabinet Office. If the Cabinet Office is not supportive, the change of customer
perception is very difficult to achieve because of an imbalance of power between MyCSP and the Cabinet Office.

On the other side, the behavioral effects of recharging on MyCSP is strong. The recharging amount is based on the budgeted number which means during the contract period, the cash inflow to MyCSP every month is fixed. MyCSP has to operate within the budget and at the same time, ensure the service quality. Each month, MyCSP has to produce a Service Deliver Review to Cabinet Office, which provides a qualitative view of all-around services and is used as a support document at a monthly contract management meeting. Moreover, 25% of shares are owned by the trustee company on behalf of employees. Although these shares are not freely traded in the open market, there is dividend payment if MyCSP makes profits during the year. 25% of the profits is attributed to the trustee company and this will be a bonus for all eligible employees. This motivates employees of MyCSP to make efforts to achieved agreed targets and increase efficiencies as large as possible since it will enhance their own economic benefits. During this process, the Cabinet Office could also get benefits in the long-term.

7.5 Summary

This chapter explained the recharging mechanism applied in MyCSP. MyCSP used to be a captive SSC in DWP (Department for Work and Pensions) but has been a mutual joint venture since 2012. It has only one client which is the Cabinet Office but actually, any employer (central government department) or member (individual employee of customer organization) of Principal Civil Service Pensions Scheme benefit from the service provided by MyCSP. General pension administrative services are covered in the core contract signed between MyCSP and the Cabinet Office. However, employer or member could require additional service from MyCSP. Statement of work which works as a mini contract would be signed. The recharging for core contract activities is based on annual budgets while the recharging for additional service required by an employer or member is based on ‘rate card’. The rate is based on the ex-ante negotiation between
MyCSP and the Cabinet Office. The main motive of setting-up MyCSP is to improve working efficiencies of both the Cabinet Office and central government department, but operating cost would be reduced afterwards. The influence of recharging on the behaviors of customer organizations relies heavily on the reactions of the Cabinet Office but the influence on MyCSP is strong, because of the imbalance negotiation power between MyCSP and the Cabinet Office.
Chapter 8 Discussion

8.1 Introduction

The previous three chapters presented the empirical results collected in the case organizations. The overall purpose of this study is to analyze the functioning of internal recharging approaches in the shared service context and the behavioral effects stemming from the various methods. This covers 1) the scope and operation of recharging process including the recharging basis, recharging targets and the functioning of the SLAs and 2) whether the chosen methods drive good behaviors of both the SSC and its customer divisions, thereby improving efficiency given the potential for agency problems within multi-divisional organization.

To organize the analysis of the cases more logically, a continuum of recharging mechanisms was developed in Chapter 3, based on the integration of the theory of organizational structure, TCE and agency theory. The conceptual framework developed in Chapter 3 (section 3.6) provides the guidance for the analysis in this chapter which starts from the governance aspiration of each of three case organizations and then explains how each is related to the choice of recharging mechanism (either transfer pricing or cost allocation). Following on, three characteristics of transactions (asset specificity, uncertainty & opportunism, and bounded rationality) and their relationship to the recharging mechanism(s) used will be discussed. Finally in section 8.4, agency theory is used to analyze the behavioral effects arising from the recharging mechanism implemented in the cases, including the possible causes of agency problems in case organizations and their reaction strategies. The chapter closes with a short summary.

8.2 Governance aspiration

As discussed in Chapter 3 (section 3.3), Williamson (1975, 1985) used TCE to explain how different firms organize their economic activities in particular ways, e.g. markets or firms (hierarchies) or hybrid. In traditional organizations, rule-based professional
support services are normally governed in line with hierarchical approaches. However, the establishment of an SSC aims to transform the orientation of support services to a market outlook i.e. an intra-divisional to inter-divisional orientation (Herbert and Seal, 2012). Vosselman (2011) argued that there is an “internal client-supplier” (p.78) relationship between an SSC and its customers, that and this relationship has a “non-hierarchical” (p. 78) nature. Thus, ‘internal transactions’ between an SSC and its customers might be expected to capture market characteristics and this suggests the appropriateness of transfer pricing. Yet, the findings in the case organizations show that relational governance with hierarchical control continues. The next sub-section will discuss the empirical findings from the three cases and explore: 1) the extent to which transactions are governed with a hierarchical or market orientation, and 2) how the governance aspiration influences the firm’s choice of recharging mechanism, that is either cost allocation, transfer pricing, or a hybrid mechanism.

8.2.1 Hierarchical Orientation -- AMD

In TCE, Williamson (1973) argued that an individual who derives ‘associational’ satisfactions may favor internal organizations. Transactions with high asset specificity, small volume, and high uncertainty are more likely to be held in-house and be governed within the organizational boundaries, in other words, within a hierarchy. An SSC that has a hierarchical governance orientation will not therefore, operate as a separate business unit and hence, project no market-based “buyer-seller” relationship. The findings in all three cases suggest that relationships between the SSC and service purchasing business units are governed simultaneously by divisional management through the SLAs and top management control through the visibility of the SSC against budget targets. According to Williamson’s classification, the AMD group has a hierarchical governance orientation, being structured in line with the various professional functions, with all resources under the control of the head office. The motivation of AMD to set
up an SSC was to reduce operating costs through the standardization of systems, processes and procedures across the group rather than making economic profits, whilst also enhancing the visibility of the administrative overhead and hence enhance the control of the head office over the company. As ‘cost’ is the driving concern of the AMD SSC, the purpose of recharging is to break-even, i.e. to cover the total cost of the SSC’s operation. Practitioner authors such as Quinn etc. (2000) and Bergeron (2003) advocated that the SSC should be formed as an independent business unit within the organization, but the SSC of AMD is inconsistent with this assumption. Rather than acting as a semi-autonomous business unit, despite its status as a separate legal entity and its relocation to Malaysia, the SSC of AMD effectively operates as a part of the head office and recharges its costs to the head office instead of to customers. With no allocation to divisional units, the SSC of AMD should be regarded as part of head office and thus, a centralized service provider from the perspective of organizational structure. However, the SSC otherwise displays all the culture and outlook of a transforming, customer focus operation.

With no direct recharging or cost allocation to purchasing units, the information about cost is hidden to the service consuming units even though this is apparent in the information supplied by the SSC to the head office. Thus, it is difficult for the SSC to directly influence management behaviors through the recharging process. In this case, the behaviors of service purchasing units will be monitored through oversight of their support costs by the top management. For the SSC of AMD, although the recharging number is based on actual cost and volume, the SSC is still controlled against budget numbers set annually in conjunction with head office. Budget targets are based on the cost reduction percentage set by the head office and informed by reference to external benchmarks along with the setting of broad operational goals for the SSC. Thus, budgets and operational goals could be treated as a tool within a firm’s system of formal control (Das & Teng, 1988) of the performance of the SSC. In the AMD case, management control plays a critical role in ensuring compliance with organizational strategy (Zimmerman, 2011). This will be explained in more detail in section 8.4.
8.2.2 Hybrid governance with market orientation – DHL and MyCSP

In order to overcome the drawbacks of hierarchical governance such as low flexibility and extended response time, organizations could be expected to move to market governance model or at least a hybrid structure positioned between hierarchy and market. An SSC model makes it possible to set out contractual terms and conditions that influence the behaviors of divisional managers in the organization. Yet, not all SSCs can be expected to have a complete market-orientation as SSCs are essentially captive and thus, would ultimately tend to a hybrid governance mechanism rather than a market one. This type of governance style blurs the normal internal/external delineation of organizational boundaries, and likely requires management controls reflecting both hierarchical and market governance mechanisms.

Within a market orientation, the relationship between the SSCs and the service purchasing business units is similar to a market-based ‘buyer-and-seller’ relationship governed by formalized contracts i.e. the mutually negotiated SLAs. In this study, the governance structure of both the SSCs in DHL and MyCSP displays an intention towards a market orientation.

At DHL, for transactional activities before 2015 and transformational activities before 2017, the relationship between the SSC and its internal customers was essentially governed by more formal internal contracts, i.e. SLAs between the SSC and its clients together with detailed transfer pricing, rather than by the intervention of head office. This is a case where the “invisible hand” of the market (Smith, 1776) is influencing the pricing mechanism and thus, the behaviors of both sellers and buyers. Yet, in practice, both parties operate within the same organization and the operation of both SSC and its customers are notionally independent. Indeed, the negotiation of detailed operating terms and the recharging mechanism were solely between the two parties to the contract and thus, independent of top management. However, any disputes arising in pricing or quality could be escalating up to higher levels of corporate management. At the end of
each accounting period, the billing for each type of service was sent directly to the divisional customers. So that they get transparent information about both the resources employed by the SSC and thus, can have a greater sense of cost consciousness. With details of service consumption, the behaviors of internal customers should be better motivated because more ‘consumption’ leads to a greater amount of cost recharged, and in turn lower divisional profits. Abdel-kjalik and Lusk (1974) argue that this is the way to stimulate the efficient allocation of resources. Yet, whilst not exposed directly to broader market focuses, the SSC within DHL does undertake regular benchmarking with its external service providers so as to calibrate its costs and performance and thereby improve its operational efficiency and service quality. This provides a good example of how a market orientation can be embraced without actually contracting out to a third-party.

The features of hierarchical governance are reflected by the management control of DHL’s head office and the “zero-profit” strategy of its SSC strategy. The head office sets the budget figures for each division, including the SSCs. Any variance between the budget and actual result needs to be explained by the SSC. In accordance with the “zero-profit” strategy, any “profit” of the SSC (when actual expenditure turns out lower than budget) is given back to the customer divisions because actually making “profits” from support functions is not one of the operating goals of the DHL SSCs.

The intriguing finding from the DHL case is that although it used to have an overt market-orientation (for transaction activities up to 2015 and for transformational activities up to 2017), even as an internal arrangement that has seen after several organizational changes, it has successfully repositioned the overall SSC structure towards a more balanced outlook with 1) a hierarchical control (from head office), 2) market control from benchmarking (external) and 3) SLAs (internal) combined with cost allocation. The latter acknowledges the need for ultimate transparency of service costs within a culture of collegial working to improve processes. In 2015, when the financial SSC of GBS became a responsibility of DHL Express, the recharging mechanism for transactional financial services was also changed. Instead of direct recharging, the SSCs report the recharges for transactional activities to the regional
head office which then allocates the charge to service purchasing countries. This strategy gives the regional office the necessary information about each business unit’s consumption of finance resources so as to monitor its alignment with the overall organizational strategy. In other words, to a more hierarchical-orientation.

DHL’s recharging of transformational activities has continued to follow this pattern of progression. From 2017, transformation activities provided by the CoE were no longer recharged directly to the customers but included in the corporate “network fee”, which reflects the more general cost of providing a global platform to attract customers across the world. This fee still seems to allocate to receiving divisions in their management accounts, but it does so in a more indirect manner. This change from transfer pricing (direct recharge) to cost allocation (indirect recharge through the head office) is assumed to be based on mutual trust, transparent information and clear cost accountability between the SSC and its customers. This is possible because a baseline of reduced costs and service performance had been established in the period up to 2017.

The situation in MyCSP is somewhat different. MyCSP used to have a very high level of hierarchical orientation since it was part of the Department for Work and Pensions (DWP). Since 2012, when MyCSP was created, the primary focus was on the transformation of the service for the benefit of the chief stakeholder, the Cabinet Office. At that time, the functioning of MyCSP was, in essence, akin to a captive shared service center with only one client, indeed MyCSP does not have the right to expand its business with government or set a service performance level unilaterally. Its bargaining power is significantly lower than its primary client, the Cabinet Office but this perhaps belies the reality because in 2018, MyCSP is operating with a new ownership structure, with majority control (51%) owned by Equiniti (a private sector partner). Unlike DHL which has moved from a market to a more hierarchical orientation, MyCSP is becoming more commercial in its outlook and attitude with an ambition to look outside the Civil Service for new business, competing with very market-oriented BPO vendors and other government SSCs.
8.3 TCE perspective and recharging in SSC

TCE uses the notion of transaction cost to explain different organizational governance choices. Transaction costs can be determined by a number of factors of which the three major ones are asset specificity, frequency & uncertainty, and bounded rationality. This sub-section will interpret the findings in terms of the relationship between these three factors and draw together some thoughts on the recharging practices of SSCs.

8.3.1 Asset specificity

Assets specificity is normally argued to be the chief cause of different approaches to transactions costs (Riordan and Williamson, 1985). It has a close relationship with an organization’s choice of transfer pricing strategy (Colbert and Spicer, 1995). Internal transactions between an SSC and its customer comprise services instead of tangible (physical) goods and thus, a greater emphasis is put on human asset specificity: that is employing special knowledge acquired through education or experience. In other words, human asset specificity in an SSC arises from employees who have professional skills, special knowledge of tasks and who understand the operation of the organizations and hold deep tactic knowledge of the corporate culture and its systems. As explained in Chapter 3, there are two types of activities in SSC which are transactional (routine/administrative) and transformational (customized/value added) activities. In the case of AMD, there is only one global SSC now and this operates essentially as a part of the head office with no clear distinction between these two types of activities, thus only DHL and MyCSP will be discussed in this section.

According to theory, activities with low asset specificity, high frequency, and low uncertainty will likely be outsourced, while the activities with high asset specificity and/or high uncertainty are more likely to be retained in captive SSC. However, the findings in DHL are inconsistent with this proposition. The majority of the activities which have high frequency and volume have remained in the SSCs so that the head office might control and manage them, even though SSCs can still benefit from
economies of scale and standardization by BPO. Yet, the only activity that was outsourced to a third-party by the SSC of DHL Express is purchase-to-pay. However, it was reported that it took DHL Express a lot of time and effort to monitor an external service provider about service performance and recharging figures every month, DHL Express decided to ‘back-source’ these activities to the SSCs. Once both the “buyers” and “sellers” are working within the same organization, the managers of each division have a responsibility to bring efficiency to their own parts and the whole organization but do not need to spend time challenging each other over prices. Another example, MyCSP, the staff payroll, which is now considered routine/transactional, is outsourced to Equinity, but that Equinity is the chief shareholder of MyCSP and thus, there is no outflow of economic benefits overall and no need for arguing and re-negotiation. Yet, despite the ownership issue, the arrangement gives top management of Equinity some influences over its different operating units.

For both types of activities in DHL, there has been a change from transfer pricing (direct recharge) to cost allocation (indirect recharge). Although the recharging target has changed from internal customers to the head office, the method they use is budget cost rate based. The adoption of an activity-based recharging mechanism enables an SSC to have clear cost structure and, at the same time, the internal customers to appreciate their consumption in each activity. A high level of cost awareness helps the SSC to drive internal customers’ good behaviors whilst also raising their own accountabilities. Up until 2015, DHL used an activity-based costing principle (based on FTEs applied to each activity) to directly recharge internal customers transactional activities with monthly adjustment to budgeted numbers. The direct recharging and monthly adjustment provide an opportunity for the representatives from the SSCs and their customers to challenge each other, about both service quality and service recharging. Through this process of discussion, negotiation, and cooperation, efficiency was improved. Once this type of recharging and challenge process had been applied over several years, the standardization process had been largely complete, in addition, each customer of the SSC had built up a good base-line of both their normal consumption and the cost for each activity. Consequently, the recharging process has changed from
transfer pricing (direct recharge) to cost allocation (indirect recharge). The reason for this change is similar to the logic of back-sourcing purchase to pay. After each party had internalized its responsibilities, the head office hopes that both SSCs and its internal customers will focus more on value-added activities, rather than spending time arguing about intra-organizational recharging, a process that will not directly improve the profitability of the whole group. Aggregating all the information within the head office could potentially enhance management control and coordination over the organization.

Although there is no changing process in the MyCSP case, the choice of transfer pricing and cost allocation is similar to the DHL case. For the service activities included in the core contact which have been undertaken for several years, both customers and MyCSP are familiar with the service content and process, recharging is enacted through the Cabinet Office to customers indirectly (cost allocation approach). However, for the additional services required by the departmental employers or individual members, the requirements vary, and the recharging numbers also vary. Unsurprisingly, these transformational activities are recharged directly to the customers (employers or members), in other words, a transfer pricing approach is applied.

After analyzing the empirical data set from a TCE perspective, it could be seen that transactional activities normally have low human asset specificity which means that apart from the volume of transactions, the service content and customer requirements are barely changed between tasks. For these activities, cost allocation is preferred because it is straightforward for SSCs to standardize these types of activities and to benchmark them with external parties to improve efficiency and quality. Also, both customers and SSC have become aware of the cost driver and cost structure for each type of activity and it is less likely for customers to have doubt, about the recharging amount. Moreover, if the SSC considers changing the recharging mechanism, they will likely start with transactional activities. On the other hand, a transfer pricing approach is preferred for the transformational activities as these normally require special knowledge (specialized “know-how” gained through training and practice) or are customized or require situational knowledge. It is difficult to find a general rule for this type of activities. For customized services like the additional services in MyCSP, direct
communication is necessary as there is no standardized process.

8.3.2 Uncertainty and Opportunism

Uncertainty in an open market requires organizations to be flexible and adapt to changes in their business environment, however, internalizing transactions within the organization does not remove all the uncertainties. In the SSC context, uncertainty can arise from the recharging mechanisms of SSCs in terms of the necessity for coordination (Colbert and Spicer, 1995) and adaption. According to TCE, authority (hierarchical) relations are used to ensure internal coordination between divisions/ departments while in the market, coordination between different contracting parties is ensured by the price mechanism (Madhok, 2002). Whether the recharging mechanism can actually help to ensure coordination between SSC and its customer business units will likely depend on whether the choice of recharging mechanism is mandated by the head office or not. In the cases conducted in this research, none of the SSCs had the right to choose its recharging mechanism. There are two methods that the head office could use to encourage co-ordination at divisional level: 1) monitoring through the administrative process, and 2) applying the budget rate/volume rather than actual number and ensuring fairness between different business units to avoid conflicts. For general financial services, all three SSCs report their costs to the head office each year and these numbers reflect how well the SSCs and its customers have collaborated to achieve the cost reduction targets that the head office had set for them. Using budget numbers motivates the SSCs to collaborate with their customers and to search for means of improving efficiencies further. The effect of using this method is significant in AMD and MyCSP. The other way is to ensure the fairness of recharging with the help of transparent information. For example, the usage of FTEs is accessible to the customers of the SSC of DHL Express. By recording all the transaction in one certain system, customer units can trace the details of any transaction if they wish. This ensures fairness (Eccles, 1983) between different business units within the organization and reduces the possibility of conflicts. If there is a conflict between customers and the SSC, then the
head office could become involved and play the role of “arbitrator” (Watson and Baumler, 1975). Whilst there were no direct examples of this observed in the empirical investigation, there were a number of references by interviewees to hypothetical intervention by head office. This seems to enforce mutual co-operation as a contractual dispute with a third-party vendor and out of step with good internal relations, not least, visibility to management and thus, a strong motivation for managers to avoid conflict. Uncertainty about transactions also requires adaption to preserve relationships between divisions. The recharging mechanism is assumed to change if the organizational structure, business environment or customer requirements change. Eccles (1985) argued that transfer pricing should be dynamic and adapt to the changes. As recharging mechanisms capture the characteristics of transfer pricing, it is also assumed to be adaptive, as an external market would be. The change of DHL’s recharging mechanism substantiated this. In order to adapt to the change of organizational structure, the recharging mechanism changed, so that the recharging for routine (transactional) activities now has to be reported to the regional head office of *DHL Express* (since 2015). Simplifying the billing procedures, reducing transaction costs and at the same time strengthens the management of the head office of *DHL Express*.

In the operation of an SSC, most of the uncertainties are not from the external business world but from inside of an organization. The application of a known recharging mechanism reduces the internal uncertainty because it could be used by the head office as a tool encouraging co-operative and interdependent behaviors (Colbert and Spicer, 1995) and ensuring integration (Watson and Baumler, 1975). At the same time, with the change of organizational strategy, structure, customer requirements, the recharging mechanism may also be changed (Eccles, 1985).

### 8.3.3 Bounded rationality

Bounded rationality reflects the assumption that human ability to process information is limited (Jones and Hill, 1988; Simon, 1972). The limit of human ability makes it is impossible for the organization to manage unlimited transactions effectively, or forecast
all possibilities. Williamson (1975, 1979) uses this factor to explain the incompleteness of contracts although it is used here to explain why a simple recharging mechanism will likely be favored by the managers. It would appear that one of the most important factors that corporate managers consider when they choose the recharging mechanism is simplicity as complex recharging mechanisms require a large amount of time for managers to understand.

*Obviously, the (recharging) mechanism that we choose has to be very ‘simple’, not too complicated. Of course, it has to be measurable; it also should really reflect the amount of the efforts that required performing particular services.* (MA1, DHL, January 2013)

Generally speaking, the calculation methods behind the recharging amount in the three case organizations are all cost-based and relatively simple to implement. AMD consolidated all the costs incurred by the SSC during the accounting period and then increased it with a modest anticipated tax requirement (5%) to arrive at the total recharging amount. DHL base all the recharging on a single basis, i.e. the number of FTEs that were used to undertake the activity. The rate for each FTE is fixed in the budget but the actual recharging amount will vary according to the number of FTEs employed each year and therefore the volume of activity becomes the focus for the client division. The total recharging amount reported to the head office also includes the minimum tax payment required by local authorities. MyCSP applied similar calculation methods to the recharging amount as DHL, except tax consideration. The system measured the time that employees take to undertake each activity and multiply that by the rate per hour agreed by the Cabinet Office to reach a total recharging amount.

Apart from AMD, who only calculate total expenses, the other two case organizations base their recharging only on one basis: labor hours. This single base recharging method might be criticized by some academic researchers for the possibility of inaccurate calculation of costs.

Another reason for the organization to choose a simple recharging mechanism is because the employees of operating units, who probably lack professional financial knowledge, have to spend time to understand the calculation method and the basis of allocation. It would be difficult for them to find out the usage of the resources and thus
find the way to increase efficiency. If a complicated recharging mechanism were to be used it may not be effective in driving good behaviors of managers in the business.

The previous three paragraphs have explained the factors driving the implementation of different recharging mechanisms in the three cases in relation to contextual factors and TCE perspectives. Asset specificity has significant importance to explain the organizations’ choice of ‘make or buy’. However, after the organizations choose to internalize the support service in a captive SSC, the effects of asset specificity on the choice of recharging mechanism are significant. Based on the empirical evidence collected in this research, the calculation method of recharging amounts for support services does not vary according to different levels of asset specificity (either for transactional or transformational activities) and either transfer pricing (direct charge) or cost allocation (indirect charge) might be used. The existence of internal uncertainties requires the head office to ensure that coordination within the organization and in so doing adapt its strategies including the recharging mechanism of SSCs to the changing business environment.

The last perspective, bounded rationality, is found to be closely related to the organizations’ choice of calculation basis of recharging amount. Due to human limited ability to process information, each organization in this research prefers a simple recharging mechanism, which is easy for both SSCs and other business units to understand. Complex methods such as ABC, which might provide more accurate cost information according to academic scholars, present application difficulties in practice.

**8.4 Agency theory perspective and recharging in SSC**

The purpose of this research is not only to investigate the method of calculating recharging figures but also to understand the underlying philosophy of recharging process and this should take account of the behavioral effects of recharging. In the traditional M-form organization (Williamson, 1985), operational activities are delegated to the divisions while corporate-level strategy is still the province of the head
office. Although it is possible that cooperative behaviors encouraged by the head office are not consistent with the interests of divisional managers and the group overall might suffer a loss of efficiency and effectiveness (Baiman, 1990). Chapter 3 has discussed the relationship between agency theory and the recharging mechanism applied in SSC. The organizational development of the SSC model creates a new agency perspective. In addition to the principal-agent relationship between divisional managers and the head office, there is also a similar relationship between SSCs and customer divisions. Especially when SSCs and customer divisions are geographically apart, the monitoring costs of the SSC’s performance could be significant and agency problems such as moral hazard might arise. Recharging for support services through either transfer pricing or cost allocation could 1) help to establish accountability of both parties, the SSC and customer divisions, and 2) enhance central control of the head office, which in turn will help to reduce the agency problem within the overall organization. The next sub-section will revisit the empirical evidence to identify possible instances of agency problems in three case organizations and the control processes used to mitigate the dysfunction effects of an agency.

**8.4.1 Possible causes of agency problem**

**8.4.1.1 Mandated decisions**

Meer-Kooistra (1994) argued that there are two elements involved in coordinating internal transactions. First is the way that authority is signaled, which means whether the SSC has the authority to decide its operating strategy with respect to internal transactions or not, including the recharging mechanism. Second is the way in which the internal transactions themselves are valued by participants.

None of the SSCs in the case organizations had full autonomy to choose their own recharging mechanisms. At AMD, the SSC costs are absorbed by the head office thus, the choice of recharging basis (budgeted or actual basis) and recharging targets are all mandated by the head office. The AMD’s SSC only provides services to internal
customers and it is not possible for them to switch to external service providers. The SSCs of *DHL Express* are all independent legal entities and managers claim that they are “quite free in handling things”. Despite the fact that the managers in different countries could choose external service providers for transactional activities, they still have to get the permission of head office, subject to represent from the SSCs. Interestingly, the customers of the SSC acknowledged that the decision to migrate supporting service activities to the SSCs is mandated. The situation is similar in MyCSP, which does not have the right to set the rate of service as this needs to be negotiated with their primary client, the Cabinet Office.

Vancil (1979) argued that there is a close relationship between the distribution of authorities and responsibilities, and the transfer pricing system. In all three cases, the decision-making authorities are not delegated to the SSCs which would suggest possible agency problems. Firstly, the recharging mechanism that is chosen by head office is to ensure compliance with organizational strategy but at the same time to encourage cooperative behaviors. If the SSC’s KPIs include financial results, then at the same time its recharging mechanisms would not bring financial benefits to the SSC. Indeed, the SSC managers might have the motive to pursue their own benefits on the costs of the whole organization. For instance, *DHL Express* has to recharge their internal customers on the basis of a budget approved by head office. If the budget number is too tight, they might lower the service level to achieve budget number. Yet, if the budget is ‘slack’, the managers of the SSC might not have the motivation to improve working efficiency because any ‘saving’ will be returned back to the customers (in *DHL Express*). Secondly, it is not generally possible for the customer divisions to switch service providers. Although the customers of SSC could benchmark the service provided by SSC with that of an external service provider from both cost and quality perspectives. If they are not satisfied with the services provided by the SSCs, realistically all they could do is to re-negotiate with the SSC or make a representation to the head office. The lack of competition and a real market option may reduce efficiency. Thirdly, the recharging mechanism should be flexible enough to adapt to a changing business environment and customer requirements. As argued by Eccles (1985,
Thus, centralized decision-making by head office would enhance central control but might be the cause of agency problems between the SSC and its customer divisions.

8.4.1.2 Imbalance in bargaining power

The SSCs of AMD and MyCSP are somewhat untypical cases in this study, although this situation maybe not so unusual given the discussion of SSC forum meetings. Although the GSC of AMD is a separate legal entity it essentially functions as part of the head office. MyCSP is a joint venture company and now has a majority private sector shareholder, although it still has only one client, the Cabinet Office. However, the bargaining power between the two parties is inherently imbalanced. For example, as a part of the head office, the SSC of AMD could only “accept” the “order” from the head office. Although the SSC has achieved the budget every year since establishment in 2002, there is still little evidence of complaining about the progressive “tightening” of the budget. Alternatively, MyCSP participates in the annual negotiation, the decisions about prices were eventually made by the Cabinet Office. As the Cabinet Office was the only client for MyCSP, it has no right to walk away during the contract period. Such an imbalance in bargaining power leaves little scope for the SSC to pursue its own economic interests. That might negatively affect the working enthusiasm of employees in SSCs and thus, reducing their service quality.

8.4.2 Strategies to reduce agency problems

The possible instances of agency problem in three cases and the behavioral effects of recharging for each case were described in previous chapters, the following sub-section will analyze these behavioral effects and discuss the common strategies of the three case organizations created to avoid agency problems.
8.4.2.1 Establishing accountability through transparent information

Information asymmetry and contractual uncertainty may cause opportunistic behaviors whereby one division might increase its own profits on the internal transaction at the expense of the other (Emmanuel, Otley and Merchant, 1990). There are two ways applied in SSCs of case organizations to raise customers’ cost consciousness and thus, establish their accountability: 1) standardize the processes, 2) providing transparent information in the system.

As discussed in previous chapters, one of the important objectives for SSCs to recharge its support services is to encourage cost consciousness and to motivate good behaviors of customers. This objective assumes that the internal customers understand their resource consumption and believe the payment is fair, thus, encouraging them to find the ways to improve their efficiency. Standardizing working processes and providing transparent information is the first method applied in the cases to reduce agency problems. All SSCs represented that they had standardized the working processes and thus enabling support service activities to be more readily quantified once process variability has been reduced.

The effects of changing customers’ behaviors are more obvious in DHL Express. The details of customers’ consumption on resources become more transparent with increasingly enhanced ERP system capabilities to provide a very detailed single source of the transactions. After transferring support services to SSCs, the DHL Express business countries must pay for their usage of support services. At the same time, they expect service improvement and to compare the costs with the past. If they now seek higher quality services at lower cost (compared to the costs of undertaking the services within countries), they have also to improve their own efficiency and cooperate with the SSCs. For instance, the SSCs of DHL Express uses budgeted cost rate to recharge its financial services. If fewer FTEs are used, the costs recharged will be lower. Thus, customers could directly benefit from their ‘good’ behaviors and this provides the incentives for them to cooperate with the SSC.

The effects of transparent information do not only influence the behaviors of the
customers of SSCs but also influence the SSCs themselves. As the agents of both the head office and internal customers, the managers of SSC could also be assumed to be motivated by self-interest, according to agency theory (Baiman, 1990). For example, the SSCs might have opportunistic behaviors through information asymmetry (Noreen, 1988). However, as discussed before, the application of the ERP system and the process of standardization makes it difficult for the SSCs to hide information from either the head office or other customer business units. In DHL Express, the SSCs’ customers reported that they know very clearly the rate per FTE and the number of FTEs that are used on their work. Some of managers frequently visit the SSCs and know directly the specific employee that deal with the activities of their units. At the same time, by benchmarking the SSC’s services with third-party – BPO vendors (from both cost and quality perspectives), customers might be in a position to put pressure on the SSCs to improve their efficiency, year-on-year.

Recharging also motivates the SSCs to take ownership of the real cost of services. For example, by fully understanding these elements, the SSCs of DHL Express can understand the activities that actually drives costs or causes wastage and can seek to improve work processes. This makes the structure of support service costs more clear and transparent to both head office and the customer business units that benefit from the support services.

8.4.2.2 Central control of head office

The previous sections have argued that mandating moving finance activities to the SSC with full-cost recharging mechanisms might lead to agency problems. However, direct supervision by the head office could also be used to reduce the agency problem and minimize agency costs. Watson and Baumler (1975) argued that placing transfer pricing in an organizational context creates a means to achieve differentiation and also integrate diverse units within the organization. They argued that transfer pricing is necessary for multi-divisional or multi-national companies to measure divisional/regional profitability (Dean, 1955; McAulay and Tomskins, 1992). All of three case
organizations in this study have inter-divisional transactions of services (inter-organizational transactions in MyCSP), which raises transfer pricing or cost allocation issues. The chosen recharging mechanism should not only enable a fair reflection of regional profitability but should also align with the overall organizational strategy. At any one time, the relationship between different business units within one organization is essentially inter-dependent. The recharging mechanism also plays a role in the integration process to motivate employees to achieve overall organizational goals (Watson and Baumler, 1975; Spicer, 1988; McAulay and Tomskins, 1992) and requires the intervention head office (Spicer, 1992).

There are two primary means of control found in the case organizations: outcome control and behavioral control (Dekker, 2004). Outcome control of all three case organizations is reflected by the ultimate cost reduction goals and budgets set by the respective head office. The use of a budgeting system could help to make agents’ behaviors transparent to the principal (Eisenhardt, 1989) and thus, mitigate any efficiency loss caused by agency problem (Baiman, 1990). The cost reduction targets set a direction to the SSCs and also to their customers (Das & Teng, 1998). For instance, the SSC of AMD has to operate strictly under the budget (which reduces continuously every year) and against its direct charge to the head office. MyCSP is operating with a budget rate which is negotiated between MyCSP and Cabinet Office and has to beat budget to make a profit. The case DHL Express is a little different. Before 2015, negotiations about recharging only happen between the SSCs and customer business units. The role played by the head office is more as a monitor: intervening only when there is a serious disagreement or conflict between SSCs and customer business units. However, after 2015, direct central control was strengthened to some extent. Now, the head office negotiates with the SSCs on behalf of service purchasing countries. By monitoring the SSCs’ performance and the behaviors of its managers' agency problems are reduced, and customer divisions are more focused on their core competencies. Behavioral control is represented by the daily monitoring of SSCs’ behaviors through organizational regulations, rules, and standardized procedures. In the case
organizations, especially in AMD where the researcher was fortunate to have access to the CFO of the corporate group, the behavioral control is explicit. The corporate head office plays the role of “arbitrator”. Managers from the AMD GSC and its internal customers enjoy the autonomy to negotiate their arrangements about the type of services, major KPIs and other terms but the head office sets the boundaries of these activities and provide intervention when it is needed. The pre-condition of this arbitration process is that each business unit within AMD does its own “independent reporting” to the corporate, which enables the corporate head office to have a good knowledge of local information. As the head office of AMD reflects the interests of top management, it resolves the conflicts over internal transactions. In practice, maximizing overall profitability is the concern of most organizational management thus, it is critical for managers to use a recharging mechanism as a “routine and standardized process” to achieve integration and ensure the head office’s control (Watson and Baumler, 1975). In DHL, there was monthly adjustment before 2015, which gives the internal customers a monthly chance to exchange the information with the SSC and thus, to monitor the behavior of the SSC. Although after 2015, the frequency of adjustment became annual, but it was reported the monitoring effect of customer is not weakened. In every year, there is four to five months period for the customer to negotiate the service quality and recharging figure with the regional head office, which is also one type of behavioral control from customers.

8.4.2.3 Performance measurement and reward system

Eccles’s framework (1985) suggests that transfer pricing policy relates closely to the performance measurement, evaluation and reward system of the organization. Vancil’s research (1979) found that the financial measurement and evaluation system determines the way that both revenue and costs are charged to the respective profit center. As explained before, if the performance of SSCs is only measured by financial results, such as the annual cost reduction percentage, the SSC managers might lower the service quality to achieve this. If the views of customers or the head office are also included in
the performance measurement of the SSC, then this problem could be largely avoided. In both AMD and DHL cases, many customer-related KPIs are included in the SLAs signed between the SSCs and their customers. For example, in AMD, there is “First Pass Yield” to ensure the quality of service provided by the SSC. In addition, quarterly meetings between the SSC and its customers are held to check the quality of services provided by the SSC. The representatives of head office (sometime the CFO personally) visit the customer facilities of SSC frequently every year to discuss their feedback. In the other case organization, DHL Express, customer satisfaction is also one of the important performance indicators. There is a monthly call between the managers of both the SSC and their client countries. The requirement of customer satisfaction for the CoE of DHL Express is 98%. If it is lower the 98%, the bonus of CoE’s managers will be negatively affected. Relating customer satisfaction to performance measurement requires the SSC to put customers at the center of its operation. Meeting the customer requirement at lower costs becomes the priority of the SSCs. MyCSP has to produce a monthly service report to the Cabinet Office, with a qualitative-view of all-around services. There will be a financial penalty if any pre-determined service level is not achieved. Also, these service levels are closely related to the assessment of MyCSP’s employees’ daily work.

Evidence of reward mechanisms is also found in the case organizations. For example, the bonus awarded to higher-level managers in both the SSC of AMD and DHL Express relates to both the performance of SSCs and performance of the whole organization. The higher the level of employees, the higher the performance-related proportion. At MyCSP, the innovative social ownership structure should further help to motivate employees (25% of shares are owned by trustee company on behalf of employees) thereby aligning the interests of the Cabinet Office, and top management and employees of MyCSP.
8.5 Summary

This chapter started from the governance aspiration framework that developed in Chapter 3. Three case organizations in this research have different degrees of hierarchical orientation or market orientation, and particularly in the case of DHL, at different times. Differences in the ways of governing internal transactions lead to different recharging mechanisms. The strong hierarchy governance model applies in AMD minimize the agency problem that might otherwise occur by following a “not recharging” strategy. Although cost information of SSC is effectively hidden, the direct supervision of the head office helps to ensure that each business unit works towards the best interests of the whole organization. The situation in DHL is different. Hence, the SSC and its customers are bounded by contracts but are actually in a market-based relationship. But both the governance orientation and the recharging mechanism progresses over time to become more hierarchical. MyCSP is different again, with the introduction of private sector shareholder and an innovative ownership model, it is becoming more commercial in its language and attitude. Three characteristics of transactions (asset specificity, uncertainty, and bounded rationality) might lead to the different choice of recharging mechanism. For transactional activities with high frequency and low uncertainty, cost allocation would be preferred. For transformational activities, transfer pricing which requires direct recharging would be preferred. The agency problem could be avoided through the standardization of working process, transparent information shared in the single system and the use of budgeting system.
Chapter 9 Conclusion

9.1 Introduction

This study was conducted for two purposes. First, to explore how SSCs recharge the cost of providing support services, either by the transfer pricing or cost allocation approaches. Second, to consider the behavioral effects arising from the choice of recharging mechanism(s) actually applied. This issue has been raised by a number of consulting companies such as Deloitte (2006, 2013) and KMPG (2007) as one of the key drivers to the success of shared services but the academic research in this field is lacking. Three case studies had been selected to explore the implementation of recharging mechanisms within the context of the SSC model and its setting within the multi-divisional form of organization.

Specifically, the thesis contributes to transfer pricing and cost allocation literature by developing an integrated transaction cost economics/agency theory perspective to explain the behavioral effects of the recharging mechanism in a new organizational context – the SSC model. The thesis has argued for a synthesis between theories of cost allocation and transfer pricing. In doing so it supports the argument of Horngren and Foster (1987) that “all cost allocation is a form of transfer pricing” (p 836). Moreover, the recharging mechanisms are found not to be static but dynamic.

This chapter starts with the summary of the main findings of the study. Following that, the theoretical contribution together with potential practical implications are presented. Finally, some limitations of the research are noted along with some suggestions for further research.

9.2 Main empirical findings of the study

The SSCs of three case organizations, two commercial, multinational companies and one UK-based company in the public sector, all apply a cost-based recharging
mechanism, no matter which stage of maturity they have reached as an SSC. Based on the empirical evidence, the governance aspiration of each organization is found to have significant influence in an SSC’s choice of recharging mechanism, including the basis for calculating the charge (e.g. budget/actual costs and budget/actual activity volume) and the target cost reduction/operating performance expected. The influence on the behavior of managers in client divisions and in the SSC arising from the choice of recharging method is confirmed in the case organizations.

The details of the empirical findings of the case study are summarized below, in line with the two research questions developed towards the end of Chapter 1.

1. To what extent do SSCs charge their costs to client units? In doing so are incurred costs simply allocated on a broad-brush basis or is a transfer pricing mechanism used to position professional support services as an internal market?

Some consulting companies identified various recharging mechanisms, such as no specific allocation, budgeted rate, activity-based costing, full direct recharging and market-based costing (e.g. Quinn, Cooke and Kris, 2000; Bergeron, 2003; Deloitte, 2007). In their illustrative life cycle of a typical SSC, Quinn, Cooke, and Kris (2000) indicated that the recharging mechanism would typically evolve from a cost-based to a market-based one across the four stages of a continuum of development. In this study, the following practices were observed.

- At AMD, the actual costs incurred by the SSC are absorbed by the head office in the US without any further allocation to customer business units. The significant finding here is that whilst there is no direct allocation to divisions.

- The SSC of DHL started with a very explicit transfer pricing approach for transactional services, based on budgeted cost rates and volumes. Any overall shortfall/surplus would be distributed across all divisions. Upon maturity in 2015 (diminishing efficiency gains) a broad brush cost allocation approach, through the head office to divisions was adopted. As transformational services
started their own SSC journey, transfer pricing was used to encourage rapid change in management behavior and also changed to cost allocation approach.

- MyCSP is another interesting situation because the whole organization acts as an SSC and is underpinned by an innovative mixed shareholder model (Government, private equity and employees). Recharges for the core contract are based on decreasing annual budgets and additional service based on a pre-determined rate. The recharging for services covered in the core contract is paid by the Cabinet Office and any additional services that are required by employers (customer government department) or members (individual employee) are paid directly by himself/herself/itself.

All three SSCs in the study had been incorporated as separate legal entities and had operated for more than five years, yet at AMD it still seemed to be treated as an extension of the head office instead of as separate business units, and thus, at variance with the progression expected in Quinn, Cooke, and Kris (2000). Indeed, in both cases of AMD and DHL, the use of the SSC for transactional activities and the choice of recharge mechanism(s) are mandated by the head office. In contrast, at MyCSP the recharging mechanism is based on an annual negotiation between MyCSP and the lead client, the Cabinet Office, despite the negotiation power being somewhat asymmetric. The two multinational companies have essentially off-shored their respective SSC operations and to avoid criticism around the global distribution of taxable profit, a modest mark-up is added to the total SSC cost to cover the requirement to pay local taxes. Generally, the recharging mechanisms applied in both commercial organizations, AMD and DHL are cost-based and, there are no plans for them to add a profit mark-up to SSC recharges. At DHL a further means of reinforcing the psychology of the market is to talk about the need for the SSC to achieve ‘zero-profit', as opposed to ‘breaking even'. The former term sounds positive, purposeful and commercial, the latter might appear to be merely the result of efficient cost allocation by back-office accountants. Interestingly, at MyCSP services are charged at the agreed budgeted cost rate and profit derives from beating budget, thus, none makes a profit out of government except by
virtue of innovation in delivery. Again, the recharging method and mechanisms are as much about psychology, in this case, the government accounting to the people and creating savings rather than paying profits to commercial firms for work previously undertaken by civil servants.

The decision to use a cost-based mechanism is consistent with some of the empirical-based research on transfer pricing (Vancil, 1978; Tang, 1979). There could be several reasons for this. First, it could arise due to bounded rationality on the part of the organizations, especially the scope of divisional managers to understand and indeed engage with complex recharges for what are to them fringe parts of their world (Williamson, 1985). Hence, a simple and understandable cost allocation is preferred. Second, for more heterogeneous activities such as management accounting, an external perfectly competitive market is rare (Collier, 2003) and activity volumes are difficult to measure other than in broad brush assumptions such as ‘number of FTEs. Third, in the scheme of the overall value chain, SSCs are still treated as cost centers (KPMG, 2007).

2. How does the choice of recharging mechanism affect management behavior in the SSC and client divisions?

The three cases show that the choice regarding the recharging mechanism in an SSC varies over time and according to different organizational contexts, not least the need to align with the overall organizational strategy and governance mode. AMD, as a highly vertically integrated company (in silicon chip manufacturing), chose to absorb the costs of the SSC centrally, rather than to recharge them. Such a process of central absorption reflects the orientation towards hierarchical governance within the company. DHL is a good example of a global company with many interdependent local customer-facing units and overarching network facilities, e.g. airplanes. Branches in each country operate independently, cross charging is a feature of commercial life. Customers purchase some specific services from the SSCs and pay them directly based on the negotiated budget rate. This would reflect the market style of the recharging mechanism.
applied in DHL. However, in 2015 the SSC strategy moved back to a more hierarchical model, with recharging the costs of financial support service to the head office. MyCSP operates as an independent business unit and seeks to grow as a commercial business by adding new clients and expanding their service offering in the future. Although it provides services to only one client at this stage, albeit to many individual customers, the recharging mechanism leaves scope for them to make profits from additional efficiency savings.

Watson and Baumler (1975) proposed that transfer pricing policies can not only enhance differentiation (by allowing local adaptation and governance) but also facilitates organization integration (through corporate standardization of systems and procedures). This study confirms this proposition by showing that recharging for the use of support services to customer business units is a type of governance which helps to ensure and maintain the control held by the head office and encourage the coordination between an SSC and its customer business units.

The empirical data from the cases show that applying transfer pricing approach (direct recharging for support services provided by an SSC) increases awareness of resource consumption in customer business units, and underscores managers’ responsibility to contribute to performance improvement of both the SSC and the whole organization. Nonetheless, even if recharging is indirect, i.e. through the head office, then behavioral influence on business managers can still be effective because the operation of the detailed SLA enables them to feel involved in the performance of the SSC and head office can intervene directly to raise cost-consciousness as appropriate on the part of SSC and/or divisional managers. It is such visibility, or at least the threat of visibility, that ensures customers’ awareness of cost and encourages them to be proactive in monitoring and improving efficiency.

What seems to be different between the three cases and historical transfer pricing/cost allocation literature is the greater transparency of information provided by the ERP system about activities and costs and the ability of head office to ‘see’ into the system.
and to direct resources to system improvement and pull recalcitrant managers into line, even when recharges are neither direct to the business unit or based upon actual prices.

To ensure success in the application of a recharging mechanism (either cost allocation or transfer pricing approach), a good level of governance has to be maintained. All of the SSCs in the three case studies sign SLAs with their customers and use relational governance as a complement to the more contractual arrangements (Popper and Zenger, 2002; Goo, Kishore, Rao and Nam, 2009).

9.3 Theoretical contribution and potential practical implications

9.3.1 Theoretical contributions

A synthesis of transfer pricing and cost allocation theories

One of the important contributions that this study makes to management accounting theories is a synthesis of transfer pricing and cost allocation literature in a support service context. Normally, these are treated as separate topics in management accounting teaching and academic research. However, when transfer pricing is used to reflect the economic value of internal support services and there is no substantial profit element leveled directly, it can be difficult to distinguish transfer pricing from cost allocation. Emmanuel, Otley, and Merchant (1985) argued that transfer pricing and cost allocation are "incorrigible twins" (p.193), whilst Horngren and Foster (1987) treated cost allocation as a form of transfer pricing. Recharging methods and mechanisms for support services provided by an SSC captures the characteristics of both transfer pricing and cost allocation, even when they are ostensibly used separately. If a wider perspective is taken over time then it can be argued that the two methods merely represent different points on a continuum of methods that first seeks to signal change and galvanize action ‘contractually’ and then foster more collaborative optimization of systems and cost in a more relational style (for example, transfer pricing followed by
cost allocation at DHL, post 2015). Within its overall mix of SSC types, recharge methods, and the use of BPO vendors and market benchmarking to create exposure to the external market, DHL could be viewed as a hybrid model of both the externalization of the finance function and internal recharging.

The costs incurred by an SSC are part of the central service costs which should be allocated "to make divisional managers aware that central costs exist and must be covered by divisional profits" (Ramadan, 1989). At the same time, an SSC is expected to operate as an independent business unit (Quinn et al., 2000) which means that if it directly charges customers, the internal transfer of support services is essentially a transfer pricing issue, especially when the intra-company's transfer of services is cross-board. With the investigation of the application of the recharging mechanism by an SSC, this study synthesizes cost allocation and transfer pricing theories by identifying instances of:

- change in methods over time – a processual view;
- mixed methods within a portfolio of change management approach;
- complementary external benchmarking;
- efficiency increases through detailed SLAs
- psychological framing involving the assumed use of sophisticated market pricing mechanisms underscored by greater head office scrutiny through better ERP systems.

In a U-form organization with a number of functioning departments or an MDF organization with several divisions, a certain degree of interdependence between departments/divisions could be observed. This interdependence can be handled by either cost allocation or transfer pricing (Emmanuel et al., 1990). No allocation means the central costs are kept within the head office which means that the departmental/divisional managers have no control of it. If the central costs are allocated to departments/divisions, the departmental/divisional managers will realize their responsibility for the costs. Even though the departmental/divisional managers do not
have control over the allocation amounts, they could still challenge or question them based on the use they make of the central services and performance levels. This shows that cost allocation has a counterpart in transfer pricing (Emmanuel et al., 1990). Both cost allocation and transfer pricing affect the performance measurement of different departments/divisions and thus are expected to influence the behaviors of subordinates (Zimmerman, 1979; Watson and Baumler, 1975; Eccles, 1985). In an organization with several responsibility centers (including SSCs), decision-making authorities are delegated to subordinates. As a service provider, an SSC performs service tasks on behalf of its internal customer and as one of the subordinates, the SSC is also operating as an agent of the head office which represents the owners of the organization – this creates an agency problem. Agents are supposed to act in the best interests of principals. However, based on the basic assumption of neo-economics that individuals are motivated by self-interest, it is possible that the manager of an SSC may make sub-optimal decisions and pursue his/her own interests at the cost of the principal’s benefits.

Both allocating central costs (Zimmerman, 1979) and transfer pricing (Eccles 1983, 1985; Spicer, 1988) are related to the financial performance of selling and buying business units and could cause sub-optimization. The recharging for support services provided by the SSC captures the characteristics of both cost allocation and transfer pricing, thus it also aims to reduce agency costs and prevent sub-optimization, which is confirmed by this study.

**Dynamic recharging mechanism**

The empirical evidence of this research confirms that the application of the recharging mechanism is contingent upon different organizational factors. Moreover, the case of DHL shows that the recharging mechanism does not remain static but is dynamic. Some academic scholars, such as Eccles (1985), Emmanuel and Mehaffi (1994) and Colbert and Spicer (1995), suggest that transfer pricing policy changes to be responsive to changes in strategy, structure, a degree of transaction specific investment and exogenous factors like a change of tax and legal requirements. In terms of cost
allocation, if the activity volumes upon which the cost allocation methods are based on change, it is likely that the cost allocation method will also need to change. Since recharging for support services provided by SSCs captures the characteristics of both cost allocation and transfer pricing, it is also assumed to be dynamic.

For example, in *DHL Express*, in contrast to the propositions made by some SSC researchers (Quinn, Cooke, and Kris, 2000; Bergeron, 2003), the recharging mechanism applied by the financial SSCs in DHL has become more hierarchy-based. In January 2015, as the financial SSCs were moved from DHL Global Business Services (GBS), the recharging mechanism was changed. The costs of both general financial services and management accounting activities provided by SSC are no longer recharged directly to the internal customers but are instead charged to the regional head office. This not only reflected the change of organizational structure but also the strategic nature of internal trade (Spicer, 1988). This change requires the financial SSCs to consider themselves as part of a more integrated system and more trust-based cooperation between SSCs and its clients is necessary.

The contribution of this finding is to extend the contingent approach to the dynamic analysis of recharging mechanism. The research of recharging mechanisms should not only be based on static analysis but should also change over time. However, due to the limited number of cases conducted in this research, it could not be concluded as to whether the recharging mechanisms in the wider SSC community are likely to become more market-based or more hierarchy-based.

*Reducing agency problem in SSC context*

The focus of this study was not only to identify how the SSC recharges for its services but also to explore the different methods of recharging processes and consequent behavioral effects. The recharging mechanism is found to be an important type of governance that the organization can implement to reduce agency problems raised by
setting up captive SSCs. In order to drive good behaviors, there are four ways that organizations could benefit:

- Ensure the transparency of information and establish accountability: using one system through the organization and standardizing operation procedures are found functioning in all three cases. Showing information like the achievements of KPIs and detail of recharging raise the cost consciousness of customers and thus, clarify their accountability and help them to reduce waste and improve efficiency.

- Enhance central control: setting the goal (Das & Teng, 1988) such as cost reduction target for both SSC and its internal customers could ensure the alignment between divisional and overall organizational goals. Other behavioral controls such as monitoring of daily operation through the system and strategic intervention when conflicts between SSC and its customers arise could also help to reduce agency problem.

- Using budgeting system (Das & Teng, 1988): setting annual budget volumes rates suggest that SSCs should comply with the SLA and cost reduction targets based on the negotiation between the SSC and its internal customers, with or without the intervention of the head office.

- Performance monitoring and reward system (Eccles, 1985): link the rewards given to the managers of the SSCs with customer satisfaction, the performance of the SSC and the performance of the whole organization.

**9.3.2 Potential practical implications**

Based on the data collected from the three empirical case organizations, this study not only focuses on the recharging processes themselves but also frames them in an organizational context with reference to several organizational variables such as the
strategy and structure of the organizations, the governance aspirations (hierarchical or market), performance measurement and reward systems and the use of budget control. Despite the three cases in this study having applied different recharging mechanisms, the findings could provide practical guidance for organizations that have captive SSCs.

**Recharging do increase the cost consciousness of customer divisions.** There is no ‘optimal’ recharging mechanism because the application of a recharging mechanism is contingent upon various organizational factors, as mentioned above. However, for the case organizations that do recharge the costs of SSCs to internal customers, the good influences on the behaviors of customers were reported by managers, especially for those SSCs that directly recharge their customers. Fewer resources employed by customer divisions, fewer they would pay. Direct recharging or instant adjustment of budgeted number raise the cost consciousness of customer divisions and thus, their accountability of cooperating with SSCs such as providing high-quality information. For those SSCs that have already finished the migration stage, applying recharging mechanism would help them to further reduce costs and improve efficiency and effectiveness. Moreover, frequent communication between SSC and its customers is necessary to reduce information asymmetry. By doing so, the customers of SSC could also monitor the behavior of SSC and encourage SSC to improve its service quality.

**Setting up SSC and recharging for support services are helpful to enhance central control of top management.** As observed in case organizations, the head office normally gathers the recharging information of SSC to monitor the behaviors of other service consuming divisions. For example, in AMD, the CFO admitted that the establishment of the SSC is to enhance the control of corporate and help the governance and compliance of the organization. In DHL, the recharging mechanism changed from transfer pricing approach to cost allocation approach, which is adapted to the change of organizational structure. This change reduces internal transaction costs and has the head office to take a lead again. This might be inconsistent with the suggestions of practitioners like Bergeron (2003) but for those companies that keen to keep their SSCs captive, they could follow the pathway of DHL.
9.4 Limitations of the study

Even though this study has made some theoretical contributions (as mentioned above), it is subject to several limitations. Firstly, this research is based on three case studies, including two multinational commercial companies and one UK-based public sector organization. Each case has its own business and organizational context and thus the results might be difficult to be generalized to other commercial companies or public sector organizations that have captive SSCs. However, the focus of this research is to investigate the recharging process for support services provided by an SSC, including the behavioral effects of the recharging process in an organizational context. It has an exploratory purpose instead of finding a context-free generalized rule.

Secondly, due to limited access to the head office and internal customer business units, most of the information collected in the cases has been provided by the employees of SSCs. However, in AMD, as the researcher was fortunate to interview the CFO of the group, which accessed information from the head office’s point of view and in DHL, the researcher contacted two representatives from a customer perspective. It should be stressed that the issues of cross-charging for services and making efficiency savings within multi-national companies is extremely sensitive and the researcher had to accept that there came a point when further probing was likely to create more negative reactions than contribute insight.

The analysis of MyCSP case was essentially reliant on the information supplied by the SSC and the general lack of access to both the head office and internal customers for all the three cases indicates that the information gathered for some cases in this study tends to provide a somewhat one-dimensional view of the recharging problem at times. The feedback of both internal customers and head office would provide a more comprehensive view for the investigation into the recharging mechanism, in light of transaction cost economies and the agency theory.
9.5 Suggestions for future research

This study was undertaken to explore how the recharging mechanism is used in an SSC context and the behavioral effects of applying the recharging mechanism. Although there are several limitations to this study which are mentioned in the previous section, these limitations can lead to suggestions for future research.

Firstly, given the exploratory purpose of this study, only three case studies were conducted and essentially finance SSCs were the focus of study. In the future, functionalist researches, based on a large number of sample organizations, could be conducted in order to explore which mechanism is chosen to recharge the costs incurred by SSCs by consulting companies (KPMG, 2007, Deloitte, 2006, 2013). Moreover, the research could be extended to investigate the causal relationship between organizational factors and the choice of recharging mechanism.

Secondly, as the SSC/BPO sector matures it is expected that tax and local regulation of labor markets will play an increasing role in recharging practice in most multinational organizations; as service center work is digitalized and off-shored. Presently, much information about income shifting and potential tax avoidance tends to be confidential and whilst this creates difficulties for researchers there could be more information available in the public domain, for example, the way in which Apple's service center operations in Ireland have been investigated by the European Commission.

Thirdly, one of the contributions of this research is to move from static analysis and treat the recharging mechanism as a more adaptive/dynamic process (e.g. DHL’s change from transfer pricing to cost allocation approach). However, since the purpose of this research is to explore the recharging mechanism generally, the underlying reasons that might cause the changes of recharging mechanism are not discussed in detail. A longitudinal study of one SSC could be conducted to find the determinants of recharging mechanism changes.
Finally, one of the limitations of this study is that it provides a one-dimensional view of the recharging mechanism. Recharging the costs of SSCs to service purchasing business units not only generates revenue that helps SSCs to cover operating expenses but it also incurs costs to the customers which influence their financial performance and their managerial behavior. More information provided by the customer business units will be extremely valuable in allowing behavioral investigation of the recharging mechanism. At the same time, in order to understand the relationship between the recharging mechanism, organizational strategy and structure and how the recharging mechanism applied by SSCs helps enforce the control held by the head office, getting access to the head office managers would provide a useful opportunity to further triangulate views across the various actors in MDF organizations.

To conclude, in order to understand the recharging mechanism applied in SSCs, this study provides a synthesis of transfer pricing and cost allocation theories. Moreover, this study extends the organizational theory of transfer pricing and cost allocation to investigate the ways used in case organizations to reduce agency problems. The purpose of this research is to explore the implementation of the recharging mechanism in SSCs through the use of empirical observations. This provides the foundations to further research to illustrate the application of transfer pricing and cost allocation in a new organizational context: an SSC.
Appendix


Hypothesis 1. *Strategy, structure and the dimensions of intra-firm transfers*

The dimensions of intra-firm transfers of intermediate product are jointly related to a firm’s diversification strategy, its product design and its organization structure.

Hypothesis 2. *Centralized control of the make-or-buy decision*

The greater: (1) the degree of transaction specific investment, (2) the frequency and volume, and (3) the degree of uncertainty and/or complexity associated with intra-firm transactions, the stronger will be the firm’s interests in centrally controlling the make-or-buy decision.

Hypothesis 3. *Existence of arbitration process*

The greater: (1) the degree of transaction specific investment, (2) the frequency and volume, and (3) the degree of uncertainty and/or complexity associated with intra-firm transactions, the more likely it is that the firm will have well specified arbitration procedures to safeguard the firm’s interest in the make-or-buy decision.

Hypothesis 4. *Performance measurement and incentives*

The greater: (1) the degree of transactions specific investment, (2) the frequency and volume, and (3) the degree of uncertainty and/or complexity associated with intra-firm transactions, the more likely it is that the firm will deemphasize performance measurement and incentive mechanisms that focus entirely on divisional profitability, in favor of broader measures and incentives that recognize the need for cooperation and adaptation.

Hypothesis 5. *Conflict*
Hypothesis 5a. The greater (1) the degree of transactions specific investment, (2) the frequency and volume, and (3) the degree of uncertainty and/or complexity associated with intra-firm transactions, the more likely is conflict between divisional managers involved in internal transfers of intermediate products.

Hypothesis 5b. Conflict between divisions involved in intra-firm transfers of intermediate product is more likely for ex-post proposals for transfer pricing adjustments than it is for ex-post proposals for quantity adjustments.

Hypothesis 6. Transfer pricing policies

Hypothesis 6a. Where standardized intermediate products are the subject of the transfer, or the transfer involves products for which the degree of customization is minor, market prices will be the primary basis for setting internal transfer prices and for profit center managers choosing between internal and external suppliers and customers.

Hypothesis 6b. Where the internally transferred intermediate product involves a moderate degree of customization and a material transaction-specific investment, internal manufacturing costs will play a greater role in the initial negotiation to set transfer prices and in ex-post proposals to adjust them.

Hypothesis 6c. Where the internally transferred intermediate product is idiosyncratic and involves a large investment in transaction-specific human and/or physical capital, internal manufacturing costs will be the primary basis for setting prices; and there will be strong central control over the make-or-buy decision.
2. Details of interviewees in each case

2.1 Interviewees in AMD case

Participants in the group discussion

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Department</th>
</tr>
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<tbody>
<tr>
<td>FD1</td>
<td>Finance Director</td>
<td>OTC</td>
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<tr>
<td>FD2</td>
<td>Finance Director</td>
<td>PTP</td>
</tr>
<tr>
<td>MF 1</td>
<td>Financial Accounting Manager</td>
<td>Disti Ops</td>
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<td>MF 2</td>
<td>Financial Accounting Manager</td>
<td>GAFS PNG-AP Support</td>
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<tr>
<td>TM1</td>
<td>Tax Manager</td>
<td>Global Tax Services &amp; CCR</td>
</tr>
<tr>
<td>MA1</td>
<td>Financial Accounting Manager</td>
<td>GAFS-BIZ ANALYTICS</td>
</tr>
<tr>
<td>MA 2</td>
<td>Finance Manager</td>
<td>GAFS-PNG_AR &amp; Global Credit Ops</td>
</tr>
<tr>
<td>IT1</td>
<td>Sect. Manager IT</td>
<td>GAFS PNG-AP Support</td>
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Other interviewees

| Name | Position  | Department                      |
|------|-----------|--------------------------------|----------------------------|
| FA1  | Vice president | Global Service Centre    |
| FA2  | CFO        | AMD (the corporate/head office) |
### 2.2 Interviewees in DHL case

<table>
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<th>Interview time</th>
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<td>MA 1</td>
<td>CFO</td>
<td>DHL GBS Asia-Pacific</td>
<td>January 2013</td>
</tr>
<tr>
<td>MA 2</td>
<td>CFO</td>
<td>DHL Express CoE</td>
<td>May 2015</td>
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<td></td>
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<td>August 2015</td>
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<td></td>
<td></td>
<td></td>
<td>May 2018</td>
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<td>MA 3</td>
<td>CFO</td>
<td>DHL Express Fsce Western European</td>
<td>August 2015</td>
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<td>MA 4</td>
<td>Senior Controller</td>
<td>DHL CoE</td>
<td>August 2015</td>
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<td>MA 5</td>
<td>Manager</td>
<td>DHL Express Global Pricing department</td>
<td>August 2015</td>
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<td>MA 6</td>
<td>Junior Controller</td>
<td>DHL CoE</td>
<td>August 2015</td>
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<td>MA 7</td>
<td>Head of Controlling</td>
<td>DHL Express UK</td>
<td>July 2018</td>
</tr>
<tr>
<td>MA 8</td>
<td>CFO</td>
<td>DHL Express Finland</td>
<td>July 2018</td>
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2.3 Interviewees in MyCSP Case

<p>| | |</p>
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<tbody>
<tr>
<td>FA1</td>
<td>Financial Controller of MyCSP</td>
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<tr>
<td>FA2</td>
<td>General Manager of MyCSP</td>
</tr>
</tbody>
</table>

Some informal discussions with the related staff were also undertaken, which were not officially recorded. But some information is included in the case chapter.
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