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THE SHIFTING METROPOLITAN GEOGRAPHIES OF ADVANCED PRODUCER SERVICES

Agglomeration processes, professional networks
and corporate restructuring in world city Brussels

Thesis submitted by Maëlys WAIENGNIER

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Alice Van Buuren 2020**



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L'ÉVOLUTION DES GÉOGRAPHIES MÉTROPOLITAINES DES SERVICES AVANCÉS À LA PRODUCTION

Processus d'agglomération, réseaux professionnels
et restructurations d'entreprises dans la ville mondiale de Bruxelles

Thèse présentée par Maëlys WAIENGNIER

en vue de l'obtention du grade académique de "docteure en Sciences" (ULB)
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CHAPTER 1.

INTRODUCTION

1 General introduction

This thesis examines the processes that structure the geography of advanced producer services (APS) in world cities. Over the past decades, APS in the fields of accountancy, advertising, finance, legal services and management consultancy, and information technology have been studied as actors in the formation of global urban networks. This empirical orientation of research on world cities emerged from the observation that APS are key actors in the processes of control and command of the economy. APS help their clients to develop financial accumulation strategies and to ensure the coordination and governance of global production networks. Recognising that these networks have been richly documented by research on global and world cities, this thesis questions two aspects of the literature on world cities that remain implicit (**chapter 2**).

On the one hand, it is assumed that APS form global networks based on nodes - the world cities - nodes within which agglomeration processes operate. This agglomeration within cities has been described as an APS complex, hence supposing strong interrelations between firms from different sectors located around the same area. However, little is known about the intensity and nature of these interrelations. The scale at which agglomeration processes act is rarely made explicit. On the other hand, I question an implicit aspect which derives from the first, this aspect being that the command and control role of APS in the global economy is supposed to derive directly from the APS networks. This dissertation will therefore attempt to identify the relationships between APS actors at the intra-urban level - questioning the idea of an APS complex, and try to clarify and better understand the real role of APS in the global economy.

The thesis will therefore focus on the question of the processes that structure the geography of APS in the world city of Brussels. In an attempt to answer this general research question, we first analyse the geography of APS within world cities on the basis of a quantitative study (**chapter 3**). However, the spatial agglomeration of APS does not allow us to say whether APS companies have strong relationships or whether they are looking for similar locations. We then examine the intensity of the relationships between APS, i.e. the reality of an APS complex on the basis of a survey of APS professionals (**chapter 4**). We show the asymmetry of the relationships between APS, which leads us to want to clarify the nature and function of APS interactions. We therefore explore a case study of concrete collaborations between APS companies in the case of the restructuring processes of a one key APS sector, namely the banking sector in Belgium (**chapter 5**). Looking at the way APS intervene in the major restructuring processes of banks in Brussels allows us to question the source of power of the APS networks. We therefore argue for a better articulation between the global APS networks and financialised capitalism.

CHAPTER 2.

THEORETICAL FRAMEWORK

2 Research framework: Advanced Producer Services in world cities

2.1 Main objectives of the dissertation

World cities have long been studied on the assumption that advanced producer services (APS) are concentrated in certain cities, among which are established networks of connected world cities that play a command and control role in the economy. The basic model would be this one : relying on agglomeration and strong links within a few places (the so-called world cities) as well as global connection, APS firms play a decisive role in the era of globalisation, a role of coordination of the global economy, also described as command and control functions. However, in this model, we argue that some assumptions are understudied and remain implicit. On the one hand, it is supposed that APS firms agglomerate and constitute strong collaborative networks of APS firms within cities, an APS complex. On the other hand, whereas global networks of APS firms have been thoroughly documented, the command and control role attributed to world cities often remains assumed to directly stem from these networks. I argue that these assumptions need to be critically re-examined. By exploring the processes that structure the geography of APS in world city Brussels, I intend to contribute to specifying and better understanding the actual role APS play in the global economy.

In this sense, I agree with the authors who identify the need to take into account the capacity for action and the power of economic actors in theorising about city-to-city networks (Watson & Beaverstock, 2014) and the fact that little is known about what constitutes the concrete practices of management and control in global cities (Parnreiter, 2014). In this perspective, I seek to re-examine three aspects of the assumptions of research on world cities.

The first aspect is the idea that APS agglomerate within world cities. World cities have been conceptualized as the places in which APS concentrate. However little research has been done on the modalities of the geography upon which APS are organized within world cities. There is an early study that reformulates the localisation and globalisation theses so as to provide a space for local agglomeration within growing global production filieres (Amin & Thrift, 1992) and another that highlights the play of agglomeration economies down to micro-local scales (Van Criekingen, Decroly, Lennert, Cornut, & Vandermotten, 2005). In this research, I try to empirically assess agglomeration and provide a conceptual disentangling of the processes leading to it.

Second, the world city concept was built on the idea that the agglomeration of APS implies connections / interactions between APS to form networks. The presence of APS has been used as proxy for drawing networks between cities, but the content of these networks remains understudied. There have been qualitative works on understanding APS professional networks, such as (Faulconbridge, 2012) on management consultancy, (Faulconbridge, 2007) on advertising and law. What I am trying to add is to engage with the relations forming these networks and evaluate to what extent the interactions further support the reality of a network/complex.

Third, is the aspect that the work done by APS enables them to play a role of command and control in the global economy. What is concretely meant by the role of ‘command and control’ remains unclear. Current research plauds to refocus world city literature towards redirecting the control functions of global cities, for instance through global production networks (Parnreiter, 2017) and make explicit the issue of power (Marcuse, 2016). In this dissertation I try to understand this command and control function through the concrete functioning of one key APS sector, namely the banking sector in Belgium. This is the last aspect that I want to study. Through the exploration of these three aspects, I hope to provide some basis for a better understanding of the role played by APS in the global economy.

2.1.1 Background: globalisation, world cities, advanced producer services

Advanced producer services refer to the type of services which are executed in so-called global cities (Sassen, 1991) or world cities (Friedmann, 1986)¹. Sassen theorised global cities as places where global control functions are produced by advanced producer services (APS). To understand what the conceptualisation of APS and global cities responds to, it is necessary to understand the conditions against which this theory has developed. The 1980s saw a shift in the conditions of economic production, the development of an increasingly globalised economy with the opening of borders, liberalisation measures, internationalisation of financial markets, ... changes which have affected the spatial organisation of the economy since the 1980s. According to Sassen's thesis, globalisation favours global cities from which APS operate (Sassen, 1991).

APS are identified as critical actors exercising the practice of command and control functions in the contemporary economy (Sassen, 1991). It is the establishment of a new international division of labour in the 1980s which requires command and control functions in this globalised economy. The thesis is the following: in order to function in a globalised economy, with an international division of labour, the economy needs to equip itself with coordination and command roles. It is in this context that I must understand the concentration of coordination and command functions, coupled with the decentralisation of production functions. Some cities are strategic for the economy because they house the management and the service functions which enable globalisation of economic activities. They have become production and innovation centers of APS, and the markets for this new service provision for large corporations (Halbert & Pain, 2010).

Initially studied with the growth of the service sector in the 1980s, services are first considered as something next to industry – which is the sector that brings economic growth (Gallouj, Leloup, Mérenne-Schoumaker, & Moyart, 2006); to gradually shift to become a sector in full contributing as well to the creation of jobs and added value (Moyart, 2005). There is a shift away from considering service activities as facilitating production and not only consumption (Bryson, Daniels, Ingram, 2006), i.e. producer services. Research orients towards the extent to which services can contribute to the economy in terms of efficiency and performance (Bryson, Daniels, & Ingram, 1999; Coffey, 2000). A report for the EU Commission focuses on ‘knowledge-intensive business services’ with the claims that knowledge is key for economic development and innovation (Miles *et al.* 1995). At the end of the

¹ In this dissertation both terms will be used interchangeably

1990s, the OECD launches a study and data collection about 'strategic business services' deemed essential for processes, competitiveness and firm growth (OECD, 1999)

Within producer services, a distinction is thus made between 'low-order' producer services, offering banalized services such as cleaning, security or office support; and 'high-order' or 'advanced' producer services whose activities require high levels of knowledge and qualification. In the 1980s as companies expand their activities through mergers and acquisitions, within the tertiary sector the importance of intermediate functions grew (Sassen, 1991, 2016). Producers of intermediate services, who offer services to other companies, were almost always winners regardless of the outcome of M&A transactions. Sassen hypothesises that the intermediation function is carried out by sectors that facilitate the globalisation of companies and markets. It is in the idea that the intermediate functions carried out by APS are essential, that I understand these functions as strategic for the current economy.

Advanced producer services are therefore a sub-group of producer services. These services have been attributed a particular role in the economy linked to the evolutions occurred during the 1980s. APS have been said to involve a highly skilled workforce, significant knowledge flows and have generally undergone processes of internationalisation (Aujean, Castiau, Roelandts, & Vandermotten, 2007). The term APS is sometimes interchanged with 'advanced business services', while the terms of 'specialized producer' or 'high-level business services' did not gain popularity (Wojcik, 2020)². For what follows, I will stick to the term 'advanced producer services'. Besides conceptual reasons, there is a pragmatic reason to use this term as a lot of research on world and global cities uses it (albeit not exclusively). I understand APS as actors that fulfill the role of command and control of the global economy attributed to global cities (Parnreiter, 2014).

However the idea of command and control of the economy is something which remains insufficiently explored in the world and global cities literature. Command and control can refer to the question of power, who holds it and how it is exercised (Marcuse, 2016). Marcuse (2016) proposes to study this economic power in and over cities as exercised by the human actions of actors and the institutions, ideologies and structures created by these actors. To (Parnreiter, 2017, p. 1), insufficient progress has been made with regard to the role of global cities in the exercise of economic power, i.e. "how cities and classes within cities manage to gain control over other regions". Some authors suggest to abandon the 'world city' concept, considered to be misleading. This critique of the 'world city' concept, highlights that some cities are prioritised over others as potential world cities – because this prioritisation is done on the basis of only one element of the multiple circuits of the global economy: the APS and financial services activities (Robinson, 2016). It is therefore necessary to "rethink the ideas of hierarchy or control which ground the definition of a global city" (Robinson, 2016, p. 271), because power is a subject that does not appear in most of the global cities literature (Marcuse, 2016). The mechanisms that allow global cities to play a leadership role through APS companies remain poorly explained.

At the level of multinational firms, command and control can refer to the functions of management and coordination, which became so complex that their headquarters outsourced these functions to specialized service firms (Parnreiter, 2014; Sassen, 1991). But where does the capability of control come from? Is it outsourced with the management and coordination functions towards APS? Or does it stay into headquarters of multinational firms? Scholars refer to the idea of vertical or horizontal

² See Wojcik (2020) for a overview of terms related to financial and business services, their origin, evolution and relationships with statistical classifications.

control in large multinational firms (Aujean, Castiau, Roelandts, & Vandermotten, 2007). Vertical control means that decisions remain taken in the multinational firms and horizontal control means the existence of effective direct functional links between subsidiaries and regional offices, without going through the headquarters. Whether vertical control between headquarters and subsidiaries seems logical, horizontal control is less evident to establish (Aujean, Castiau, Roelandts, & Vandermotten, 2007).

But the idea of command and control is not restricted to the level of the firm in Sassen's analysis: command and control is a function attributed to the global city (1991). One remark which was noted is that assigning power to the category of the global city is problematic, when the capacities to control and command are located in certain actors and institutions within a small part of the city's economy (Robinson, 2002). Therefore, the whole idea of global circuits controlling other territories is questionable. Cities are not unitary entities, they have "multiple meanings and internal contradictions" (Marcuse, 2016, p. 113). So how would control over other cities translate to APS? In other words, it is needed to understand at which level is control exercised and what control I do speak about.

To do so raises the question of the operationalisation of APS. Sassen draws up a list of services which includes the sectors of accountancy, advertising, finance, law and management consultancy (Sassen, 1991). This selection of sectors is based on the sectors identified in Friedmann's studies on world cities: corporate headquarters, international finance, global transport and communications and high-level business services such as advertising, accounting, insurance and legal services (Friedmann, 1986).

A sectoral approach to APS has had many empirical echoes that allow cities to be assessed as global service centres. Beaverstock *et al.* (1999) have focused on four key services: accounting, advertising, banking and law. Taylor gives as examples of advanced producer services accounting, advertising, finance, insurance and law applied in transnational context (Taylor, 2001). I can see that the selection of APS sectors varies between studies. Two remarks should be made here: firstly, it is possible to understand that the sectors selected differ because their role in command and control is not clarified, leaving a large part to the interpretation of what is contained in the APS. Secondly, the selection of sectors partly overlap, which indicates that they probably cover common characteristics but been accepted without being questioned (see Table 1 for an overview of scope of definitions). In this dissertation, I use the term of advanced producer services, with a choice of sectoral categories inspired by the world and global cities literature which focuses on the sectors of finance, law, accountancy, management consultancy, advertising and IT. Although IT is not associated with APS in the original works of Sassen, IT is included as sixth APS sector since digitisation is rapidly transforming the makeup of all APS sectors (Hendrikse, Bassens, & Van Meeteren, 2018; Hendrikse, van Meeteren, & Bassens, 2019).

I would nevertheless like to draw attention to the limits of an operationalisation of APS as sectors. Data and statistics are generally available categorised by sector. Nevertheless, these sectors do not form homogeneous sets. For example, in the legal sector, some lawyers will specialise in cases related to local companies, while others will establish international links. However, the international character of services is often exaggerated in policy discourses (Massey, 2007). It is therefore necessary to clarify to what extent each sector contains activities that would allow them to play a role of command and control in a globalised economy.

Table 1: Scope of service definitions for a selection of studies

Sectors	Knowledge Intensive Business Services (Miles <i>et al.</i> , 1995)	High-order services (Coffey, 1996)	Strategic business services (OCDE, 1999)	High-order business services (Shearmur and Alvergne, 2002)	Financial and Advanced Business Services (Wojcík, 2020)	Advanced Producer Services (Sassen, 1991 ; Beaverstock, 1999)	Advanced Services (Aujean <i>et al.</i> 2007)	Advanced Producer Services (Derudder, 2014 ; Hanssens <i>et al.</i> 2007)	Advanced Producer Services (Taylor <i>et al.</i> , 2014)
Finance		x		x	x	x	x	x	x
Insurance		x		x				x	
Real Estate		x		x					
Legal activities	x	x		x	x	x	x	x	x
Accounting	x	x		x	x	x	x	x	x
Consultancy	x	x	x	x		(x)	x	x	
Advertising	x	x	x	x		x	x	x	x
Head offices	x		x						
Telecommunications	x	x							
IT	x	x	x	x			x	(x)	
Architecture, engineering and technical activities	x	x	x	x			x		x
Research and development	x		x	x					
Logistics							x		

The first five columns operationalize terms similar to the APS, the next four columns are part of the literature of global cities.

2.1.2 Research aims

Research on APS emphasized the importance of global interurban networks and the processes of ‘command and control’ associated with them (Castells, 2000; Friedmann, 1986; Sassen, 1991; Taylor, 2001). The rise of a relational approach in economic geography (Beaverstock, Smith, & Taylor, 2000; Castells, 2000; Taylor, 2001) coincided with a major shift in the organisation of economic activity, with the extensive restructuring of production in advanced economies associated with a search of new forms of economic coordination for economic actors (Boggs & Rantisi, 2003). Cities are understood as more than just basing points for global capital, but defined by what flows through them (Watson & Beaverstock, 2014). This relational turn got extensively documented quantitatively with network models of global cities based on the presence of APS companies (Taylor, 2001).

Since these early studies on world and global cities, the limitations of these quantitative network-centred approaches have been highlighted (Halbert, 2010a). Many authors point out that network-centred approaches have masked the dynamics that lead to hierarchies between global cities, and between global cities and the rest of the world (Van Meeteren & Bassens, 2016). Network-centred approaches have long overlooked the role APS play in the management and governance of the global economy (Parnreiter, 2014).

For instance, global cities can be seen as governance nodes from which wealth transfer is organised along global production chains (Parnreiter, 2017). Mechanisms through which value is transferred geographically require the intervention of APS firms. Next to global production chains, another direction to clarify the economic control functions of global cities is to rethink the hypothesis of the world city to include and emphasise financialisation logics. Global cities are understood as ‘obligatory passage points’ for the realisation of capital, which is produced by the APS complex (Bassens & van Meeteren, 2015).

In this dissertation I interrogate two aspects of the world and global cities literature that remain implicit. First, I interrogate the intra-urban relations between APS actors. It is established that global networks rely on global cities as nodes – nodes on which agglomeration processes act. However the link between the global networks and the agglomeration processes is rarely explicit – except in some spectacular cases such as the city in London, studied both for its insertion in global networks as well as for the agglomeration processes on which it is built (Cook, Beaverstock, Taylor, & Pain, 2002; Pandit, Cook, & Beaverstock, 2016). Actually we know relatively little on the relations between APS actors at the intra-urban level. In the study of cities’ competitiveness through international firm networks, the intra-urban level and its multiplier effects have been neglected (Rozenblat, 2010). What relations do global networks in global cities rely on? This dissertation will try to explicit the relations between APS actors at the intra-urban level.

Second, I look at a second implicit aspect that follows from the first. After trying to clarify the relations between APS actors at the intra-urban level, I then interrogate how these APS intra-urban relations support a control function in global networks. So far it seems to be assumed that, as APS are present in global cities, they form a complex which controls, coordinates, extract value, etc. I can understand global cities as nodes in global commodity chains from which the transfer of wealth is organised by APS firms (Parnreiter, 2017). But how is the transfer of wealth organised? How in practice do APS firms ‘command and control’ the global economy? The issue of power is not treated in global cities literature (Marcuse, 2016). This dissertation will try to explicit how these APS intra-

urban relations support a control function in global networks and reflect about the role of APS in the global economy.

Both issues are part of the general question raised by this dissertation which can be formulated the following way: which processes structure the geography of APS in world city Brussels under the conditions of globalization? By studying where APS locate in Brussels, as well as how they work together, my objective is also to shed some (modest) light on their actual role in the global economy: do they play a role of command and control or rather of facilitator, e.g. to maximize profit for global firms and their shareholders?

These aspects are studied from the specific context of Brussels. To study the operationalisation of APS, the idea of an APS complex, the role of APS, ... in Brussels has implications. In the literature on global cities, Brussels's position in the world city network is qualified as second-tier in terms of connectivity (Beaverstock *et al.*, 1999; Derudder & Taylor, 2003). Brussels has been said to play an international role with international agents directly or indirectly linked to the European Union institutions (Elmhorn, 2001). Next to a "leading political world city with a mainly European scope", Brussels is pointed as "dominated corporate world city with limited control over international economic capital", which together constitutes an ambivalent profile (Van Criekingen *et al.*, 2005). Moreover, I follow a timeline that encompasses the introduction of a globalised international division of labour at the end of the 1980s and analyses the evolutions through the financial crisis of 2007-2009 until now [2018]. This timeline implies that it covers the development of an increasingly globalised economy from the 1980s and encompasses the post-2008 financial crisis period with the current stakes.

2.1.3 The general approach

Methodologically, my research follows the trajectory of mixed-methods. I start from a quantitative approach on the APS agglomeration at the intra-urban level. However, spatial agglomeration does not tell if APS firms do have intense relations or only if they look for similar locations. This is why after having observed the agglomeration of APS actors, I question the intensity and nature of relations between the APS actors, also from a quantitative basis, drawing on a survey among APS professionals. Showing the real but also the unequal nature of the relations among APS leads to questions about the nature of APS interactions. These questions were then approached qualitatively in a case study to inform the statements from the quantitative study – how the nature of APS work relates to APS agglomeration. However, this is precisely in the qualitative exploration of concrete collaborations among APS firms in a specific case study that the question of command and control through APS has arisen in the course of my research. Indeed, looking at the way APS intervene in a major restructuring process of major banks in Brussels has indeed raised the question on the source of power among the identified networks.

I now turn to how I will respond in practice to the identified objectives – explicit the relations between APS actors at the intra-urban level and the role of APS in the 'command and control' of the global economy.

A. Agglomeration economies: which scale?

The new economic geography highlights the effects of agglomeration economies as the main rationale for the spatial concentration of economic activities. Isard (1956) calls 'localisation economies' the benefits of concentrating an industry in one place and 'urbanisation economies' the benefits of all industries in one place. Theories on 'clusters' (Froud, Johal, Leaver, & Williams, 2006) or 'industrial districts' (Porter, 1990), are based on this idea of a positive (or negative) externality linked to the concentration of economic activities that gives the agglomeration a competitive advantage. Within the space of world cities, agglomeration economies are the logic that prevails in the concentration of the control and management activities of large firms (Markusen, 1996).

“The complexity of the services they [these firms] are required to provide, the uncertainty of the markets they penetrate, the growing importance of the speed factor in all transactions, are all favourable conditions for the emergence of a new urban dynamics” (Sassen, 1991).

The mechanisms underlying agglomeration economies are well described in the literature. The mutual proximity of companies is a key argument for explaining the advantages of agglomeration effects. In addition to the importance of market relationships, the importance of 'untraded interdependencies and knowledge' is emphasised (Sassen, 2005, p. 29). These are therefore material, formalisable links, but also immaterial links, which are difficult to formalise. So not only economic relations but also social relations. Especially for APS companies, so-called 'high-level' service companies, knowledge 'sticks' to certain places (Storper, 1997). The accumulation of knowledge within certain spheres, and the skills to use them, therefore implies that not every place is able to develop as a financial centre. The literature on financial centres emphasises that standardised financial products can be used everywhere, 'tailor-made' financial products can only be 'decoded' in a limited number of financial centres (Gordon L. Clark, 2005). The concentration of APS within the economic space of globalised cities may be explained by the benefits that APS companies derive from their mutual proximity.

Nevertheless, there remains a theoretical shortcoming about the scale to which these benefits of mutual proximity apply. It is generally assumed that “the large city provides a set of urban amenities and intra-industrial linkages, which results in increased firms' productivity” but that “the spatial boundaries within which agglomeration economies operate are usually taken for granted” (G. L. Clark & O'Connor, 1997). Competitive advantages are thus attributed to metropolises (Cottineau, Finance, Hatna, Arcaute, & Batty, 2018, p. 1612), but the degree of spatial agglomeration required for this superior economic performance remains unclear (Halbert, 2010b). Despite the global spatial reorganisation of the economy, the study of European metropolitan regions shows the emergence of various configurations where urban functions are no longer concentrated only in business districts within cities (David, Peeters, Van Hamme, & Vandermotten, 2013), which illustrates a relative but not absolute decline in cities (Van Criekingen, Bachmann, Guisset, & Lennert, 2007).

On what scale should I study the benefits that APS derive from their mutual proximity? Is a presence within the urban area sufficient? Or do their activities require them to be part of local proximity networks (Coffey & Shearmur, 2002)? Clarifying the proximity between APS firms would provide a better understanding of the agglomeration economies at play within the metropolitan area of a global city. I now turn to a second as of the world city literature that is re-examined which is the assumption that APS work together in networks. The point here is not to contest this assumption, but rather complement it with the perspective of understanding how APS work together in practice.

B. The APS complex: how does it function?

We have seen that APS agglomeration matters in world cities, but the understanding of what happens through this process remains superficial. It is assumed that APS find advantages to proximity and form a complex of firms, an APS complex (Amin & Thrift, 1992), but little is known about how the advantages of proximity function in practice. Until now how APS actors collaborated was overlooked, I will here try to understand that aspect.

The geography of APS allows to understand the ‘territorialisation’ of globalised agents in global cities, i.e. the intersection between global processes, the functions performed by APS, and local, the existing socio-spatial structure of the city (Kesteloot, 2005). Global cities are the sites where ‘agglomeration economies’ and ‘network economies’ are particularly expressed, explaining the attraction that these cities exert on the future growth of APS on a global scale (Sassen, 1991). However, the idea that a city's position in global networks benefits its economic performance has resulted in a competitive policy focused on promoting the economic growth of cities by improving their connectivity (Sassen, 1991), which seems to be inappropriate policy objectives to justify the allocation of resources within a territory (Pain, Van Hamme, Vinciguerra, & David, 2015).

Inter-city studies have neglected to assess the links between firms within cities, which would make it possible to estimate intra-urban effects: ‘agglomeration economies’ that multiply ‘network economies’ (van Meeteren, Neal, & Derudder, 2016). It has not been observed how cities simultaneously allow connections to inter-urban and local networks. These local networks are composed of local interactions between companies or their mutual benefits gained by sharing services or resources (Rozenblat, 2010). APS companies are attributed a network functioning based on interactions that gives them a ‘command and control’ function of the globalised economy (see above). A significant part of what happens in a company is often dictated by other entities, located at a higher level of the hierarchical structure of these firms (Rozenblat, 2010). By extension, an increasing proportion of the economic decisions affecting certain territories, through their establishments and companies, are no longer taken within them: the differentiated extent of control of establishments and companies by foreign transnational firms within a territory or a city can potentially influence its evolution in relation to the whole system (Finance, 2015). But this control is not well known: if the idea of vertical communications between firms seems plausible, horizontal communications between subsidiaries at the same hierarchical level seems more problematic (Finance, 2015). The question therefore remains to understand, if APS fulfil a function of orchestrating the global economy (Aujean *et al.*, 2007; Halbert, 2004b), at what level(s) do they exercise this power?

It is assumed that the competitive advantage that APS brings to global cities can be brought down to the work done by APS professionals, which depends on both the effects of ‘agglomeration economies’ and ‘network economies’ (Amin & Thrift, 1992). This assumption involves several things. First of all, that the ‘orchestration of the world economy’ can be conceptualised as a function, which depends on an ‘assemblage of resources and abilities’ present in global cities (van Meeteren *et al.*, 2016), and that in this case, this function crosses the levels of analysis: professional, establishment, company, sector. It can be suggested that much of the work carried out by APS takes place in ‘project ecologies’ (Bassens & van Meeteren, 2015, p. 4) that go beyond companies and sectors, that structure traded and untraded interdependencies between APS actors (Bassens, Gutierrez, Hendrikse, Lambert, & Waiengnier, 2020; Grabher, 2004). Moreover, this premise also implies that in order to understand the role assigned to global cities, it is necessary to clarify the work carried out by the lowest level, namely

APS professionals, actors defining the formation of the global city, and to highlight the practices of these actors (Storper, 1997).

Finally, it is a question of assessing how the benefits of agglomeration economies, or integration into global networks, are translated into the organisation of local networks (Hoyler, Parnreiter, & Watson, 2018). How should these networks be conceptualised? While there are empirical studies of networks within specific sectors, such as the legal and advertising sectors (Rozenblat, 2010), studies of APS networks within cities are more rare (Halbert, 2004b). Should the effects of concentration and connectivity be observed within a uniform APS complex subject to the same localisation economies? In the other direction, can we identify common practices, or interactions between APS that allow them to benefit from similar location and connectivity advantages? To what extent can we see the emergence of ‘APS complexes’ in the sense of new industrial complexes (Amin & Thrift, 1992)?

Let us now consider the idea that APS are agglomerated in world cities and working together. In this case, the reasons of this situation are to be explicated. The world cities literature refers to the notion of command and control role of APS in orchestrating the global economy. I argue that this assumption needs to be explicated with regards to APS practices in the shifts of a global context, which I will try to do in the next section.

C. *Command and control practices of APS under globalisation*

Since the 1980s, European cities have experienced a spatial redistribution of economic activities on a global scale. This spatial redistribution consists simultaneously of the dispersion of productive functions and the reinforcement of the command functions of these productive functions in a few places (Friedmann & Wolff, 1982). For many authors, this spatial redistribution of economic activities is associated with an international division of labour, command of which is located within global cities. Such command functions are described as being performed through headquarters of multinational enterprises with global strategies (Vandermotten, 2016) and/or by networks of APS firms (Taylor, 2001).

Indeed, intermediate functions are performed by APS which are located in global cities (Sassen, 1991). Command and control of APS has been specified in the following ways. Command and control of the economy is attributed to APS for example in the organisation of value chains (Parnreiter, 2017) in which APS intervene in the direct and indirect mechanisms by which value is transferred geographically in global production networks. More specifically, APS practices include activities such as facilitation, switching, advice and knowledge circulation (Bassens & van Meeteren, 2015). The power exercised by APS exploits “legal and financial vehicles designed to escape the control of governmental or intergovernmental organizations through the use of offshore jurisdictions” (Wójcik, 2012, p. 1). Nevertheless, there is a gap between practices of APS that would always make them winners in economic transactions, as Sassen shows for the example of company mergers and acquisitions (Sassen, 2016), and the idea of locating the power within these complex networks of APS.

Indeed, to my view, the theories developed in the world and global cities literature around the command of a globalized economy have not sufficiently taken into account simultaneous transformation of the global economy, in particular the functioning of corporate business models in a financialized capitalism. I understand financialised capitalism as the financial dimension of globalisation (Finance, 2016). In this very large understanding of the concept, I mainly put the

emphasis on the growing importance of shareholder logics for the management of firms, while obviously financialised capitalism also supposes other dimensions, such as an economy in which financial assets are increasingly important (Froud *et al.*, 2006).

The importance of shareholder logics is manifested as the conditions under which APS operate (Williams, 2000). The logic of maximising shareholder value creates a new competition that drives the search for flexibility as a mean of reducing costs (Martinez, 2010). Corporate restructuring strategies are implemented to maximise profits in each segment of the value chain (Mudambi & Venzin, 2010). This spatial reorganization of work involves the flexibilization of firms and labour, a reduction in the weight of the state in the economy (Van Hamme, Wertz, & Biot, 2011) and deregulation of economic sectors such as finance.

I argue that these dynamics must be taken into account in a theorisation of command and control of the global economy. Two processes complement each other. First, the rise of intermediate functions in the international division of labour, because the management and coordination of multinational companies has become so complex that head offices have increasingly outsourced these functions to specialized intermediate service companies (Parnreiter, 2014). Second, the importance of shareholder logics in management behaviour in multinational companies, particularly under financialised capitalism (Ertürk, 2016). Let us detail the implications of these two processes for the theories of command of a globalised economy.

Combining these two processes brings me to question how APS exercise command or control power in corporate restructuring. I understand APS as agents of global financialized capitalism (in the sense that they perform a function under it), but they are also affected by global financialized capitalism themselves leading to corporate restructuring of APS and potentially shifting functions of APS in world and global cities. It is finally through the construction of financial accumulation strategies for their clients that APS reproduce a space of global cities (Van Meeteren & Bassens, 2016). Financial narratives guide organisational change for example the introduction of financial management strategies and accounting systems that prioritize the maximization of shareholder returns (O'Neill, 2001). Within APS, banking services are rarely studied for their internal dynamics; rather, the analytical categories of cities, countries or regions are used (Knight & Wójcik, 2017). However, like any company today, banking groups are driven by the profitability requirements of shareholder value for the management of their banking subsidiaries, and since the financial crisis, these profitability logics have not been questioned (Ertürk, 2016). I now turn to how this will be studied in the dissertation.

2.1.4 Structure of the dissertation

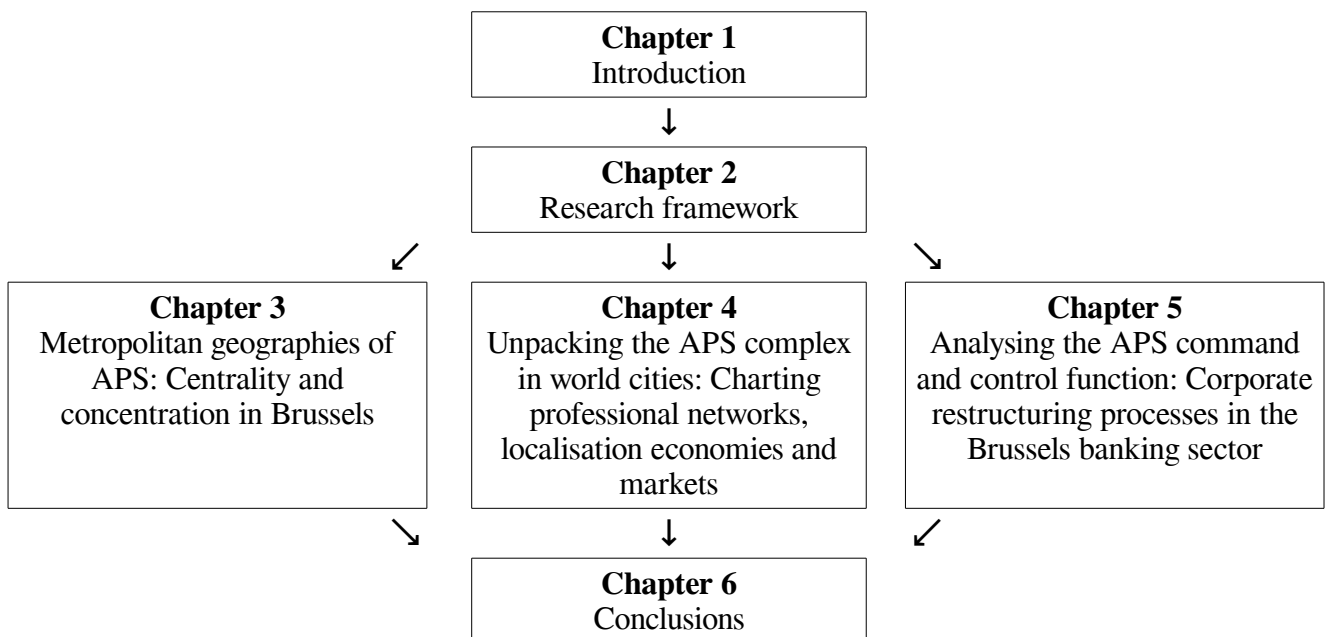
The study of world cities is based on the idea of the agglomeration of APS within world cities (Sassen, 1991). It is generally assumed that APS agglomeration within global cities provides advantage to firms, which are conceptualised as agglomeration or network economies (van Meeteren *et al.*, 2016). However, the scale at which these advantages of agglomeration happen remains unclear. The question of the scale of agglomeration of APS is therefore the first assumption that the dissertation will re-examine. This question is investigated with a location analysis based on employment data at the level of the company establishment. The main source for labour market data was the national DBRIS company register (DGSIE 2014), listing all companies in Belgium with their number of employees

(counted as full time equivalent). This company register allowed to provide fine-grained data on the size and composition of the APS sector in Brussels.

Another significant assumption of world cities is that APS agglomeration is associated with a command and control role for the economy (Bassens & van Meeteren, 2015; Parnreiter, 2014). This role refers to the context of a globalised economy organised on the basis of an international division of labour in which the APS operates. It is assumed that if APS are located in the same places in global cities, it is because they work together to form networks. However, how this idea does translate in practice has received little attention and little empirical validation. This is a second assumption reviewed by the dissertation through a survey analysis. The survey was designed to reach out to Brussels-based APS professionals and calibrated on the actual composition of the sectors in Brussels. The survey was guided by questions about how often, on what basis and where Brussels-based APS professionals interact, both among themselves and with their clients.

Finally, the question arises as to why APS cluster and/or work together (Parnreiter, 2017). The idea of the control and command role of APS in orchestrating the global economy needs to be understood in its concrete happening. This is the third assumption that the dissertation will re-examine. The content of APS interactions is investigated through a qualitative case-study on the transformations of the banking sector. I draw on semi-structured interviews with various players of the banking sector in Brussels. Their internal viewpoint is confronted to written and numerical data, in the perspective of ‘narratives and numbers’ method (Froud, Johal, Leaver & Williams, 2006) : official documents from banks or industry players, specialised press and academic literature. This case contributes to a concrete understanding of the dynamics and practices of APS in an international division of labour.

Table 2: Dissertation outline



In terms of structure, the dissertation is organised in three consecutive chapters which explore different aspects of the APS metropolitan geographies in Brussels (**Table 2**). The sequence of the three

consecutive chapters also corresponds to the different analytical stages of my PhD research that allowed to move from description to analysis: a level that describes the geographical patterns of APS, a level that examines APS operating practices and a level that analyses APS transformation processes. Each chapter is thus organised around a specific research question, for which suitable methodology is developed. Chapters 3 and 4 result from work carried out in the context of the collective research project *Service Brussels* in which the PhD was carried out. Both are published as papers. Chapter 5 results from personal work.

2.2 References

- Aglietta, M. (1999). Les transformations du capitalisme contemporain. In B. Chavance, E. Magnin, R. Motamed-Nejad, & J. Sapir (Eds.), *Capitalisme et socialisme en perspective. Evolution et transformation des systèmes économiques* (La Découverte, pp. 275–292). Paris.
- Amin, A., & Thrift, N. (1992). Neo-Marshallian Nodes in Global Networks*. *International Journal of Urban and Regional Research*, 16(4), pp. 571–587.
- Aujean, L., Castiau, E., Roelandts, M., & Vandermotten, C. (2007). Le positionnement des villes belges dans le réseau global des services avancés. *Belgeo*, (1), pp. 15–29.
- Bassens, D., Gutierrez, L., Hendrikse, R., Lambert, D., & Waiengnier, M. (2020). Unpacking the advanced producer services complex in world cities: Charting professional networks, localisation economies and markets. *Urban Studies*.
- Bassens, D., & van Meeteren, M. (2015). World cities under conditions of financialized globalization: towards an augmented world city hypothesis. *Progress in Human Geography*, 39(6), pp. 1-24.
- Beaverstock, J. V., Smith, R. G., & Taylor, P. J. (2000). World-city network: A new metageography? *Annals of the Association of American Geographers*, 90(1), pp. 123–134.
- Boggs, J. S., & Rantisi, N. M. (2003). The "relational turn" in economic geography. *Journal of Economic Geography*, 3(2), pp. 109–116.
- Bouba-Olga, O., & Grossetti, M. (2018). La mythologie CAME (Compétitivité, Attractivité, Métropolisation, Excellence) : comment s'en désintoxiquer?, HAL.
- Carroué, L. (2009). La crise financière et économique mondiale : enjeux géoéconomiques et géopolitiques, *BSGLg*, 53, pp. 5–13.
- Castells. (1972). *La question urbaine*. Paris: Maspero.
- Castells, M. (2000). *The rise of the network society*. Hoboken: Wiley-Blackwell.
- Clark, G. L., & O'Connor, K. (1997). The informational content of financial products and the spatial structure of the global finance industry. In Cox, K. (Ed.) *Spaces of Globalization. Reasserting the Power of the Local*. (Guilford Press, pp. 89–114). New York and London.
- Clark, Gordon L. (2005). Money flows like mercury: The geography of global finance. *Geografiska Annaler, Series B: Human Geography*. 87(2), pp. 99–112.

- Coffey, W. J., & Shearmur, R. G. (2002). Agglomeration and Dispersion of High-order Service Employment in the Montreal Metropolitan Region, 1981-96. *Urban Studies*, 39(3), pp. 359–378.
- Cottineau, C., Finance, O., Hatna, E., Arcaute, E., & Batty, M. (2018). Defining urban clusters to detect agglomeration economies. *Environment and Planning B: Urban Analytics and City Science*, 46(9), pp. 1611–1626.
- David, Q., Peeters, D., Van Hamme, G., & Vandermotten, C. (2013). Is bigger better? Economic performances of European cities, 1960–2009. *Cities*, 35, pp. 237–254.
- Ertürk, I. (2016). Financialization, bank business models and the limits of post-crisis bank regulation. *Journal of Banking Regulation*, 17(1–2), pp. 60–72.
- Faulconbridge, J. R. (2007). London's and New York's advertising and law clusters and their networks of learning: Relational analyses with a politics of scale? *Urban Studies*, 44(9), pp. 1635–1656.
- Faulconbridge, J. R., Muzio, D. (2012). Professions in a globalizing world: Towards a transnational sociology of the professions. *International Sociology*. 27(1), pp. 136-152.
- Finance, O. (2015). Attractivité et dépendance : intégration des villes françaises par les firmes transnationales étrangères. In M.-F. Mattei & D. Pumain (Eds.), *Données urbaines*, 7 (pp. 187–197). Anthropos-Economica.
- Friedmann, J. (1986). The World City Hypothesis. *Development and Change*, 17(1), pp. 69–83.
- Friedmann, J., & Wolff, G. (1982). World city formation: an agenda for research and action. *International Journal of Urban and Regional Research*, 6(3), pp. 309–344.
- Froud, J., Johal, S., Leaver, A., & Williams, K. (2006). *Financialization and Strategy. Narratives and numbers. Financialization and Strategy*. London: Routledge.
- Gardiner, B., Martin, R., & Tyler, P. (2011). Does spatial agglomeration increase national growth? Some evidence from Europe. *Journal of Economic Geography*, 11(6), pp. 979–1006.
- Grabher, G. (2004). Temporary Architectures of Learning: Knowledge Governance in Project Ecologies. *Organization Studies*, 25(9), pp. 1491–1514.
- Guironnet, A., & Halbert, L. (2018). Produire la ville pour les marchés financiers. *Espaces et Sociétés*, 174(3), pp. 17–34
- Halbert, L. (2004). *Densité, desserrement, polycentrisme et transformation économique des aires métropolitaines. Interpréter la concentration des activités d'intermédiation dans la zone centrale de la région francilienne*. Université Panthéon-Sorbonne - Paris I.
- Halbert, L. (2010a). Flow-Place: Reflections on Cities, Commutation and Urban Production Processes. *GaWC Research Bulletin*, 352, pp. 1–11.
- Halbert, L. (2010b). *L'avantage métropolitain*. Paris: PUF.
- Harvey, D. (1973). *Social Justice and the City*. Athens: University of Georgia Press.
- Harvey, D. (1989). From Managerialism to Entrepreneurialism : The Transformation in Urban Governance in Late Capitalism. *Geografiska Annaler, Series B: Human Geography*, 71(1), pp. 3–17.

- Hendrikse, R., van Meeteren, M., & Bassens, D. (2019). Strategic coupling between finance, technology and the state: Cultivating a Fintech ecosystem for incumbent finance. *Environment and Planning A*.
- Hollinshead, G., Capik, P., & Micek, G. (2011). Beyond Offshore Outsourcing of Business Services. *Competition & Change*, 15(3), pp. 171–176.
- Hoyler, M., Parnreiter, C., & Watson, A. (2018). *Global City Makers : Economic Actors and Practices in the World City Network*. Cheltenham: Edward Elgar Publishing.
- Knight, E., & Wójcik, D. (2017). Geographical linkages in the financial services industry: a dialogue with organizational studies. *Regional Studies*, 51(1), pp. 116–127.
- Marcuse, P. (2016). For the Repoliticization of Global City Research. *City & Community*, 15(2), pp. 113–117.
- Marissal, P., Medina Lockhart, P., Van Hamme, G., & Vandermotten, C. (2007). *Atlas de Belgique - Géographie politique*. Academia Press.
- Markusen, A. (1996). Sticky places in slippery space: A typology of industrial districts. *Economic Geography*, 72(3), pp. 293–313.
- Martinez, E. (2010). *Les salariés à l'épreuve de la flexibilité*, Bruxelles : Editions de l'Université Libre de Bruxelles.
- Massey, D. (2007). *World City*. Cambridge: Polity Press.
- Mudambi, R., & Venzin, M. (2010). The strategic nexus of offshoring and outsourcing decisions. *Journal of Management Studies*, 47(8), pp. 1510–1533.
- O'Neill, P. (2001). Financial narratives of the modern corporation. *Journal of Economic Geography*, 1(2), pp. 181–199.
- Pain, K., Van Hamme, G., Vinciguerra, S., & David, Q. (2015). Global networks, cities and economic performance: observations from an analysis of cities in Europe and the USA. *Urban Studies*, pp. 1–25.
- Parnreiter, C. (2010). Global cities in Global Commodity Chains: Exploring the role of Mexico City in the geography of global economic governance. *Global Networks*, 10(1), pp. 35–53.
- Parnreiter, C. (2014). Network or hierarchical relations? A plea for redirecting attention to the control functions of global cities. *Tijdschrift Voor Economische En Sociale Geografie*, 105(4), pp. 398–411.
- Parnreiter, C. (2017). Global cities and the geographical transfer of value. *Urban Studies*, 00(August 2016), pp. 1–16.
- Porter, M. (1990). *The Competitive Advantage of Nations*. New York: Free Press.
- Poupard, G. (2015). Développement local et emploi productif : un monopole des métropoles? *Population & Avenir*, 725(5), pp. 4-8.
- Robinson, J. (2016). Theorizing the global urban with 'global and world cities research': Beyond cities and synechdoche. *Dialogues in Human Geography*, 6(3), pp. 268–272.
- Rorive, B. (2005). Restructurations stratégiques et vulnérabilités au travail. *La Revue de l'Ires*, 47(1), pp. 117–134.

- Rozenblat, C. (2010). Opening the black box of agglomeration economies for measuring cities' competitiveness through international firm networks. *Urban Studies*, 47(13), pp. 2841–2865.
- Sassen, S. (1991). *The Global City: New York, London, Tokyo*. Princeton: Princeton University Press.
- Sassen, S. (2005). G.2.1 The global city: introducing a concept. *The Brown Journal of World Affairs*, XI(2), pp. 27–40.
- Sassen, S. (2016). The Global City: Enabling Economic Intermediation and Bearing Its Costs. *City and Community*, 15(2), pp. 97–108.
- Storper, M. (1997). *The Regional World: Territorial Development in a global economy* (Guilford Press). London.
- Taylor, P. J. (2001). Specification of the World City Network. *Geographical Analysis*, 33(2), pp. 181–194.
- Van Criekingen, M., Bachmann, M., Guisset, C., & Lennert, M. (2007). Towards polycentric cities. An investigation into the restructuring of intra-metropolitan spatial configurations in Europe. *Belgeo. Revue Belge de Géographie*, (1), pp. 31–50.
- Van Hamme, G., Wertz, I., & Biot, V. (2011). Economic growth devoid of social progress: the situation in Brussels. *Brussels Studies*, 48.
- van Meeteren, M., & Bassens, D. (2018). Chasing the phantom of a 'global endgame': the role of management consultancy in the narratives of pre-failure ABN AMRO. *Global City Makers*, (October), pp. 170–191.
- Van Meeteren, M., & Bassens, D. (2016). World Cities and the Uneven Geographies of Financialization: Unveiling Stratification and Hierarchy in the World City Archipelago. *International Journal of Urban and Regional Research*, 40(1), pp. 62–81.
- van Meeteren, M., Neal, Z., & Derudder, B. (2016). Disentangling agglomeration and network externalities: A conceptual typology. *Papers in Regional Science*, 95(1), pp. 61–80.
- Watson, A., & Beaverstock, J. V. (2014). World city network research at a theoretical impasse: On the need to re-establish qualitative approaches to understanding agency in world city networks. *Tijdschrift Voor Economische En Sociale Geografie*, 105(4), pp. 412–426.
- Williams, K. (2000). From shareholder value to present-day capitalism. *Economy and Society*, 29(1), pp. 1–12.
- Wójcik, D. (2012). Where governance fails: Advanced business services and the offshore world. *Progress in Human Geography*, 37(3), pp. 1–18.

CHAPTER 3. APS METROPOLITAN GEOGRAPHIES

3 Metropolitan geographies of Advanced Producer Services: centrality and concentration in Brussels

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Abstract The literature on global and world cities points towards a growing concentration of advanced producer services (APS) firms in a restricted number of cities, who execute strategic command and control functions over globalised capitalism. However, relatively little attention has been paid to how APS are located within such cities. We argue that APS locations within cities are related to two partly independent processes: localisation economies and centralisation dynamics, which result in patterns of concentration and centrality superimposed on socio-historical constructions of urban space. Utilising data from a national company register, we analyse the local insertion of APS firms in the Brussels' metropolitan area in light of these two processes. The outcome reveals that only some of Brussels' APS firms are concentrated and central, which we suggest to be the most strategic and internationalised APS functions

3.1 Introduction

Over the past decades world cities research has documented the deepening agglomeration of advanced producer services (APS) – conventionally covering financial services, legal services, accountancy and audit, management consultancy, and advertising – in a limited number of cities (Sassen 1991; Taylor & Derudder 2016). A new international division of labour, seeing manufacturing activities relocate to lowwage countries, and increased capital mobility has led to the globalisation of economic activities, captained by multinational firms (e.g. Fernandez & Hendrikse 2015). Accordingly, APS intermediation functions have increasingly become indispensable for the functioning of the global economy (Sassen 2016; Taylor *et al.* 2014). Multinational corporations depend upon APS firms to organise (i.e. finance, structure, promote, etc.) their global activities (Parnreiter 2017). This has turned certain cities into "*obligatory passage points*" for global capital (Bassens & van Meeteren 2015), with APS firms offering crucial corporate command and control functions (Friedmann and Wolff 1982; Sassen 1991). The rise of financialisation has deepened patterns of hierarchy and stratification in the world city archipelago, as APS firms enter that space when assisting their clients in financial accumulation strategies (van Meeteren & Bassens 2016). More narrowly defined, the formation of financial centres, as concentrations of financial(ised) capital, expertise and power (Wójcik, 2013), have become indispensable in managing global economic activities.

Locally, the reproduction of global capitalism can be organised in many ways (Massey 1995, 2007), implying that the agglomeration of APS firms in a limited number of cities at the global scale is supported by complex geographies at the urban level, mediated and shaped by the structure of the city and embroiled in wider processes of metropolitanisation (Brenner 1998). Historically and

geographically-specific circumstances have contingent effects (Massey 1995), meaning that location patterns need to be interpreted in light of social, historical and economic dynamics in a specific urban context. In other words, local APS geographies may be influenced by the circumstances that previously structured the place. The insertion of globally-integrated APS firms illustrate how globalisation is "*territorialised*" in world cities – a process moderated by the pre-existing socio-spatial structure of the city (Kesteloot 2005). Between the local and global, scholars have noted the importance of other analytical geographical scales, such as "*mega-city regions*" (Hoyler *et al.* 2008) or "*the Nation-State*" (Taylor 2006). The existence of a primary city shows the importance of the national scale (Polèse 2005), and especially in the services sector where actors typically settle in the main city of the country.

Despite the large literature highlighting global APS functions being located across a range of world cities, few papers zoom in on geographical APS organisation within cities (exception made by Amin & Thrift 1992; van Criekingen *et al.* 2005 on the highly uneven impacts of globalisation at the local level). Although it is recognised that APS firms agglomerate in world cities, the scale at which to consider agglomeration is not clearly defined. Yet we observe that APS firms do not just locate "*anywhere*" in the city: examples from different world cities suggest that APS agglomeration typically occurs in specific areas, for instance in the City of London or "*La Défense*" in Paris. This issue raises questions about the processes that lead to APS agglomeration within metropolitan areas.

On the one hand, APS firms agglomerate because they need to be close to each other to manufacture their intermediary services for globally operating firms (Sassen 1991). It is then the very nature of APS functions that requires proximity to other APS firms. Proximity produces localisation economies, namely, benefits from the concentration of an industry in one place (Moulaert & Djellal 1995; Parr & Budd 2000). The concentration of firms within cities can thus be conceptualised as an endogenous process, hence inherent to the activities of the firms, and is partly independent from where this concentration actually takes place in the city. On the other hand, APS firms locate in a pre-existing urban fabric. In general, central places within cities tend to house higher densities of professional workers and urban activities, are more accessible with public transport (Aguiléra 2003), function as innovative milieus (Baró & Soy 1993), and benefit from higher prestige (Shearmur & Alvergne 2002). APS firms may require such characteristics to different degrees, whatever the location of other APS firms, and hence be ready to pay the price for the locational advantages related to them. APS central locations are then understood to be linked to the characteristics of centrality itself. This can be viewed as an exogenous process that shapes APS agglomeration.

We therefore argue that the location of APS firms within world cities is related to two partly independent processes: localisation economies that lead to the concentration of firms conducting similar activities (endogenous to APS firms) and the search for centrality in an inherited urban core-periphery divide (exogenous to APS firms). We argue here that this search for centrality and/or concentration within cities depends on the nature of the firms, their activities and the geography of the pre-existing city. In practice, it is true that when APS are centrally located, they are concentrated. We take this limitation into account by assuming that in the case of central places both processes are at play, and that we cannot isolate to what extent which one is at work.

This paper first seeks to connect literatures on world and global cities to the large and insightful literature on metropolitanisation processes. Second, it offers a methodology to empirically measure centralisation and concentration processes of APS firms, which might be useful for research

elsewhere. Third, it seeks to contextualise APS geographies for the particular case of Brussels, adding more empirical flesh to the bones around how Brussels' global city functions are rooted in the city. The remainder of this paper is structured as follows. We first discuss the key drivers of agglomeration processes in the following section. Subsequently, the third section offers a methodological discussion, including a discussion of our data sources, their operationalisation, the area of study and the indicators used. We then offer our empirical study of the Brussels' case in the fourth section and reflect on our findings in the fifth section for three APS sectors (banking, accountancy, and law), illustrating distinct patterns of centrality and concentration. We end our paper with a set of concluding reflections.

3.2 Metropolitan geographies of APS firms

3.2.1 Exogenous processes: centralization and new forms of centrality

Traditionally, central urban areas are viewed as attractive locations for APS firms because of low public transport costs (Buisson *et al.* 2001; Gaschet & Lacour 2002; Lennert & van Criekingen 2003), size of the market (Baró & Soy 1993; Aguiléra 2002), a large high-quality labour pool (Coffey *et al.* 1996; Gaschet & Lacour 2002), proximity to political functions (Aguiléra 2002; Gaschet & Lacour 2002), and prestige (Coffey *et al.* 1996; Gaschet & Lacour 2002). Given that central places are relatively expensive, it is important to emphasise that APS firms typically can afford the high rents (e.g. Baró & Soy 1993; Wang *et al.* 2016). However, since the 1980s the shift of APS firms to peripheral urban areas has sparked a debate about the nature of centralisation. In US cities, this relates to the declining quality of urban infrastructure and accessibility issues, undercutting the attractiveness of the centre. In the model of the "edge city" proposed by Garreau (1991), peripheral poles provide all facilities the central city would offer without the congestion-related costs. Accordingly, central APS activities move there, or new APS activities locate in these peripheral poles. The Canadian case study conducted by Coffey and Shearmur (2002) points to the role of high-order services like APS as principal components of edge cities in the transformation of the metropolitan structure. This implies that even high-end services deem central areas less attractive and instead choose for suburban areas (Halbert 2005; also see Fernandez 2011, on Amsterdam).

Existing studies suggest that central business districts (CBDs) indeed host less APS firms than before. However, how decentralisation processes shape up across different contexts remains an open question. In fact, central areas continue to host APS firms, but their growth may be less strong compared to peripheral areas. One survey about the Montreal metropolitan area (Coffey *et al.* 1996) showed patterns of spatial stability rather than decentralisation. However, a subsequent study on Montreal found growth in peripheral poles, illustrating a relative but not absolute decline of the centre (Coffey & Shearmur 2002). Other authors argue that decentralisation strategies of APS firms can be explained by degrees of specialisation. In the Paris metropolitan region, the centre grows towards neighbouring municipalities, which increases the selection of high-value added APS activities in the centre (Shearmur & Alvergne 2002), resulting in a logic of complementarity rather than competition between different types of urban spaces and functions within the metropolitan area (Lennert & van Criekingen 2003). Across contexts, therefore, central areas maintain some of their attractiveness limiting decentralisation processes.

That said, not all APS functions require the same degree of centrality. Aguiléra (2002) formulates the hypothesis that APS activities in the periphery are not necessarily the same as central activities. Some sectors seem more centralised than others, such as advertising and management consultancy in Barcelona (Baró & Soy 1993), or financial services (Coffey *et al.* 1996) and legal services in Montreal (Shearmur & Alvergne 2002). However, although it is difficult to generalise by sector, specialised APS functions are more concentrated than routine APS services, and remain largely located in city centres (Aguiléra 2002). This highlights the need of differentiating between different APS functions instead of sectors, as their variegated geographies transform the structure of the metropolitan area. Shearmur and Alvergne (2002) suggest that combinations of concentration and dispersal can be explained through the interlocking patterns of market provision, the internal structure of services, and the nature of each sector. To be present at prestigious locations has in itself become an important explanatory factor, as reputation is very important to leading APS firms. A prestigious location suggests quality to clients and partners (Shearmur & Alvergne 2002). Yet not all prestigious locations are central. For instance, "*La Défense*" in Paris has gained its reputation as a business district but has been planned extra muros. Because of their intermediary functions, APS firms look for characteristics of places associated to central locations (prestige, density, accessibility, amenities, etc.), but to various degrees, depending on the nature of specific APS functions. Nevertheless, as the example of La Défense shows, the inherited core-periphery structures of cities is not fixed, neither in space nor in time. Instead, it is influenced by past and present developments that (re)structure the urban fabric, including the locational strategies of APS firms. We now turn to endogenous processes of agglomeration through the concept of localisation economies.

3.2.2 Endogenous processes: localisation economies

A second way to explain the mechanisms leading to APS agglomeration relates to the benefits gained from proximity with other APS firms that are known as localisation economies. The nature of APS work requires high-skilled staff (Baró & Soy 1993). However, within a given metropolitan area, the presence of a skilled labour pool seems a weak locational determinant, as firms normally have access to the entire metropolitan workforce, regardless of their location (Coffey *et al.* 1996; Aguiléra 2003). What emerges from the world cities literature is that APS provision depends on close physical proximity between various APS firms and sectors, even though the specific economic geographies supporting such forms of clustering often remain implicit in these discussions. Storper's (1997) conceptualisation of traded and untraded interdependencies is useful to understand the drive towards APS proximity.

Traded interdependencies link firms to a location because of market relations with suppliers, partners and clients. Baró and Soy (1993) point to the need for a high degree of cooperation between APS customers and suppliers. In their role as intermediaries to provide tailored services, APS firms require to be close to their partners (Sassen 2016). However, Aguiléra (2003) points towards a relaxation of the need for service providers to locate near their clients because of the size of the market area and the increasing use of ICT technologies. Untraded interdependencies drive APS firms to specific locations because of the more subjective and informal dimensions of their activities. Firms, and especially APS firms, develop their activities based on trust, generating the know-how and know-who in specialised matters. These informal links between firms are built on immaterial aspects such as perceptions, attitudes, habits, and conventions, marking particular business cultures in place.

Three implications can be derived from the importance of untraded interdependencies. First, it is key for APS professionals to have face-to-face contact with clients, competitors and other industries (Coffey & Shearmur 2002), although the importance of face-to-face contact may vary depending on the APS sector (Aguilera 2003). Second, although many activities can be coordinated from afar, not all kinds of knowledge is easily transmitted over long distances, making it "stick" to specific places (Clark & O'Connor 1997; Gertler 2003; Clark 2005). Such tacit forms of knowledge are not easy to codify and tend to circulate within social circles of key economic actors (Asheim *et al.* 2007). Third, the concentration of activities in a specific location creates a place where future informal networks and exchanges between professionals are likely to be rooted. The proximity of similar and related industries and socialising spaces will be determinant for informal encounters and business networks (Coffey *et al.* 1996; Coffey & Shearmur 2002). This also explains why, despite the growth of ICT, CBDs or other specialised inner-city districts remain attractive 'milieus' for APS, either in finance or other business services (e.g., Pandit *et al.* 2016 on the City of London).

In sum, distinct processes structure geographies of APS within cities. Our point of departure was that APS increasingly agglomerate in world cities. Within cities however, APS firms can be more or less concentrated – because their need for proximity is varied – and more or less central. Empirically, it will not always be possible to distinguish from which processes APS agglomeration results, since the concentration of certain APS activities in the centre necessarily results in physical proximity. In the following sections, we propose to measure concentration and centrality for different sorts of APS activities in the Brussels metropolitan area. We then link the observed diversity on both dimensions with the nature of activities. But first we present the data and indicators used to study the processes.

3.3 Methodology : data, spatial framework and indicators

This section presents the dataset used to study APS location patterns within the Brussels' metropolitan region, and our indicators for centrality and concentration.

3.3.1 Description of the data

Our sample of APS firms has been sourced from the national company register. The main source for labour market data was the DBRIS company register (DGSIE 2014) updated until 2014. This company register lists all companies in Belgium with the number of full and part-time employees (counted as full time equivalent) for each of their business establishments and per type of economic activity. Economic activities are classified according to the statistical classification of economic activities in the European Community³ (NACE). We understand APS firms as services that serve intermediate rather than final demand, and follow the five APS sectors conventionally studied in the world cities literature (see Taylor & Derudder 2016). With regard to financial services, we have also included figures on insurance and real estate, both of which are intimately entwined with finance, and are cumulatively known as the FIRE sector. As highlighted in the introduction, the other APS sectors are legal services, accountancy and audit, management consultancy, and advertising.

3 The NACE codes chosen are 64 and 66.1 for banking, 65 and 66.2 for insurance, 69.1 for law, 69.2 for accounting, 70 for management consulting, and 73. for advertising.

The APS sectors account for 117,000 jobs in the Brussels metropolitan area (13%), with finance alone being the largest sector (5%)(**Table 3**). About half of the national employment in finance, insurance and advertising services is located in Brussels. Finance and insurance are mostly composed of large firms (over 50 employees), whereas legal services are comprised of just a few large enterprises. For all APS sectors we observe a high share of small firms (0–1 employees), which are mostly self-employed professionals.

In spatial terms, the Brussels metropolitan region has no official administrative delimitation. For various reasons, including functional and morphological urban sprawl, it is paramount not to limit the analysis of Brussels to the 19 municipalities of the Brussels Capital Region (BCR), which is considered the core of the labour pool, but also include peripheral municipalities in Flanders and Wallonia. Although there are numerous spatial delimitations possible (such as Riguelle *et al.* 2007), this does not change much in the case of Brussels' APS because the essential employment dynamics are playing out in the central area. We have opted for a delimitation for the Brussels metropolitan area, which is based on a population density threshold of 650 inhabitants per km² (ESPON project 2010; Vandermotten 2014) and the degree of suburbanisation (van der Haegen *et al.* 1996). Thus defined, the Brussels metropolitan region hosts 25.7% of the total APS employment of Belgium, 62.9% of which is located in the BCR.

Table 3: APS sectors in the Brussels metropolitan area

	Total employment	Share of employment in firms ≥ 50 p. (%)	Number of firms	Share of firms with 0-1 employees (%)	Share of each sector in Brussels employment (%)	Share of APS Brussels employment in national employment (%)
Financial services	44,900	73.51	4,168	76.68	5.04	46.97
Insurance	17,439	90.94	543	69.06	1.96	56.54
Real estate	8,874	12.67	5,328	89.94	1.00	27.95
Management consultancy	17,534	26.67	8,774	92.74	1.97	41.49
Legal services	10,898	6.48	6,933	92.38	1.22	33.18
Advertising	8,757	30.41	3,034	88.96	0.98	45.20
Accountancy and audit	8,495	29.56	4,344	90.26	0.95	26.80
Total	116,897	51.80	8,775	89.13	13.11	41.11

Source: Employment figures from DGSIE, 2014.

3.3.2 Centrality and concentration

Centrality has been calculated by using a time-distance measure from any statistical sector of the Brussels metropolitan area to the centre. The centre is approximated by three centrally-located transport nodes (i.e. the Arts-Loi metro station, North Station, and South Station). Time-distance is measured two times of the day (8:30 and 03:00 AM), by public transport and car, from the centroid of

each statistical sector to the three transport nodes. The advantage of using time-distance to the centre is to include congestion effects, and thus better reflect the real "accessibility" of the city. The exact time-distance is an average of the 'google time' distance toward each of the three transport nodes and a weighted average of public transport and car, considering the real transport means used in each district⁴.

Meanwhile, concentration has been calculated by means of a concentration index. Concentration is theoretically independent from centrality, since specific activities can be agglomerated either in central or peripheral parts of the city. To calculate this, we use individual firm locations and their size in terms of employment. The concentration index is based on a Gini coefficient, broken down into the spatial and non-spatial components (see spatial Gini and non-neighbour Gini in **Table 4**). The Gini coefficient is one of the most common indices to examine the degree of overall inequality in a given dataset (e.g. Yitzhaki 1979). The general formula is:

$$G = \frac{\sum_{i=1}^n \sum_{j=1}^n |x_i - x_j|}{2n^2 \bar{x}} \quad (1)$$

where x_i is the value for variable x observed at location $i = [1, 2, \dots, n]$ and $\bar{x} = \frac{1}{n} \sum_i x_i$.

The Gini coefficient ranges from 0 to 1, where 0 implies perfect equality (all locations having the same proportion for a given variable) and 1 implies perfect inequality (one location having the highest possible proportion while the rest having zero).

The Gini coefficient is a global statistic to measure the degree of inequality in a given dataset but tells us little about the modalities of this inequality. We hence applied a spatially decomposed version of the Gini index as proposed by Rey and Smith (2013). This new index examines both spatial inequality and spatial autocorrelation. The general equation (1) consists of two terms:

$$G = \frac{\sum_{i=1}^n \sum_{j=1}^n w_{ij} |x_i - x_j|}{2n^2 \bar{x}} + \frac{\sum_{i=1}^n \sum_{j=1}^n (1 - w_{ij}) |x_i - x_j|}{2n^2 \bar{x}} \quad (2)$$

In this formula, w_{ij} are the spatial weights expressing the neighbour relationship between locations i and j . The interpretation of this formula is that as positive spatial autocorrelation increases, the second term (the non-neighbour component) should grow relative to the first (the spatial component). In the case of negative spatial autocorrelation, the effect should be the opposite. To interpret the results for detecting spatial autocorrelation with the decomposed Gini, we thus need to focus on the non-neighbour component. We calculated the indexes considering different ranges ($n = 10, 20, 30, \dots$) of neighbours (firms) for each APS sector, meaning that for each firm, we considered the n nearest neighbours. Since results appeared to be similar across ranges, the analysis will only show results based on the 50 neighbours range.

⁴ The Social Security (RSZ-ONSS) produces data on the mean of transport used from residence to work place, the modal share (2014).

3.4 Results : metropolitan geographies of APS sectors in Brussels

As outlined, to estimate the extent to which endogenous and exogenous processes lead to APS agglomerations we use the dimensions of concentration and centrality. Hence, we discuss APS agglomerations in light of continuity and change of the spatial makeup of the Brussels metropolitan region. This allows us to link the observed location patterns to the nature of the selected APS sectors.

3.4.1 Centrality

We have calculated a timedistance from each statistical APS sector of the metropolitan area to the geographical centre. We then classified statistical sectors according to their time-distance and, for each timedistance, we calculated the number of jobs in all kinds of APS. The results show that APS firms locate more centrally than other activities: 36% of APS jobs are within 15 minutes from the centre vs. 26% of jobs in general (**Table 4**). At the same time, APS are underrepresented in the more peripheral areas of the city: there is a lower proportion of APS jobs located over 20 minutes from the centre as compared to the average. Using different thresholds or central reference points did not significantly affect our results.

However, not all APS activities require the same degree of centrality. Therefore, we categorised each APS sector according to its proportion of jobs included within the 15 minutes time-circle and its proportion of jobs in the over 30 minutes time-circle. This allows distinguishing profiles of very central or very peripheral APS activities (**Figure 1**). As it turns out, more than half of the activities in finance and insurance are located less than 15 minutes away from the centre, making these the most centrally-located APS activities. On the contrary, more than half of the jobs in accountancy and audit are located more than 30 minutes away from the centre, showing a very peripheral profile. In between the two extremes, the other APS sectors reveal average profiles, with legal services showing the second most central APS profile, housing about a quarter of its activities within 15 minutes from the centre.

Table 4: Location of APS jobs in the Brussels metropolitan area, according to the time-distance to the centre

Time-distance	Number of jobs in APS	Share of jobs in the time travel circles to the center	
		APS	All jobs
< 10 min	9,775	9.86%	7.10%
10 – 15 min	27,113	27.36%	19.70%
15 – 20 min	15,325	15.46%	15.10%
20 – 25 min	15,694	15.84%	17.10%
25 – 30 min	9,621	9.71%	9.90%
30 – 40 min	11,145	11.25%	15.30%
> 40 min	10,427	10.52%	15.80%
Total	99,100	100.00%	100.00%

Source: Employment figures from DGSIE (2014); Time-travel distance from each district to central areas is calculated from google maps; own calculations.

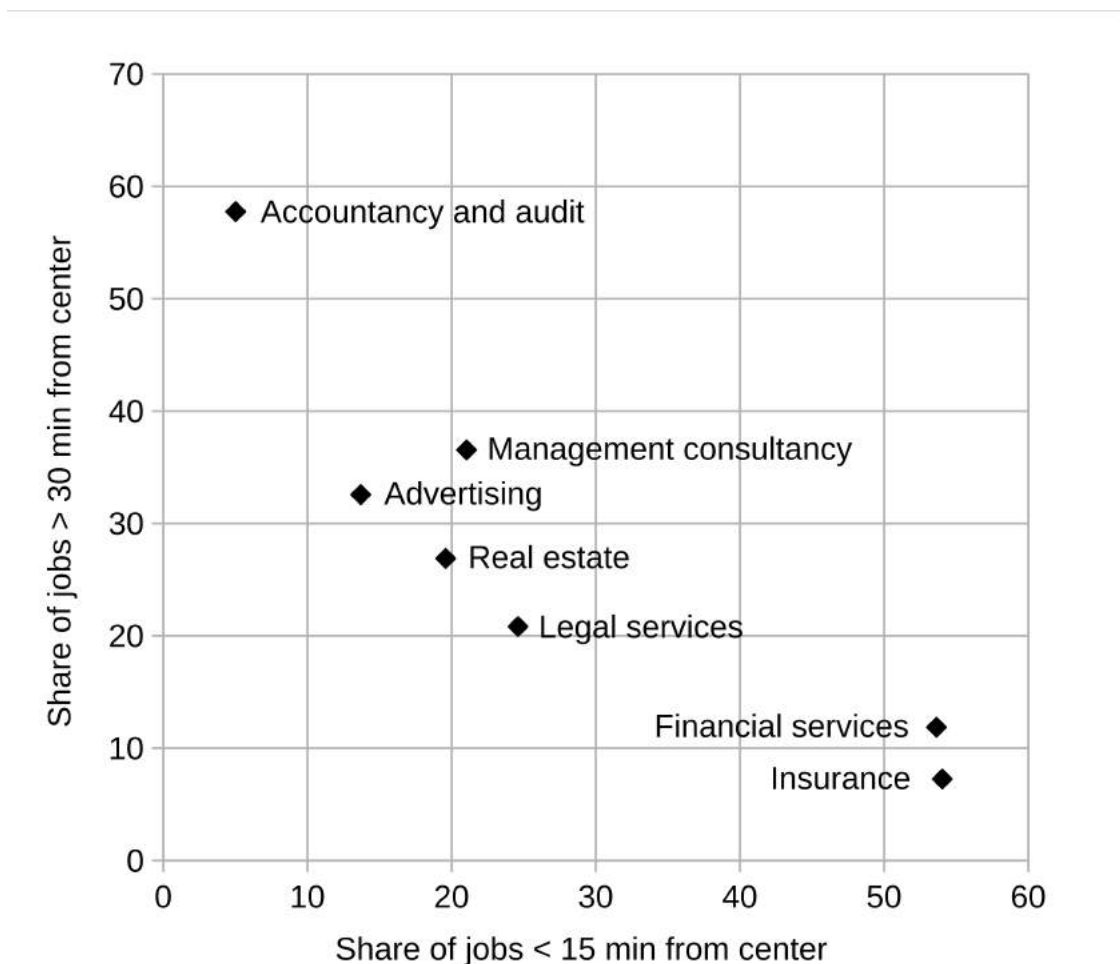


Figure 1: Centrality of the APS sectors in Brussels

3.4.2 Concentration

Table 5 shows the results of the concentration index calculations. The Gini coefficient, which examines overall inequality in the dataset, is broken down into a spatial (gw) and non-neighbour component (ns). The highest Gini levels are the most spatially-concentrated sectors, led by finance and insurance; the lowest levels characterise legal services, with small and medium law practices dispersed throughout Brussels. The increase of the non-neighbour component (see methodology) means that the observations are correlated to themselves: there are contiguity effects between the observations, implying that the spatial distribution is made of homogenous observations. In other words, each district is very similar to its neighbour for its APS job distribution.

Table 5: Spatial Gini of the APS sectors in Brussels

APS sector	Gini	Spatial Gini	Non-neighbor Gini
Insurance	0.908	0.020	0.888
Financial services	0.884	0.003	0.881
Advertising	0.681	0.003	0.678
Management consultancy	0.542	0.001	0.541
Accountancy and audit	0.541	0.001	0.540
Real estate	0.464	0.001	0.463
Legal activities	0.424	0.001	0.423

Scores near 0 mean that the distribution is very equal; 1 means very unequal.

Source: Employment figures from DGSIE (2014); own calculations.

3.4.3 Combining concentration and centrality measures

By combining measures of concentration and centrality, we offer a systematic approach to understand APS agglomeration in metropolitan areas. **Figure 2** shows the results for Brussels. Finance and insurance emerge as very concentrated and central sectors. In contrast, accounting is very peripheral and moderately concentrated. Legal services and real estate are the most spatially dispersed, and moderately central. However, we need to go beyond the idea that merely "market forces" drive agglomeration, and also account for policy decisions, path-dependencies, and wider metropolitanisation processes that have also shaped the geographies of APS. In Brussels, APS geographies have emerged amidst ongoing suburbanisation processes of economic activities which commenced in the 1980s. Since then the key economic developments, in absolute as well as relative terms, have unfolded in suburban spaces, close to the Brussels-Zaventem airport in particular (Lennert & van Criekingen 2003). Business parks were developed at the edge of the BCR, as well as outside its administrative limits, generating territorial competition between the BCR, Flanders, and Wallonia, in the absence of a federal metropolitan (planning) authority.

Although Brussels shows a story of suburbanisation processes, when observing the Brussels metropolitan area (**Figure 3 (1)**), it appears APS agglomerate mainly within the Brussels Capital Region proper (**Figure 3 (2)**). A few locations with a large employment in APS are visible in the north-eastern peripheries just outside the BCR, close to Zaventem airport. Further south, other large

employment places can be noted across the Walloon regional border, with La Hulpe revealing high employment with a high proportion of APS firms. Within the BCR, most APS firms locate near or in the historical centre of the city, dubbed "the Pentagon". Expanding from the centre, they are distributed in the nearest neighbourhoods towards the north (North District), and the east (European District). APS firms also locate in the southern limits of the BCR, along the main boulevards.



Figure 2: Centrality and concentration of the APS sectors in Brussels

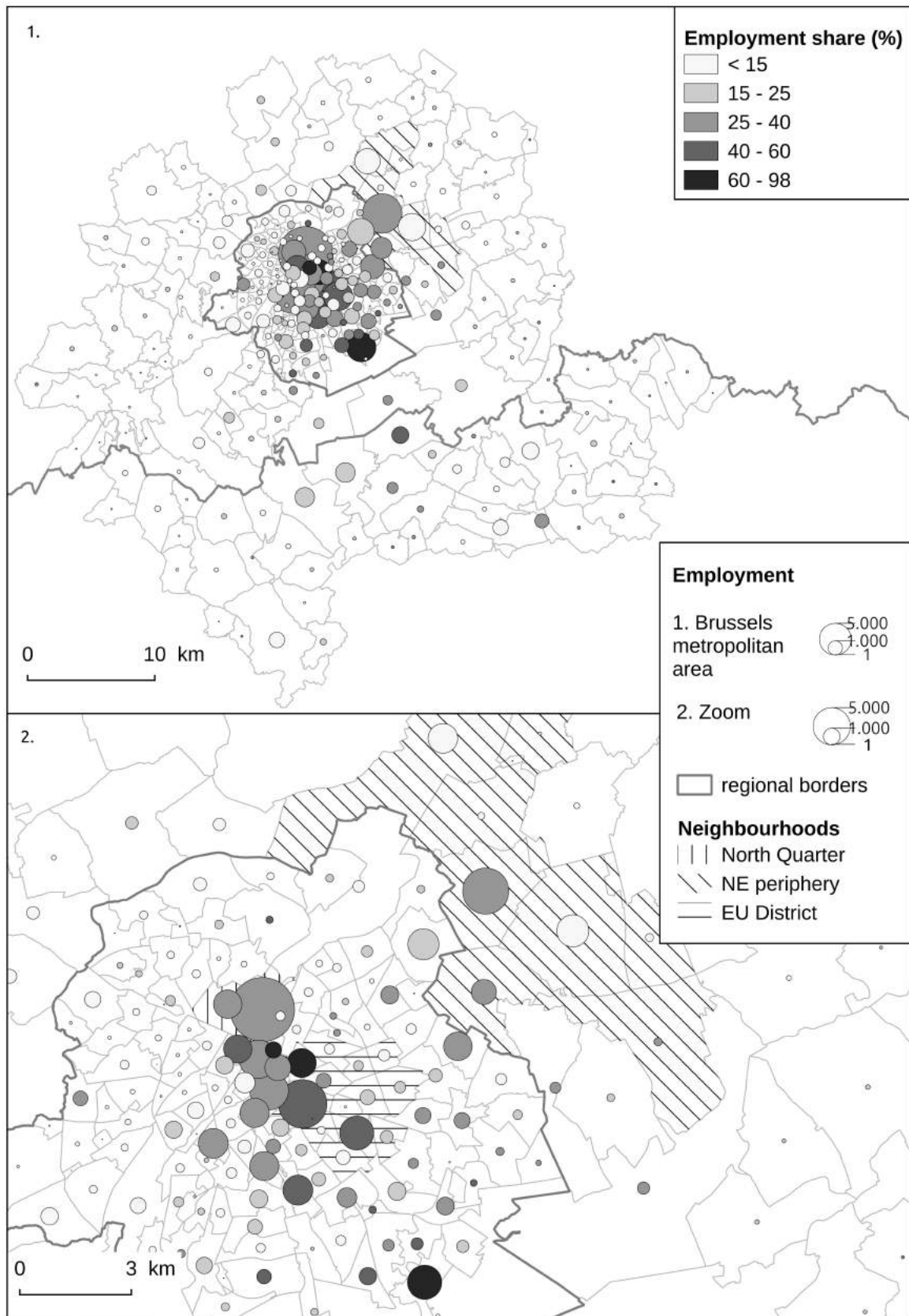


Figure 3: Location of the combined APS sectors in the Brussels metropolitan area, 2014

3.5 Discussion

Economic activities take place in a historically constructed space, where neighbourhoods have over time acquired different levels of prestige, have been fitted with different amenities, and so forth. In this section, we discuss the processes of concentration and centralisation within the urban fabric of Brussels by foregrounding three examples: financial services, legal services, and accountancy and audit.

Finance appears as the most concentrated and central APS sector (**Figure 2**). Leaving aside branch networks, most financial jobs concentrate in large companies located in the Brussels core, settled in large and prestigious buildings. In this very strategic activity, concentration facilitates strong interactions and easier face-to-face contacts between the different financial actors, notably the major ones (i.e. BNP-Paribas-Fortis, Belfius, ING, KBC), while centrality is associated with prestige, links to political functions, etc. Crucially, these location patterns are largely inherited. That is to say, the Brussels-based banking sector has been closely entwined with political functions since the establishment of the Belgian nation state in 1830. The history of Société Générale is exemplary in this respect. Founded before Belgian independence by the King of the Netherlands and financiers and merchants of Brussels, the Société Générale gradually developed as the prototype of the universal bank shaping Belgian capitalism at that time. Another illustration is the decisive economic role that the Société Générale played in Congo. The bank acquired a hotel in 'Montagne du Parc', in the Brussels' epicentre of political power, at equal distance of the King's Palace and the 'Palais de la Nation' – hosting the federal parliament (Mabille 1993). The heir of Société Générale, BNP Paribas-Fortis, is still headquartered at the same place today.

In contrast, another major Belgian bank, KBC, moved its seat along the canal in the West of Brussels, close to the CBD of the North District (**Table 4**). The North District was built in the 1960s following a large redevelopment plan. With the 'Manhattan Plan' preexisting neighbourhoods were demolished to create a new CBD aimed at international business (Martens 2009). The CBD in the North District, which was planned by public authorities to become the image of modernity in Brussels (De Beule & Dessouroux 2009), has not held its promises: the crisis of the 1970s halted its development and only a part of the initial plan has been realised. In these conditions, businesses did not move to this new neighbourhood. Ever since, the downsized developments have mainly been occupied by administrative functions or (formerly) state-owned companies, such as the Belgian telephone company (Proximus), while APS presence, though significant, is mostly a result of a few financial-sector giants, including Belfius, KBC, BNP Paribas, and Euroclear (Doornaert *et al.* 2016).

A radically different example is the accountancy and audit sector. As shown in **Figure 2**, this sector has a peripheral geography, and is less concentrated than financial services. This pattern reveals the double nature of the sector (**cf. Table 3**): a large number of small actors, largely self-employed accountants and auditors, are dispersed over the city, while the 'Big Four' accountancy and audit giants are located in the North-Eastern periphery near the airport. This peripheral location has hosted large and ongoing development of offices since the 1960s, often through the creation of business parks around the airport, which accelerated over the last 20 years. If airport proximity may have initiated this movement, facilitating accessibility at European and global level, further developments stem from the need of agglomeration in the services sectors, and the supply of large real estate projects. Big players in accountancy illustrate this point: accounting activities require centrality not in geographical terms but in terms of accessibility and international connectivity (De Wolf 2017), which corresponds

to favouring a peripheral location close to the airport (**Figure 3**), resulting in peripheral APS concentration. Such location strategies are also supported by the strategic vision plan of the Brussels airport (Brussels Airport n.d.). For instance, the Belgian head office of Deloitte was planned there.

Finally, legal services illustrate a third location pattern: relatively more dispersed but looking for central locations (**Figure 2**). Here again, the duality of the sector reflects the dispersal of small actors related to local market, while we observe the concentration of bigger law firms along the "Avenue Louise" as well as in the EU District (in line with van Criekingen *et al.* 2005). In the latter case, proximity to European institutions seems the driving factor explaining their locations. Compared to other European cities, Brussels has a high proportion of international legal activities (van Criekingen *et al.* 2007). This specificity is linked to the EU-related status of Brussels as a regulatory powerhouse. Elmhorn (1998) classifies Brussels as one of the most important political capitals given the growth of the international functions in the city and the upgrading of its position in the European hierarchy. APS in Brussels are expected to be mostly linked to Brussels political functions. The "European District" (**Figure 3**), initially the "Leopold District", was developed in the 1840s, being the first planned outer expansion of Brussels. About a century later, the district had become quite central in the city. A profound change was provoked with the implantation of the European Community buildings in the "Leopold district" (Lundy 2017). The construction started in the 1950s and lasted for 30 years, having as consequence a radical modification of the district. It is now mainly shaped by the activities of the European institutions and activities (in)directly related to them. Housing has been replaced by offices with EU institutions and others attracted by the institutions' power – lobby consultancies, law firms, and public affairs and relations agencies (Kuus 2011; Lundy 2017). Vandermotten and Noël (2004) note that Brussels only concentrates a small number of multinational firm headquarters, reflecting Brussels' low weight as concentration of economic power in the Belgian economy. Having said this, as elsewhere, APS firms in Brussels also cater to the Belgian market, illustrating that Brussels does function as a specialised service centre on the national scale (Hanssens *et al.* 2013).

Three implications emerge from the analysis. First, some APS such as financial services or insurance can afford to pay higher rents to keep prestigious locations, or keep close spatial proximity to regulators. Second, not all APS sectors concentrate in central areas. Some APS are non-central but still concentrated. This illustrates that our conceptual disentangling allows us to detect new centralities, where APS firms benefit from localisation economies, though being located in suburban rather than central places. This means that we find agglomeration outside central areas, for instance accountancy and audit. Third, we have to keep in mind that to interpret the spatial concentration versus dispersal pattern, an understanding of concentration in terms of the structure of a given sector is paramount (**cf. Table 3**). Some sectors, such as finance in Brussels, are highly concentrated around a limited number of big players. In contrast, for accountancy and law, the existence of a more dispersed organisation based on a large number of small and medium-sized firms is evident. Spatial differences are thus also related to the nature of APS activities, and in particular the clients and markets they serve: higher numbers of smaller firms may be related to the importance of the local market, as it is the case for legal services or accountancy. However, all APS sectors are dual in this respect, with big players serving national and international markets, while small firms, all other things being equal, are more connected to local clients. The share of these two components differ from one sector to another, which implies that not all APS sectors experience the same need for centralisation and concentration.

3.6 Conclusions

Observing the deepening concentration of APS firms in world cities, this paper has sought to analyse a terrain that has received relative little attention in the world cities literature: the geographies of APS firms within these cities. Set in Brussels, the paper identifies how APS agglomeration processes lead to distinct patterns of concentration and centralisation for different APS sectors. Whereas centralisation and localisation economies are both at play on a historically centralised banking sector, peripheral concentrations of the accountancy sector mostly show the importance of localisation economies for developments at the outskirts of the city.

For a substantial part of APS activities, concentration and/or centrality remain(s) important. Hence, our interpretation is that centrality, but also concentration, depends on the nature of APS activities, and in particular on the relative share of the most strategic segments of APS activities. This is the reason why financial activities present the most concentrated and central location pattern in Brussels. However, we also insist on the inherited character of this location pattern of financial activities, in which centrality seems historically linked to the proximity with political and regulatory functions. In contrast, accountancy services are peripheral and less concentrated, following a local market, except for a few large firms that developed at the BCR's edge, near the airport. Legal services present a relatively more dispersed yet central location pattern, with a dispersal of small actors related to the local markets, and the concentration of larger actors close to strategic places, such as the EU District. The consultancy and advertising sectors, in turn, show intermediary patterns. The variegated degrees of APS centrality and concentration imply that although physical proximity remains important in the current "*digitisation*" era (Hendrikse *et al.* 2018, 2019), it is not the only necessary component for carrying out intermediary APS activities. Socio-historical processes moderate the urban space in which APS firms locate, which in turn is influenced by the establishment of APS firms. Concentrations of APS firms transform parts of the metropolitan area, such as the European District with batteries of lawyers and lobbyists trying to influence the European Commission, or like the accounting firms centred around Brussels airport.

Methodologically, we have used sectoral employment data to calculate synthetic indicators of centrality and concentration. We have to bear in mind that a number of limitations arise from the sectoral classification. Working with pre-set statistical categories does not allow us to dissect the most strategic or international segments of activities/functions within these sectors, especially in the case of non-regulated professions like consultancy. Another limitation comes from the increasingly mingled nature of APS activities. For a considerable number of large APS firms, disciplinary divisions between accounting and law, law and consultancy, and so forth, have progressively become fluid. Large APS firms such as KPMG offer a variety of legal, accounting and advisory services, which cannot be reduced to a single category. However, even though our sectoral categorisation limits what we can say for a single firm, these APS activities should still be represented in the sample we chose. Our findings should therefore be used for what they are, indicative of metropolitan agglomeration processes in APS sectors. As we see that only a part of Brussels' APS firms are concentrated and central, we suggest these represent the most strategic and internationalised APS functions. Despite these disclaimers, the here proposed methodology can help to measure how centralisation and concentration dynamics explain APS agglomeration in metropolitan areas beyond the particular case of Brussels. In the future, these might be complemented with qualitative methods digging into the strategies of APS firms and

professionals to further contextualise the observed patterns constituting concentration and centralisation processes.

3.7 References

- Aguiléra, A. (2002), Services aux entreprises, centralité et multipolarisation. Le cas de Lyon, *Revue d'Économie Régionale et Urbaine*, 3, pp. 397–442.
- Aguiléra, A. (2003), La localisation des services aux entreprises dans la métropole lyonnaise : entre centralité et diffusion, *Espace Géographique*, 32 (2), pp. 128–140.
- Amin, A., & Thrift, N. (1992), Neo-Marshallian Nodes in Global Networks*, *International Journal of Urban and Regional Research*, 16 (4), pp. 571–587.
- Asheim, B., Coenen, C., Vang, J. (2007), Face-to-face, buzz, and knowledge bases: sociospatial implications for learning, innovation, and innovation policy, *Environment and Planning C: Government and Policy*, 25(5), pp. 655-670.
- Baró, E., & Soy, A. (1993), Advanced Service Location Strategies in the Barcelona Metropolitan Region, *The Service Industries Journal*, 13 (2), pp. 23–35.
- Bassens, D., van Meeteren, M. (2015), World cities under conditions of financialized globalization: towards an augmented World City hypothesis, *Progress in Human Geography*, 39 (6), pp. 1-24.
- Beaverstock, J. V. (2005), Transnational elites in the city: British highly-skilled inter-company transferees in New York city's financial district, *Journal of Ethnic and Migration Studies*, 31 (2), pp. 245–268.
- Brenner, N. (1998), Global cities, glocal states: global city formation and state territorial restructuring in contemporary Europe, *Review of International Political Economy*, 5 (1), pp. 1–37.
- Brussels Airport 2040 (n.d.), Available at <<http://www.brusselsairport2040.be>>. Accessed 29 October 2019.
- Buisson, M.-A., Mignot, D., & Aguiléra-Belanger, A. (2001), Métropolisation et polarités intra-urbaines. Le cas de Lyon, *Revue D'Économie Régionale et Urbaine*, 2, pp. 271–296.
- Clark, G.L., O'Connor, K. (1997), The informational content of financial products and the spatial structure of the global finance industry, pp 89-114. In: K. COX, ed., *Spaces of Globalization: reasserting the power of the local*, pp. 89-114. New York; London: Guilford Press.
- Clark, G. L. (2005), Money flows like mercury: the geography of global finance, *Geografiska Annaler, Series B, Human Geography*, 87 (2), pp. 99-112.
- Coffey, W. J., Drolet, R., & Polèse, M. (1996), The intrametropolitan location of high order services: patterns, factors and mobility in Montreal, *Papers in Regional Science*, 75 (3), pp. 293–323.
- Coffey, W. J., & Shearmur, R. G. (2002), Agglomeration and Dispersion of High-order Service Employment in the Montreal Metropolitan Region, 1981-96. *Urban Studies*, 39 (3), pp. 359–378.
- De Beule, M. & Dessouroux, C., EDS. (2009), *Bruxelles, ses bureaux, ses Employés*. Bruxelles: La Fonderie et Ministère de la Région de Bruxelles-Capitale.
- Derudder, B., Witlox, F., & Taylor, P. J. (2007), Les villes dans les réseaux mondiaux : Une nouvelle méthodologie pour cartographier la position relationnelle des villes, *Revue d'Économie Régionale et Urbaine*, 2, pp. 179-200.
- De Wolf, B. (2017), Le Gateway Building, un immeuble taillé sur mesures pour Deloitte, *Le Soir*, 16 November, online. Available at: <<https://www.lesoir.be>>, 16/11/2017. Accessed on 29 October 2019.

- Doornaert, A., Demeuter, P., Hanssens, B. (2016), Observatoire des bureaux : vacance 2015 à Bruxelles et zoom sur le quartier Nord, *Observatoire des bureaux*, 36, pp. 1-24.
- Direction Generale Statistique et Information Economique (DGSIE) (2014), firm register DBRIS.
- Elmhorn, C. (1998), Brussels, a reflexive world city, *Bulletin de la Societe Belge d'Etudes Geographiques Tijdschrift van de Belgische vereniging voor Aardrijkskundige Studies*, 1, pp. 79-101.
- ESPON Project (2010), Metroborder. Cross-border Polycentric Metropolitan Regions, final report. ESPON and University of Luxembourg, pp. 1–193. Available at <<https://www.espon.eu/metroborder>>. Accessed on 29 October 2019.
- Fernandez, R. (2011), Explaining the decline of the Amsterdam Financial Centre (Ph.D. thesis, University of Amsterdam).
- Fernandez, R., Hendrikse, R. (2015), Rich Corporations, Poor Societies: The Financialisation of Apple, GoodElectronics and SOMO, pp. 1– 23. Available at: <https://goodelectronics.org/rich-corporations-poor-societies/>. Accessed 1 November 2019.
- Friedmann, J., & Wolff, G. (1982), World city formation: an agenda for research and action, *International Journal of Urban and Regional Research*, 6(3), pp. 309–344.
- Garreau, J. (1991), *Edge City: Life on the New Frontier*. New York: Doubleday.
- Gaschet, F., Lacour, C. (2002), Métropolisation, centre et centralité. *Revue d'Économie Régionale et Urbaine*, 1, pp. 49-72.
- Gertler, M. S. (2003), Tacit knowledge and the economic geography of context, or The undefinable tacitness of being (there). *Journal of Economic Geography*, 3(1), 75–99.
- Halbert, L. (2005), Le desserrement intra-métropolitain des emplois d'intermédiation : Une tentative de mesure et d'interprétation dans le cas de la région métropolitaine parisienne, *Géographie Économie Société*, 7(1), pp. 1–20.
- Hanssens, H., Derudder, B., Witlox, F. (2013), Are advanced producer services connectors for regional economies? An exploration of the geographies of advanced producer service procurement in Belgium, *Geoforum*, 47, pp. 12-21.
- Harvey, D. (1989), From managerialism to entrepreneurialism: The transformation in urban governance in late capitalism. *Geografiska Annaler*, 71(1), pp. 3-17.
- Hendrikse, R., Bassens, D., van Meeteren, M. (2018), The Appleization of Finance: Charting Incumbent Finance's Embrace of FinTech. *Finance and Society* 4, pp. 159–180.
- Hendrikse, R., van Meeteren, M. and Bassens, D. (forthcoming), Strategic Coupling Between Finance, Technology and the State: Cultivating a Fintech Ecosystem for Incumbent Finance. *EPA: Economy and Space*.
- Hoyler, M., R. Kloosterman & M. Sokol (2008), Polycentric Puzzles – Emerging Mega-City Regions Seen through the Lens of Advanced Producer Services. *Regional Studies* 42, pp. 1055–1064.
- Kesteloot, C. (2005) Urban Socio-Spatial Congurations and the Future of European Cities, In: Y. Kazepov, ed., *Cities of Europe: Changing Contexts, Local Arrangements, and the Challenge to Urban Cohesion*, London: Blackwell.
- Kuus, M. (2011), Bureaucracy and place: expertise in the European Quarter, *Global Networks*, 11, pp. 421-460.
- Lennert, M., Van Criekingen, M. (2003), Centre et périphérie : des espaces en compétition ?, *Belgeo*, 4, pp. 425-442.
- Lundy, D. (2017), The Corporate Europe Observatory guide to the murky world of EU lobbying, Corporate Europe Observatory.

- Mabille, X. (1993), La Société générale de Belgique : Éléments pour une histoire de la Banque mixte 1822-1934, *Courrier hebdomadaire du CRISP*, 29-30 (1414-1415), pp. 1-67.
- Martens, A. (2009) Dix ans d'expropriations et d'expulsions au Quartier Nord à Bruxelles (1965-1975) : quels héritages ? [Ten years of expropriations and evictions in the Brussels North Quarter (1965-1975): what are the legacies today?], *Brussels Studies*, Collection générale, 29.
- Massey, D. (1995), Spatial divisions of labor: social structures and the geography of production, 2nd ed. Basingstoke: Macmillan.
- Massey, D. (2007), *World City*, Cambridge: Polity Press.
- Moulaert, F., Djellal, F. (1995), Information Technology Consultancy Firms: Economies of Agglomeration from a Wide-area Perspective, *Urban Studies*, 32(1), pp. 105-122.
- Pandit, N. R., Cook, G. A. S., & Beaverstock, J. V. (2016), Economies and diseconomies of clusters: Financial services in the city of London. In: F. Belussi and J.-L. Hervás-Oliver, eds., *Unfolding Cluster Evolution*, pp. 23–38, London: Routledge.
- Parnreiter, C. (2017), Global cities and the geographical transfer of value, *Urban Studies*, 00(0), pp. 1-16.
- Parr, J. & L. Budd (2000), Financial Services and the Urban System: An Exploration. *Urban Studies* 37, pp. 593–610.
- Polèse, M. (2005), Cities and National Economic Growth: A Reappraisal. *Urban Studies* 4, pp. 1429–1451.
- Rey, S. J., Smith, R. J., (2013), A spatial decomposition of the Gini coefficient, *Letters in Spatial and Resource Sciences*, 6(2), pp. 55-70.
- Riguelle, F., I. Thomas & A. Verhetsel (2007), Measuring Urban Polycentrism: A European Case Study and its Implications. *Journal of Economic Geography* 7, pp. 193–215.
- Sassen, S. (1991), *The Global City*. Princeton: Princeton University Press.
- Sassen, S. (2016), The Global City: Enabling Economic Intermediation and Bearing Its Costs, *City and Community*, 15 (2), pp. 97-108.
- Shearmur, R., & Alvergne, C. (2002), Intrametropolitan patterns of high-order advanced service location: A comparative study of seventeen sectors in Ile-de-France, *Urban Studies*, 39(7), pp. 1143–1163.
- Sigler, T., Searle, G., Martinus, K., & Tonts, M. (2016), Metropolitan land-use patterns by economic function: a spatial analysis of firm headquarters and branch office locations in Australian cities, *Urban Geography*, 37(3), pp. 416–435.
- Storper, M. (1997), *The Regional World: Territorial Development in a Global Economy*, London: Guilford Press.
- Taylor, P. (2006), Comment: On a Non-appraisal of the 'Jacobs hypothesis'. *Urban Studies* 43, pp. 1625–1630.
- Taylor, P.J., Derudder, B. (2016), *World city network: A global analysis*, Abingdon: Routledge.
- Taylor, P., B. Derudder, J. Faulconbridge, M. Hoyler & P. Ni (2014), Advanced Producer Service Firms as Strategic Networks, Global Cities as Strategic Places. *Economic Geography* 90, pp. 267–291.
- Van Criekingen, M., Bachmann, M., Guisset, C., & Lennert, M. (2007), Towards polycentric cities. An investigation into the restructuring of intra-metropolitan spatial configurations in Europe. *Belgeo*, 1, pp. 31–50.
- Van Criekingen, M., Decroly, J.-M., Lennert, M., Cornut, P., & Vandermotten, C. (2005), Local Geographies of Global Players: International Law Firms in Brussels, *Journal of Contemporary European Studies*, 13(2), pp. 173–187.

- Van Der Haegen, H., Van Hecke, E., Juchtmans, G. (1996), Les régions urbaines belges, 1991, *Etudes statistiques*, Institut National de Statistique, 104.
- Vandermotten, C. (2014) Bruxelles, une Lecture de la Ville. De l'Europe des Marchands à la Capitale de l'Europe. Bruxelles: Editions de l'Université de Bruxelles.
- Vandermotten, C., Noël, F. (2004), La planification de Bruxelles dans le cadre du développement des « villes-mondes », Rapport final du Programme d'actions transversales : La Belgique dans une société mondialisée, Action III : Villes Viables.
- van Meeteren, M., Bassens, D. (2016), World Cities and the Uneven Geographies of Financialization: Unveiling Stratification and Hierarchy in the World City Archipelago, *International Journal of Urban and Regional Research*, 40 (1), pp. 62-81.
- Wang, J., Zhang, X., & Yeh, A. G. O. (2016), Spatial proximity and location dynamics of knowledge-intensive advanced service in the Pearl River Delta, China, *Habitat International*, 53, pp. 390–402.
- Wójcik, D. (2013), The Dark Side of NY-LON: Financial Centres and the Global Financial Crisis, *Urban Studies*, 50 (13), pp. 2736-2752.
- Yitzhaki, S., (1979), Relative deprivation and the Gini coefficient. *The Quarterly Journal of Economics*, pp. 321-324.

CHAPTER 4.

THE APS COMPLEX

4 Unpacking the advanced producer services complex in world cities: charting professional networks, localisation economies, and markets

Bassens, D., Gutierrez, L., Hendrikse, R., Lambert, D., Waiengnier, M. (2020) *Unpacking the advanced producer services complex in world cities: charting professional networks, localisation economies, and markets*. *Urban Studies*. <https://doi.org/10.1177/0042098020908715>

Abstract

Limited empirical evidence in support of world-city formation has been the "dirty little secret" of the eponymous research area. In the late 1990s, inspired by Sassen's account of *The Global City*, the field focused on advanced producer services (APS) firms as primary actors in world-city formation. While generating robust insights into the shifting geographies of world cities, empirical attention has mostly focused on mapping inter-urban world city *networks* formed by APS firms. Despite a rich literature on APS clusters, the degree to which specific intra-urban agglomerations and their inter-firm connections shape up has received little systematic attention. Based on a company survey in Brussels (Belgium), our study charts interactions between APS professionals to better understand the geographies, quality and intensity of their encounters. Our findings reveal that the Brussels-based APS cluster constitutes a hybrid of an industrial complex with stable formal ties and a social network based on informal exchange. Financial services assume a central position in what might be called "*a para-financial services complex*", revealing close ties with legal services, accountancy and audit, and ICT. Geographically, we find that the APS complex depends on fine-grained localisation economies, which allow a small share of APS professionals to service both domestic and international clients. We conclude that APS actors in Brussels exhibit a strong domestic anchoring, indicative of the continued relevance of world cities as national financial centers amidst financial globalisation.

4.1 Introduction: World-city formation and the advanced producer services complex

Ever since Sassen's (2001) [1991] *The Global City*, advanced producer services (APS) in finance, law, accountancy, management consultancy, and advertising have been considered primary actors in world-city formation. For Sassen, centrality in the global economy emanated not merely from the command practices by transnational corporations (TNCs) hypothesised by Friedmann (1986). Power in the global economy, she conceptualised, hinged on control capabilities generated by a complex of interwoven APS firms residing in global cities who serve TNCs. Besides a handful of case studies, the early work on world-city formation was haunted by scant evidence, deemed to be field's "dirty little secret" (Short *et al.*, 1996), and Sassen's reconceptualisation also served as hypothesis-generating agenda, leaving many theoretical claims open for empirical corroboration. A key response to this empirical lacuna came during the late 1990s, when the Globalisation and World Cities (GaWC) research network started mapping urban connections supported by APS firms (Beaverstock *et al.*, 1999).

To date, however, most empirical attention has focused on *networks* of world cities⁵ through analyses of the Interlocking World City Network (IWCN) model (Taylor and Derudder, 2016). Even though this approach has received criticism because of the assumed, not observed nature of the modelled interactions (Pazitka *et al.*, 2019), it has offered a robust and sustained analysis of shifts within the economic geographies of APS at the global scale. Still, world city networks are but half of the story: world-city formation is just as much about rooted dynamics *in place* that allow for the reproduction of control capabilities over the global economy, hinging on both network and localisation economies (van Meeteren *et al.*, 2016c). While recent contributions have called to focus on the "*economic actors and individual and collective economic practices*" (Hoyler *et al.* 2018), how control capabilities are collectively produced *within* world cities remains poorly understood. There is an insightful set of qualitative studies of APS clusters, focusing on the embeddedness of professional practices in rooted and transnational social networks (Faulconbridge, 2007a; 2007b; Grabher, 2001). However, most of these studies are sectoral in scope, based on qualitative methods such as interviews, unearthing how proximity is instrumental to knowledge transfer through professional interactions beyond the firm. As such, little attempt to offer a systematic analysis of APS interactions beyond sectoral silo's has been made, implying that the localisation economies that drive APS clustering *across* sectors remain poorly understood. Resultantly, the strength and nature of traded and untraded interdependencies (Storper, 1997) between APS sectors remain an open question, alongside questions of whether APS clusters function as project ecologies (Grabher, 2004), industrial complexes, or social networks (Gordon and McCann, 2000).

Another key assumption we aim to corroborate is the degree to which APS firms produce and depend on localisation economies in their day-to-day practices. This is an important question since Sassen's line of reasoning, and the work it inspired, identifies the existence of an APS complex to be at work as a central driver of world-city formation, and hence the polarised outcomes it has on a city's professional, income, and spatial structure (Sassen, 1988; Sassen 2001, [1991]). World cities, in such readings, are the sites where localisation and network economies play out disproportionately, explaining the path-dependent pull these cities exert on the growth of services on a global scale. The literature on financial geography has much to add in terms of explaining the path-dependent nature of those economic geographies (Cassis and Wojcík, 2018), but seldom studies APS clusters beyond finance proper. Such an epistemic barrier between students of APS geographies and financial centers is regrettable, since world cities are in many ways obligatory passage points for financialised modes of accumulation (Bassens and van Meeteren, 2015), with APS firms interlacing world cities with offshore financial centers (Fernandez and Hendrikse, 2020; Wojcík, 2013a).

Based on a company survey targeting APS firms in Brussels, deepening our research into Brussels APS geographies (see Hendrikse *et al.*, 2019; Waiengnier *et al.*, 2019), we aim to investigate whether we can speak of an APS complex with clear localisation effects. Three questions have guided our analysis: what is the strength and nature of inter-firm relations within and across various APS sectors? To what extent do these inter-firm relations depend on geographical proximity? And to what extent do APS clusters enable the export of services, domestically and internationally? Although we do not treat Brussels as a representative case, as its specialisation towards regulatory and political functions as a world-class diplomatic center is likely to be reflected in the composition of Brussels-based APS firms (Elmhorn, 2001), our findings relating to the internal structure of the APS cluster, its localisation

⁵Aware of nuanced differences between the world and global city concept (Bassens and van Meeteren, 2015) we use the term world city because this term has featured more prominently in empirical analyses of APS.

economies and export patterns do allow us to distill some general APS practices and patterns.

We continue as follows. Section 2 sketches the debate around empirical studies of world-city formation and APS clusters, distilling a set of lacunae we seek to address. Besides introducing the city of Brussels, section 3 details our methodology, with the steps performed to improve the representativeness of our blind sample of APS respondents. Subsequently, section 4 empirically unpacks the structure of APS interactions, their nature, spatial footprint, and the geography of the markets served. The concluding section 5 discusses the implications of our analysis for world city and financial center literatures.

4.2 Hidden in plain sight: localisation economies in advanced producer services

While world cities research is distinctively plural (van Meeteren *et al.*, 2016b), one of the key concerns of the field is to understand the role and place of cities under capitalism's uneven development. The field's initial impetus emerged from Friedmann's (1986: 71) observation that certain cities served as "*basing points*" for capital amidst globalisation. Even though production had globalised, it remained commanded from world cities housing TNCs, which steadily evolved into places of advanced accumulation deepening global core-periphery structures. For Sassen 1991[2001], control is not something 'held' by stand-alone TNCs, but is acquired via insourcing a set of "*capabilities*" produced by a complex of APS firms residing in world cities. Finance, law, accountancy, management consultancy, and advertising are indispensable to maintain global production and financial networks, allowing for the geographical transfer of value (Parnreiter, 2019). TNCs depend on APS, who exert influence through providing organisational capabilities in what Sassen calls "*embedded governance*" (2010: 158). Beyond large-scale processes such as globalisation, financialisation has also deepened corporate dependence on APS as obligatory passage points for financialised capital accumulation on a global scale (Bassens and van Meeteren, 2015; cf. Krätke, 2014).

Recent analysis of the world city network suggests that APS geographies are prone to both agglomeration and network economies (van Meeteren *et al.*, 2016c). However, even though the literature agrees that the power of the APS complex is relational, the bulk of research empirically uncovered connections *between* cities housing APS firms, for instance by applying the IWCN model (Taylor and Derudder, 2016). Put differently, most empirical studies of world-city formation have focused on one particular dimension of the process, namely the globally networked nature of APS complexes across cities. These networks are arguably central in Sassen's (1991[2001]) global city conceptualisation, but so are place-based rooted geographies of the APS complex, as the quote below illustrates:

"Producer services, unlike other types of services, are mostly not as dependent on vicinity to the buyers as consumer services. Hence, concentration of production in suitable locations and export, both domestically and abroad are feasible. Production of these services benefits from proximity to other services, particularly when there is a wide array of specialised firms" (Sassen, 2001 [1991]: 104-105).

While a core premise of world cities research, the inner workings of the APS complex have received

little empirical systematic attention, even though evidence at the sectoral level is in place. Financial geographers have stressed the dual roles of agglomeration and network economies (Van Meeteren *et al.* 2016c) in supporting representation, interaction, and innovation (Amin and Thrift, 1992). The knowledge content of financial products is an important driver of agglomeration: whereas standardised products have a ubiquitous character, tailor-made products require "*decoding*" available in a limited set of financial centers (Clark and O'Connor, 1997). Agglomeration as evidenced in financial centers hence results in knowledge sticking to particular places (Clark, 2005), circulating within the knowledge value chain that connects profession(al)s within the APS complex (Bassens and van Meeteren, 2015). Other financial-sector evidence indicates that APS collaboration between different sectors is crucial in accessing offshore markets (Fernandez and Hendrikse, 2020; van Meeteren and Bassens, 2016; Wójcik, 2013b), and is equally widespread in the age of digitising finance (Hendrikse *et al.*, 2018; 2019).

Beyond finance, a rich set of qualitative studies has dug into the role of professional interactions in APS clusters around law and advertising (e.g. Faulconbridge 2007a; 2007b, Grabher, 2001). These studies confirm the role of professional networks beyond the firm – through project work, professional organisations, industry events, educational spaces, and so forth – in tacit knowledge transfer, collective learning, or trust building that are deemed crucial mechanisms for contemporary agglomeration dynamics. From these literatures, one derives that much of the APS work takes place in shifting project ecologies (Grabher *et al.*, 2004; also see Hendrikse *et al.*, 2019) that stretch across the boundaries of firms and sectors that structure traded and untraded interdependencies (Storper, 1997) between APS actors. Such a conclusion was also drawn by Cook *et al.* (2007) that reports on a commissioned study on the City of London's financial services agglomeration. This study is one of the rare examples of a systematic analysis of how the above relevance of APS interactions is surveyed across a wider APS agglomeration. Based on the stated importance of different sectors to respondents, the study finds that while intra-sectoral (i.e. horizontal) interactions are in place, clustering in the City is strongly driven by inter-sectoral (i.e. vertical) linkages, with a pre-eminent role for finance.

While Cook *et al.* (2007) offer compelling evidence for the existence of an APS complex, their analysis is mostly concerned with centrifugal and centripetal forces at play. Much is to be gained by performing a systematic analysis of APS interdependencies beyond the emblematic case of London, whilst extending the research problem and refining methods of analysis. First, applying such a systematic analysis in a more intermediate and hence ordinary or typical world city such as Brussels allows us to detect whether it is indeed useful to utilise the "*APS complex*" as a theoretical construct that explains world-city formation more widely. To what extent is the preponderance of finance particular to London, or do we find a more polycentric structure elsewhere? Given the depth and breadth of financialisation processes, having also transformed professions like law and accountancy (Faulconbridge and Muzio, 2009), increasingly constituting what might be called "*a (para-) financial sector*" instead (Engelen *et al.*, 2014: 1086), finance might well prove to be "*the mother of all intermediate sectors*" (Sassen, 2016: 98).

Second, we need to further scrutinise the assumption that the centralisation of APS in world cities *de facto* requires spatial proximity in work practices – a particularly salient question amidst progressive digitisation (Hendrikse *et al.*, 2018; 2019). As van Meeteren *et al.* (2016c: 64) explain, agglomeration "*is a unit with variable geometry, where certain effects overlay several cities while others are confined to more local environments*". The above-mentioned qualitative studies on the professions

suggest that APS depend on mutual proximity, which echoes the idea of localisation economies as a subset of agglomeration economies that refer to "*the benefits accruing to a single industry in a single location*" (Isard, 1956). Cook *et al.* (2007) find that proximity to other APS firms matters, but they do not specify the spatial scale of these traded and untraded interdependencies. Do APS interactions require proximity at district level (e.g. law firms in Van Criekingen *et al.*, 2007), or is co-location within a larger metropolitan area or global-city region sufficient? Mapping the spatial footprint of APS interactions can help uncovering the spatial scale of both localisation and network economies, the latter referring to benefits that accrue to firms because of their extra-local connections. Moreover, if information could be collected on the formal or informal nature of interactions, we would be well-placed to qualify APS clusters in light of a set of industrial complex, pure agglomeration, or social network ideal-types (Gordon and McCann, 2000). While the pure model of agglomeration would apply generally to urban sectors, we may more meaningfully wonder to what extent APS clusters behave as an industrial complex, marked by stable formal trading links driving location behavior, or whether clusters depend on more informal club-like structures, where access depends on experience, routine interaction, personal relations, and trust (Gordon and McCann, 2000: 518; 521) .

A third guiding premise that requires empirical backing are the functional linkages between APS and their client firms (Sassen, 2001[1991]), which enable APS to perform services to clients beyond the national scale. Although APS firms often exhibit an international focus, coordinating TNC activities across borders (e.g. Faulconbridge and Muzio, 2016; Muzio *et al.*, 2013), there is an aspirational tendency with entrepreneurial political elites to inflate the esteemed international character of services (Massey, 2007). It can hence be expected that APS are in fact catering unevenly to clients across local, national and international scales, with only particular APS segments counting as "*internationally strategic*". Cook *et al.* (2007) acknowledges the primordial role of London as a context for APS firms with international ambitions, but offers no analysis of the actual geographies of APS markets. To date, only a few studies have systematically scrutinised the geographies of transaction links between APS firms and clients (Rossi *et al.*, 2007; Parnreiter, 2010; Hanssens and Derudder, 2011). However, while showcasing the continued relevance of the national scale in APS markets, these studies fall short of offering a systematic analysis of such patterns across the different subsectors.

4.3 Methodology: Surveying Brussels

Observing the current gaps in the literature, the methodology applied in this paper hinges on a company survey guided by questions about *how often*, on *what basis* and *where* Brussels-based APS professionals interact, both among themselves and with their clients. The rationale for selecting Brussels was to study contemporary world-city formation beyond the extreme and oft-studied cases of London and New York. While research has adopted a geographically variegated focus (van Meeteren *et al.*, 2016b), it remains an open question to what extent key assumptions about the workings of the APS complex speak to other contexts (e.g. Krijnen *et al.*, 2018). When considering the population of cases, then, Brussels would present itself as a more typical case, representative of second-tier world cities where extraterritorial command and control functions are less dominant in the urban economy, but where clear signs of world-city formation are in place nonetheless.

Indicative of its world city status, Brussels houses the majority of APS firms located in Belgium, including half of Belgium's financial services (Waiengnier *et al.*, 2019). As elsewhere (Fernandez,

2011), the city has seen a decline in some of its (inter)national financial center functions yet continues to be Belgium's preferred headquarter location for APS firms (Aujean *et al.*, 2007). Reflecting its role as a political and regulatory hub, moreover, Brussels' peculiar APS makeup is shaped by the dominant presence of several international organisations, chiefly the European Union (EU) and the North-Atlantic Treaty Organisation (NATO). As a result, a comparatively large number of legal professionals – approximately 9.000 full-time equivalents according to the Belgian company register⁶ – reside in Europe's diplomatic hub, some of whom double as public affairs lobbyists, estimated around 25.000 heads (CEO, 2017). Brussels' APS firms cluster around the North Quarter business district (finance), the European Quarter (law), and around Brussels Airport (accountancy) (Waiengnier *et al.*, 2019). Despite these particularities, the structure of professional APS interactions still reflects the generic nature of APS work as such, allowing us to detect general trends. The fact that leading APS firms operate corporate networks across cities (Taylor and Derudder, 2016) enhances organisational isomorphism (Bassens *et al.*, 2013) and the generalisability of our insights.

To date, research has predominantly focused on APS linkages *across* cities, instead of delving into APS practices *within*. Furthermore, the few studies of APS practices tend to be qualitative in nature, with the interview method deployed to gain in-depth knowledge of APS work (e.g. Faulconbridge, 2007a; 2007b; Grabher, 2001). That said, surveys have proven valid quantitative tools for this type of research, despite typically low response rates (Lüthi *et al.*, 2010, Hanssens *et al.*, 2013). Taking inspiration from the latter examples, our approach consisted of rolling out an online company survey targeting APS professionals working in Brussels. Over the year 2017, we devised a 10-minute survey, based on three themes covered in twenty questions. These themes related to i) general information on the work and work context of individual professionals; (ii) the frequency, nature and location of interactions with APS professionals outside of their firm; and (iii) the location and type of interaction with non-APS clients who constitute the final demand for the services offered. In practice, we asked APS professionals to list the three most important non-APS clients, adding information on their location and sector, followed by a set of forced-choice rating questions. Interactions between APS professionals were prompted by asking about both *formal* exchanges e.g. buying/selling a service, co-developing a service for a client, strategic collaboration, and *informal* engagements through encounters at industry associations and other events. We expect that face-to-face contact is key throughout these different types of exchanges, and particularly relevant for the reported networking activities. Answers were indicated on a five-point Likert scale to allow standardisation and comparability.

To target APS professionals in the Brussels metropolitan region, i.e. the Brussels Capital Region and its adjacent peripheries, we deployed a several strategies. First, we sourced company registers and databases, including Bureau van Dijk's (*AMADEUS*) and the Belgian company register (*Banque Carrefour des Entreprises*). Both registers use the NACE classification⁷, which cover the five APS sectors of interest: finance (64.1, 66.1) typically including banking and insurance in Belgium's universal banks, legal services (69.1), accountancy and audit (69.2), management consultancy (70.22), and advertising (73). Furthermore, we included information and communication technology (ICT) (62, 63) as our sixth APS sector, since digitisation is rapidly transforming the makeup of all APS sectors

6 The Belgian Company Register (version 2014) was made available via formal request to DGSIE, i.e. Direction Générale Statistique et Information Économique, see <https://statbel.fgov.be/en>.

7NACE Rev.2 Statistical Classification of Economic Activities in the European Community available on <https://statbel.fgov.be/fr/propos-de-statbel/methodologie/classifications/nace-bel-2008>

(Hendrikse *et al.*, 2018; 2019). This sectoral focus derives from our intention to select sectors that both work as inputs to client firms *and* showcase advanced forms of professional organisation to which the surveyed professionals could relate in Brussels. Real estate, wealth management, and other potential APS subsectors were not targeted since these typically are not serving as input to firms, hence not generating Sassen's type of control capabilities. To assure a diverse sample in terms of size and international status we reached out to the five largest players of each of the targeted APS sectors. In addition, we contacted APS industry federations and representations, including *Brussels Legal* and Belgium's financial sector representative *Febelfin*, as well as trade unions. We opted to target individual APS professionals rather than firms, in line with recent calls to unpack APS practices of “command and control” (Hoyler *et al.*, 2018).

In total, we sent out over 5.000 survey requests between October 2017 and March 2018, generating 143 relevant responses, equaling an acceptable three percent response rate. To test the representativeness of our blind sample, we compared our responses with a larger dataset of formal annual transactions between the sectors, collected in an *input-output table* (IOT, 2014)⁸. The correlation between our sample and the IOT resulted in an R² score of 0.66, which means that although our sample is relatively small, it offers a reliable reflection of APS activities in Brussels. To improve our sample's representativeness, each sector was weighted by their actual weight in the Brussels economy. To calculate this, we used the Belgian company database, which contains data on APS firms in terms of employment. In sectoral terms, ICT and finance were overrepresented in our sample, while within-sector size biases were in place: there was an overrepresentation of big firms in law, accountancy and management consultancy, and an underrepresentation of small firms in finance, law and accountancy. That said, the weighted sample generated a R² of 0.78, leaving us with a robust and representative sample.

4.4 Unpacking the Brussels advanced producer services complex

This section sets out our main findings structured along three empirical questions: what is the strength and nature of inter-firm relations, as observed through the surveyed interactions between APS professionals? To what extent do these inter-firm relations depend on geographical proximity? And to what extent are services exported locally, domestically, and globally?

4.4.1 The structure of the APS complex

Commencing our analysis, the insights emerging from the survey allow us to detail the structure of the Brussels APS complex (Figure 4). Figure 4 expresses the average intensity between APS sectors, showing the sum of the number of APS interactions weighted by their frequency (rated by professionals from 1 to 5), standardised by the highest score (i.e. finance to finance), and expressed on a scale of 0-100%. Generally, about 80% of the sampled professionals indicate they interact with professionals across selected APS sectors, with about half of the community interacting on a frequent to very frequent basis. Crucially, however, these interactions are highly uneven.

⁸2015 data available via the website of the Federal Planning Bureau: <https://www.plan.be/databases/data-63-en-input+output+tables+2015>

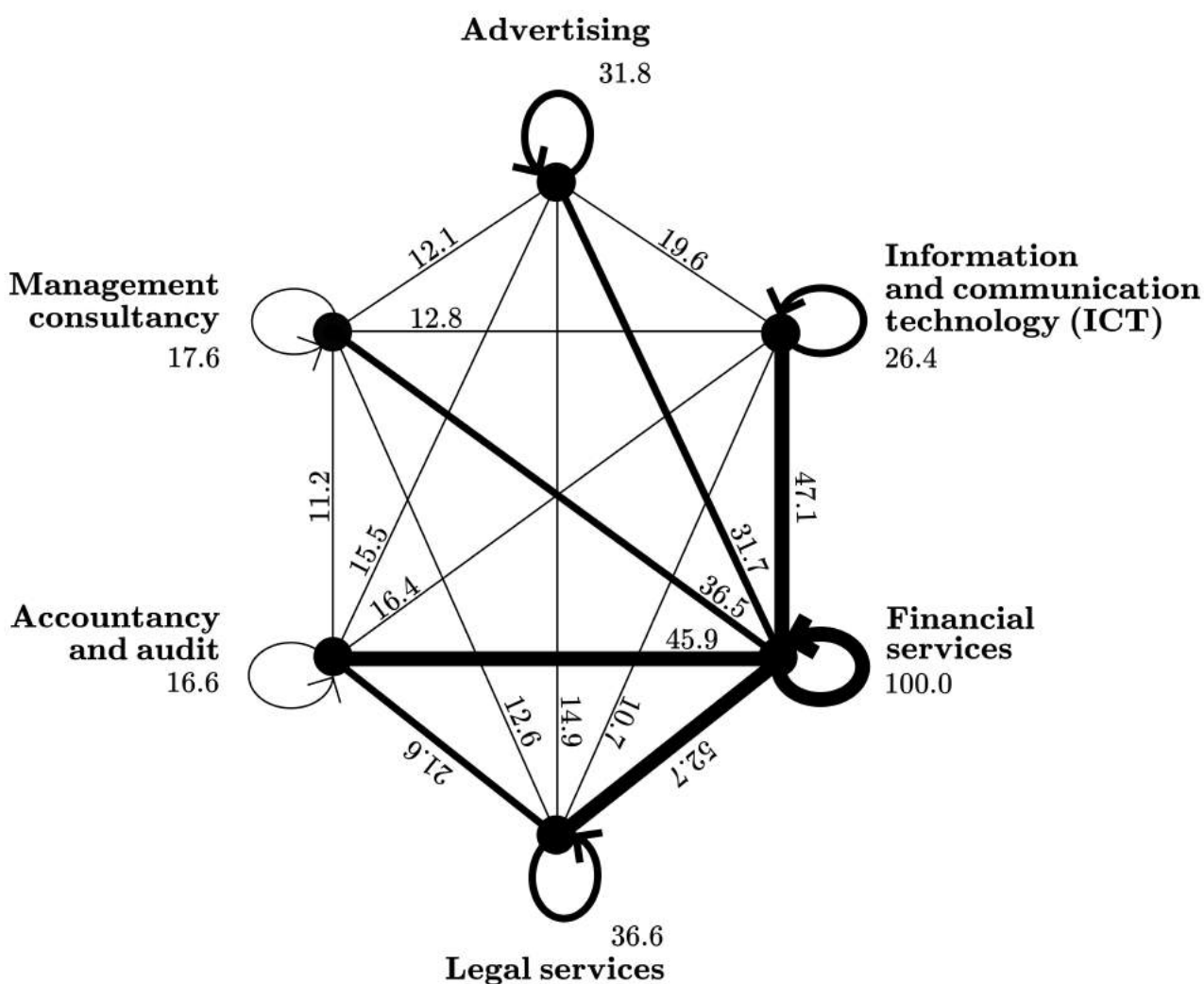


Figure 4: The Brussels APS complex

First, intra-sectoral interactions are key to the relations between APS professionals: between 70% to 90% of all respondents interact frequently with professionals working within the same sector. In fact, the volume of intra-sectoral interactions (i.e. finance to finance) outweighs all others professional exchanges, resulting in a weight of 100% in **Figure 4**. But also the intra-sectoral linkages of advertising (32%), ICT (26%), and law (37%) are among the highest of all, often outweighing interdependencies with other professions. For accountancy and audit (17%) and management consultancy (18%), intra-sectoral exchanges are present, but less prominent.

A second observation is that our analysis confirms Sassen's claim that finance constitutes "*the mother of all intermediate sectors*" (2016: 98), since inter-sectoral interactions between finance and other sectors constitute the core of the APS professional community. The connections between financial professionals and those in law (53%), accountancy and audit (46%), and ICT (47%) are particularly strong, while those with management consultancy (36%) and advertising (32%) are also substantive. This implies that for APS professionals outside of finance, interaction with financial professionals outweighs the importance of other APS sectors. Moreover, beyond the data presented in Figure 4, but when looking at the frequency of interactions it appears that about a quarter of frequent and very frequent interactions of all APS professionals is directed towards the financial sector.

A third and related observation pertains to the differences in diversity of professional interactions across sectors. While finance, accountancy, management consultancy, and ICT professionals engage with a wide range of APS professionals, law and advertising have a much narrower scope of interaction. Legal professionals are mostly engaging with finance (27%) and accountancy and audit (22%) professionals. Combined with the high relative weight of these interactions, this suggests that finance-law-accountancy form somewhat of a more closely interwoven "*para-financial*" triangle. Advertising, on the other hand, seems to be more peripheral to the wider APS community, although revealing substantial links with ICT professionals (20%). Further, we find that professional interactions between finance and ICT are substantive (47%), arguably indicative of the current digitisation wave in financial services.

4.4.2 The nature of the APS interactions

A bit more detail on the actual *nature* of APS interactions seems appropriate here (Table 6). While formal exchanges cannot be viewed as disembedded from wider social networks and their role in sustaining mutual understanding, shared cognition, and trust-building (Faulconbridge, 2007a), the survey also included a dedicated "*informal exchanges*" category to tease out the importance of networking practices. Further, the inclusion of the "*buying/selling a service*" category allowed to pinpoint to what extent APS interactions signal "*internal consumption*" of services within the APS complex itself (e.g. an ICT professional overhauling the digital infrastructure of a bank). Next, we also included a category "*co-developing a service*" to capture intermediary APS cooperation in catering to a third-party client (e.g. a lawyer and a banker advising on a merger and acquisition deal). Finally, the category "*strategic collaboration*" sought to detect more structural forms of collaboration across firm boundaries. **Table 6** shows the breakdown of interactions between sectors. Taking the example of finance-finance, the table can be read as follows: 60% of the interactions among financial professionals involves buying/selling a service, 16% is about strategic collaboration, 15% concern informal exchanges, and 9% of professional interactions are geared towards co-developing a service for clients.

Table 6: Nature of interactions by APS sectors

	FS		LAW		ACC		MC		ADV		ICT	
FS	60	16										
	9	15										
LAW	67	9	56	17								
	12	11	11	15								
ACC	63	15	62	14	64	16						
	15	7	5	18	14	6						
MC	68	7	43	11	60	12	39	24				
	10	15	30	16	22	6	16	22				
ADV	60	13	37	27	65	10	47	19	68	10		
	9	19	3	32	12	13	13	21	11	11		
ICT	64	7	100	0	59	13	45	18	52	13	67	13
	3	26	0	0	14	13	18	20	22	13	0	20
<i>Buying/selling a service</i>							<i>Strategic collaboration</i>					
<i>Co-developing a service for a client</i>							<i>Informal exchanges</i>					

Note: read as 60% of FS-FS interactions involve buying/selling a service

Overall, across all sectors, we find that about 58% of APS interactions are dedicated to internal consumption among APS proper. This is particularly strong between finance and respectively law and management consultancy, but also between advertising and ICT. Project work on average amounts to 12% of APS interactions and is particularly relevant for management consultants engaging with lawyers (30%) and accountants (22%), and to bankers engaging with accountants (15%) and lawyers (12%). More structural forms of cooperation cover on average 14% of APS interactions but are particularly relevant for interactions between advertising and law (27%) and amongst management consultants (24%). Lastly, some 15% of interactions is categorised as informal networking, indicating that a significant amount of professional time is dedicated to activities that support social networks. This is relevant for management consultants mingling among themselves (22%), but it also applies to informal exchanges between finance and ICT professionals (26%), as well as law and advertising (32%). In sum, both mechanisms of internal consumption and formal/informal cooperation drive the reproduction of APS clusters.

4.4.3 The spatial footprint of the APS complex

Having established the finance-centered structure of the APS complex, driven by both internal consumption and formal/informal cooperation, we now turn to the question of proximity. To reiterate, Sassen's thesis is that APS depend on spatial proximity in their day-to-day activities. Put differently, APS depend on localisation economies, which should be reflected in their professional interactions.

The literature on world city networks, in turn, suggests networked interactions beyond Brussels would be of importance as well. Beyond that, the metropolitan or national scales might be relevant, as APS interactions would follow the wider structure of the Belgian urban system (Hanssens *et al.*, 2011). As **Table 7** illustrates, the survey operationalised this question by probing the importance of professional interactions across spatial scales. Specifically, we asked respondents to list where their three most important fellow professionals were located. These scales ranged from the very local scale up to European and global scales, allowing us to detect a continuum stretching from localisation to network economies.

Table 7: Location of APS interactions

	Brussels Metropolitan Region (BMR)				Rest of Belgium	EU	Out of EU	Sum
	Same building/district	BCR	Periphery	Total BMR				
FS ↔ APS	9%	36%	14%	59%	21%	15%	5%	100%
LAW ↔ APS	7%	45%	10%	61%	13%	18%	8%	100%
ACC ↔ APS	12%	31%	25%	68%	19%	9%	4%	100%
MC ↔ APS	7%	29%	12%	49%	18%	24%	9%	100%
ADV ↔ APS	8%	37%	16%	61%	18%	16%	5%	100%
ICT ↔ APS	3%	32%	21%	57%	25%	13%	6%	100%
APS ↔ APS	9%	35%	15%	58%	20%	16%	6%	100%

First, across APS sectors we find that the very local scale is most relevant, but less than expected: about 9% of all interactions take place within the same building or district. Instead, far more important is the Brussels metropolitan scale, structuring 58% of APS interactions. Beyond Brussels, we see that professional interactions mostly remain within Belgium, while 21% connect to the wider EU and beyond. The implication is that localisation economies mostly play out at the metropolitan scale. Interactions beyond Belgium, in turn, which can be read as network economies, vary greatly. Brussels seems to be a good location to tap into international professional networks for management consultancy, law, and advertising. The latter points to the particular nature of advertising in Brussels, which is geared towards public affairs (PA) and public relations (PR) around the city's political and regulatory functions. In contrast, network economies play a far smaller role in the financial sector. This is an intriguing result since the centrality of finance within the APS complex is not mirrored in its international outlook. This arguably is the result of Brussels being a second-tier financial center with a clear domestic function. Globally, only law and management consultancy showcase substantial interactions, confirming Brussels' European orientations in terms of professional networks.

4.4.4 Local and international hinterworlds of the APS complex

The final step of our analysis focuses on the geographies of market relations sustained by the Brussels' APS complex. To what extent is the complex involved in the export of APS services domestically and internationally? Do we see a continued logic of proximity to corporate clients? To grasp the urban footprint of APS firms, Sassen's hypothesis suggests that interactions between APS professionals are (at least) as important as interactions with corporate non-APS clients, who constitute the final demand for these services. **Table 8** summarises the results by using the same scales of analysis as in the previous section.

Table 8: Brussels APS markets

Location of the three most important clients (%)									
		Brussels Metropolitan Region (BMR)				Rest of Belgium	EU	Out of EU	Sum
		Same building/district	BCR	Periphery	Total BMR				
FS	Clients	15%	21%	19%	55%	28%	10%	7%	100%
LAW		0%	15%	15%	30%	15%	28%	27%	100%
ACC		11%	34%	36%	81%	9%	3%	7%	100%
MC		4%	27%	10%	41%	17%	17%	25%	100%
ADV		0%	31%	5%	36%	12%	46%	6%	100%
ICT		0%	46%	11%	57%	22%	21%	0%	100%
APS		9%	25%	18%	51%	21%	17%	11%	100%

A first observation is that the geography of APS provision follows the spatial breakdown of the interactions within the complex: overall, 9% of services provision occurs very local, about half within the metropolitan area, another 21% in Belgium, and about 28% in Europe and beyond. Overall, the market structure closely follows the way professional networks are spatially structured, but with a higher proportion of APS catering to international clients. Second, mirroring the analysis of professional interactions, we see that there are notable sectoral differences: where accountancy is an extremely parochial business, with as much as 90% of the market contained within Belgium, advertising (especially PA/PR), and law, to a lesser degree, service Brussels' international political and regulatory roles. Management consultancy also has a clear international focus, which can be explained by the role of Brussels in catering to European operations of TNCs. Finance, in turn, is taking a more intermediate position, with a strong domestic focus and a somewhat average international clientele compared to other sectors. This is consistent with the role of Brussels as national banking center hosting a limited number of domestic and foreign-owned universal banks that primarily see Brussels as a gateway to the Belgian retail market in the post-crisis conjuncture.

4.5 Conclusion

Witnessing almost three decades of world cities research following Sassen's recalibration of the field, this paper has sought to close one of the empirical lacunae in the literature. While the field generated a wealth of insight on the geographies of world city networks (Taylor and Derudder, 2016), we argue that APS interactions at the world city scale have received less systematic attention. Reminiscent of Short *et al.*'s (1996) *dirty little secret*, we observed that empirical evidence on how APS professionals act as agents of global city formation is very limited (*pace* Cook *et al.*, 2007), in particular in their relations to clients (*pace* Rossi *et al.*, 2007; Parnreiter, 2010; Hanssens and Derudder, 2011). Most of what we know about the practices of what Sassen (1998, 2001[1991]) called a complex of APS firms is hence based on her guiding assumptions and piecemeal evidence from financial center research (e.g., Hall and Appleyard, 2009), and a set of qualitative studies limited to dynamics within APS subsectors (e.g. Faulconbridge, 2007a; 2007b; Grabher, 2001).

A landmark study was performed by Cook *et al.* (2007), but what remained lacking was a more

systematic attempt to reconstruct inter-firm/intra-urban APS interactions beyond emblematic cases such as London. Further, the Cook *et al.* paper left open questions about (i) the spatial scale of agglomeration at work in APS economies, (ii) how APS clusters can be qualified conceptually as either prone to pure agglomeration, or showing traits of industrial complexes or social networks, and (iii) to what extent APS in fact cater to international markets – a dimension often assumed, but seldomly researched. Engaging with these key questions, this paper has presented an analysis of a company survey with APS professionals in Brussels, a city more representative of a larger sample of intermediate cities in the world-city network. For example, the city's domestic orientation of financial services appears generalisable across second-tier financial centres (Fernandez, 2011). That said, the international orientation of law and advertising appears unique to Brussels as *de facto* capital of the EU, housing political and regulatory functions attractive to international lawyering and lobbying. Despite Brussels' propensity towards political and regulatory functions, the found structure of the APS complex has likely a more general validity, even though such a claim would need further corroboration.

The first and foremost outcome of the study is empirical proof for the existence of strong interdependencies within APS clusters: through an in-depth examination of the Brussels context, we found that there is indeed a complex that hinges on APS proximity and that services clients domestically and abroad, as the frequency and depth of formal and informal professional exchanges suggests that APS function in an integrated fashion, collectively enabling clients to function under conditions of financialised globalisation. Reviewing the nature of APS exchanges, we find that our APS cluster in fact constitutes a hybrid between the industrial complex and social network model (Gordon and McCann, 2000) allowing us to specify Sassen's initial ideas. The hybrid nature of APS clusters is evidenced by the relevance of formal trading links within and between subsectors, but also the substantial role of informal exchanges that are likely to be instrumental in building club-like structures that matter for future inter-firm collaborations (cf. Grabher, 2001; 2004). The latter observation suggests that proximity in APS clusters is a necessary, but not sufficient, condition to enter APS markets that also hinge on personal connections.

Second, our study also allows to pinpoint the *knowledge value chain* (Bassens and van Meeteren, 2015: 768) that connects the dots of the various professions within the complex. More precisely, finance emerged as "*the mother of all intermediate sectors*" (Sassen, 2016: 98), while closely interacting with classic vectors of corporation finance i.e. law and accountancy. The exposed structure puts empirical flesh on the bones of the idea that APS are in fact centered on an inner core of services jointly constituting "*a para-financial sector*" (Engelen *et al.*, 2014: 1086), confirming the dominance of "*vertical linkages*" as in the case of London (Cook *et al.*, 2007). Even though more research into the effect of these traced professional exchanges is needed, the strength of this para-financial APS complex chimes with the shifting role of world cities under financialisation, i.e. gearing up TNCs for (being key actors in) global financial markets. Another insight is that finance and ICT showcase mounting professional ties, most instrumentally responding to the needs of digitising financial institutions, but also indicating the merging of industrial fields of "*fin*" and "*tech*" (Hendrikse *et al.*, 2018; 2019). The fact that we find evidence for a close-knit para-financial community and a strong link between finance and ICT in a city that is not an established host of fintech activities, suggests that evidence from Brussels will likely be an underestimation of financial dominance elsewhere.

Third, our entry through professional APS interactions provides a sobering counterpoint to the globally networked picture conventionally drawn. Professional exchanges mostly rely on localisation economies playing out at the metropolitan scale. Echoing van Meeteren and Bassens (2016), we find that research on APS has perhaps too single-mindedly focused on the networked dimensions of APS geographies, being less sensitive to how APS agglomerations unpack "*on the ground*". The focus on inter-sectoral interdependencies has a substantial impact on what we find: yes, we find that segments of the complex (especially law and advertising) tap into global professional networks, but, taken together, APS work is mostly embedded in metropolitan professional communities. The geometric unit of localisation economies at times of digitisation hence overlays the metropolitan scale and illustrates that the spatial form of professional districts may be a bad predictor of factual exchanges. In sum, without negating the role of networks to gain economies of overview (Moulaert and Djellal, 1995; Van Meeteren and Bassens, 2016), our results chime with more nuanced readings of world cities as neo-Marshallian nodes in global networks (Amin and Thrift, 1992). Future research can meaningfully scrutinise how local and global professional exchanges perform tautological or complementary roles. However, not having started from an *a priori* scalar ontology, our inductive mapping does challenge "*flat ontology*" readings of APS exchanges and reasserts the scalar nature of APS communities (cf. Faulconbridge, 2007a).

Fourth, the analysis of APS "*hinterworlds*" allowed us to pinpoint the degree to which APS professionals cater to domestic and international clients. Despite the extraterritorial regulatory and political world city-functions of Brussels, we found that most clients are located in Belgium, not abroad. For Belgium, this confirms earlier studies by Hanssens *et al.* (2013) approaching APS provision from the client perspective, indicating that world cities beyond their role in global markets mostly serve regional economies. As such, the strong concentration of APS professionals in Brussels is also a reflective of the wider primacy of the city in the Belgian urban system, with Brussels being the center for specialised labor and associated higher-order central functions (van Meeteren *et al.*, 2016a). Global provision itself is mostly *European* in character, reflexive of its earlier-mentioned functions. Adding a methodological caveat, the small share of international APS work in Brussels may in part be a result of the location choices of its clients: Brussels is known to be one of the main gateways for international corporations to access European markets (Elmhorn, 2001), but this fact indicates that spatial proximity is paramount in this type of business. As Massey (2007) has found for the case of London, the internationalisation of APS work is often overblown for political purposes, whereas actual APS geographies remain much more contained to domestic provisioning.

To end, beyond the need for further disentangling localisation and network economies that support APS practices, and beyond the need to distinguish between domestic and more international segments of APS markets, any analysis of any APS complex must seek to account for the multiscale political-economic dynamics that reproduce its current dominance in urban economies as conveyor belts of financialised globalisation, whilst confronting any lingering "*dirty little secrets*" in the literature.

4.6 References

Amin, A. and Thrift, N. (1992) Neo-Marshallian nodes in global networks, *International Journal of Urban and Regional Research*, 16(4), pp. 571–587.

- Aujean, L., Castiau, E., Roelandts, M. and Vandermotten, C. (2007) Le positionnement des villes belges dans le réseau global des services avancés [The positioning of Belgian cities in the global advanced services network], *Belgeo: Belgian Journal of Geography*, 1, pp. 15–29.
- Bassens, D., Engelen, E., Derudder, B. and Witlox, F. (2013) Securitization across borders: Organizational mimicry in Islamic finance, *Journal of Economic Geography*, 13(1), pp. 85-106.
- Bassens, D. and van Meeteren, M. (2015) World cities under conditions of financialized globalization: towards an augmented world city hypothesis, *Progress in Human Geography*, 39(6), pp. 752-777.
- Beaverstock, J.V., Taylor, P.J. and Smith R.G. (1999) A roster of world cities. *Cities*, 16(6), pp. 445-458.
- Cassis, Y. and Wojcik, D. (2018) *International Financial Centres after the Global Financial Crisis and Brexit*. Oxford: Oxford University Press.
- Clark, G.L. and Connor, K. (1997) The informational content of financial products and the spatial structure of the global finance industry. In K. Cox, (Ed) *Spaces of Globalization. Reasserting the Power of the Local*. New York and London: Guilford Press, pp. 89–114.
- Clark, G.L. (2005). Money flows like mercury: The geography of global finance. *Geografiska Annaler, Series B: Human Geography*, 87(2), pp. 99-112.
- Cook, G., Pandit, N., Beaverstock, J., Taylor, P., Pain, K. (2007) The role of location in knowledge and diffusion: evidence of centripetal and centrifugal forces in the City of London financial services agglomeration. *Environment and Planning A*, 39(6), pp. 1325-1345.
- Corporate Europe Observatory (2017) The Corporate Europe Observatory guide to the murky world of EU lobbying, available online via <https://corporateeurope.org/en/lobbyplanet>, consulted on 22/06/2020.
- Elmhorn, C. (2001) *Brussels: A Reflexive World City*. Stockholm : Almqvist & Wiksell International.
- Engelen, E., Fernandez, R. and Hendrikse, R. (2014) How Finance Penetrates its Other: A Cautionary Tale on the Financialization of a Dutch University, *Antipode*, 46(4), pp. 1072-1091.
- Faulconbridge, J.R. (2007a) Exploring the Role of Professional Associations in Collective Learning in London and New York's Advertising and Law Professional-Service-Firm Clusters. *Environment and Planning A*, 39(4), pp. 965-984.
- Faulconbridge, J.R. (2007b) London's and New York's Advertising and Law Clusters and their Networks of Learning: Relational Analyses with a Politics of Scale? *Urban Studies*, 44(9), pp. 1635-1656.
- Faulconbridge, J. and Muzio, D. (2009) The financialization of large law firms: situated discourses and practices of reorganization, *Journal of Economic Geography*, 9(5), pp. 641-661.
- Faulconbridge, J. and Muzio, D. (2016) Global Professional Service Firms and the Challenge of Institutional Complexity: "Field Relocation" as a Response Strategy, *Journal of Management Studies*, 53(1), pp. 89–124.
- Fernandez, R. (2011) *Explaining the decline of the Amsterdam Financial Centre*. PhD thesis. University of Amsterdam.
- Fernandez, R. and Hendrikse, R. (2020) Offshore finance. In Mader, P., Mertens, D. and Van der Zwan, N. (Eds) *International Handbook of Financialization*. Abingdon: Routledge.
- Friedmann, J. (1986) The World-City Hypothesis, *Development and Change*, 17(1), pp. 69-83.
- Gordon, I., McCann, P. (2000) Industrial Clusters: Complexes, Agglomeration and/or Social Networks? *Urban Studies*, 37(3), pp. 513-532.
- Grabher, G. (2001) Ecologies of Creativity: The Village, the Group, and the heterarchic organization

- of the British advertising industry. *Environment and Planning A*, 33(2), pp. 351-374.
- Grabher, G. (2004) Learning in projects, remembering in networks? Communality, sociality, and connectivity in project ecologies, *European Urban and Regional Studies*, 11(2), pp. 103–123.
- Hall, S., Appleyard, L. (2009) 'City of London, City of Learning'? Placing business education within the geographies of finance, *Journal of Economic Geography*, 9(5), pp. 597-617.
- Hanssens, H. and Derudder, B. (2011) The urban geography of advanced producer service transaction links in Belgium, *Belgeo: Belgian Journal of Geography*, 1(2), pp. 17-28.
- Hanssens, H., Derudder, B. and Witlox, F. (2013) Are advanced producer services connectors for regional economies? An exploration of the geographies of advanced producer service procurement in Belgium, *Geoforum*, 47, pp. 12-21.
- Hendrikse, R., Bassens, D. and van Meeteren, M. (2018) The Appleization of finance: Charting incumbent finance's embrace of FinTech, *Finance and Society*, 4(2), pp. 159-180.
- Hendrikse, R., van Meeteren, M. and Bassens, D. (2019) Strategic coupling between finance, technology and the state: Cultivating a Fintech ecosystem for incumbent finance, *EPA: Economy and Space*, DOI: 10.1177/0308518X19887967
- Hoyler, M., Parnreiter, C. and Watson, A. (2018) Agency and Practice in the Making of Global Cities: Towards a Renewed Research Agenda. In M. Hoyler, C. Parnreiter, A. Watson (Eds) *Global City Makers: Economic Actors and Practices in the World City Network*. Cheltenham: Edward Elgar, pp. 5-22.
- Isard, W. (1956) *Location and space-economy*. Cambridge (MA): The MIT Press.
- Krätke, S. (2014) Cities in contemporary capitalism, *International Journal of Urban and Regional Research*, 38(5), pp. 1660–1677.
- Krijnen, M., Bassens, D., van Meeteren, M. (2018) Manning circuits of value: Lebanese professionals and expatriate world-city formation in Beirut, *Environment and Planning A*, 49 (12), pp. 2878-2896.
- Lüthi, S., Thierstein, A. and Goebel, V. (2010) Intra-firm and extra-firm linkages in the knowledge economy: the case of the emerging mega-city region of Munich, *Global Networks*, 10(1), pp. 114-137.
- Massey, D. (2007) *World City*. Cambridge: Polity Press.
- Moulaert, F. and Djellal, F. (1995) Information technology consultancy firms: Economies of agglomeration from a wide-area perspective, *Urban Studies*, 32 (1), pp. 105–122.
- Muzio, D., Brock, D.M. and Suddaby, R. (2013) Professions and institutional change: Towards an institutionalist sociology of the professions, *Journal of Management Studies*, 50 (5), pp. 699–721.
- Parnreiter, C. (2010) Global cities in global commodity chains: Exploring the role of Mexico City in the geography of global economic governance, *Global Networks*, 10(1), pp. 35–53.
- Parnreiter, C. (2019) Global cities and the geographical transfer of value, *Urban Studies*, 56(1), pp. 81-96.
- Pazitka, V., Wojcik, D. and Knight, E. (2019) Construct validity in world city network research: From office location networks to inter-organisational projects in the analysis of intercity business flows, SSRN paper, available online via https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3349287
- Rossi, E., Beaverstock, J. and Taylor, P. (2007) Transaction links through cities: 'decision cities' and 'service cities' in outsourcing by leading Brazilian firms, *Geoforum*, 38(4), pp. 628-642.
- Sassen, S. (1988) *The Mobility of Labor and Capital*. Cambridge: Cambridge University Press,.
- Sassen, S. (2001 [1991]). *The Global City. New York, London, Tokyo*. Princeton (NJ): Princeton University Press.

- Sassen S (2010) Global inter-city networks and commodity chains: Any intersections? *Global Networks*, 10(1), pp. 150–163.
- Sassen, S. (2016) The Global City: Enabling Economic Intermediation and Bearing Its Costs, *City and Community*, 15(2), pp. 97–108.
- Short, J., Kim, Y., Kuus, M. and Wells, H. (1996) The dirty little secret of world cities research: Data problems in comparative analysis, *International Journal of Urban and Regional Research*, 20(4), pp. 697–719.
- Storper, M. (1997) *The Regional World: Territorial Development in a Global Economy*. New York: The Guilford Press.
- Taylor, P. and Derudder, B. (2016) *World City Network: A Global Urban Analysis* (2nd edition). London and New York: Routledge.
- Van Criekingen, M., Decroly, J.-M., Lennert, M., Cornut, P. and Vandermotten, C. (2007) Local geographies of global players: International law firms in Brussels. *Journal of Contemporary European Studies*, 13(2), pp. 173-187.
- Van Meeteren, M. and Bassens, D. (2016) World cities and the uneven geographies of financialization: Unveiling stratification and hierarchy in the world city archipelago, *International Journal of Urban and Regional Research*, 40(1), pp. 62–81.
- Van Meeteren, M., Boussauw, K., Derudder, B. and Witlox, F. (2016a) Flemish Diamond or ABC-Axis? The spatial structure of the Belgian metropolitan area, *European Planning Studies*, 24(5), pp. 974-995.
- Van Meeteren, M., Derudder, B. and Bassens, D. (2016b) Can the straw man speak? An engagement with postcolonial critiques of 'global cities research', *Dialogues in Human Geography*, 6(3), pp. 247-267.
- Van Meeteren, M., Neal, Z. and Derudder, B. (2016c) Disentangling agglomeration and network externalities: A conceptual typology, *Papers in Regional Science*, 95(1), pp. 61-80.
- Waiengnier, M., van Hamme, G., Hendrikse, R. and Bassens, D. (2019) Metropolitan geographies of advanced producer services: Centrality and concentration in Brussels, *Tijdschrift voor Economische en Sociale Geografie*, DOI: 10.1111/tesg.12394
- Wójcik, D. (2013a). Where governance fails: Advanced business services and the offshore world, *Progress in Human Geography*, 37(3), pp. 330–347.
- Wójcik, D. (2013b). The dark side of NY-LON: Financial centres and the global financial crisis, *Urban Studies*, 50(13), pp. 2736–2752.

CHAPTER 5 : APS 'COMMAND AND CONTROL' FUNCTION

5 Analysing the APS command and control function: Corporate restructuring processes in the Brussels banking sector

5.1 Introduction

After having shown that APS are agglomerated at the intra-urban scale of Brussels (**chapter 3**), we sought to evaluate the actual interactions between APS and saw that finance occupies a central place in the interactions between APS in Brussels (**chapter 4**). The primary objective of this chapter is precisely to explore the nature of these relationships through a case study.

We propose to achieve this objective through the analysis of the restructuring of the banking system in Belgium. Since the 1990s, mergers and acquisitions (ING takes over BBL, Crédit Communal and Crédit Local de France become Dexia), reorganisations or individual layoffs (ING reduces its staff by a third in 2016⁹) have marked the Belgian banking sector.... In Belgium in 1995, the share of employment in financial and insurance activities was above the European average, whereas in 2018, it decreased to the European average (see **Table 9**). Over the same period, the share of gross added value created by the financial and insurance activities in Belgium remained high over the European average. In other words, the financial sector in Belgium has been able to maintain a high level of production with a significant drop in jobs. While this trend has been observed all over Europe, it has been much accentuated in Belgium. From **Table 10**, we clearly observe that this process is particularly intense in Brussels, where around half of the Belgian financial sector is located: in 2014, finance accounts for around 9 % of jobs and 19 % of added value in Brussels. It is also the story of this huge change, and the role of APS in this process, that I want to tell.

I therefore propose this case study of the restructuring of the banking sector to study in a concrete situation the real interactions between APS and the bank. I discuss two ideas from the literature on world and global cities, that APS form a complex (Sassen, 1991) and that APS enable world cities to take on a command and control role in a globalised economy (Taylor, Derudder, Faulconbridge, Hoyler, & Ni, 2014).

The first idea - APS as a complex - has been tackled in chapter 4 through the analysis of the interactions among APS sectors on the basis of a survey about their intensity, nature, location, etc. It emerged from the survey that, in Brussels, APS professionals from each sector were more frequently in contact either with professionals from the same sector or with professionals from the financial sector. It is therefore with the intention of studying in greater depth the interactions between APS and the financial sector, including more specifically the banking sector, that this chapter is situated.

In order to better understanding the nature of the interactions, the methodological option is to assess the role of APS in an in-depth study of the banking restructuring, starting from the hypothesis that APS are among the driving forces behind these restructurings. By adopting this larger perspective -

9 ING (2016) Rapport annuel

the study of the restructuring process of large banks in Brussels - I hope avoiding focussing too narrowly on my research object. Focusing too narrowly on APS may have led to conclude prematurely on the decisive importance of their interactions. By adopting this open perspective, I believe I have been able to better assess the specific role of APS.

This leads to the second idea I discuss in this chapter, the issue of command and control of APS. The observation of the relations among APS in company restructurings sheds light on a particular aspect of command and control, that of the question of the location of important decisions in restructuring processes. In particular, I raise the issue of command and control in the spatial reorganisation of the value chain of the banks in Belgium.

Indeed, the relationships that make up the APS complex to enable command and control remain little studied. Few researchers have committed themselves to the economic geography perspective of the production of globalisation processes (Parnreiter, 2014). While vertical relationships within groups seem obvious, horizontal links among subsidiaries or with other firms are more difficult to identify (Aujean, Castiau, Roelandts, & Vandermotten, 2007). I situate the problem/mobilise the concept of command and control of APS in the literature through two concomitant processes: the localisation of a command that results from the interaction among APS actors - because of their skills, market positions, network... - and the development of a financialised capitalism in which the demand for profitability of shareholder value takes precedence.

Since the 1980s, the economy has undergone a spatial redistribution of economic activities on a global scale. The resulting international division of labour has led to the concentration of the decision-making and coordinating locations of this economy in world cities (Friedmann & Wolff, 1982). Some empirical studies have attempted to better define the role of APS. For example, one can think of the role played by APS in different regulatory frameworks for the fiscal optimisation of their clients (Wojcík, 2013). One can also see the role of consultants in strategic and tactical changes in business management (see van Meeteren & Bassens, 2018 on the ABN-AMRO bank) or in knowledge production (see Faulconbridge on collective learning in the professional communities of legal and advertising services). The role of APS has also been specified as the assemblage of “resources and capabilities accessible from the archipelago of world cities that enable command and control in the cities of the world” (Bassens & van Meeteren, 2015)¹⁰. In sum, the work carried out by APS helps to prepare companies for the creation of shareholder value, both for the company and for APS itself.

Meanwhile, the maximisation of shareholder value has today become a fundamental logic that guides corporate movements (Ertürk, 2016; Froud, Johal, Leaver, & Williams, 2006) and without which it is impossible to understand the transformations that mark the bank today. This logic helps to produce the context in which banks are put under pressure to be profitable. The maximisation of shareholder value logic applies in capitalist banks by shareholders having their own demands and interests. Regulatory initiatives that (such as the PSD2¹¹ for example) aim to regulate access to the interface between banking and new technologies in the field of payments ultimately produce the regulatory conditions that define the conditions of access to these new markets for non-financial actors. This is not a moral assessment of whether the competition between banks and non-banks is legitimate, nor is it an

10 Bassens and Van Meeteren refer to a world city archipelago to describe a “material yet non-contiguous space of world city ‘islands’ which is (re)produced through the socio-spatial practices of advanced producer services (APS) firms as they assist in constructing (financial) accumulation strategies for their clients.” (Bassens & Van Meeteren, 2015, p. 62)

11 Revised Payment Services Directive (2015), see Table 13 on page 99.

assessment of the role of regulation in this ecosystem. Rather, the point is to stress that the banking sphere is changing, both in the contours of its activities and in the actors involved (Bassens & van Meeteren, 2015, p. 62).

The rest of this chapter is structured as follows. The following section provides a portrait of restructuring processes in the banking sector, through a review of the literature that presents restructuring processes along five dimensions: consolidation, internationalisation, outsourcing, flexibilisation and digitisation. Some of these processes overlap and encompass a similar reality. They are presented here separately to highlight different aspects in order to shed light on complementary aspects of restructuring. After the literature review, the methodological section presents the approach followed to build the case study of restructuring in the Brussels banking sector. The case study of restructuring in the Brussels banking sector is built on two types of sources. On the one hand, on the basis of a collection of information from the annual banking reports of the four main Belgian banks and an extensive review of the specialised economic press over the period 2008-2018. On the other hand, on the conduction of 28 semi-directive interviews with a diversified panel of banking professionals. Following the methodology, the results are structured according to the five dimensions identified in the literature. The results reveal a dual role of APS: their functions in the restructuring itself, and those in the new value chain that emerges from these restructuring processes. The relations between APS and the bank in bank restructuring processes shed light on the crucial role played by APS in enabling banks to operate in a financialised capitalism. This empirical contribution is then discussed and put into perspective in relation to the notion of command and control of the economy.

Table 9: Finance and insurance activities in the EU-28

	% of gross value added		% of employment	
	1995	2018	1995	2018
EU-28	5.0	4.9	2.7	2.5
Belgium	6.4	6.2	3.7	2.5
France	4.0	3.9	3.0	2.8
Germany	4.6	3.9	3.3	2.5
Spain	4.7	4.0	2.5	1.8
UK	6.2	7.1	4.2	3.3

Source: Eurostat

Table 10: Finance and insurance activities in Belgium

	% of gross value added		% of employment	
	1995	2014	1995	2014
Brussels Capital Region	16.8	19.1	10.5	8.8
Brussels employment basin	10.8	11.5	6.8	5.3
Antwerp employment basin	4.7	5.1	4.4	3.2
Ghent employment basin	3.1	3.7	3.1	2.5

Source: RSZ – ONSS

5.2 Theoretical considerations: corporate restructuring processes in the banking sector

This section provides an overview of the organisational and spatial changes in the banking sector at different scales during the period from the 1990s up to nowadays. Since the 1980s, financial, economic, regulatory and technological changes have continued to disrupt the banking sector in its organisational, strategic and decision-making aspects (Callandret, Rollet, & Lejeune, 2017).

The conditions under which the financial sector is evolving have undergone profound changes since the opening up of global financial markets and the establishment of the European Economic Area in the 1990s. The 1990s were a major turning point in the macroeconomic conditions surrounding banking activity in Europe. A series of deregulations of banking activities transformed the conditions under which banking activity takes place: the development of a single European market leading to a shift towards a market-based financing of the economy. With the development of a single European market, the possibility opened up for banks to expand their activities geographically in other euro area member countries (Goddard, Molyneux, Wilson, & Tavakoli, 2007). The single European market opens up international capital markets, i.e., sets the possibility for banks to finance themselves directly on the financial markets (Cassiers, de Briey, Degavre, & Provost, 1998).

The year 1993 marked the adoption of a single regulatory framework in Europe. The advent of this single market was only possible because the broadest definition of banking activity was accepted by all member countries: the universal banking model in which credit and deposit activities are authorised within the same institution (Cassiers *et al.*, 1998). A universal banking system allowing both types of financing developed (Butzbach, 2015), to the detriment of the multiple forms of banks that existed until then (cooperative banks, savings banks or mutual banks) (Bülbül, Schmidt, & Schüwer, 2013). These regulatory changes increased competition and consolidation of the sector, i.e. the creation of a banking sector made up of fewer larger players with a wider range of activities (Jeffers & Oheix, 2003).

There is therefore a shift from bank intermediation-based financing of the economy to market-based financing of the economy (Boussemart & Saidane, 2005; Howarth & Hardie, 2013). Methods of funding for banks have complexified. We can no longer consider a simple opposition between

methods of funding based on either credit or on capital markets: bank credit and capital markets-based methods of funding. We have to consider that banks “rely on the market to enable their lending in a variety of ways” (Howarth & Hardie, 2013).

A market-based financing of the economy is based on firms directly financing themselves on financial markets. Market-based banking is considered to be partly responsible for the financial crisis. Before the financial crisis of 2007-2009, there was the strong idea that financial systems should resemble as closely as possible a model financial system in which capital markets are the dominant force and banks are large, privately owned, purely shareholder-oriented and publicly traded companies (Bülbül *et al.*, 2013). This idea has been discredited since banks were rescued during the financial crisis (Bülbül *et al.*, 2013).

To frame the restructuring of the banking sector, I reviewed literature along five dimensions of consolidation, internationalisation, outsourcing (and offshoring), flexibilisation and digitisation. I observe each process at different scales. For each process and each scale, I note the key idea from the literature (**Table 11 and Table 12**). For a matter of clarity, the processes are here presented as separated, but it is certain that some processes are intertwined. The next sections develop each dimension of the restructuring process.

Scale \ Process	consolidation	internationalisation	outsourcing	flexibilisation	digitisation
Sector	The process of concentration remains restricted to the national level (Jeffers & Oheix, 2003).	International business has become a growth issue for the major European banks since the 1990s and more precisely since the end of the 2000s (Troudart, 2012).	Setting up technical partnerships can be an alternative consolidation strategy (commercial agreements, joint ventures, minority shareholdings) (Ayadi <i>et al.</i> , 2002).	The greater or lesser flexibility of the labour market appears to be a key driver for achieving cost synergies (Ayadi <i>et al.</i> , 2002).	The adoption of digital technologies could reshape economic geographies of finance (Hendrikse, Bassens, & Van Meeteren, 2018).
Firm	The EU Member States have gone through a phase of national consolidation leading to the creation of national champions, followed by cross-border M&A (Mishkin, 2010 in Bikoukrane, 2011).	Large internationalised groups are adapting to the requirements of competition policies (Beaujolin-Bellet, 2012). Banks create an international network or form alliances with foreign banks (Cossalter <i>et al.</i> , 2007).	Banks are outsourcing activities that are increasingly close to their core business / with higher added value (Bourdeaux, 2008; Pujals, 2005).	Banking institutions are tending to increase organisational flexibility in order to be more responsive to changes in the environment (Pujals, 2005). Strategic restructuring moves the company towards more flexible organisational forms (Rorive, 2005).	Digital restructuring is a workforce reduction strategy (Rorive, 2005).

Table 11: Transformation processes in the banking sector at different scales (1)

Scale \ Process	consolidation	internationalisation	outsourcing	flexibilisation	digitisation
- HQ	There is a correspondency between the number and concentration of bank headquarters and bank systemic risks (Flögel & Gärtner, 2018).	Some of the world's major firms are not necessarily among those that are highly internationalised (Vandermotten, 2016)	Banks are outsourcing activities that are increasingly close to their core business / with higher added value (Bourdeaux, 2008; Pujals, 2005).	The dominant model today is that of the flexible mobilisation of workers, following a deregulation movement based on shifting the regulation of working time to industries and enterprises. (Martinez, 2010)	Digitisation transforms retail banking, resulting in the optimisation, via the Internet, of the customer experience, the transformation of operational processes, the evolution of organisations and internal operating methods, and the transformation of the banks' business model (Brack, 2016).
- Branch	Banks are involved in merger processes which entail the closing of many branches (Alamá, Conesa, Forte, & Tortosa-Ausina, 2015).	The increasing complexity of banking systems resulting from interbanking and internationalisation has led to internal reorganisation marked by the redistribution of tasks at each level (Sechet, 1997).	There are continuities with regard to the employer's inclination towards a flexible work organisation at the level of company structures through the continuation of the trend towards outsourcing of the banking distribution network through the use of franchising. (Martinez, 2017)	Bureaucratic labour market models have been overturned in favour of more flexible variants, while at the same time many financial services firms have engaged in the wholesale spatial reorganisation of their activities (Leyshon & Thrift, 1993). While work organisation in retail banks is becoming more flexible, individual jobs are more rigidly defined constrained than previously (Sinden, 1996).	Multichannel strategies turn branches into less and less attractive places for clients who become independent enough to make their daily operations on their own (Mouillot, 2019).

Table 12: Transformation processes in the banking sector at different scales (2)

5.2.1 Banking on consolidation and internationalisation

The logics of consolidation of the banking sector have been studied in the 1990s (Berger, Demsetz, & Strahan, 1999). Consolidation was associated with technological progresses in financial services, creating opportunities to improve efficiency and increase value. New tools of financial engineering were said to be more efficiently produced by larger institutions. New delivery methods such as phone centres, ATMs, and online banking were considered to exhibit greater economies of scale than traditional branching networks (Berger *et al.*, 1999). Moreover, mergers and acquisition activity is closely related to changes in branch networks, particularly when the merger takes place in overlapping jurisdictions. It is therefore on a small scale that consolidation logics are supposed to have an impact (Avery, Bostic, Calem, & Canner, 1999).

With the formation of large multinational financial groups, many financial services companies have embarked on a global spatial reorganisation of their activities (Leyshon & Thrift, 1993). The deregulation of banking activities and processes of financial integration in Europe since the 1990s profoundly transformed the structure of the banking and financial markets in Europe, enabling the conditions for internationalisation of banking groups:

“The phenomenon of internationalisation of banking and financial markets has led to the gradual removal of barriers to national, European and even global mobility. The harmonisation of regulatory barriers is far from complete, but at the European level national legislation regulating financial institutions is converging. This has accentuated the importance of economic and technological barriers to the detriment of regulatory restrictions. ‘Cost’ and ‘performance’ factors are becoming paramount in the strategic decisions of banking and financial institutions regarding their entry or exit from a new market” (own translation of Jeffers & Oheix, 2003, p. 9).

The economic system opens up and complexifies, leading to economic and financial interrelations among territories that are diversifying and across increasing distances (Finance, 2016). Pressures of a more competitive environment caused a clear and major trend of employment decline for instance in British retail banks (Sinden, 1996). This environment also resulted in the establishment of large multinational financial groups, which generated issues regarding national regulations, insofar as the group as a whole is not considered as such (Vincent, 2012).

To what extent does internationalisation lead to the relocation of decision-making? In terms of organisational changes,

“We can see the closure of the banks as the end point of a series of changes in which functional control by branch was gradually abolished and transferred to regional or national centres, a process accompanied by a reduction in the autonomy of the branches, the elimination of middle management and their increasingly strict compliance with procedures and products developed at head office. This process of ‘financial distancing’, in which control is progressively centralised in one or two key locations, is linked to the increasingly close relationships between international, national and regional financial markets” Morrison & O’Brien, 2001, p. 302).

Given that regulators are located primarily in major financial centres and that the new regulation is primarily targeted at large, systemically important financial institutions, the use of the new regulation is likely to act as a powerful centripetal force in the post-crisis period (Wójcik & MacDonald-Korth, 2014).

The internationalisation of the banking sector is marked by the increased involvement of banks in the international money market and by the expansion of banking activities outside the national territory, whether through a branch office, a wholly or majority-owned subsidiary, or by the development of links with other banks internationally (Morris, 1987). Legally, the branch is directly dependent on the parent company, while the subsidiary enjoys a certain degree of autonomy in theory. Nevertheless, in a company run by a shareholders' meeting, it seems clear that decisions will be made in favour of the parent company, without giving as much power to the sometimes numerous subsidiaries. Italian researchers use the term 'functional distance' to characterise the distance between the headquarters of a bank and a given territory. They find that banks perform better when they are located in regions with a high presence of head offices, decision-making centres and other strategic functions of banks (Alessandrini, Croci, & Zazzaro, 2005).

During the financial crisis, European and national regulators demanded a reduction in the scope of banking activities, either geographically or in terms of business lines, in return for rescuing banks¹². In addition, not all banking activities are subject to the pressure of internationalisation with the same intensity. Some activities, such as retail banking, can generate "significant economies of scale at the national level alone, while other business lines, such as investment banking" are being pushed towards internationalisation (Jeffers & Oheix, 2003, p. 223).

"Language, regulation, taxation and consumer behaviour are other obstacles that prevent financial institutions from offering the same products to all European consumers, particularly in retail banking. Products designed and distributed within a national framework cannot simply be transferred to other countries" (Jeffers & Oheix, 2003).

5.2.2 Digitisation of the banking sector

The dimension of digitisation is particularly important to highlight. Digitisation reorganises the way the banking world operates today (Roman, 2017). Its implementation requires new IT expertise that is not always present within the bank (BIPE, 2017).

"When I started in the banking profession in the late seventies, the French banking sector was already being compared to the next 'steel industry', then liberalisation and deregulation went through it, strongly boosting jobs in the sector" (Nijdam, 2017)¹³.

Since the early 1980s, the liberalisation of the banking sector and changes in the comparative profitability of their various activities have led banks to make retail customers a profitable market (Gloukoviezoff, 2008). To this end, the service production process has been largely streamlined by relying on new information technologies and marketing theories (Gloukoviezoff, 2013). Investment banks are not under the same staff reduction pressure as commercial banks, because they already "suffered a certain degree of deterioration as a result of the crisis which they caused, and because they weigh less in terms of net banking income and number of employees than commercial banks"¹⁵. The concern of banks is to obtain maximum profitability, which translates into a search for constant

12 For example, in return for the aid granted following the 2008 crisis, the European Commission is demanding a reduction in the scope of the ING and KBC group, leading to the sale of the Belgian insurance subsidiaries (Vincent, 2013)

13 Analyse financière 28/09/2017, "Secteur bancaire cherche nouveau modèle" <http://analysefinanciere.org/2017/09/28/4-questions-a-christophe-nijdam-secteur-bancaire-cherche-nouveau-modele/>

growth (Fares, 2019a). Banks today are driven by the interest of their owners, i.e. the shareholders, whose objective is to increase the value of the stock they hold (to make possible a capital gain) and the dividends they receive each year (Fares, 2019a).

This means that the entire bank system is run with the aim of maximising income and minimising expenditure, which leads, for example, to a reduction in the number of bank branches against the interests of the populations concerned, to pressure on staff such that the number of burn-outs is becoming alarming, not to mention tax schemes to evade taxes, permanent lobbying to prevent legislation from undermining their profits (Fares, 2019b). Certainly, there is a cooperative banking sector¹⁴, but in countries like France or Belgium, it is still a very small minority and it has long been influenced by the logic of profit maximisation (Abhervé, 2015 ; Fares, 2019a). New technologies represent a challenge for banks in their competition on the financial market.

The banking law and the development of the mastering of new digital technologies are linked to the exacerbation of competition within the banking sector and to the emergence of new competitors such as fintech companies, GAFAs, phone operators (Pluchart, 2017). The growth of financial technology (fintech) is generating new business models by integrating financial services and information and communication technologies, in a process that Hendrikse *et al.* call ‘appleization’ or how financial incumbents mimic ICT companies while trying to neutralise the challenges of digitisation (Hendrikse, Bassens, & Van Meeteren, 2018). The year 2016 represents a decisive turning point in Belgium in this respect, both in terms of the scale of restructuring and the more frequent use of collective redundancy procedures, for which the financial sector supplants the metal and distribution sectors, which have regularly been the most affected since the financial crisis (Martinez, 2017).

What is striking when looking at the banking sector is the dominant discourse that technology is an inescapable force¹⁵ for or against which the bank must position itself. According to the consulting firm Accenture, a ‘GAFA-style’ banking transformation (like Google, Amazon, Facebook or Apple) can increase revenues, client engagement and reduce costs¹⁶. The change in customer behaviour is therefore not simply induced by the diffusion of mobile communications, but is also driven by the financial firms themselves, both with a view to reducing costs and to gain a temporary competitive advantage (Martinez, 2017).

The interface between banking and technology is particularly embodied by ‘fintech’ companies, based on the combination of financial services and technology. The development of the fintech domain is particularly well documented by consulting firms (Cichowlas, 2015; PwC, 2016) that try to establish the contours of the ‘disruption’ caused by this new type of company (Chesneau, 2019). However it is important to flag that the question of the competition between fintech and banks documented by consulting firms masks the question of the role of the consulting firms themselves in constructing the discourse on the subject, a discourse which prioritises the role of technological change over the role of actors. This is why the role of APS professionals or companies in the digitisation processes allows to

14 Cooperative banks are owned by cooperators. Each co-operator has one vote, unlike capitalist banks where the voting right is proportional to the number of shares held.

15 On this subject, see the L’Echo interview with Max Jadot, CEO of BNP Paribas Fortis on 16/03/2019 "La digitalisation s’accélère, c’est inarrêtable" <https://www.lecho.be/entreprises/banques/La-digitalisation-s-accelere-c-est-inarretable-Max-Jadot-BNPP-Fortis/10107787>

16 Accenture (2016) Digital performance of french firms. https://www.accenture.com/t00010101t000000_w_/fr-fr/acnmedia/accenture/fr-fr/interactive/digital-performance-index.pdf

delve deeper into the nature of the interactions between the APS complex and the financial sector (Bassens, Gutierrez, Hendrikse, Lambert, & Waiengnier, 2020).

5.2.3 Outsourcing and offshoring

Outsourcing and offshoring are two distinct strategies, with complementary logics, which are part of a deeper trend of major changes in firms' organisational modes in response to new challenges (Pujals, 2007). For these two management researchers, Mudambi and Venzin, outsourcing and offshoring can be analysed as aspects of the overall disaggregation of the value chain, as attempts by firms to combine the comparative advantages of geographical locations to maximise their competitive advantages from their own resources and skills. It is the interaction between geographical and competitive advantages that determines the optimal location of value chain components (offshoring decisions) as well as the boundaries of the firm and its control strategy (outsourcing decisions) (Mudambi & Venzin, 2010). These processes, which 'blur' the contours of companies (Beaujolin-Bellet, 2012, p. 4), lead to the question of the transfer of the company's control over the offshore or outsourced activity to another geographical area.

For a firm, outsourcing consists in "calling on a third party to entrust it with part of its activity" (Bourdeaux, 2008, p. 2). Bourdeau (2008) summarises the different ways in which outsourcing can take place, depending on whether the firm uses an internal or external service provider. Using an internal service provider consists of making an activity a subsidiary within a group (insourcing). Outsourcing may also consist of entrusting an activity to a third party company outside the group. Sometimes, outsourcing can take the form of partnerships (joint ventures) set up with companies in another sector of economic activity. Finally, from a geographical point of view, it is when outsourcing is not carried out in the national territory where the company is established that we speak of offshoring, which can take place in the same way as outsourcing -- within or outside the company. It appears that the more strategic and crucial the activity is for the company, and is therefore decisive the control over that activity, the more companies will choose to keep it within the group (Pujals, 2007). Conversely, the less strategic an activity is, the more companies will use an external service provider located in a country with low labour costs (Pujals, 2007).

While the processes of outsourcing and offshoring first concerned industrial sectors in the 1970s, they take on a new dimension as they affect higher value-added activities in services (Pujals, 2007). These processes intensified during the 1990s as a result of the liberalisation of international trade, increased competition (partly related to globalisation) and the technological revolution in the new information and communication technologies (ICT) sector (Pujals, 2007). So-called 'competitiveness' restructuring, carried out with a view to improving the performance of healthy or even profitable firms, became more widespread during the 2000s (Beaujolin-Bellet, 2012). For Rorive, outsourcing reflects a more profound transformation of companies' mode of organisation, whose form of reconfiguration is not fixed in time but evolves as companies try to adapt to increasingly unpredictable, globalised, demanding and competitive markets (Rorive, 2005). Froud suggests that this context disposes executives to make short-term profits through a multiplicity of pragmatic short-term strategies, rather than promoting corporate growth and welfare through coherent, even rational, long-term planning (Froud *et al.*, 2006).

Within contemporary corporate restructurings, the banking sector is particularly prone to outsourcing because, first, it is highly vertically integrated - most banking services are produced by the banking companies themselves, which offers potential for outsourcing them to a more specialised service provider (Pujals, 2007). A second reason lies in the nature of the bank's activities, which require the processing of a large amount of information, which is likely to be managed electronically (Pujals, 2007). Nevertheless, it can be noted that since outsourcing processes can increase the risks incurred by credit institutions, national and international, European banking policies limit outsourcing operations, which is a specificity compared to other economic sectors (Bourdeaux, 2008). Within the banking sector, the waves of outsourcing and offshoring have mainly taken place in non-strategic activities, mainly the IT function (hardware, software and maintenance) (Bourdeaux, 2008; Pujals, 2007), and have gradually spread to support functions for activities such as call centres or payment processing (Pujals, 2007). The use of offshoring is observed mainly in large banking firms (Pujals, 2007). Offshoring occurs when the main objective of the firm is to reduce labour costs by relocating activities to low-wage countries (Park & Hollinshead, 2011; Pujals, 2007). India accounts for more than 70% of global financial firms that make the decision to offshore in 2002-2003 (Pujals, 2007). In the European banking sector, the core business remains almost exclusively handled in-house, with outsourcing mostly related to non-core activities, and in particular so-called 'support' functions (Pujals, 2007). A study by the United Nations Conference on Trade and Development and the Roland Berger consulting firm on 500 large European companies (2004) puts forward two main motivations for outsourcing operations. For 90% of financial firms, the main reasons are cost reduction, through economies of scale achieved by a specialised service provider working for several clients or geographical location in a country where labour costs are lower; and for 50% of firms, the main reason is investment optimisation, which consists in reducing non-strategic tasks in order to focus on the core business (UNCTAD & Berger, 2004).

5.2.4 Flexibilisation of work

While changes have taken place in most industries in European countries, few examples can be compared with the profound transformation of retail banking from strong, strictly regulated, 'lifelong' employment organisations to highly competitive firms with fragmented career structures and a new focus on sales and performance (Regini, Kitay, & Baethge, 1999). Changes in employment relationships can be examined under the banner of 'labour flexibility', an umbrella term that refers to a variety of strategies adopted by employers to more closely adapt the workforce to changing quantities and qualities of output (Pollard, 1995; Scott & Storper, 1990). The introduction of teleworking through remote terminals contributes to the flexibilisation of the financial sector (Scott & Storper, 1990). The organisation of work at head offices is subject to changes towards more flexible hours and wages. Labour flexibility in the retail banking sector includes the growth of part-time, temporary and irregular working hours (Sinden, 1996). The introduction of part-time and irregular hours is forcing banks to confront the trade-off between wage costs and the quality of services to be provided (Pollard, 1995). Times have changed since the days when stable jobs, with collective working hours, ensured the synchronisation of all social time (Martinez, 2010). Variations in working hours have become commonplace, and free time reserved for family and personal life is being invaded by work (Martinez, 2010). Next to changes in time, by taking into account a global cost reasoning, the spaces occupied by FIRE sector firm headquarters request in certain cases, less costs per employee to move in new buildings, rather than to renovate a building (Nappi-Choulet, 2011). Meanwhile the

introduction of teleworking and open working spaces also allow to reduce the space required per employee.

There are qualitative changes in banking work, with an increased polarisation of qualifications and a feminisation of lower qualifications (Morris, 1987). This polarisation of qualifications results in higher wages for the highly skilled employees (Hunter *et al.*, 2001). These authors point out that it is not technological change itself, nor individual skills that determine the effects on jobs and wages, but management strategies (Hunter *et al.*, 2001; Martinez, 2017). In this thesis I will refer to ‘high’ and ‘mid’ or ‘low’ activities to refer to the level of knowledge and qualification.

5.3 Methodological aspects

I have sought to understand the role played by APS in reshaping the spatial organisation of the banking sector. I chose to reconstruct the trends that structure the banking sector from the internal point of view of its players. To do this, I opted for a qualitative strategy based on a series of interviews with various players in the banking sector. The objective was twofold: to understand the concrete materialisation of the restructurings within the four major banks, and the role played by APS in these restructurings. So interviewees did not need to occupy a particular job position to be likely to be able to answer these questions: it was the diversity of actors and their interests that allowed me to reconstruct an informed response on the general tendencies of the sector. I then went through the transcription of the entire interviews, which allowed me to carry out systematic keyword analyses. It is on the basis of this collection of hierarchised information that I tried to reconstruct as faithfully as possible the trends that seem to me to be structuring, not hesitating to mention the existing controversies. In this sense, the information collected has been interpreted and reconstructed. This approach involves a degree of subjectivity both in the choice of actors and in the selected statements, choices that cannot be neutralised in the name of a standardised methodology or a rational perspective (Barbot, 2010). The first interviews allowed me to assess the relevance of my theoretical hypotheses and to circumscribe my research questions. The stance adopted in this case was shaped by the back and forth between the interviews and the literature review, which shifted the pre-defined fields of interest regarding bank restructurings (Barbot, 2010).

I focused in this research on the four large banking groups that constitute the main actors of the banking sector in Belgium (Febelfin, 2017). This choice allows to grasp the main trends of the sector, but also limits the subject to large universal banks and not to smaller banking actors present in Belgium. The banking sector is not the most accessible sector to approach. It is a sector where the vocabulary remains technical (Fares, 2019a) and where people belong to a privileged social category (Bauwelinkx, 2011). The difficulty encountered in conducting interviews with people from the financial sector in this case consisted in mastering the conversation as well as in the conditions of access to the actors themselves. This is why the strategy I initially developed was to start with the contacts of people close to me in the first instance, and by a ‘snowball’ technique to approach new contacts recommended by these first people I met (Sauvayre, 2013). This allowed me to immediately enter into a relationship of trust with the speakers and to familiarise myself with their speeches. I conducted 15 interviews between January and April 2018. The elements brought back during the conversations allowed me to refine my analysis grid and to develop the main viewpoints of the actors. I then tested my interpretations of trends in 13 additional interviews with new stakeholders between

June and July 2019 (see list of interviews in Appendix). In particular, I completed my documentation on the field of digital transformations by selecting people based on the online description of their function or on the professional network LinkedIn. Participants were assured that their responses would remain confidential.

I thus conducted 28 semi-directive interviews with different categories of actors who could shed light on restructuring processes: they were emblematic of actors with different levels of interest and knowledge of the subject. Within the three major banks¹⁷ I spoke with people in the following positions of responsibility: managers, back office, IT specialists, analysts, traders, branch managers, HR. I interviewed trade union representatives and trade union sectoral officials. I have had contacts with the employers' federation of the financial sector, Febelfin and with employees at the National Bank, particularly in terms of exchanging documentation. Finally, I also conducted interviews with people from civil society, working in NGOs on financial issues. I thus focused on the point of view of the managers, trade unions and employers' federation.

In total I spoke to 9 women and 22 men in French¹⁸ at the university, at bank headquarters or in cafés in the surrounding area. The speakers were questioned on the following themes: their understanding of the causes and consequences of bank restructuring; the geographical dynamics of their bank; the impact of group logics in spatial reorganisations; their description of the functions / departments affected by restructuring; how they would characterise the profiles sought within banks; the links between digitisation and job cuts; the implementation of restructuring / the intervention of external companies such as APS. The aim of the interviews was to highlight some of the key elements of the intervention of APS companies and highlight the geographical dynamics of the major banking players.

The semi-structured interview approach is common to study the role of APS professionals: (A. Cook, Faulconbridge, & Muzio, 2012; Yamamura, 2019), (Muzio, Kirkpatrick, & Kipping, 2011) on management consultants; (Faulconbridge, 2007) on advertisers and lawyers; (Lai, 2016) on financial advisers; (Kantola, 2016) on PR consultants). With some 20 such diverse speakers on a relatively broad issue, I cannot claim to be able to provide a comprehensive study of the workings of the financial sector as a whole. Nevertheless, I asked the speakers to reflect on the trends that they consider to be structural, on the divergent interests that agitate the sector, and to mention their own positioning.

Moreover, in order to make sense of the subjective speech held by the speakers, I chose to compare their statements with written and numerical data, an approach inspired by Froud *et al.* (2006), which can be summed up by the expression 'narratives and numbers'. I have thus relativised the narratives of the actors (e.g. "branches have become obsolete following the development of phone banking applications") in relation to the numbers (e.g. banking branches have been in decline in Belgium since the 1980s, see (Huysentruyt, Lefevre, & Menon, 2013)). I was also able to situate the discourse of the official documents in relation to the speeches of the speakers: the 'multi-channel' approach promoted

17 We were not able to get contacts at KBC, neither by snowballing nor by direct selection on the internet. To overcome the lack of primary data at KBC Bank, the interviews were supplemented by a careful focus on articles found in trade press and official KBC documents. We also conducted interviews at smaller banks/private banks, which are not directly used in this study, but which allowed me to compare and pinpoint trends within the different large banks.

18 In French with French-speaking interlocutors, in French supplemented by expressions in Dutch or English with bilingual interlocutors, and in Dutch and English. Sometimes two people express themselves during the same interview.

by the bank (online and in branch customer interaction) masks the increase in the use of franchising in bank branches (the bank is in fact distancing itself from the management of branch networks).

To obtain these ‘numbers’, I supplemented interview data with an extensive review of documents. The information gathered comes from official documents from banks (press releases, annual reports), industry players (professional associations, trade unions), specialised press (trade press) and academic literature. I have carried out an economic press review covering the period from 2008 to 2020. It is the triangulation of these diverse sources of information that allows me to support, qualify or even highlight the inconsistencies of the elements advanced in the analysis.

5.4 The role of APS in the restructuring processes of the four large Belgian banks

The next section traces the role played by the APS through the restructuring of the four large Belgian banks. I hypothesise here that the work of the APS facilitates the implementation of processes of flexibilisation, in particular the use of outsourcing or offshoring in a banking sector which is going digital.

For the rest of this chapter, I propose a reading of the different modalities of the role of the APS through the banking sector restructuring processes discussed in the previous chapter. These are the processes of consolidation, internationalisation, outsourcing and offshoring, flexibilisation and digitisation. For each process, I seek to observe the modalities by which interactions with APS can be found and to specify the scale of these interactions.

5.4.1 Consolidation

This section explains the consolidation processes which have led to the composition of the Belgian banking sector today. The Belgian banking system follows the classical path of the European national economies at the time of the establishment of a common European market in 1993. With some hesitation at first, the banking sector is consolidating, i.e. concentrating via a series of corporate mergers and acquisitions. In 1995, the country's three largest banks, Générale de Banque (ex-Fortis), Banque Bruxelles Lambert (taken over by ING) and Crédit Communal de Belgique (ex-Dexia) attempted a merger, which was to end in failure (Cassiers *et al.*, 1998). The mergers finally take place with French banking groups for the creation of Dexia : via the merger of Crédit Communal with Crédit Local de France (1996). And with Dutch banking groups (private and public) to create Fortis Bank via the integration of Générale de Banque into a Belgian-Dutch bank insurance holding company (1999) and the absorption of Banque Bruxelles Lambert by the Dutch group ING (1997). KBC Bank will be formed by the merger of various Belgian financial institutions, savings banks and cooperative banks in 1998 (see **Figure 5**).

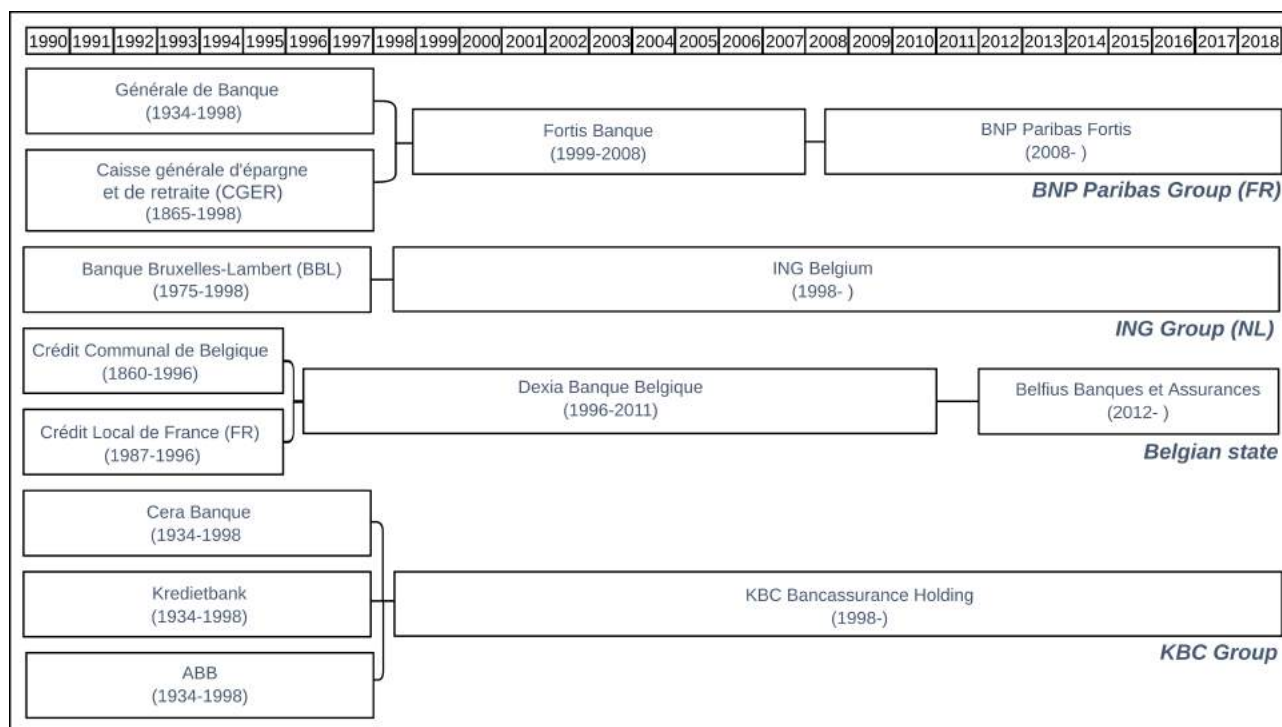


Figure 5: Large banking groups in Belgium (1990-2018)

A. Formation of the four Belgian banking groups

BNP Paribas Fortis is a bank that has changed ownership several times. During the 1990s, the Fortis group merged with Générale de Banque, the bank of Société Générale de Banque, a company linked to the economic development of Belgium, and with the CGER (Caisse Générale d'Epargne et de Retraite), Belgium's main savings bank. The privatisation of these two public institutions gives Fortis the status of Belgium's leading bank. In 2008, Fortis went bankrupt and was acquired by the French group BNP Paribas, making it its Belgian subsidiary BNP Paribas Fortis.

The bank ING is created by the takeover of the second largest Belgian bank by the Dutch group ING in 1998. The Dutch group ING acquired BBL (Banque Bruxelles-Lambert), making it its Belgian subsidiary ING Belgium. When it went bankrupt in 2008, ING Belgium received a capital injection of EUR 10 billion from the Dutch State¹⁹.

Belfius Bank is the name of the former Dexia bank. Dexia was created by the internationalisation of Crédit Communal, which merged with Crédit Local de France in 1996. The activity of the Dexia group focuses on public sector banking (Dexia Annual Report, 2008). In 2002, Dexia merged with the banking group Artesia Banking Corporation, making it the second largest Belgian financial group²⁰. In 2008, Dexia bank went bankrupt and the French, Belgian and Luxembourg governments recapitalised it for an amount of EUR 6.4 billion. Three years later, Dexia is once again bankrupt. In 2011, the Dexia Group is dismantled and the Belgian State takes over Dexia Bank Belgium for the amount of

19 Le Monde (19/10/2008) L'État néerlandais injecte 10 milliards d'euros dans la banque ING https://www.lemonde.fr/la-crise-financiere/article/2008/10/19/l-etat-neerlandais-injecte-10-milliards-d-euros-dans-la-banque-ing_1108688_1101386.html

20 Le Soir (07/03/2001) Banque Bacob et Artesia vont unir leur destin au groupe Dexia Banque <https://www.lesoir.be/art/banque-bacob-et-artesia-vont-unir-leur-destin-au-groupe-t-20010307-ZOQP6P.html>

EUR 4 billion²¹. This operation splits the banking activities between the retail bank which will be renamed Belfius and the bad bank Dexia, a ‘bad bank’ for toxic assets for which the Belgian State provides a 54 billion²¹ guarantee. If the Belgian government does not pay out more than 1% of its GDP for the rescue, the amount of the guarantees granted represents 15% of Belgian GDP (and is worth only 2% of that of France)²². As Belfius is gradually getting back on its feet, in 2014 the Minister of Finance announces the intention to privatise Belfius²³. In 2017, the Board of Directors and the Management Committee unanimously opted for a partial privatisation of Belfius²⁴, which provoked strong reactions from trade unions, associations and citizens' groups²⁵. For the time being, the decision is postponed²⁶, making Belfius the only public bank in Belgium.

KBC is a Belgian bank that was formed in 1998 by the merger of the “three pillars of Flemish finance”: Cera Bank, Kredietbank and the insurer ABB²⁷. It is owned by the Cera holding company, the Boerenbond and several wealthy Flemish families who own Almanij (Algemene Maatschappij voor Nijverheidskrediet). In 2008, KBC went bankrupt and received aid of 3.5 billion euros from the federal government and 3.5 billion euros from the Flemish government²⁸. The group has to sell a large part of its activities and subsidiaries, mainly those not directly related to its core business. The debts are finally repaid and the group resumes its activities. In 2016, KBC splits its activities into three banners in Belgium: KBC in Flanders, CBC in Wallonia and KBC Brussels in Brussels.

The establishment of banking groups as we know them today was achieved through mergers of public and/or private institutions which led to the consolidation of the banking industry. All these mergers are part of the prospect of creating large financial groups of international dimension whose activity now extends beyond the traditional contours of the business lines, through the development of *bancassurance* (Martinez, 2017). In the course of the 2000s, the consolidation of the banking sector in Belgium and within European countries led to the emergence of pan-European financial conglomerates with market and savings activities, based on the universal banking model (Cassiers *et al.*, 1998; Goddard *et al.*, 2007). Moreover, the consolidation of the sector through mergers and acquisitions was directed towards the insurance sector, which led to a diversification of activities on the basis of the *bancassurance* model (Jeffers & Oheix, 2003). These mergers have led to a reconcentration of the branch network. Researchers show that the consolidation led to a massive physical reconfiguring of Belgium’s retail-branch networks, on which the availability and usage of online banking surged.

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- 21 Trends tendances (10/10/2011) Dexia : les 4 chiffres-clés de la vente à l’État belge <https://trends.levif.be/economie/banque-et-finance/dexia-les-4-chiffres-cles-de-la-vente-a-l-etat-belge/article-normal-205391.html>
 - 22 L’Echo (10/10/2011) Les détails du sauvetage <https://www.lecho.be/entreprises/banques/Les-detaills-du-sauvetage/9113844>
 - 23 VRT (12/10/2014) Van Overtveldt : "Belfius op termijn privatiseren" https://www.vrt.be/vrtnws/nl/2014/10/12/van_overtveldt_belfiusoptermijnprivatiseren-1-2116789/
 - 24 Communiqué de presse Belfius (21/04/2017) Le conseil d’administration et le comité de direction optent à l’unanimité pour une privatisation partielle de Belfius https://www.belfius.be/about-us/dam/corporate/press-room/press-articles/downloads/fr/2017/Communique_Belfius_Raad_Van_Bestuur_21_04_2017.pdf
 - 25 Plateforme Belfius est à nous <http://www.belfiusestanous.be/>
 - 26 Trends Tendances (22/02/2019) "Pas encore le moment opportun pour privatiser l’actionnariat de Belfius" <https://trends.levif.be/economie/banque-et-finance/pas-encore-le-moment-opportun-pour-privatiser-l-actionnariat-de-belfius/article-normal-1096403.html>
 - 27 L’Echo (07/06/2008) KBC ou la success story d’un célibataire endurci <https://www.lecho.be/actualite/archive/KBC-ou-la-success-story-d-un-celibataire-endurci/7554245>
 - 28 Trends Tendances (07/09/2018) KBC, du sauvetage public aux généraux bénéfiques <https://trends.levif.be/economie/banque-et-finance/kbc-du-sauvetage-public-aux-generaux-benefices/article-normal-887955.html>

“Classic banks began to boost their online portals, cross-selling products via their website in order to reach new clients, diversify their distribution channel and introduce home-banking” (Huysentruyt *et al.*, 2013, p. 292).

B. Post-crisis shift of ownership structures

Since the financial crisis the characteristics of the main players in the sector have undergone significant changes. Ayadi *et al.* (2016) addresses the diversity of bank types and ownership structures in European countries, and identify the response function of each model in a crisis situation. Their *Banking business model monitor 2015* highlights the singularity of the Belgian case, which, unlike other European countries with a stable business model, is moving from investment and wholesale to retail oriented business models in 2008 (Ayadi *et al.*, 2016). The authors attribute this shift to the failure of two large banks, Dexia and Fortis who rely more on retail oriented activities than investment activities in terms of assets : customers loans account for between 55.6% and 78.5 % of funding (Ayadi *et al.*, 2016, pp. 20–21). It remains questionable however, whether this is the sole explanation, and whether a more profound shift happened in the funding of Belgian banking activities. For sure, at the end of the crisis, three of the four large Belgian banks were bailed out by the public authorities and one bank was sold to a French group. Today, there is one state-owned bank, two banks that are subsidiaries of foreign private groups and one bank owned by a Belgian private group.

C. Uniformisation of the Belgian banking landscape

At the end of a decade of restructuring, privatisation and concentration, the Belgian banking sector is seeing the virtual disappearance of public credit institutions and the integration of the main banks into foreign, Belgian-foreign or (mainly Flemish) cooperative groups (Vincent, 2012). This is the gradual disappearance in Belgium, as in Europe, of a ‘three-pillar’ banking system consisting of private banks, (public) savings banks and (mutual) cooperative banks (Bülbül *et al.*, 2013). The four banking groups together today constitute about 80 % of the banking sector’s total equity (Febelfin, 2017). The 2008 financial crisis crystallised the systemic risk associated with the composition of the sector, in which the failure of one group is likely to alter the equilibrium of the entire system. At the end of the crisis, the bancassurance model is being called into question, as is the public credit sector and the cooperative sector (Vincent, 2012). There is a refocusing of banking activities within the Belgian national territory, as well as a trend towards the separation of banking and insurance activities (Vincent, 2012). The Belgian banking sector is also characterised by substantial savings and the weight of banks in the economy (Vincent, 2012). The household savings rate falls from 16.7% of income in 1999 to 11.5% in 2017, slightly below the European average (Febelfin, Facts&Figures, 2017).

5.4.2 Internationalisation

Next to the story of consolidation, the role of capital city played by Brussels in the European integration helped to accelerate the internationalisation of the banking sector. Brussels is both a national capital city and a city that serves as an interface between the economic and political system

(Vandermotten, 2016). At the national level, Brussels is home to the majority of bank headquarters. At the same time, the location of the European institutions in Brussels makes Brussels a preferred location in Europe for the establishment of foreign banks (Elmhorn, 2001). In addition, the shareholding structure of Belgian banks is highly internationalised, which means that the decision to turn out dividends is not in their control. With the takeover of Fortis Bank by the French group BNP Paribas in 2008, the shareholding structure of the main institutions changed significantly. Febelfin, the financial industry federation, estimates the share of banks with decision-making centres abroad at 83%, a proportion that is exceeded in Europe only by Luxembourg (calculated on the basis of Febelfin data, key figures 2017). Having decision centres located abroad results in less knowledge of the markets and therefore difficulty in obtaining credit for companies, diluted responsibilities, but also in the transfer of funds from the most profitable subsidiary to its abroad headquarters (Vincent, 2012). One example is ING, which has paid 7.2 billion in dividends to its parent company in 10 years²⁹. This situation raises the problem of the limits to regulation, insofar as the group as a whole is not considered as such (Vincent, 2012).

A. *Rising of foreign ownership post-crisis*

In the post-crisis period of 2008, two of the major Belgian banks became subsidiaries of banking groups with their headquarters abroad. Having a decision-making centre abroad is a source of structural change, as a trade unionist explains:

“The takeover of banks by foreign groups is a source of structural change and of disappearance of certain functions, because these groups have their structure in the parent companies. It is obvious that there has been a phenomenon of outsourcing or transfer of activities to other centres within the group for a certain number of IT-style, logistical or other activities. This is a phenomenon that has been going on for about tens of years due to changes in the structure of the companies. The most revealing examples are ING and BNP. It is obvious that there have been a number of decision centres that have been taken over by the parent company. This shows that there has been a slow erosion of employment at the banking level” (Interview IX).

The evolution of the decision centres provides an insight into how the logic of mergers and acquisitions is transforming the hierarchies between banking institutions.

For banks, the example of trading rooms illustrates the evolution of decision-making centres. At the end of 2016, ING had decided to centralise a large part of its trading room in London, to the detriment of Brussels and Amsterdam. This room currently employs 80 FTEs, compared with more than 300 before the restructuring initiated by ING³⁰. The Dutch parent company motivated the move by a desire to “simplify, rationalise, standardise, increase scale”³⁰. The financial markets department in Belgium was therefore greatly reduced.

For BNP Paribas Fortis, the situation is equivalent.

“In 2008, Fortis had four trading rooms, located in Brussels, Utrecht, New York and Hong Kong. With the demerger of the Belgian-Luxembourg and Dutch activities, the trading room in

29 L'Écho, 3 octobre 2016. "En dix ans, ING Belgique a versé 7,2 milliards d'euros au groupe"

<https://www.lecho.be/dossier/banques/En-dix-ans-ING-Belgique-a-verse-7-2-milliards-d-euros-au-groupe/9815173>

30 L'Echo (01/02/2020) "Finance ING rapatrie 45 jobs de Londres vers Bruxelles"

<https://www.lecho.be/actualite/archive/finance-ing-rapatrie-45-jobs-de-londres-vers-bruxelles/10204942>

Utrecht is no longer part of the package. BNP Paribas therefore remains at the head of 3 trading rooms employing a thousand people, half of whom work in the sole Brussels room. The French group already has two trading rooms in Paris and London, but also in the United States, Asia and in the major cities of Italy and France”³¹.

In 2018, the BNP Paribas Fortis trading room is the one that has been the most transformed since the financial crisis.

“Before the crisis, the trading room was Fortis' headquarters. It is now just one of several subsidiaries of BNP Paribas. Before the financial crisis, the former trading room had 400 staff. Afterwards, the staff was reduced to 150 and now 80. After the crisis, the trading room refocused on the flow of clients. BNP Paribas concentrates large clients and large orders in London”³².

As underlined in the following passage:

“There are centres of competence that have remained, centres of competence where there really were skills that were recognised, etc. But unfortunately there are many things that have been transferred to Paris, such as the trading room. It still exists today in the centre of Brussels, and I believe that there may still be around fifty people working there. In Fortis's time it was 600 people, so it is no longer comparable. This has led to a further drastic staff reduction” (Interview XVII).

The Belfius group has several trading rooms, in Brussels, Paris and Luxembourg. Since the financial crisis, the trading room at Belfius has changed. Located in the bank tower on Place Rogier in Brussels, its staff has been reduced.

“At the time of the financial crisis, the number of staff between 2007 and 2008 was 130. After the crisis, the staff increased up to 80-85 people and today the room has 100 staff members”³².

Nevertheless, an office of 70 jobs was created for the employees in Ghent, duplicating the Belfius trading room. The reduction in staff in the trading room is attributed to the focus on value-added transactions.

“The activity where the part of client advice is reduced and where the added value is low has been digitised at a very fast pace”³².

Only the more complex activities, which cannot be automated, remain in the trading room. Advice to the retail client does not represent added value. However, for advice to corporate and asset management clients, Belfius signed a partnership in 2017 with Kepler Cheuvreux, an independent European securities broker³³. It appears that the strategy is to outsource the service to a specialised company.

For KBC, the situation is different. After selling one of the buildings that made up its Brussels headquarters, it moved its trading room to one of its two remaining buildings. The new premises

31 L’Echo (07/11/2008) Quel avenir pour les salles de marchés belges ? (own translation)

<https://www.lecho.be/actualite/archive/Quel-avenir-pour-les-salles-de-marches-belges/8100864>

32 L’Echo (03/08/2018) Les salles de marchés changent de visage <https://www.lecho.be/les-marches/actu/actions/les-salles-de-marches-changent-de-visage/10036999.html>

33 Press release Kepler Cheuvreux (s.d.) https://www.keplercheuvreux.com/press_releases/17.aspx or Press release Belfius (23/11/2017) <https://www.belfius.be/about-us/dam/corporate/press-room/press-articles/downloads/en/2017/Press-release-Belfius-Kepler-Cheuvreux-23-11-2017.pdf>

accommodate 164 workstations compared to 200 in the old building. However, the bank did not reduce staff numbers during the move³⁴. This indicates the use of a flexible office-style layout.

B. International division of labour allows outsourcing/offshoring

The use of an international division of labour affects almost all the functions of the bank's back office, and sometimes the mid-office. At ING, for example, the administrative functions are intended to be eventually transferred to Asia, while part of the risk management activities will be relocated to Poland³⁵. These are positions in the main control room of the infrastructure services division. In customer services and business units, ING also wants to transfer jobs (50.6 FTEs) to low-wage countries: Bratislava in Slovakia and Manila in the Philippines. In the past, jobs had already moved from Brussels to these countries³⁶. In 2014, ING Belgium announced at a works council meeting, the outsourcing and relocation of documentary credit activities to Manila and Slovakia (148 jobs in Brussels)³⁷. The question of labour costs seems thus a crucial factor in the possibility of offshoring an activity.

In the early 2000s, KBC moves the processing of its domestic and international payments to Fin-Force, its 90%-owned outsourced back office subsidiary founded with Electronic Data Systems (EDS)³⁸, with Fin-Force taking over the 116 employees of the corresponding departments of KBC Bank in Brussels³⁹. While KBC was the subsidiary's sole customer to begin with, a few years later other major banks joined the ranks of the shareholders (DZ Bank, Rabobank Nederland) and a second location was opened in Bratislava⁴⁰. In 2011, the KBC group then relocates 250 to 500 back office jobs to the Czech Republic, with a series of activities in the field of payments and accounting in 2011. In addition, 4 divisions (65 jobs) will be added in 2015: the scanning centre for transfers, a service for the administrative processing of damage claims (insurance), the internal account manager and a division for pricing studies⁴¹.

“At BNP, all invoicing and expense reports are done in Portugal. But beware, this is not an outsourcing, it's still the bank that has a branch there and has workers there. The idea is really to have workers there who are committed to Portuguese law, with Portuguese social rules that are cheaper than in Belgium. So that's how an economy is made, by decentralisation” (Interview XVII).

34 L'Echo (22/04/2017) KBC s'offre une nouvelle salle de marchés <https://www.lecho.be/actualite/archive/KBC-s-offre-une-nouvelle-salle-de-marches/9885826>

35 L'Echo (22/10/2016) "ING délocalise une partie de ses activités vers les pays à bas salaires" <https://www.lecho.be/economie-politique/belgique-economie/ING-delocalise-une-partie-de-ses-activites-vers-les-pays-a-bas-salaires/9823150>

36 L'Echo (05/12/2015) <https://www.lecho.be/entreprises/banques/ING-Belgique-va-supprimer-185-postes-et-50-agences/9707001>

37 <https://www.lecho.be/economie-politique/belgique-federal/Action-syndicale-chez-ING-148-emplois-en-danger/9556827>

38 https://www.kbc.com/content/dam/kbccom/doc/newsroom/pressreleases/2007/com_TBO_pb_fr_Fin_Force_22022007_0900dfde80280c6b.pdf

39 KBC Bank shifts domestic paiements to Fin-Force <https://www.finextra.com/news/fullstory.aspx?newsitemid=9881>

40 Communiqué de presse KBC/Fin-Force (22/02/2007) Fin-Force crée à Bratislava (Slovaquie) un tremplin en Europe centrale https://www.kbc.com/content/dam/kbccom/doc/newsroom/pressreleases/2007/com_TBO_pb_fr_Fin_Force_22022007_0900dfde80280c6b.pdf

41 L'Echo (07/05/2015) KBC délocalise des emplois en Tchèque <https://www.lecho.be/entreprises/banques/KBC-delocalise-des-emplois-en-Tchequie/9630766>

BNP Paribas Fortis has in fact transferred the back office activities of its corporate banking division to Lisbon (124 functions). Two functions related to internal IT support will be transferred to Madrid⁴².

“The helpdesk is in Madrid. Half of the back office of the trading room has moved to Portugal. This represents more than 500 people” (Interview XIX).

The department employs more than 500 people, 412 internally, 103 externally (of which the contract of 53 will not be renewed). On the other hand, for the proximity functions, the Belgian product design entities will remain in Belgium⁴². For Belfius, which no longer has subsidiaries abroad⁴³, this logic of considering the distribution of employees within a transnational group does not appear to be applied today.

5.4.3 Outsourcing and offshoring

Outsourcing, often associated with offshoring, is the process of having some or all of the activities of one firm performed by another firm. This configuration is usually associated for the outsourcing company with the goal to reduce costs by using international labor force. Researchers note that while outsourcing or offshoring processes primarily concern low value-added activities, it is increasingly observed for higher value-added activities in the banking sector (Pujals, 2005). In the banking sector, it has become common for large banks to enter into partnerships with external companies. The motivations for this are generally to focus on core business⁴⁴, to obtain specific expertise not present in the bank⁴⁵, to reduce staff costs⁴⁶ or to achieve economies of scale⁴⁷. I now look at the functions that are subject to outsourcing processes in the four banks. To do so, I position these functions along different axes.

A. *Added value, core business and specialisation*

First of all, there is an axis which depends on the added value brought by the jobs. It has been observed that functions with lower added value could be outsourced or offshored with the aim of accessing cheaper labour in countries with low wage costs. Value added can be associated with the complexity of the activities and therefore their replicability. It is the most repetitive activities that will be sent abroad to be carried out elsewhere. These are also the activities that are likely to be automated.

“Outsourcing is the next step after process automation. Outsourcing makes it possible to reduce costs by having teams do activities in other countries where the wage costs are lower. But outsourcing means that some teams will disappear entirely and that is more difficult to manage socially” (Interview XV).

42 L’Echo (23/06/2017) "BNP Paribas Fortis délocalise à Lisbonne" <https://www.lecho.be/dossier/banques/bnp-paribas-fortis-delocalise-a-lisbonne/9907246.html>

43 Sauf une succursale à Dublin, dont les activités portent uniquement sur la gestion de portefeuille (Rapport annuel Belfius, 2018)

44 Interview Interview X

45 Interview Interview XV, Interview XXIV

46 Interview Interview XIX

47 Interview Interview III

This brings us to a second axis on which to position the bank in relation to outsourcing processes, an axis according to the 'core business'. The banking skills themselves tend to remain at the bank's head office. But the bank relies on other service providers for everything that is not related to the banking business as such. For example, ING outsourced its facility management activities to the real estate services group CBRE in 2017⁴⁸. Facility management means general services: mail management, procurement of supplies, maintenance management of buildings and green spaces, technical premises, fire, security, electricity and heating systems, catering services. The bank's stated objective is to focus on its core business. Part of the 110 employees will be transferred to the new entity.

“The bank focuses on its core banking business. All activities that are not purely banking have been outsourced. Facility management has been outsourced” (Interview X).

It is therefore an *in-situ* outsourcing function. The storage and management of physical archives can also be outsourced, in a context where the development of digital technology is reducing the importance and volume of paper archiving. BNP entrusts the storage and management of the bank's physical archives to a specialist partner, Iron Mountain. Until 2014, the archives were stored in Gosselies in three warehouses totalling more than 13,000 m²⁴⁹.

“With digitisation, the overall volume of archives was decreasing. For the bank, keeping its own buildings and staff to manage the archiving activities would have increased the cost per storage unit. (...) the decision to outsource was strongly motivated by the possibility, with an external partner, of being able to switch from a static system in which the bank was faced with fixed costs (staff, rent, heating, electricity, rolling stock...), to a dynamic system in which costs are linked to volumes and related operations”⁵⁰, as reported in a professional magazine.

This brings us back to the question of costs and their terms. For while the bank relies on outside service providers for services that do not relate to the core banking business, it also relies on outside service providers to acquire specific expertise. This expertise is then combined with a more flexible form of employment.

A third axis for understanding outsourced functions is the specialisation of functions at the group level. We have seen this as a strategy in the internationalisation division of labour. We can see that banks are implementing local specialisation strategies of certain skills for the entire group. For example, the outsourcing of facility management from ING to the CBRE services group has the ultimate objective that CBRE takes care of logistics for the entire group⁴⁹. But ING is also transferring the entire back office, which handles transactions, to The Hague. The 138 jobs concerned are in the ING Investment Management department, of which only 25 will remain in Belgium in the long term. Only local sales and marketing activities will remain in Belgium⁵¹. Furthermore, in 2011, for example, the BNP Paribas Group decided to set up two data centres in the province of Luxembourg. These infrastructures will serve the entire group and not just BNP Paribas Fortis, which has two central IT

48 L’Echo (09/08/2017) "ING reste au Cours Saint-Michel encore 5 ans" <https://www.lecho.be/actualite/archive/ING-reste-au-Cours-Saint-Michel-encore-5-ans/9921405>

49 Profacility Magazine (Juin 2015) Outsourcing : Case study BNP Paribas Fortis http://www.profacility.be/piclib/biblio/PDF_00000867FR.pdf

50 L’Echo (03/12/2015) Plus de 1.000 emplois passent à la trappe chez BNP Paribas Fortis <https://www.lecho.be/entreprises/banques/Plus-de-1-000-emplois-passent-a-la-trappe-chez-BNP-Paribas-Fortis/9705973>

51 l’Echo (16/01/2009) "ING Belgique va supprimer plus de 100 emplois" <https://www.lecho.be/actualite/entreprises-finance/ING-Belgique-va-supprimer-plus-de-100-emplois/8130785>

rooms in Belgium. It is the Belgian entity in charge of the European Datacentre Optimisation program, in order to deploy services for the entire group by country. Belgium is thus considered as a competence centre for internet banking for retail and the group's global network⁵².

The BNP example is also interesting in relation to the competence centres that remain in Belgium. The Arval subsidiary, actor in the leasing of company vehicles of the BNP Paribas Fortis group, is being transferred to the Belgian banking subsidiary. The operation makes it possible “to allocate to the Arval group part of the financial resources of BNP Paribas Fortis to ensure its development”. Instead of financing itself through debt, Arval can draw on the deposits of BNPP Fortis⁵³. The reasons for such an operation are explained here :

“When Fortis took over Fortis pr BNP in 2009, one of the requirements of the Belgian state, at that time a shareholder, was that there should be a few competence centres remaining here in Belgium. And so the competence centres that remained in Belgium bring a real added value for the group, especially in the area of car financing. In fact, there is Arval, it's renting (renting with the services around it), it's here in Belgium and it's for the whole BNP Paribas Group worldwide. It's the same thing with leasing, it's also a centre of competence. And there is also factoring, which has remained here in Belgium and where the factoring entity of BNPPFortis works for the group worldwide”. (Interview XVII).

ING, for its part, emphasises ‘cross-border’ functions.

“Typically, what we do today is to make the link with the Dutch. The employees have a cross-border assignment. Half their week in Belgium, half their week in Holland, with a team in Holland and Belgium”. (Interview X).

When announcing its restructuring in 2016, ING announced its intention to move from “traditional banking to a banking platform at the forefront of the digital world”, a platform that is unique to both countries, which motivates “the unification of the IT organisation”⁵⁴. Cross-border functions therefore represent a status with responsibilities in one area in both the Netherlands and Belgium, with an adapted contract to that effect. The resulting reduction in staff numbers is then motivated by an economy of scale. In 2018, the bank will reduce its IT staff in Belgium from 1,215 to 1,000 full-time equivalents⁵⁵ in one year. This means that 150 internal contracts and 64 external contracts will disappear.

In terms of geographical consequences of outsourcing / offshoring processes, I observe that at the head office level of the major banks, many functions are disappearing. Increasingly advanced functions are being taken away from the bank’s head offices in Brussels or from their internal staff. I now turn to a function which, although it was already heavily outsourced in its routine elements, is being thoroughly overhauled in the current context of the transition to digital. These are the IT activities for which the bank is looking for expertise that it does not always have beforehand.

52 Datanews (10/11/11) BNP Paribas : datacenters au Luxembourg belge <https://datanews.levif.be/ict/actualite/bnp-paribas-datacenters-au-luxembourg-belge/article-normal-281587.html>

53 L’Echo (04/11/2016) Arval devient une filiale de BNP Paribas Fortis <https://www.lecho.be/entreprises/banques/arval-devient-une-filiale-de-bnp-paribas-fortis/9827590.html>

54 Voir rapport annuel d’ING, 2016.

55 L’Echo (30/03/2018) "ING Belgique accélère la restructuration de son département IT" <https://www.lecho.be/entreprises/banques/ING-Belgique-accelere-la-restructuration-de-son-departement-IT/9997419>

B. Offshoring of routine IT activities

Before getting to current digitisation logics, I have to outline IT activities are strongly influenced by outsourcing processes, and this already before the financial crisis, in the course of the decade 2000. The boundary between outsourcing and offshoring is also not always clear. Banks that outsource their IT activities often resort to the offshoring of these IT activities to lower-wage countries, whether this is done in one or several steps. In the case of BNP and ING, this involves using the company structure by setting up foreign subsidiaries with group employees. So at BNP :

“We have more and more support in India and Portugal. This is a BNP group policy. It's not outsourcing, because it's always people from the company, except that it's not Belgians that you put in India, it's Indians. It's called offshoring for India and nearshoring for Portugal. At the BNP Paribas group level, it has been developing for years and it's really cheaper. Portugal has become a high-performance platform at a cost that is generally a quarter of the rest of Europe. It is a middle and back office platform. They've invested in languages and we're starting to have people who have relationships with customers. However, not all the middle office of BNP Paribas Fortis is in Portugal, there are still some middle and back office functions in Brussels. In India it is mainly back office: IT support, developers, infrastructure” (Interview XXI).

We can see that one of the factors that distinguishes nearshoring from offshoring is the operational distance from the client. The BNP Paribas group is in partnership with IBM for the management of its IT infrastructure, in a joint venture called BP²I (BNP Paribas Partners for Innovation). In 2012, BP²I will extend its services to BNP Paribas Fortis in order to harmonise the IT infrastructure between BNP Paribas and BNP Paribas Fortis. The agreement provides for no impact on Belgian employment⁵⁶.

At ING, the strategy seems similar. Operational skills have been transferred to Manila and IT to India, as confirmed in interview (Interview XVIII). Language remains a barrier to offshoring, but also to reintegrating employees from other departments internally.

“We have a whole part of IT outsourced to India, a part of IT in Poland and a part in Romania. So the working language is already English, and we are asking for people who are at least bilingual” (Interview XXIV).

Finally, the management of the IT infrastructure seems to be associated with a non-core activity that needs to be managed as efficiently as possible.

“Offshoring to non-Belgian entities is done. Rather Manila and India. For everything IT, purely programming. But also operations. There is a tendency to go outside Belgium. That also explains why we need fewer people. Everything that's not related to the banking activity, we're trying to solve in another direction” (Interview X).

ING therefore has subsidiaries in India and the Philippines, which do not mean outsourcing but relocation of activities in a group logic. We can also note that the opposite movement exists partially.

“Functions have been outsourced, generally support functions. There are outsourcing companies that tell you ‘I can provide 50 Indians, from here in India I can arrange accommodation for people who come to Belgium’. They come to work with their family, in some cases for 6 months” (Interview XX).

But it is interesting to note that these outsourcing logics within a group are not confined to Belgian subsidiaries of banks whose head office is abroad. The example of Belfius then Dexia illustrates a

⁵⁶ BNP Paribas Fortis press release (27/12/12) "Signature of agreement between BNP Paribas Fortis and BNP Paribas Partners for innovation (BP²I)" [https://www.bnpparibasfortis.com/newsroom/press-release/signature_of_agreement_between_bnp_paribas_fortis_and_bnp_paribas_partners_for_innovation_\(bp2i\)](https://www.bnpparibasfortis.com/newsroom/press-release/signature_of_agreement_between_bnp_paribas_fortis_and_bnp_paribas_partners_for_innovation_(bp2i))

strategy of outsourcing IT infrastructure similar to that of BNP Paribas. In 2006, Dexia created a subsidiary for the management of its IT infrastructure, under the name Dexia Technology Services⁵⁷. DTS employs 150 people in Luxembourg and 350 in Belgium and provides IT infrastructure for financial institutions that are part of the Dexia Group⁵⁸. In 2013, DTS is taken over by the IBM Group for an amount of USD 1.3 billion in ICT services for a period of 7 years⁵⁹. This joint venture between Dexia and IBM transforms the DTS entity into an IBM company under the name Innovative Solutions for Finance (IS4F). Through this outsourcing agreement, IBM implements a cloud infrastructure to extend IS4F services into new markets. The following year, 200 of the 360 Belgian jobs of IS4F are relocated to Poland⁶⁰. In 2018, Belfius announces the continuation of the outsourcing contract with IBM until 2023⁶¹, but in the form of a new joint venture called PI-SQUARE, this time entirely dedicated to providing IBM services to the Belfius group. All Belgian employees of IS4F are transferred to the new entity. In this example, the IT activity is first outsourced and then relocated. The impact on jobs is marked as follows, the function is first outsourced, which means that it is taken out of the bank's payroll. People are no longer counted as employees but as service providers. I will come back to this shift later.

KBC, for its part, is also relocating part of its IT activities to India, but by directly acquiring an IT services company there. In 2004, KBC acquired ValueSource, located in Chennai, India. ValueSource functions as an offshore development for KBC. In 2013, the ValueSource subsidiary is sold to Cognizant, a global provider of IT, consulting and business process outsourcing services⁶². At the same time KBC and Cognizant enter into a 5-year agreement for the provision of IT services. ValueSource's 170 employees continue to maintain KBC's systems from India. The case of KBC is interesting in the sense that since the crisis, while other Belgian banks have refocused on the Belgian domestic market, KBC remains a group managed from Belgium with a market in Eastern Europe. At the end of 2007, KBC took the decision to set up a new IT centre near Budapest. The aim was to manage the network infrastructure and store customer data in Central and Eastern Europe. This double data centre replaces the 23 data centres currently spread over 18 different locations in Poland, the Czech Republic, Slovakia and Hungary⁶³. More recently, in 2019, KBC announced its forthcoming restructuring strategy, which includes the contracts breach of 400 external contractors (mainly in IT or interim functions)⁶⁴. A transfer of 300 functions (Belgian headquarters, support and network) will be

57 IT Nation (20/09/2012 "Les trois prétendants pour l'acquisition de DTS sont connus" <https://www.itnation.lu/les-trois-pretendants-pour-lacquisition-de-dts-sont-connus/>)

58 La Libre (24/10/2011) Dexia banque Belgique s'est bien engagé avec DTS services <https://www.lalibre.be/economie/entreprises-startup/dexia-banque-belgique-s-est-bien-engage-avec-dts-services-51b8ddabe4b0de6db9c3df1f>

59 American Chamber of Commerce in Belgium (06/12/2013) "IBM acquires Associated Dexia Technology Services" <http://www.amcham.be/member-news/ibm-acquires-associated-dexia-technology-services>

60 L'avenir "Belfius délocalise des services informatiques vers la Pologne : colère des syndicats" 26/06/2014 https://www.lavenir.net/cnt/dmf20140626_00495978

61 Belfius press release "IBM Extends Its Services Agreement with Belgium's Belfius Group Through 2023" (04/04/2018) https://www.belfius.be/about-us/dam/corporate/press-room/press-articles/downloads/en/2018/Press%20release%20Belfius%20IBM%20PI-SQUARE%2004%2004%202018_tcm_77-151919.pdf

62 De Tijd (03/10/2013) "KBC verkoopt ValueSource aan Cognizant" <https://www.tijd.be/ondernemen/banken/kbc-verkoopt-valuesource-aan-cognizant/9415036.html>

63 L'Echo (26/01/2011) KBC ouvre un nouveau centre informatique près de Budapest <https://www.lecho.be/entreprises/banques/KBC-ouvre-un-nouveau-centre-de-donnees-pres-de-Budapest/9014176>

64 KBC press release. "KBC Group details results group-wide governance optimisation exercise meant to further increase operational efficiency and customer service" 04/09/2019 https://www.kbc.com/content/dam/kbccom/doc/newsroom/pressreleases/2019/20190904_ResultOperationalEfficiencyExer

carried out in internal shared service centres in Brno in the Czech Republic and Varna in Bulgaria. While in 2015 KBC had some 350 external IT consultants, this number has now risen to 1,300, 800 of whom are based in Belgium. A large proportion of the external IT staff are employed under an ICT outsourcing contract with Cognizant⁶⁵.

C. Outsourcing the recruitment for specific IT skills

At this stage, it is worth discussing a little more about Cognizant, which appears in the cases of three of the major banks (all except Belfius). This allows us to focus on one role played by APS in banking restructuring towards digitisation, which is IT ‘body shopping’. Cognizant is an American multinational company providing IT and consulting services, mainly focused on digital transformation. It has a significant activity in India and employs about 200,000 people worldwide⁶⁶. We have seen that it is Cognizant which is acquiring KBC's IT subsidiary in India⁶⁷, but it is also Cognizant (or a similar company) which provides ‘body shopping IT services’ to ING.

“In my experience, we have done a lot of IT body shopping for recruitment. We contacted a Cognizant or an Indian company that rents developers. The company comes to you and says, ‘Do you need such a speciality?’. In the short, medium or long term” (Interview XX).

At BNP Paribas Fortis too, the company Hedera carries out business consulting and business data analytics services, and is a company that is now a subsidiary of the Cognizant group⁶⁷.

And thus Cognizant, as a major player offering a wide range of advanced services, illustrates a trend that seems to become more widespread within banks.

“There are firms that do bodyshopping, i.e. they will place consultants who help on a temporary basis. I'm thinking of Trifinance, which has grown quite a bit in recent years, and Dynafin” (Interview IV).

Trifinance is a Dutch consultancy company based in Brussels, Antwerp, Ghent and Amsterdam that employs 800 people⁶⁸. DynaFin is a Belgian specialist in consulting for the financial industry. The company has more than 70 consultants and is taken over in 2017 by *Alan Allman Associates*, which claims to be ‘an ecosystem company model’ and mainly comprises companies that would be described as advanced services⁶⁹. We therefore find a constellation of players offering a wide range of services that hinge around business management, particularly in the field of IT consulting with specialised workforce management.

The growth of companies such as Cognizant is explained by interviewees by the motivation to acquire specific skills that are not present internally in the bank. As underlined in the following passage, these skills seem crucial to them for the implementation of a strategy of transition to digital technologies:

“Today we are confronted with the fact that from a human point of view we still have a lot of legacy of people who do not have the necessary skills on this digital transformation. (...) We are

[cise_ENG.pdf](#)

65 <https://datanews.levif.be/ict/actualite/la-restructuration-kbc-touche-aussi-l-ict/article-news-1185917.html>

66 <https://www.cognizant.com/nl-be/#aboutcognizant>

67 Press release Cognizant (02/05/2018) Cognizant acquires Hedera Consulting, a Belgian Advisory and Analytics Company <https://news.cognizant.com/2018-05-02-Cognizant-Acquires-Hedera-Consulting-a-Belgian-Advisory-and-Analytics-Company>

68 <https://www.linkedin.com/company/trifinance/?originalSubdomain=be>

69 <https://www.dynafin.be/>

not yet flexible and agile enough internally to get people up to speed on new technologies and new functionalities. That's the big problem. (...) So we are forced to rely on external companies that have succeeded in training people and bringing them up to levels that we don't have internally. Now, we're able to transform people as we go along and direct them towards these training courses, or at least redirect them towards these subjects". (Interview XXI).

For what is interesting to point out is that these companies do not just offer consulting services. They also provide recruitment management services, as well as providing skilled workforce, by reorganising internal departments or bringing in external people into the bank. On the one hand, the presence of consultants on short-term projects seems to be an element that has always been relatively present at the heart of the bank, according to the following interview at ING.

"Historically, we have always worked with a lot of consultants at ING. Sometimes for short-term projects, but for which we need really specific expertise. Typically, in general often everything more related to anything legal. So I think of projects like GDPR, PSD2 and things like that. So, if we can find someone on the market who already has this expertise and who has already done a similar project elsewhere, clearly for us it's worth a lot of money and we'll take this type of profiles. It's really more about the expertise of having already worked on an identical project, it's clearly something that helps us" (Interview XXIV).

On the other hand, the field of expertise sought seems to have broadened to include technical skills further away from the bank. This service can be made available by companies on an ad hoc basis. Consultants are hired to develop a particular product, as here at BNP.

"Specialised consultants are hired to develop specific solutions. For example, for a robotisation project in the Finance department: the digitisation of reporting. Previously, reports were made statically on a document. Now these reports are available digitally and therefore dynamically. The user can search for the detailed parts on the part of the results he is interested in. Once this project is developed, it is taken over by the internal teams who have the knowledge of computer language and design and who are trained to produce the reports. Consultants are used for IT development, not for content knowledge" (Interview XV).

This same logic taken to extremes weakens the relationship between the bank and the people who work there, whatever their expertise.

"This is not strategic consulting, where the company comes in and tells you what to do. Here it is you who tells them what to do. The extreme is luxury interim, where companies provide temporary staff to fill in the gaps during six months or the nine months of maternity leave, etc. The temporary staff are skilled people who generally come from the banking sector" (Interview XXI).

Digitisation requires thus bodyshopping.

Yet a constant in the interviews conducted is the assertion that banking knowledge remains in the bank. Consultancy contracts concern expertise that is not present in the bank.

"Generally speaking, for everything that is purely banking business, we are experts and we have the expertise in-house. In all other areas, I can well imagine that on certain occasions the bank has called on expertise that it did not have. When SAP (human resources software) was installed here in human resources management, we didn't invent it. People helped human resources put it

all together. I'm quite sure there were contacts. Legally too, we have lawyers but we are not experts in all legal fields” (Interview XIII).

For indeed, consulting companies or outsourced IT services also take the form of long-term consulting in the bank.

“Consultants are employed at all levels of the bank. In the group there are 13,000 employees and 2950 consultants, paid externally” (Interview XIX).

A part of this workforce stays in the bank on the long term.

“It's consultancy, but in itself they are people who work for us. There are consultancy companies that bring you a capacity, a skill. A capacity means people, so you pay them. They bring you skills that you don't have. (...) It can be in the more data, programming aspects, but also in consulting. For example, programming in such and such a language. Not all consultancies have the same skills, it depends” (Interview XXI).

We can therefore note that part of the job cuts is mitigated by the use of external consulting firms, whose jobs are not on the bank's payroll but whose people still work in the bank.

One may then wonder what motivates banks to use long-term outsourced employment within their structure?

“There is no time to train people. That's why we use outside companies for that. Especially in operations and IT with programming and development techniques. Which we haven't managed to integrate and which we don't take the time to integrate because it changes too quickly. If you have to train your 200 developers on a new technology, by the time they can implement it, the technology is obsolete” (Interview XXI).

This means that the digitisation is seen as one of the pressures influencing the range of skills that banks consider necessary for their business. This implies that the banking profession is transforming itself towards more digital knowledge. This transformation then has repercussions on the modalities of access to a competent workforce in that sense.

5.4.4 Digitisation

Alongside cost-cutting strategies, in a post-crisis context where banks can make little profit on their margins, digitisation is a possibility for diversifying bank revenues that is anchored in political questioning on the issues of work automation. The digital transformation occupies a predominant place in current policies. The European Commission has made it one of its priority strategies⁷⁰. Studies allowing us to observe the digital maturity of banks are flourishing (Deloitte, 2018⁷¹, D-Rating, 2019⁷², European Commission, 2019⁷³). Consultancy firms are also making it one of the main aspects

70 European Commission's priorities : A Europe fit for the digital age https://ec.europa.eu/info/strategy/priorities-2019-2024/europe-fit-digital-age_en

71 Deloitte (2018) EMEA Digital Banking Maturity <https://www2.deloitte.com/content/dam/Deloitte/global/Documents/About-Deloitte/central-europe/ce-digital-banking-maturity-study-emea.pdf?nc=1>

72 Communiqué de presse D-Rating (05/09/2019) Digital Proposition of Belgian Retail Banks – 2019 <https://www.d-rating.com/single-post/Digital-Proposition-Belgian-Retail-Banks-2019>

73 Digital scoreboard (29/10/2019) <https://ec.europa.eu/digital-single-market/en/digital-scoreboard>

that companies could develop. An Accenture study indicates that 45% of bank revenues would be generated digitally by 2022, compared to 15% by the end of 2017. The study was carried out in 2017 on 32,000 consumers across 18 markets⁷⁴. The Deloitte study *EMEA Digital Banking Maturity 2018* compares six Belgian banks with 238 banks and 10 fintech start-ups in 38 countries to determine the positioning of Belgian banks in terms of digital services⁷¹. Deloitte conducted a survey among HR executives and managers⁷⁵. The Deloitte study *Global Human Capital Trends* was conducted on the basis of interviews with 11,000 managers from 124 countries. The Belgian part was conducted with 649 managers, of which 70% were executives and 30% HR managers. The study shows that a majority of managers and HR managers believe that robotisation will create more jobs than it will destroy.

Under the banner of digitising I group together a set of processes that include the use of digital tools to carry out processes previously carried out in a physical way. The term digitisation is the one referred to in banks. To use a more precise term, we could speak of process automation. Because that is what it is all about, when part or all of a process is carried out by a machine, instead of being carried out by human intervention. The word digitisation appears in the official communications of the banks around 2015 (see **Figure 6**). Its use is becoming more widespread with the advent of the smartphone. Indeed, Internet banking, although it is now considered part of digital strategies, has been implemented since the 2000s and was not referred to as digital. The digital terminology therefore seems to be well linked to the customer interface, and even more so for the retail customer, since in business and corporate banking, contact with one's regular banker is still necessary for customers “who are not going to carry out their transactions alone, they will pay someone to do so” (Interview XXI, Interview XVII). It is therefore noticeable that digital is associated with the change in the behaviour of the retail customer in relation to his bank. It is therefore not by chance that this change in behaviour is accompanied by a transformation of the existing physical structure, the branch network. I will speak here of the automation of back office processes.

74 Accenture (2017) Etude consommateur bancaire : Au-delà du digital <https://www.accenture.com/fr-fr/insight-banking-distribution-marketing-consumer-study>

75 2018 Deloitte Global Human Capital Trends <https://www2.deloitte.com/cn/en/pages/human-capital/articles/global-human-capital-trends-2018.html>

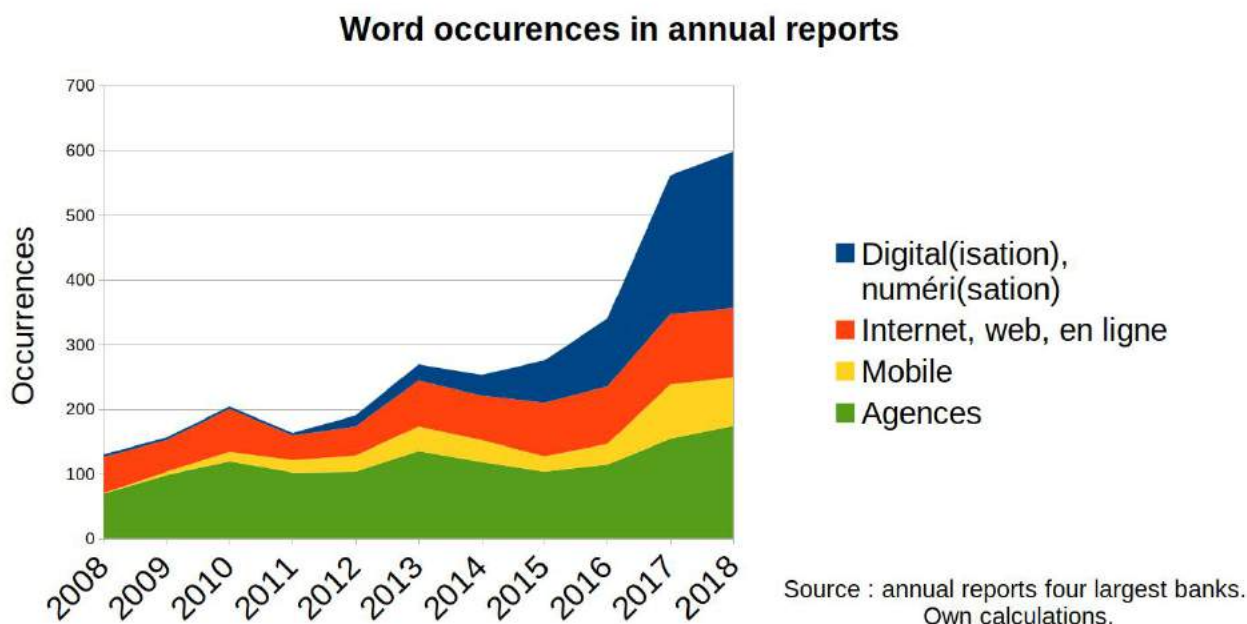


Figure 6: Digital-related word occurrences in annual reports

A. **Back office automation processes : the implementation of IT platforms and RPA**

I now turn to the automation of work processes in large banks. Automation is a fundamental trend in the services sector. Automation makes processes or parts of processes more efficient and, above all, less dependent on expensive labour. The more complex a service is, the more difficult it is to automate it. The notion of complexity is therefore crucial. An OECD study states that 14% of jobs across all sectors are considered highly automatable (probability of automation greater than 70%) and 32% of jobs exposed to a risk of automation between 50 and 70%, i.e. a total of 46% of jobs with a 50% risk of being automated. These are the routine functions that are most at risk, the professions that lend themselves least to automation require professional training and/or a higher education diploma⁷⁶.

I will first look at how automation processes affect the back office. Banks reorganise their corporate structure on the basis of automated processes. For example, KBC is investing one and a half million in digitising in 2017 in order to fully automate its back office⁷⁷. After a first phase of modernisation of the front office (branches, sites, apps), the aim is to integrate new technologies such as block chain, artificial intelligence, biometrics and big data analysis into the underlying systems. This integration will make it possible to develop fully automated processes. For example, an accident report procedure could be processed directly by an algorithm and sent to a repairer, with verification of the transaction by block chain technology. Much of the infrastructure in place dates back to the 1980s or 1990s. For this purpose KBC decided to install a new IT platform in 4 countries (Slovakia, Bulgaria, Hungary and Ireland). In Belgium the aim is that the IT infrastructure can integrate cloud-computing solutions and collaborate with external partners such as fintech. In 2019, KBC announces that in the next three

⁷⁶ OECD (2018), Job Creation and Local Economic Development 2018 : Preparing for the Future of Work, OECD Editions, Paris.

⁷⁷ Trends (21/09/2017) KBC zal binnen tien jaar onherkenbaar veranderd zijn (interview CIO KBC)

years, 300 functions of the head office, support functions and the branch network will be provided by shared service centres in the Czech Republic and Bulgaria.

For ING, the aim of the restructuring that will start in 2016 is to set up a common IT platform between the Netherlands and Belgium. The bulk of the digital transformation costs go to setting up a common platform between the Netherlands and Belgium as indicated by the interviewees :

“we will have a common platform for a large part of the market and therefore we will find synergies in terms of staff, investment, and many other things. Which means that we will be able to do more with less resources” (Interview XXIII).

The platform is implemented with a goal of increasing efficiency and reducing costs, and faces the difficulties of high IT maintenance costs and the differences between Belgian and Dutch regulations.

For BNP Paribas Fortis, the strategy is more diffuse.

“BNP Paribas Fortis as a whole puts more or less 100-120 million euros a year into digital transformation. There are certain regulatory things that we are asked to do that require IT changes (process and system transformations). For example, instant payment is a regulatory reality. We are not yet there individually” (Interview XXI).

Automation primarily concerns repetitive functions, with the aim of improving process efficiency :

“Typically in the back office someone who encodes mandate creation requests, for example. We sometimes had dozens of people doing the same job all day long: looking at a piece of paper and encoding data in three different systems. Clearly, we worked on everything that was robotised. We try to automate as much as possible. Because a robot can work 24 hours a day. A priori, if it's smart enough, it doesn't make too many mistakes either. So it has also allowed us, unfortunately, to eliminate jobs in certain departments, and we have replaced that with robots, so this is more of a digital transformation, I would say, purely internal. In order to optimise and also to save time somewhere, because here someone can maybe process a maximum of 10 files per day, a robot will process 100, well that means somewhere that we can also provide a better service to the customer because when he will make his request to open an account, he won't have to wait three weeks but maybe three days before having an account opened” (Interview XXIV).

The implementation of automated processes is developing in banks through technologies that can be grouped under the term Robotic Process Automation (RPA).

“At BNP Paribas, for example, we are going to hire consultants from firms like Blueprism who will sell us their robot that runs 24 hours a day” (Interview XIX).

Blueprism is a British multinational software company, a pioneer and market leader in the field of Robotic Process Automation (RPA)⁷⁸.

“Blueprism had been approached for a trading room fee project. There was an automatic accounting. It would take the invoice from the supplier, it would scan - basically that's what we had developed in the 2000s but with an artificial intelligence behind it that was supposed to work better. Blueprism sold the services of its consultants with the program, then we sent some business people to our company to check the process” (Interview XIX).

⁷⁸ <https://www.blueprism.com/fr/who-we-are/>

Another testimony of the implementation of RPA in the support and operational functions:

“Everything that is relatively simple and repetitive could be automated quite quickly. So three years ago we started to implement projects and for the last two years we have had robots in place. So robots are not robots on legs. They are software that work instead of people who have to do things in emails and put the information in emails and put it into another computer tool and then look at a third computer tool. As soon as it's repetitive enough, all the time the same thing, we know how to teach machines to do these repetitive tasks” (Interview XV).

The objectives are relatively different between the automation of the back office and that of the front office.

“Yes, whereas on the front-office side, the interface with the client it is both to reduce costs and also to meet the client's expectations, that's what the client is asking for more digitising; internally it only meets a need only, yes almost only a need to reduce costs. There is also a bit of a concern to reduce operational risk. We consider that when there are manual tasks, even if people do their job well, it is inevitable that mistakes will be made, errors and therefore if we configure the tools well, it allows us to systematically prevent mistakes from being made, it is more ‘controllable’ ” (Interview XV).

Automation of the front-office is the possibility for customers to carry out the majority of their transactions over the Internet or via ATMs. The automation of the majority of services and the possibility offered to customers to carry out the majority of their transactions over the Internet have transformed the uses since the early 2000s. Branch employees now rarely act as executive agents, their role is more to provide advice to clients. For example, some KBC branches are being transformed into “unstaffed branches where customers can continue to carry out most of their daily transactions on user-friendly ATMs”⁷⁹. Staff from these branches will be reassigned to remote branches, KBC Live⁷⁹. Technological developments have also transformed the trading room business. “We are experiencing very rapid change. A few years ago, for example, in foreign exchange transactions, there were 12 to 13 traders. Today, there are only six because a large part of the business has been automated. Hedging is partly automated and clients can trade themselves on trading platforms”, explains Didier Lannoy, head of BNPPF's trading room⁸⁰. “But for bonds, the hedging part is not automated, because when a company needs financing, it does so once a year. Then contact is made with the seller in the room. However, for bond trades, we have developed an automated execution platform which we are looking to expand.”

B. Reorganisation of corporate governance

Another key aspect of digitising banks concerns the organisation of the way they work. The four banks, without exception, have tended in recent years to achieve a work organisation that has been described as more flexible, more ‘agile’, with fewer hierarchies and fewer ‘silos’ containing separate disciplines⁸¹. Indeed, we can see that the automation of processes and the introduction of new

79 KBC, Rapport annuel 2018, p 76.

80 L’Echo (03/08/2018) Les salles de marchés changent de visage <https://www.lecho.be/les-marches/actu/actions/les-salles-de-marches-changent-de-visage/10036999.html>

81 L’investisseur Jürgen Ingells médiatise l’image de la transformation de la banque d’un "plat de spaghettis en une lasagne". Sa conférence Tedx sur le sujet <https://www.youtube.com/watch?v=WGXYY-E33NY>

technologies is accompanied by a transformation in the way of working. The 'Agile' model is 'inspired by Spotify' (Interview XXIV), 'small startups' (Interview IV).

"The goal was to say: it takes 9 months to develop a software from idea to production. As technology is evolving more and more, it's not sure that at the end of these 9 months your product is not already outdated. So let's skip the development and each time put on the market a product that is not completely finished but that we test with customers to see if they agree or not" (Interview XVIII).

The agile model thus represents the arrival of more flexible management methods, to counter the structures of a banking institution considered too rigid to be able to evolve in today's competitive world.

"In concrete terms, we put a number of employees in teams together instead of having separate teams. These management methods, while giving more autonomy to the people who work, also create a more flexible framework in which working conditions are more dependent on the work of other employees. It totally changes the way work is conceived. If before, a sales person that we could say that he had flexibility until 8pm, before he did his job, he would pass on his file at risk and these were people who worked during the day and they had the answer the next day. If you now have to create multidisciplinary teams every time, all the people have to be at the limit, at the same time, so it upsets the way things work. It not only upsets the way things work in terms of schedules, but it also upsets the way things work geographically" (Interview IX).

Corporate governance changes as a result of this model. At ING, for example, "we have gone from around 40 different functions to 7 in agile. The stakes behind agility seem to be for banks to be able to 'react faster', to have 'lighter governance'" (Interview XXIV), because consumers can change banks with a 'snap of the finger', that banks must "stay up to date in technologies that change every two or three years" (Interview XVIII). Banks have to show a "dynamism, a platform that continues to develop over time, which is important for the customer, to see that it is not something that is frozen in time" (Interview XVII).

In April 2019, KBC announces a global restructuring of its governance model, in order to move towards an organisation that is "more agile, flatter, with fewer levels of decision making and greater scope of control"⁸². It is within the same direction that ING announced its restructuring in 2016:

"ING Belgium intends to do away with the internal silo vision and to replace the highly hierarchical management system with multidisciplinary, 'agile' and self-managed teams in order to deliver faster and at lower cost"⁴⁹.

ING's transformation plan is particularly revealing in this respect, both because of the scale of the restructuring carried out and because of the impetus given to the development of flexibility in the name of the digital transition (Martinez, 2017). It was a question of adopting "an 'agile' way of working in order to build a high-performance, entrepreneurial and self-managed organisation". This required "the creation of a transversal, less hierarchical organisation in which employees will be given more autonomy and flexibility, as well as the corresponding responsibilities to collaborate effectively and enterprisingly in multidisciplinary teams". As Martinez underlines, in practice the negotiations

82 Communiqué de presse KBC (16/05/2019) KBC Groupe optimise la gouvernance à l'échelle du groupe pour accroître encore l'efficacité opérationnelle <https://www.kbc.com/fr/newsroom/archive-de-communiques-de-presse/2019/strategie-acquisitions-et-desinvestissements.html>

have, more prosaically, focused on working time and wage flexibility (Martinez, 2017, p. 83). ING is perhaps the example of a bank that has been the clearest in its intention to transform its organisation:

“At ING, we are 100 % in the agile principle. You need agility because you have to constantly reinvent yourself. You have to constantly learn new things. Starting from the principle that technology changes every two or three years. That the customer himself evolves more and more. What wasn't possible before has become possible now. Where clients gave little feedback, because the opportunity they had was to come to the branch and yell at the guy if it didn't work. They now have the ability to switch banks like that (snaps fingers), ... We're much more attentive, if we feel that things aren't working out we have to react faster ourselves. In addition to the different technical skills we now require, with a much more flexible approach to the way we work” (Interview XVIII).

The particularity of the ‘agile’ mode is to propose a development in several successive phases. Working in a team accelerates the processes. Products that are not entirely finished are put on the market and updated as they are developed. The following example illustrates how this works.

“We're doing a first development. It's kind of like if you make a car, with two wheels, you put it on the market and then you ask ‘what do you think?’ Oh, no, that's outdated. Okay, so the product will come in stages, with customer feedback every time. And to develop this product before in 9 months where there was an IT layer, guys all working together, then coming in for a meeting, talking to the core business, getting feedback and then leaving. No, we put them all together, we did what we call squads. For product A that we want to develop, we take, usually it's 7-8 people together and we put them on that product, a mix of customer journey experts so business people and devops, and they're going to work together until the end, and they're going to constantly come up with iterations, customer feedback that they're going to do and a phased production. It allows for the software to be very efficient. We're trying to generalise that. Of course it's impossible to do that for what we're supposed to do legally. We are not going to give a half-finished document to the National Bank. ‘Well, this is what we think we should...’. No, there's a limit to that. But for almost all of our activities, now we do like this” (Interview XVIII).

BNP Paribas Fortis is also working with a new way of working, for which most of the buildings have been reorganised.

“Depending on the activity you do, there are different places on the plateau where you can go. In a sofa, in a small room with a big screen to have a visio with someone, a big room with a bigger screen to have a visio with lots of people. That's why I said digitising is also in the organisation.” (Interview XXI).

C. *Business model diversification*

Digitisation represents an opening up of new markets, allowing the emergence of new business models which, once implemented, require few resources to expand to a larger customer base. The ‘digitisation’ of banks is therefore crucial because it refers to the bank trying to keep its market share.

“Competing against the GAFAs means looking at your future model. Where your income will come from. That's why we need to change, to have a global platform, because on the banking side you have a lot of data from people and a lot of trust with customers. And that's very

different from Amazon where it's all sales-driven. A bank is much more trust-driven. Because these are products that are relevant to you at a certain point in your life and that have a great impact. You have to look for these advantages in the future” (Interview X).

For Febelfin, the digital revolution will have a fundamental impact on the business model of banks in two ways:

firstly, by reducing costs through efficiency gains and automation. As a result, banks that do not react to innovation will soon be left behind. Although that obviously puts pressure on them, many banks see an opportunity : the current cost/income ratios of Belgian banks have recently been supported by temporary factors such as reinvestment charges for mortgage loans, but in the longer term it is crucial that that ratio remains low. Technological innovation can play an important role in this respect. Second, digitisation will allow the market to move faster than before to the bank with the most attractive offering. Given our competitive banking landscape, with more than 100 active banks, the digital challenge will therefore also be played out at the customer level (Febelfin).

The diversification of banking business models can be observed with for example, the Studio, a subsidiary of Belfius. The mission of the Studio is to “develop digital solutions for customers, partners and Belfius”⁸³. For example, the Studio is the home of BrightKnight, a company developed in collaboration with Sd Worx, an international provider of human resources services⁸⁴. The service offered is based on robotic process automation technology and artificial intelligence (Optical Character Recognition, Natural Language Processing, Machine Learning) to integrate wizards that can interact with existing systems. The Studio therefore embodies a collaboration between a human service company and the bank, gathered around the thematic of digital tools development. Another example is the ING Fintech Village, launched by ING in 2015 as an ‘accelerator’ programme for start-ups active in the field of financial technologies. It is a partnership between ING, Deloitte, Innotribe (SWIFT's innovation platform), IBM and B-Hive, Smartfin Capital and startups.be (the last three companies under the umbrella of Jurgen Ingels, a Belgian fintech investor)⁸⁵.

Moreover, there are things that are decided at sectoral level, for example

“everything concerning IT transformation, digitisation of operations, ... requires regulation. The PSD2 rules correspond to this. All the European players in the SEPA zone must resolve this. So this is something that comes from outside the bank but which must be implemented everywhere” (Interview XVII).

PSD2 does not directly concern IT transformation, but allows non-financial third parties to gain access to financial data. This is the challenge that the banks intend to preserve, the secure management of data. The banks refer to it in terms of ‘open banking’. The new Payments Directive (PSD2) opens up financial services to third parties (**see Table 13 for more explanation**). Banks will be able to share their customers' data with third parties, if at least they give their consent. This is a gradual

83 Le Studio, filiale créée en 2016 par Belfius (Rapport annuel Belfius, 2016) ou <http://thestudio.digital/>

84 Brightknight, entreprise fondée en 2017 <https://brightknight.eu/>

85 Communiqué de presse ING (16/07/2015) ING fintech village : le premier accélérateur dédié aux fintech en Belgique <https://about.ing.be/A-propos-dING/Press-room/Press-article/ING-FinTech-Village-le-premier-accelerateur-dedie-aux-FinTech-en-Belgique.htm>

development that requires third party companies to develop technology to make their APIs⁸⁶ available. PSD2 does not only open up financial services.

Banks are often portrayed as being particularly sensitive to the ‘disruption’ of ‘fintech’ or other start-ups (PwC, 2016). Recent developments in the field of payment management illustrate that banks retain a stranglehold in this area, although their presence is becoming less visible formally. The legal conditions under which banks carry out their payment activities have been changed by the European PSD2 Directive, which aims to regulate European payment systems⁸⁷. The current version, the third revision, changes, among other things, the conditions for access to bank data. It establishes the possibility for non-financial players to enter the market for electronic payment systems. This means that this segment of the banking business can be carried out by other companies, which puts pressure on banks and opens up a market for any company that, for example, sells over the internet. However, this opening needs to be qualified. It is interesting to see how traditional players such as banks play the same cards as other companies. Payconiq has been launched in 2015 in an ING ‘incubator’ in Leuven⁸⁸. This start-up created in an ING space dedicated to the development of innovations entered the electronic payments market. Its capital was quickly joined by the six main Dutch banks and several major Belgian banks as shareholders. Payconiq announced its intention to extend its use to the European market and acquired Digicash, the leading Luxembourg company on the electronic payments market. It is expanding in Germany in certain cities. In 2018, Payconiq merges with bancontact, the bank terminal company. Within a few years, the small start-up rapidly develops almost into a monopoly position in the field of payment management. The strategy developed to capture market share is a merger-acquisition strategy that has characterised the banking sector since the early 1990s (Ayadi *et al.*, 2002). Large technology companies can be said to be transforming the global economy by providing the hardware and software foundations on which other companies can operate (Srnicek, 2016). These foundations constitute platforms, new forms of digital economic circulation connected by online communities (Langley & Leyshon, 2017). The major banks do not, therefore, appear directly as digital players, but we can see from the example of Payconiq that they are developing strategies that enable them to maintain their market share, just as they are carrying out merger and acquisition operations that enable them to establish strong positions in the markets of other business segments. Following the launch of the European directive in 2015, the major banks jointly set up a subsidiary in which they are majority shareholders. We are therefore far from an outmoded bank in the ‘race to digitise’.

Table 13: Payconiq and the PSD2 directive

Industry-specific initiatives can be seen when banks organise themselves to keep their market segments competitive with other companies. The digital offer in the field of payments is a fundamental issue for banks. In 2015, ING Group is launching a pilot project in Leuven, designed in

86 Application Programming Interface. Un API est une interface qui permet à deux systèmes de dialoguer et d'échanger des données

87 European Commission. www.europa.eu > Press release > «Payment Services Directive : frequently asked questions" 12/01/2018. Page consulted on 11/11/2019.

88 Payconiq website. <http://www.payconiq.com>. Page consulted on 11/11/2019.

the ING Innovation Centre in Amsterdam⁸⁹. The payment application allows payment without a bank card, terminal or contactless. The application will then be developed jointly with Belfius, KBC and the six major Dutch banks. Payconiq then chooses to locate its headquarters in Luxembourg and expands its commercial footprint in Luxembourg by acquiring Digicash Payments SA in 2017. In 2018 Bancontact and Payconiq Belgium merge into a new company: Bancontact Payconiq Company. Behind this new Belgian company are five banks: AXA Bank, Belfius, BNP Paribas Fortis, ING and KBC. The system currently operates in the Netherlands and Luxembourg. The aim is to extend its operation to other EU countries in the coming years, within the framework of the European PSD2 legislation, which opens up the mobile payment markets in the EU.

The transformation of the banking system today is a paradigm shift for banks, based on new business models that integrate digital interaction with the customer and partnerships with other sectors. The bank is trying to diversify its sources of income, including non-banking products. For example, Belgian Mobile ID is a company launched and owned 50% by the four major Belgian banks and 50% by telecom operators⁹⁰. Initially launched under the brand name Sixdots in 2013, the Belgian Mobile ID consortium is reinvesting 20 million euros in 2016⁹¹ with the same objective of integrating the electronic identity card into a telephone via an application. The authentication procedure in the its.me application constitutes a legally valid signature. This makes it possible, for example, to open a bank account, which until now required the physical presence of the banker and the customer, or to access online government portals. The partners of the its.me application include most Belgian banks, public bodies (mutual societies, FPS) and private companies (e.g. insurance, energy).

Belfius, bpost and proximus are, for example, investing together in the Citie platform, intended for merchants, consumers and local authorities⁹². The Payconiq payment solution is integrated into this platform. Belfius is also launching a digital platform with non-banking services. This platform provides a link between property owners and construction and renovation professionals⁹³. Once registered, contractors have access to claims and pay a commission to the platform to obtain customer data. Launched in autumn 2018, it now has 10,000 completed projects and 2,000 craftsmen/workers reachable⁹⁴.

“The payment sector is one of the sectors that moves the most at the bank level. The user needs a facility, no longer wants to spend 5 minutes waiting at a checkout, waiting at the restaurant. (...) The challenges are the biggest because payment is the most important thing at the end of the day. Money itself is what matters because all industries operate on instantaneous. So if you as a bank are not able to keep track of that snapshot, the security of that snapshot you risk losing a lot of market share in the future. That's why the bank is doing a lot of partnerships with fintech in this area. (...) The objective is to make the payment totally transparent at all levels, which no

89 Payconiq by Bancontact <https://www.payconiq.be/fr>

90 Soit Belfius, BNP Paribas Fortis, ING, KBC, Proximus, Orange et Telenet <https://www.belgianmobileid.be/fr>

91 BX1 (30/05/2017) Itsme, une nouvelle application belge pour remplacer tous les mots de passe utilisés en ligne <https://bx1.be/news/itsme-une-nouvelle-application-belge-pour-remplacer-tous-les-mots-de-passe-utilises-en-ligne/>

92 Communiqué de presse Belfius, bpost, Proximus (27/10/2016) Belfius, bpost et Proximus unissent leurs forces pour soutenir l'économie locale : la plateforme numérique Citie rassemble commerçants, clients et pouvoirs locaux

93 Plateforme Jaimy <https://jaimy.be/fr>

94 Communiqué de presse Belfius (09/09/2019) Nouveau dans Belfius Pop-Up à partir de fin septembre <https://www.belfius.be/about-us/dam/corporate/press-room/press-articles/downloads/fr/2019/Communique-de-presse-JAIMY-Belfius-Mobile-09092019.pdf>

longer exists. Payment is seen as a moment that can be simplified to the point of making it transparent” (Interview XXI).

The bank wins on these new business models with the partnerships with fintech at several levels. First of all, there are no longer any costs associated with ‘acquiring’, i.e. the action of processing payments on behalf of a merchant. In fact, it will be the companies that will pay to obtain data (anonymised and aggregated) on their consumers: amount of purchases, products, time spent in the store.

The interviewees agree that this is an ongoing process that will continue to transform the banking sector in the coming years. The easiest things to digitising have been done like the web interface, the applications, but with relatively unsophisticated features. Many other more complex steps, with artificial intelligence can continue to be integrated into the bank's operations, which will eliminate jobs in the bank. This transformation entails costs related to cyber security. Cybersecurity is seen as a future issue for banks: for example the online storage of user data. Banks are seeking to install more and more data in the ‘cloud’. For example, the personal data of bank customers are gathered in private, physical data centres: at Belfius, for example, they are stored in a data centre managed by IBM in Luxembourg. For the time being, ‘critical’ data remains stored in the data centres, as banks already use cloud services for a number of related activities⁹⁵. Belfius' agreement with IBM in 2018 is focused on digitising: “Particular emphasis will be placed on cybersecurity, the cloud and cognitive solutions to enable the acceleration of Belfius' digital transformation.”

D. What are the reasons attributed to current digitisation processes ?

According to several interviews, in the big banks digitisation is a pretext to justify a profound transformation of the organisation of work:

“In the large banks digitisation will be used to question and challenge a whole series of elements that were the basis of the organisation of work as we know it today. While in small and medium-sized banks, they are not making the big bang, they are going gradually and we can see that it is department by department that the transformation is taking place and that the repercussions in terms of employment are much softer” (Interview XXII).

Other interviews, on the contrary, point out that the digitising that accompanies cost reduction is the result of economic and social pressures.

“It's sometimes a bit of a pity, the way in which -- especially in the press in Belgium, where they are hitting the banks a bit, saying that banks are making billions and firing thousands of people. I think that this is a shortcut that is actually a bit easy. It's not -- well, yes, we make a lot of money, it has to be said, but there is a lot of pressure from the shareholders behind it, there is pressure from the group to produce results, and one has to realise that we are not a non-profit organisation. So I mean, we are clearly working to make money (...) We are doing a digital transformation, clearly to save costs, it's not to make it cost us more. But we are also doing it because we feel that there is a need in the market. And we're not the ones who invented that people were less going to branches. The figures are there, we have fewer and fewer people going to branches. We can see that as soon as we update the site or the smartbanking application, directly, if something doesn't work the way it should, we get super bad reviews on the apple

95 (L'Echo, 30/08/2019) Le cloud inévitable étape pour les futur des banques belges
<https://www.lecho.be/entreprises/banques/le-cloud-inevitable-etape-pour-le-futur-des-banques-belges/10158228.html>

store or the google play store. So, people are very careful and they really expect a digital service that's really at the top and that puts a lot of pressure on us too and it puts pressure on us to deliver, to have to deliver quickly, but quickly, something of quality. So that's where I see the transformation coming from -- yes, it's a cost reduction, but it's not just a cost reduction. And it's all too easy to say that banks do digital transformation for the sole purpose of firing people. Because that's not the case. Clearly it's not" (Interview XXIV).

The interviewees admit that digitising is a strategy thought up by management, even if this strategy is supposed to correspond to customer expectations. "So digital, we're going to do it but there is no study that has never been done that says that the customer wants digitising. It's a 'proof is in the cake phenomenon'. We give you flour, milk, eggs and butter and we tell you, if you mix them together you will have a great cake. No, you make the cake and you say it's good. But it's those four things that make the cake. So we actually threw it out and we realise it's working well" (Interview XIV). In any case, the impact of digital technology on bank branches is usually presented as a fairly inevitable evolution. "Digitising appears to be a way of minimising costs, digitising is the magic word that allows us to validate the principle of cost reduction. We reduce the number of branches, people, paper, everything is done via the Internet" (Interview XIV). This minimisation is not necessarily linked to digitising.

"There is also a story of cost rationalisation behind it, which is not especially digital transformation, but it's a little bit like this: if clients go to fewer agencies because they can do more things digitally, is it worth keeping as many agencies? That's more like it" (Interview XXIV).

The reduction in costs would come from the simplification that digitising makes possible, as explained in the following passage:

"Digitising is a simplification, but it is always to the detriment of something else. For example, all our contracts were in paper format, kept in archive premises. That's all over now. The contracts are scanned and then destroyed. Why is that? Because time has made a copy of a contract legally invalid before, now it is. So this digitisation is also accompanied by a change in mentality. Simplification, especially since since then the electronic signature was also invented, so now customers can sign with their bank card. All this is going towards more simplification but it's at the expense of something else. Simplification may mean more speed in drawing up contracts and fewer human resources to be put in place to satisfy the customer. I don't dare imagine the day when the client will be able to draw up his own contract. It could be quite possible. He gives the amount, he gives the type of investment he wants to make, and that's it. Now, it may be 10-20 years from now, but it's still quite possible. It's true that the term that comes to mind with 'digitisation' or 'digitising' is to simplify the work" (Interview XIII).

5.4.5 Flexibilisation

In this section, I examine the flexibilisation of work organisation, drawing on the analysis of Mayer *et al.* (2001), who define the flexibility of work, in terms of extension of working hours and in terms of precarisation of salary conditions. I add an analysis of employee qualifications as discussed by Ferrary (2002). Although there are disparities in the flexibilisation of work organisation across banks, these

disparities seem to me to relate more to transparency and communication about management practices than to real disparities in ways of doing things, since a common vocabulary and similar ‘good practices’ can be found within the four banks. Several interviewees tell that “the final objectives are the same, the ways of making these objectives visible are different” (Interview IX, Interview XIX).

A. A flexible workforce

In the interviews, it appears that much of the work of the banking sector is carried out through forms of work outside the firm. These external forms are not strategic business management consultancy, but consultancy on subjects related to the banking business (Interview XV). In a way, they are people who work for the bank and could be paid internally but are not. They belong to small or large consultancy firms (Interview IV). The interviewees point out that a significant part of the employees are paid as external consultants at different levels of the bank (Interview XIX). These consultants can sometimes hold their position for years (Interview XVII). A system based on external persons is advantageous for the bank because their remuneration does not appear as personnel costs on the social balance sheet. It is in fact a cost, such as infrastructure or administrative costs. In contrast to internal employment contracts, which are governed by collective labour agreements with the trade unions (Interview XXII), external employment contracts individualise the employee in the negotiation of his working conditions vis-à-vis the bank.

The other main advantage for the bank of employing external consultants is numerical flexibility. This system of externally paid employees under less stable working conditions (Interview XIX) allows the bank to more easily adapt the required volumes of manpower according to the period (Interview XIX). One of the interviewees emphasised the ‘labour-intensive’ nature of the banking business, the costs of which are essentially personnel costs. It is therefore the main variable that the bank has taken to reduce its costs (Interview XV). Considering employees' remuneration in terms of costs allows the bank greater flexibility in managing these costs. However, the long-term nature of these consultants who are paid more than if they were paid internally means that they end up accumulating knowledge that the interns do not have (Interview IV, Interview XXI), which leads to a contradiction on the presumed flexibility of these employees. Nevertheless, this procedure is still being used, for example ING announcing that it will reduce the fees and working hours of 700 consultants⁹⁶ due to the coronavirus pandemic.

Employee flexibility is not only present in the forms of employment contracts but also in the extension of working hours. At ING, a system of shifts is introduced in 2016: customers can call the bank from 8 a.m. to 8 p.m. (sometimes 10 p.m.), also on Saturdays but not on Sundays. It is up to the employee to organise himself within his team so that each shift in the opening hours is covered (Interview X). At Dexia, the working hours have been extended in recent years from 7 am to 8 pm. Between 7 and 7.30 a.m. and from 6 p.m. it is a ‘voluntary decision’ of the employee (Interview VII). The employee manages his working time himself or in a team. There are current negotiations about bank late openings, and Saturdays and Sundays⁹⁷

96 L’Echo (17/06/2020) ING réduit les honoraires et le temps de travail de 700 consultants
<https://www.lecho.be/r/t/1/id/10233650>

97 L’Echo (19/01/2019) L’ouverture des banques le samedi après-midi est en vue
<https://www.lecho.be/entreprises/banques/l-ouverture-des-banques-le-samedi-apres-midi-est-en-vue/10088710.html>

Flexibility is observed in time and space. Some of the job cuts at headquarters can be attributed to teleworking, which results in fewer people being physically present, and new management techniques to optimise space and work. The procedure has changed: “If before you had to ask to telework, you now have to ask not to do it” (Interview XXI). The advantages of teleworking are for the employee a ‘flexibility’ of the workplace, and for the bank a reduction in the cost of infrastructure. Indeed, the new ‘agile’ management methods (see 5.4.4B) are accompanied by a transformation of physical space. “In our bank”, says one interviewee, “the ratio is around 0.7: we have 7 places for every 10 people” (Interview XXI). In the new headquarters under construction, “there will be fewer places than there are people working at the moment, it is clear that we are considering keeping a similar ratio”. At Belfius, the reorganisation of the working method also involves the elimination of individual workplaces. Since 2017, Belfius has been doing away with individual cabinets for its staff as part of its digitisation (Paperless) and BeWoW (Belfius Way of Working) concept (Belfius Annual Report, 2017). One speaker reported that in order to adapt the interior of the new building to new management techniques, the bank called on the services of international expert Colliers, a global leader in real estate and investment management services⁹⁸, which advocates flexible work organisations⁹⁹. The new management techniques are therefore also spreading thanks to this type of company.

B. A flexible remuneration: ‘cafeteria plans’

Another aspect of flexibilisation can be found in the salary remuneration policies known as ‘cafeteria plans’, introduced thanks to the work of the APS, in this case legal consultants. The human resources department that was responsible for salary remuneration policies has in fact been partially outsourced in two of the major banks and the remaining internal services have been greatly reduced (Interview XX, Interview XVII). ING Group specifically outsourced the salary remuneration in 2006 in a contract with Accenture, Atos Origin, Getronics and KPN¹⁰⁰. The 7-year agreement provided for the transfer of approximately 430 employees from ING Netherlands and ING Belgium to the four service providers. BNP Paribas launches Unbox in partnership with Dutch recruitment group USG People and Antwerp-based brand consultancy company Brandhome group¹⁰¹. The following year they will be joined by SD Worx, a major international HR services provider based in Antwerp¹⁰².

With the Unbox joint venture, BNP Paribas Fortis is investing in the recruitment, selection, training and remuneration of staff. One of the projects is a new flexible remuneration policy, a ‘cafeteria 2.0 plan’. The law firm Loyens & Loeff assisted the bank with the legal and tax aspects of the concrete implementation of the system¹⁰³. Since its launch in September 2016, Unbox has revenues of more

98 L’entreprise emploie 18 000 professionnels dans 15 000 entreprises dans le monde. <https://www2.colliers.com/en-BE/About>

99 Colliers (2019) The flexible workspace outlook report 2019 <https://www.colliers.com/-/media/files/emea/emea/18039-flexible-workspace.pdf?la=en-GB>

100 Zone bourse (14/12/2006) "ING signe avec quatre prestataires de services un accord d’externalisation de la gestion des postes de travail" <https://www.zonebourse.com/ATOS-ORIGIN-4612/actualite/Atos-Origin-ING-signe-avec-quatre-prestataires-de-services-un-accord-d-externalisation-de-la-gesti-262929/>

101 L’Echo (27/09/2016) "BNP Paribas s’allie à USG People pour réinventer le recrutement/sélection" <https://www.lecho.be/entreprises/management-entrepreneuriat/bnp-paribas-fortis-s-allie-a-usg-people-pour-reinventer-le-recrutement-selection/9813449.html>

102 Communiqué de presse SD Worx (06/09/2017) SD Worx rejoint Unbox <https://grayling-sd-worx.prezly.com/sd-worx-invests-in-unbox>

103 Loyens & Loeff (s.d.) "Le plan cafétaria 2.0 une innovation BNP Paribas Fortis" <https://loyensloeff.lecho.be/un-plan-innovant-cafeteria-2-0-pour-bnp-paribas/>

than EUR 20 million and has signed contracts with major employers in Belgium¹⁰². This is because 'cafeteria plans' have become widespread in all the major banks. The advantage for the employer is that it does not have to pay the employer's social security contributions to the RSZ/ONSS. For the employee it makes almost no difference, except that his basic salary is lower (Interview XIX, Interview IX, Interview XXII). It is therefore a fiscal engineering, which we see has been set up by the bank, in partnership with human resources companies and a law firm. It has been developed three/four years ago and became widespread now in the banking sector as well as other firms, as long as they have a sufficiently large number of employees (Interview IX). BNP was the first bank to go ask an agreement to the SPF Finance, now it has become relatively common (Interview IX).

C. A flexible qualification : 'a flexible digital employee'

Beyond the questions of flexibilisation based on resources external to the bank, we can note a flexibilisation of the labour market internally. The bank expects its employees to be more flexible in terms of working hours and skills.

“At the limit now the main competences of people who can be hired in banks is to be able to adapt all the time. To continue learning, to change functions, to be curious, and to develop new competences in the same way” (Interview IV).

Instead of functions more clearly defined by the company to which several profiles may correspond, the emphasis is placed on the valorisation of individual skills.

Second, the skills sought have evolved, there is a growing demand for people who are interested in technology (Interview X). This expertise is not easy to find: “there are not enough students coming out of universities with technology degrees, or even double degrees” (Interview X). Banks rely more and more on technological skills for complex jobs: data analytics, modelers. Previously we had 20% of highly qualified people, now it's 70% (Interview X).

In addition, while the bank organises some training, in general, it is up to the employee to draw up a career path and select from among his individual abilities those he wishes to develop (self-entrepreneurship). The link to technology is subtle here, since it contributes to shifting the responsibility for 'updating' onto the employee. What is said is that “new technologies are developing extremely fast”, this acceleration is invoked to make the bank not take responsibility for employee training, since complete training modules would be too expensive and too quickly obsolete (Interview XXIII).

The implementation of digital tools is then reduced to a question of corporate culture. Most of the interviewees refer to digitising as a change that requires getting into the right 'mindset'. The following excerpts show how the consequences of the implemented changes are passed on to the staff:

“Staff are resistant to change”; “older people are the most likely to fail to adapt”; “it is human nature to resist change”; “people who are hiding in a quiet daily train will not last very long”; “change isn't something that people like but once you're in it and you have no choice”, “we all realise now the positive effect it has”; “when people have been doing the same thing for 20 years, it's because they don't want to change. We have offered them solutions, however”.

Whether positively or negatively, these excerpts suggest that reactions to digitising can be understood simply in terms of personal reasons, how the individual with all his or her characteristics will or will not be resistant to change.

5.5 Conclusions

This chapter focused on the relationship between APS and the banking sector, analysed in the context of the restructuring processes in the Brussels banking sector. The observation of the APS relations in corporate restructurings sheds light on a particular aspect of command and control. The observation of the interactions between the APS complex and banking enlighten the question of the location of important decisions in restructuring processes.

In this conclusion, I first synthesise the restructuring processes of big Belgian banks and its drivers, before turning to my two research questions: what did we learn about the interactions between the bank and APS as a complex? What did we learn about command and control in the global economy, and specifically about the function APS play in the global economy?

5.5.1 Synthesis of the restructuring processes of the banking sector

The consolidation and internationalisation of the Belgian banking sector were long-term processes which led to the formation of the Belgian groups as we know them today (**Figure 7**). The financial crisis has led to the bankruptcy of two banks, one of which was taken over by the Belgian State (Belfius) and the other by the French group BNP Paribas Fortis. After the financial crisis, the trading room activities of international groups were sharply reduced in Brussels, to be carried out instead in Paris (in the case of BNP Paribas) or London and Amsterdam (in the case of ING). These emblematic activities of banking groups have therefore been moved outside Belgium, indicating a reduction in strategic financial activities in Brussels. A wide range of activities are being reorganised according to the specialisation logic of a multinational group. For example, at BNP Paribas Fortis, invoicing is managed from Lisbon, the helpdesk is in Madrid. These are still internal group employees, but they are no longer employed from Belgium. In this sense, we can see that the internationalisation of banking groups is leading to the relocation of certain activities at group level.

Consolidation and internationalisation are part of the story of the banking restructuring for which I did not find a decisive role of APS. However, APS intervene in and between the other restructuring processes, which is synthesised in **Figure 7**. Outsourcing / offshoring processes have been particularly strong for so-called routine activities. There is a trend towards centrally managed IT activities for large banks, through a subsidiary often located in low-wage countries such as India or the Philippines. More recently, back office automation processes and new digital technologies have been developed through the use of APS companies specialising in recruitment, consultancy and IT skills. These external companies are responsible for the selection and hiring of candidates with the mission of finding and providing 'digital profiles' sought after for digital transformations.

This transformation can also be understood according to the theme of flexibilisation. Work within the banks is in fact organised according to more flexible logics than before, based on external employment contracts, more flexible salary remuneration policies and a broadening of the necessary skills. The flexible pay policies were developed by legal consultants and quickly became widespread in the large banks. These policies have the main advantage for the employer of reducing social security charges. Flexibility is also found in the new ‘agile’ management techniques that are transforming the organisation of work. These management techniques are combined with a broadening of the skills sought within the bank.

The broadening of the skills sought can also be understood in the link with the ‘race for technology’ into which banks say they are being pushed. The postulate of the speed of evolution of the new technologies justifies the fact that the internal training structures cannot keep up. Digitisation processes appear strongly as a performative discourse. It can therefore be seen that the ‘race for technology’ has an effect on the use of an external labour market to obtain skills that the bank does not have internally. We can therefore see that the production and circulation of ideas about what is required in terms of technology influences strongly the functioning of banks. Banks have recourse to APS specialised recruitment firms to enable it to obtain these specific skills in the short time required by the conditions of a financialised capitalism.

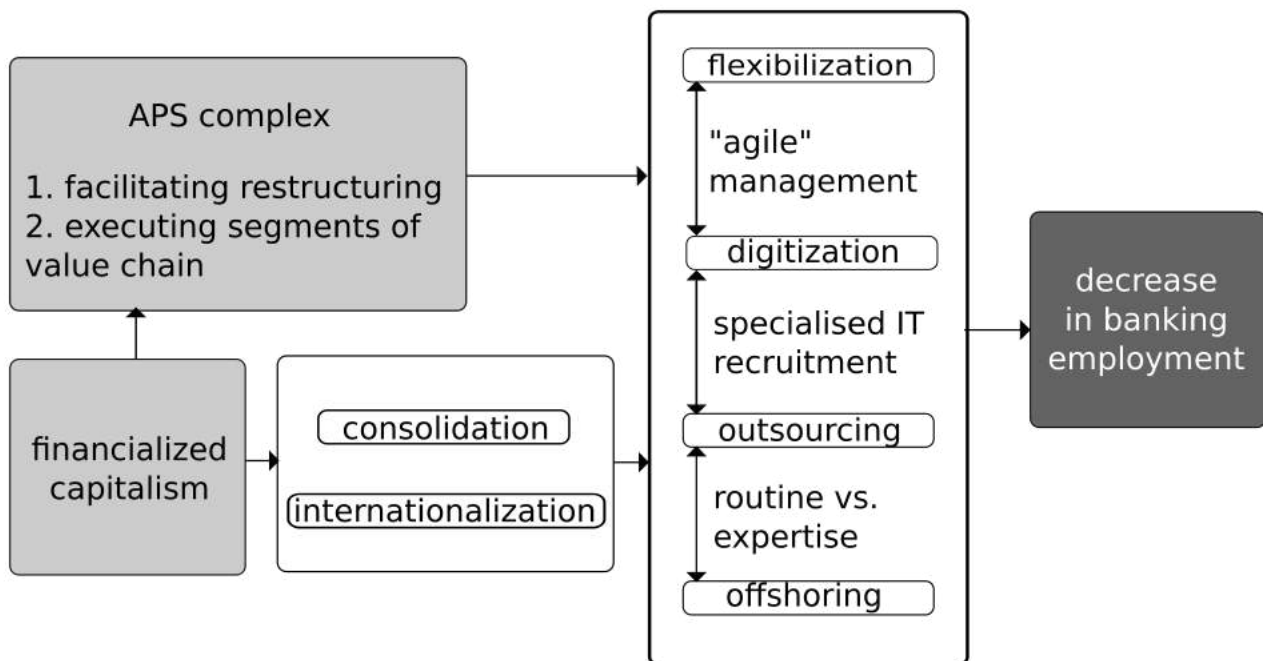


Figure 7: Restructuring processes of the banking sector and their interconnections

The observation of the restructuring process in Brussels has emphasised the spatial redistribution of the value chain at global scale. In other words, the evolution of the context in which Belgian banks play has not only resulted in the reorganisation/flexibilisation of the work done within banks but also in a spectacular relocation of the different segments of the value chain once located in, Brussels. **Figure 8** shows the spatial redistribution of banking activities. Two elements should be highlighted: the prevalence of the European space and the position of Brussels.

Figure 8 shows which activities are outsourced and where they are offshored. While many activities are executed from abroad, most of them remain executed in the EU. What is clear from the movements of banking activities is thus the emphasis on the European scale. What remains in Brussels are activities related to the national market (local sales, marketing activities). Only the most routinised activities are offshored outside the EU, some back office and IT functions in India or Philippines.

In this transformation of the banking value chain, Brussels shows an in-between position. In the banking sector, 'higher end' activities such as trading are relocated to major world cities (Paris, London, Amsterdam) and 'mid or lower' functions such as IT are offshored to South or Eastern Europe, or India (**Figure 8**). Basically, this is in line with Mudambi and Venzin's analysis: there seems to be a relocation of each segment of activity to its 'optimal location', which resembles the idea of the value chains. Firms disaggregate value chains into smaller parts. This allows for a less path dependent approach to the firm's ideal locations (through offshoring and relocation) and control strategies (Mudambi & Venzin, 2010). This spatial reorganisation of banking seems like a reproduction of what has been done in industry since the 1980s.

This in-between position explains the intensity of employment decrease in Belgium, which is particularly marked compared to other European economies – employment decreases but added value remains stable (see Table 9 on page 65). It also shows the strengthening of central places and a reconcentration on a European/global scale, which does not contradict Sassen's hypothesis of the reconcentration of APS in world cities at the global scale. This transformation of the value chain further supports the idea that APS intervene to transfer value geographically, and therefore, world cities are nodes in global commodity chains, from which the transfer of wealth is organised (Parnreiter, 2017). Brussels seems neither to be the location for low, nor high functions, as both are offshored. What remains in Brussels are marketing, sales and branch activities. Brussels keeps an activity of coordination for the national market (Figure 8). While certain functions are moving away from Brussels, other processes are transforming the banking sector, such as processes of flexibilisation and digitisation.

Spatial redistribution of Brussels bank activities (2000-2018)

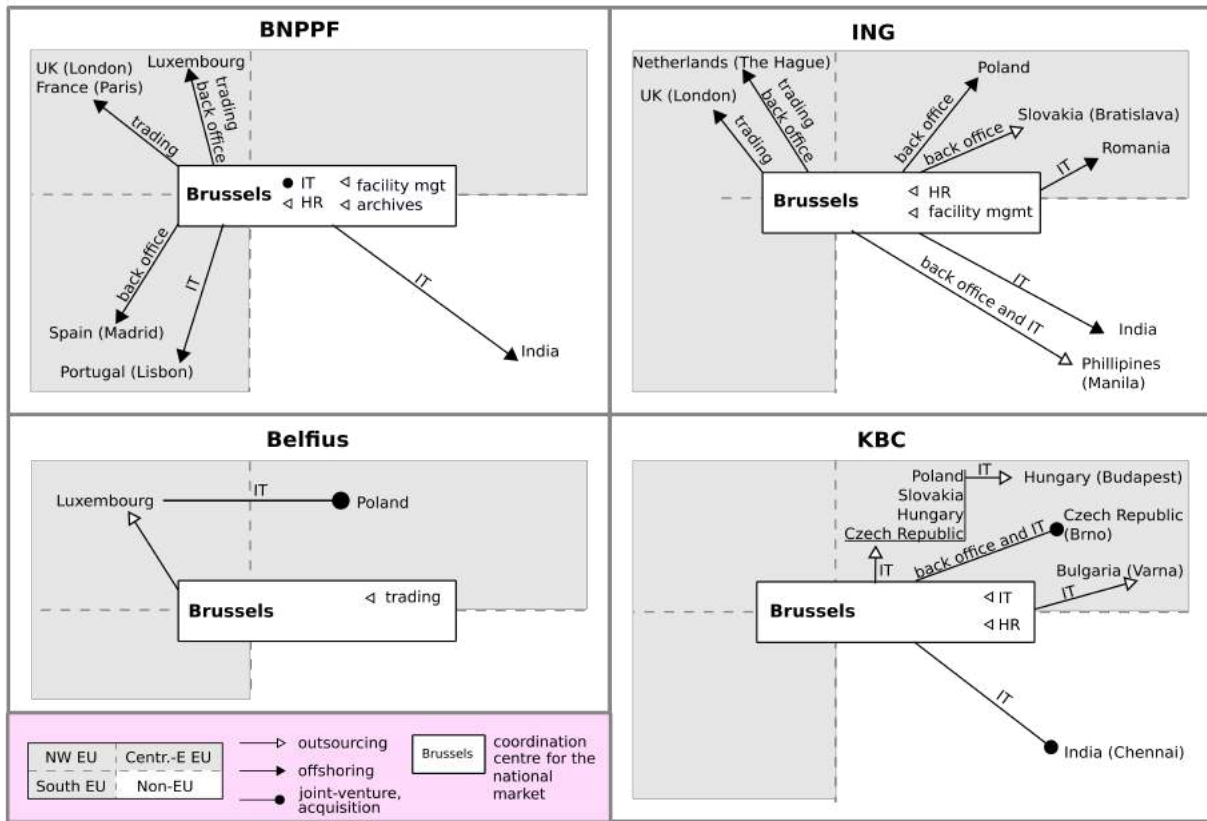


Figure 8: Spatial redistribution of Brussels bank activities (2000-2018)

5.5.2 APS as a complex? The role of APS in the restructuring of banks

Sassen argues that the management and coordination functions of global companies have become so complex that their head offices have increasingly outsourced these functions to specialised service firms (Sassen, 2016). In this chapter, I wanted to shed light on these processes by observing the concrete interactions between APS and the restructuring of the large Belgian banks. In this study, it is nevertheless necessary to distinguish two levels of intervention of APS: their functions in the restructuring itself, and those in the new value chain that emerges from these restructuring processes.

In my research, I was able to situate the role of APS companies in the entire complex process of bank restructuring. Firstly, APS are directly involved in the restructuring process. The bank is in the context of a transition to a bank whose presence is increasingly based on digital (online) tools. The skills needed for this transition are being sought with the help of APS. The APS have a dual role. On the one hand, studies by APS firms such as Deloitte or Accenture estimate the number of jobs that are likely to be automated through technological change. APS advise on how to adapt to technological change with the help of products and a specialised workforce. This dual role has a performative, self-fulfilling effect. “The proof is in the cake” summed up one of the interviewees (Interview XIV).

In addition, APS sometimes work with the bank on a specific aspect of restructuring. For example, the ‘cafeteria plans’ constitute a reorganisation of the wage policy. They offer extra-wage benefits to employees (such as a car or IT equipment) and reduce employers' social security contributions. They were set up by BNP Paribas through the Unbox joint venture - made up of a recruitment agency, a brand consultancy and an HR service provider. Unbox collaborated with a law firm for the legal and tax aspects. The device, filed by BNP Paribas Fortis with the FPS Finance, has now been extended to companies and institutions with the critical mass of employees to implement it. The implementation of this device illustrates the idea that a complex of APS companies works together towards one objective, in this case the flexibilisation of remuneration.

Secondly, this restructuring is also a process that gives certain APS companies a specific function in the new value chain that has emerged from this reorganisation of the bank. As specialised companies, APS firms carry out part of the activities through partnerships or outsourcing contracts. APS firms can then take over some of the segments of the production chain, as companies to which specific tasks are delegated. This is the case for the outsourcing processes of so-called routine activities such as IT activities or human resources. IT activities illustrate this segmentation of the value chain quite well. A first example is the development of the IT infrastructure which is entrusted to IBM in the form of joint ventures in the case of BNP Paribas and Belfius (and in the latter case first outsourced and then relocated) and which opens up the market for cloud computing and cybersecurity. The second example is specialised IT recruitment, passed on to Cognizant in three of the four banks (with the exception of Belfius).

Our study thus illustrates the existence of service-based groups that play an important role in the intensification of the division of labour on a global scale. In this process, it seems that APS firms play an even more important role, given their specific skills. In some cases, I have also observed the concrete collaboration of actors necessary to achieve an objective. However, there is a discrepancy between these observations and the idea of a set of firms whose links would be sufficiently intense and whose action sufficiently coherent to form an APS complex. To be able to take this step, I need to

discuss the functions of the APS complex in the global economy more generally and the implications for the theory of world and global cities.

5.5.3 APS as a complex: the command and control function of the economy

After having questioned the relations between the APS and the bank, this case study leads me to propose tentative answers to better define the notion of the control and command function of the economy that is attributed to the APS complex. The concept of the world city was intended to understand the role (or function) that APS firms concentrated in world cities take in organising the unequal relationships that underpin economic globalisation (Parnreiter, 2017). Yet, this function is only vaguely defined in the concept of the world city, in terms of command and control. In this case study, I choose to look at the question of the location of decision making in an attempt to clarify the command and control role of APS in corporate restructuring.

What I have seen empirically, in the case of the restructuring of banking enterprises, is that they cannot be carried out without the collaboration of APS. The role of APS is expressed in two particular ways: facilitating restructuring processes and executing particular segments of the banking value chain. Nevertheless, the control of business processes is still largely managed vertically, i.e. within the internal hierarchical relationships of the major banks. APS facilitates the process by accumulating particular skills, but at no time is it perceived that 'power changes hands'. The execution of these particular segments (such as IT activities, human resources, trading) takes place within the framework of outsourcing contracts or partnerships set up by the banks. In other words, I find APS players with a strong market position due to their specific skills. But if this strong position is sufficient to make APS a source of power or the source of power of the cities where they are concentrated...., this remains to be clarified. There is a discrepancy between the fact that APS do indeed gain a market share in their respective activities and the question of whether an APS complex would support a command and control function.

Finally, this analysis also highlighted that in order to understand the function of the APS complex in the global economy, it is necessary to take into account the external pressures on companies in the context of financialised capitalism. This is an aspect that has been little explored in the literature on world cities (Bassens & van Meeteren, 2015). However, like any business today, banking groups are driven by the demands of shareholder value profitability for the management of their banking subsidiaries (Ertürk, 2016). I suggest that these requirements lead the banking sector to rely on the expertise of companies or professionals from other APS. The imperative to maximise shareholder value is then in line with a race for technology which is also part of the logic of making work more flexible.

5.5.4 Limits of the approach

The approach presented here has many limitations and can only shed light on a modest portion of the understanding of the relationship between APS and their role in the global economy. It seems reasonable to point out that the starting point of corporate restructuring processes induces from the outset a bias in analysing the notion of command and control. As corporate restructuring processes are vertical, it is normal that the company retains control. Nevertheless, I have nevertheless been able to show that in these processes, APS intervene in particular roles, that they have a market position with

specific competences. But such position in a segmented banking value chain does not seem to result in any change in the command and control function, the banking company being in control of the whole restructuring process. Yet the question can be asked whether Belgian banks would be 'competitive' under financialised capitalism without APS' work as facilitating restructuring or taking over parts of their activity.

One other limitation of this case study is that it only observes the relationships between APS through the dynamics of one particular APS, i.e. universal banks. This approach is probably not the most direct one. However it offers the advantage of starting with no preconceived ideas to understand the interactions between APS. I look at how APS interacts with the APS complex itself, here how APS allow corporate restructuring of banking. The study would benefit from being complemented by an analysis of the spatiality of APS, by directly questioning these actors in the line of what has been done for instance on law and advertising firms (Faulconbridge, 2007).

Although the banking sector is a major employer in Brussels, the results of this case study should be put into perspective. Brussels is not comparable to the emblematic case of London, whose operation of the APS complex is described by Cook *et al.* (2007). It is nevertheless likely that the European developments described here for the Belgian banking sector may find echoes in other European national economies. I will discuss this more in detail in the general conclusions.

5.6 References

- Aalbers, M. B. (2017). Corporate Financialization. In D. Richardson, N. Castree, M. F. Goodchild, A. L. Kobayashi, & R. Marston (Eds.), *The International Encyclopedia of Geography : People, the Earth, Environment, and Technology*. Oxford : Wiley.
- Abhervé, M. (2015). Les banques coopératives, des banques comme les autres ? *C.E.R.A.S | Revue Projet*, 2(345), 7pp. 3–79. Retrieved from <https://www.cairn.info/revue-interdisciplinaire-d-etudes-juridiques-2015-1-page-91.htm>, consulted on 22/06/2020.
- Alessandrini, P., Croci, M., & Zazzaro, A. (2005). The geography of banking power: The role of functional distance. *BNL Quarterly Review*, 58(235), pp. 129–167.
- Avery, R. B., Bostic, R. W., Calem, P. S., & Canner, G. B. (1999). Consolidation and bank branching patterns. *Journal of Banking and Finance*, 23(2), pp. 497–532.
- Ayadi, R., De Groen, W. P., Sassi, I., Mathlouthi, W., Rey, H., & Aubry, O. (2016). *Banking Business Models Monitor 2015 Europe*, Montreal : International Research Centre on Cooperative Finance.
- Ayadi, R., de Lima, P., & Pujals, G. (2002). *Les restructurations bancaires en Europe*. *Revue de l'OFCE*, 83 bis (5), pp. 325–382.
- Barbot, J. (2010). Mener un entretien de face à face. In S. Paugan (Ed.), *L'enquête sociologique* (pp. 114–141). Paris: PUF.

- Bassens, D., Gutierrez, L., Hendrikse, R., Lambert, D., & Waiengnier, M. (2020). Unpacking the advanced producer services complex in world cities: Charting professional networks, localisation economies and markets. *Urban Studies*.
- Bauwelinkx, A. (2011). Les espaces résidentiels du monde de la banque. *Les Cahiers de La Fonderie*, 43, pp. 55–64.
- Beaujolin-Bellet, R. (2012). Les modes de gestion des restructurations : quoi de neuf ?, *La Revue de l'Ires*, 72(1), pp. 3–28.
- Berger, A. N., Demsetz, R. S., & Strahan, P. E. (1999). The consolidation of the financial services industry: Causes, consequences, and implications for the future. *Journal of Banking and Finance*, 23(2), pp. 135–194.
- BIPE (2017). *La Banque à 2020-2025 : Emploi et compétences, quelles orientations ?* Paris.
- Bourdeaux, G. (2008). L'externalisation dans le secteur bancaire. *Humanisme et Entreprise*, 289(4), pp. 9-28.
- Boussemart, J. P., & Saidane, D. (2005). Convergence et performance des systèmes bancaires des pays de l'OCDE. *L'Actualité économique*, 81(4), pp. 617-664.
- Brack, E. (2016). La transformation digitale de l'intermédiation bancaire. *Géoéconomie*, 81(4), pp. 79-91.
- Bülbül, D., Schmidt, R., & Schüwer, U. (2013). Caisses d'épargne et banques coopératives en Europe. *Revue d'économie Financière*, 3(111), pp. 159–188.
- Butzbach, O. (2015). From thrifts to universal banks: the sources of organisational change in French savings banks, 1945–2000. *Business History*, 57(8), pp. 1155-1191.
- Callandret, E. (2019). La révolution digitale dans le secteur bancaire (pp. 5–10).
- Callandret, E., Rollet, A., & Lejeune, V. (2017). La banque, un commerce de détail en profonde mutation. Les impacts sur la relation client, conference notes, pp. 1–16.
- Capelle-Blancard, G., Crozet, M., & Tripier, F. (2003). La localisation des activités financières dans l'Union européenne, conference notes, pp. 1–22.
- Cassiers, I., de Briey, V., Degavre, F., & Provost, A.-C. (1998). Les banques belges face à l'État : une rétrospective (1935-1993). *Revue d'économie Financière*, 48(4), 125–155.
- Castellani, D., Evangelista, R., Maggi, B., & Meliciani, V. (2013). The role of business services for innovation, internationalisation and structural change. *Structural Change and Economic Dynamics*, 25(1), 74–76. <https://doi.org/10.1016/j.strueco.2013.03.001>
- Chesneau, D. (2019). Fintechs et banques : coopération et coopération. *Réalités Industrielles*, 1(February), pp. 45–50.
- Cichowlas, A. (2015). Technologie et transformation des services bancaires : l'exemple de TechnoVision de Capgemini. *Revue d'économie Financière*, 120(4), pp. 35-56.

- Cook, A., Faulconbridge, J., & Muzio, D. (2012). London's legal elite: Recruitment through cultural capital and the reproduction of social exclusivity in City professional service fields. *Environment and Planning A*, 44(7), pp. 1744–1762.
- Cook, G., Pandit, N., Beaverstock, J., Taylor, P., & Pain, K. (2007). The role of location in knowledge creation and diffusion: Evidence of centripetal and centrifugal forces in the City of London financial services agglomeration. *Environment and Planning A*, 39(6), pp. 1325–1345.
- Elmhorn, C. (2001). *Brussels, a reflexive world city*. Stockholm : Almqvist & Wiksell, pp. 1-400.
- Ertürk, I. (2016). financialisation, bank business models and the limits of post-crisis bank regulation. *Journal of Banking Regulation*, 17(1–2), pp. 60–72.
- Fares, A. (2019a). Financer un autre monde (1/2): une tâche impossible pour le système financier actuel. *Smart*, pp. 1–9.
- Fares, A. (2019b). Financer un autre monde (2/2) : la possibilité d'un secteur bancaire socialisé. *Smart*, pp. 1–8.
- Faulconbridge, J. R. (2007). London's and New York's advertising and law clusters and their networks of learning: Relational analyses with a politics of scale? *Urban Studies*, 44(9), pp. 1635–1656.
- Ferrary, M. (2002), Mécanismes de régulation de la structure des qualifications et spécificité du capital humain. Une analyse du capital social des conseillers bancaires – Regulating the structure of job qualifications according to the specificity of human capital. An analysis of the social capital of financial advisers in banks, *Sociologie du travail*, 44(1), pp. 119–130.
- Finance, O. (2016). *Les villes françaises investies par les firmes transnationales étrangères : des réseaux d'entreprises aux établissements localisés*. Thèse de Géographie. Université Paris 1 Panthéon-La Sorbonne.
- Froud, J., Johal, S., Leaver, A., & Williams, K. (2006). *financialisation and Strategy. Narratives and numbers. financialisation and Strategy*. London: Routledge.
- Froud, J., Tischer, D., & Williams, K. (2017). It is the business model... Reframing the problems of UK retail banking. *Critical Perspectives on Accounting*, 42, pp. 1–19.
- Giroux, H. (2007) Pourquoi suivons-nous les modes en gestion ? *Gestion*, 32(4), pp. 10-19.
- Gloukoviezoff, G. (2008). *De l'exclusion à l'inclusion bancaire des particuliers en France – Entre nécessité sociale et contrainte de rentabilité*, Thèse en sciences économiques, Université Lumière Lyon 2.
- Gloukoviezoff, G. (2013). Les banques face à leurs clients. *La vie des idées*, https://laviedesidees.fr/IMG/pdf/20130128_gloukoviezoff.pdf, consulted on 22/06/2020.
- Goddard, J., Molyneux, P., Wilson, J. O. S., & Tavakoli, M. (2007). European banking: An overview. *Journal of Banking and Finance*, 31(7), pp. 1911–1935.
- Hendrikse, R., Bassens, D., & Van Meeteren, M. (2018). The Appleization of finance: Charting incumbent finance's embrace of FinTech. *Finance and Society*, 4(2), pp. 159–180.

- Howarth, D., & Hardie, I. (2013). *Market-based banking & the International Financial Crisis*. Oxford : Oxford University Press, pp. 1-262.
- Hunter, L. W., Bernhardt, A., Hughes, K. L., Skuratowicz, E., Hughes, L., & Skuratowicz, E. V. A. (2001). It's Not Just the ATMs : Technology, Firm Strategies, Jobs, and Earnings in Retail Banking, *54*(2A), pp. 402–424.
- Huysentruyt, M., Lefevere, E., & Menon, C. (2013). Dynamics of retail-bank branching in Antwerp (Belgium) 1991-2006: Evidence from micro-geographic data. *Journal of Banking and Finance*, *37*(2), pp. 291–304.
- Immergluck, D. (2001). The Financial Services Sector and Cities: Restructuring, Decentralisation, and Declining Urban Employment. *Economic Development Quarterly*, *15*(3), pp. 274–288.
- Jeffers, E., & Oheix, V. (2003). Concurrence et concentration bancaires en Europe. *Revue d'économie Financière*, *72*, pp. 223–242.
- Kantola, A. (2016). Cleaning rotten politics , selling exclusive liaisons : Public relations consultants as storytelling professionals between markets and politics, *Public Relations Inquiry*, *5*(1), pp. 33–52.
- Kindleberger, C. (1974). *The Formation of Financial Centres: A Study in Comparative Economic History*. Princeton : International Finance Section, Department of Economics, Princeton University.
- Lai, K. P. Y. (2016). Financial advisors, financial ecologies and the variegated financialisation of everyday investors. *Transactions of the Institute of British Geographers*, *41*(1), pp. 27–40.
- Leyshon, A., & Thrift, N. (1993). The restructuring of the U.K. financial services industry in the 1990s: a reversal of fortune? *Journal of Rural Studies*, *9*(3), pp. 223–241.
- Martinez, E. (2010). *Les salariés à l'épreuve de la flexibilité*, Bruxelles : Editions de l'université Libre de Bruxelles.
- Martinez, E. (2017). Grèves et conflictualité sociale en 2016. *CRISP | Courrier Hebdomadaire Du CRISP*, *16*(2341–2342), pp. 5–132.
- Massey, D. (1984). *Spatial Divisions of Labour*, London : Macmillan.
- Mayer, G., Andersen, T., & Muller, M. (2001). Employment restructuring and Flexibility in Austrian and Danish banking. *SAGE*, *7*(1), pp. 71–87.
- Morris, J. (1987). The Internationalisation of Banking, Technological Change and Spatial Patterns: a Case Study in South Wales. *Geoforum*, *18*(3), pp. 257–267.
- Morrison, P. S., & O'Brien, R. (2001). Bank branch closures in New Zealand: The application of a spatial interaction model. *Applied Geography*, *21*(4), pp. 301–330.
- Mudambi, R., & Venzin, M. (2010). The strategic nexus of offshoring and outsourcing decisions. *Journal of Management Studies*, *47*(8), pp. 1510–1533.

- Muzio, D., Kirkpatrick, I., & Kipping, M. (2011). Professions, organizations and the state: Applying the sociology of the professions to the case of management consultancy. *Current Sociology*, 59(6), 805–824. <https://doi.org/10.1177/0011392111419750>
- Nappi-Choulet, I. (2011). An index of global occupancy cost per employee: A study of service activities in Paris business district. Estimation du coût immobilier global par salarié: application aux activités tertiaires supérieures dans les quartiers d'affaires parisiens. *Revue d'Economie Régionale & Urbaine*, 3(June), pp. 575–599.
- Park, K. M., & Hollinshead, G. (2011). Logics and Limits in Ethical Outsourcing and Offshoring in the Global Financial Services Industry. *Competition and Change*, 15(3), pp. 177–195.
- Petit, P. (1984). Automatisation Des Services: Le Cas Du Secteur Bancaire. *Politiques d'Information Informatique et de Communications de l'OCDE*.
- Petit, P. (1988). Tertiarisation, croissance et emploi: quelles nouvelles logiques? *Revue d'économie Industrielle*, 43(1), pp. 164–178.
- Pluchart, J.-J. (2017). Vers une nouvelle esthétique bancaire. *Vie et sciences de l'entreprise*, 203(1), pp. 9–21.
- Pollard, J. S. (1995). The contradictions of flexibility: Labour control and resistance in the Los Angeles banking industry. *Geoforum*, 26(2), pp. 121–138.
- Pujals, G. (2007). Délocalisations et externalisations gagnent la finance européenne. *Revue d'économie Financière*, 90(4), pp. 117–147.
- PwC. (2016). How FinTech is shaping Financial Services | Febelfin. Retrieved from <https://www.febelfin.be/en/how-fintech-shaping-financial-services>, consulted on 22/06/2020.
- Regini, M., Kitay, J., & Baethge, M. (1999). *From Tellers to Sellers - Changing Employment Relations in Banks*. (M. Regini, J. Kitay, & M. Baethge, Eds.) (MIT Press). Cambridge, Massachusetts: MIT Press.
- Roman, B. (2017). *Transformer la banque - Stratégies bancaires à l'ère digitale*. Paris: Dunod.
- Rorive, B. (2005). Restructurations stratégiques et vulnérabilités au travail. *La Revue de l'Ires*, 47(1), pp. 117-134.
- Sauvayre, R. (2013). *Les méthodes de l'entretien en sciences sociales*, Paris: Dunod.
- Scott, A. J., & Storper, M. (1990). Work organisation and local labour markets in an era of flexible production. *International Labour Review*, 129(5), pp. 573–591.
- Sinden, A. (1996). The decline, flexibility and geographical restructuring of employment in british retail banks. *The Geographical Journal*, 162(1), pp. 25–40.
- Troudart, J. (2012). Analyse et comparaison des stratégies d'internationalisation des banques. Thèse en sciences de gestion, Bordeaux: Université Montesquieu – Bordeaux IV.

- UNCTAD, & Berger, R. (2004). *Service offshoring takes off in Europe*. Retrieved from <https://unctad.org/en/pages/PressReleaseArchive.aspx?ReferenceDocId=4865>, consulted on 22/06/2020.
- Van Hamme, G., Wertz, I., & Biot, V. (2011). Economic growth devoid of social progress: the situation in Brussels. *Brussels Studies*, 48. Retrieved from http://www.brusselsstudies.be/medias/publications/EN_135_BruS48EN.pdf, consulted on 22/06/2020.
- van Meeteren, M., & Bassens, D. (2018). Chasing the phantom of a ‘global endgame’: the role of management consultancy in the narratives of pre-failure ABN AMRO. *Global City Makers*, (October), pp. 170–191.
- van Meeteren, M., & Bassens, D. (2016). World Cities and the Uneven Geographies of financialisation: Unveiling Stratification and Hierarchy in the World City Archipelago. *International Journal of Urban and Regional Research*, 40(1), pp. 62–81.
- Vandermotten, C. (2016). La localisation du commandement de l’économie dominante. *Belgeo*, (1), pp. 0–19.
- Vincent, A. (2012). Restructurations et réductions d’emplois dans le secteur bancaire belge. Bruxelles : Les analyses du CRISP.
- Vincent, A. (2013). Le secteur des assurances. *CRISP | Courrier Hebdomadaire Du CRISP*, 17(2182), pp. 5–46.
- Williams, K. (2000). From shareholder value to present-day capitalism. *Economy and Society*, 29(1), pp. 1–12.
- Wójcik, D. (2012). Where governance fails Advanced business services and the offshore world. *Progress in Human Geography*, 37(3), pp. 1-18.
- Wójcik, D., & MacDonald-Korth, D. (2014). The British and the German financial sectors in the wake of the crisis: Size, structure and spatial concentration. *Journal of Economic Geography*, 15(5), pp. 1033–1054.
- Yamamura, S. (2019). Transnational professionals’ socio-spatial venturing out to the Tokyo global city-region. In *Regional Studies, Regional Science*, 6, pp. 512–519.

CHAPTER 6.

CONCLUSIONS

In this thesis I have tried to explore the processes that structure the geography of APS in the world city of Brussels in order to contribute to clarify and better understand the real role of APS in the global economy. APS form global networks based on nodes - the world cities - nodes within which agglomeration processes act. The local relationships on which the global networks of APS are based remain an under-researched aspect of this literature. My general research question therefore focuses on the processes that structure the geography of APS in the world city of Brussels in the context of globalisation. The thesis subdivides this question into two main issues. The first issue concerns the intra-urban relations between APS actors. In other words, I question the notion of the APS complex, understood as a set of interdependent relationships among firms within the city, which is at the origin of the global function of APS.

In an attempt to answer this question, I first analyse the geography of APS within world cities (**chapter 3**) before examining the intensity of relations among APS firms, in other words, the actual reality of an APS complex (**chapter 4**). Then the second issue concerns the nature of these intra-urban relations among APS firms, which enable them to exercise a command and control function on a global scale. This question emerged during the research process focused on the concrete nature of the relations among APS through the study of the role of APS in the restructuring of banks in Belgium. In the course of my study, it emerged that the command and control function given to the APS complex rested on uncertain theoretical and empirical bases, and neglected the effective role of other sources of power, namely the firms themselves and the actors of financialised capitalism through shareholding (**chapter 5**).

In the course of this approach, I therefore start from a quantitative observation of the agglomerated nature of APS activities in the city (**chapter 3**) and then seek to verify whether this spatial concentration is the result of intense relations among the actors in the sector rather than, for example, the search for the same externalities within the city (**chapter 4**). Based on the reality of the relationships among the APS actors, **chapter 5** then uses a qualitative method to investigate the exact nature of these relationships.

In the following sections, I return to these two issues in a transversal way through each of the chapters, pointing out the limits of the research. I close with a reflection on the implications of this research for the case of Brussels.

6.1 The APS complex

Networks between world cities have been widely documented, but the relationships among the APS firms that would support these networks at the intra-urban level remain understudied. It is clear that a thesis can only give a partial view of the processes that structure the intra-urban geographies of APS. I

have been working on the idea of an APS complex made up of the relationships among APS. Here I discuss my observations on the geography and nature of the APS complex in Brussels.

6.1.1 Geography of the Brussels APS complex

In **chapter 3**, the location of APS firms in the Brussels Metropolitan Region (BCR and surroundings) was analysed along two geographical dimensions: the centrality and concentration of these firms. It appeared that APS firms are more central and concentrated than other firms (all sectors combined). APS are particularly central sectors - they remain more central than the other sectors regardless of the boundaries of the Brussels metropolitan area tested using a time-distance measure. The APS firms are also more concentrated than the other sectors, which shows that the APS do not only agglomerate on a global scale in world cities, but also on an urban scale within these world cities. It can therefore be noted that, however complex APS is, it presents a geography structured by logics at both the global and urban scales.

The interest of these empirical quantitative measures of the location of APS enterprises lay in the interpretation of the processes that influence the location of APS, global actors, in a local environment. The theoretical framework proposed offered to distinguish conceptually the processes that lead to the geographical concentration and centrality of firms.

On the one hand, we had linked concentration processes to agglomeration economies, which mean that firms find advantages in locating close to each other. The scale at which agglomeration economies operate remains a debate in the literature (Cottineau, Finance, Hatna, Arcaute, & Batty, 2018). Based on our analysis, we can say that APS show a geographical proximity at the urban scale, which suggests that for global players such as APS firms, the benefits of agglomeration economies also operate at the urban scale.

On the other hand, the geographical centrality of the APS actors was linked to the processes of centralisation-decentralisation of economic activities in the pre-existing urban fabric of the metropolitan area. The geographical centrality of the metropolitan area offers advantages of accessibility, high density of activities and prestige (Gaschet & Lacour, 2002). The economic activities located there are willing to pay the price for the advantages of this centrality (Baró & Soy, 1993; Wang, Zhang, & Yeh, 2016). I suggest that the location of APS also falls under the advantages of central location, regardless of the nature of their activities as APS.

There are two limitations to these results. Firstly, while the theoretical approach makes it possible to distinguish conceptually between the processes of centralisation and concentration, it does not entirely allow empirical distinction to be made between the spatial effects of these processes. In the case of a central and concentrated location of APS activities - which is particularly the case here for the financial sector - it is not possible to distinguish which process is at work. This is a limitation of the analysis, which is recognised by assuming that it is likely that both processes are probably at work, without being able to estimate to what extent.

The second limit concerns the operationalisation of APS in terms of economic sectors. One may question the relevance of studying APS in terms of sectors. The literature on world cities originally looks at APS for their function in globalisation: APS operate as a complex of intermediate services of a production that extends to the global scale (Sassen, 2016). However, each APS sector that is

analysed here also contains 'mundane' functions, services to the population that are not linked to the globalised economy. With a quantitative analysis of the APS sectors, I can only cover part of the reality that the concept of APS covers. To go beyond this limit, I propose to discuss now the analysis of the nature of the relationships that make up the APS complex.

6.1.2 The nature of the relationships of the APS complex

In order to move beyond the quantitative sectoral approach, the relationships that would form an APS complex are then examined. On the basis of a survey of APS professionals in Brussels, **chapter 4** discusses the characteristics of interactions among APS, more specifically, the intensity, nature and location of interactions between APS.

In terms of intensity of interactions, firstly, our survey confirms that APS professionals do indeed have contacts with other APS professionals who work in other companies (and not necessarily even subsidiaries). This is already a first theoretical element that few theoretical studies confront from a relational geographical perspective, assuming that the presence of APS subsidiaries implies a horizontal relationship between APS (Taylor, 2001). I can therefore validate that APS interact with each other. Second, the intensity of APS interactions is greatest within the same sector. This means that APS professionals mainly interact with... actors of the same sector in other companies. This idea is less consistent with the idea of a supposedly cross-sectoral APS complex. The APS complex observed in Brussels is composed of strong relationships *within* sectors before being composed of relationships *between* sectors. Thirdly, when I look at the interactions between APS, I see that they are mainly oriented towards finance. Finance therefore shows a preponderant weight in the APS complex: this suggests that, far from being horizontal, finance would play a central role within a complex made up of asymmetrical relations. Not all relations between APS are equal, which questions the idea of a homogeneous APS complex and the fact of considering APS as a homogeneous block exercising a certain function. I suggest that the idea of an APS complex needs to be nuanced with the idea that finance functions as the central element in the relations among APS with auxiliary sectors around finance, i.e. what could be called a « para-financial » complex.

In order to study the nature of the interactions among APS, the relationships among economic actors were categorised on the basis of a literature review, the relevance of which was verified with APS professionals. There is a relatively broad spectrum of the nature of interactions. In particular, the survey supports the idea that APS are economic agents linked not only by traded but also by untraded interdependencies (Scott & Storper, 1990). For the APS complex, this shows that we are talking about a complex whose nature is hybrid (Gordon & McCann, 2000), based on formal trading links but also on informal exchanges to build inter-firm collaborations (Grabher, 2001).

For the geography of APS interactions, professionals about the three main APS professionals with whom they interact were asked. We could see that the majority of interactions among APS do not take place on an ultra-local scale (such as the building or the municipality) but on the Brussels urban scale, and then on the national scale. These results therefore reconfirmed that agglomeration economies play out at the urban scale. The European and global scale only concerns a small part of the interactions among APS, in particular the interactions with management consultancy.

Should we speak of an APS complex composed of inter-sectoral relations among APS (Sassen, 2016)? Based on my research, I suggest nuances. The relations among APS are asymmetrical. Finance in Brussels occupies a central place, IT appears in the interactions, while advertising seems to play only a minor role. This makes it possible to question the operationalisation of the APS sectors, whose now 'traditional' list consists of finance, accounting, the legal sector, management consultancy and advertising (Taylor, 2001). I have noted that APS interact with each other, which does not exclude that APS could interact with a multitude of other economic actors who are not APS. But this nevertheless says that the selection of the APS chosen is relevant, since it has been seen that they do indeed interact with each other. I have seen that not all the sectors that have been named APS have the same role, the same interactions between them. Having questioned the intra-urban relations among APS, is it now possible to specify the function that APS perform in the global economy?

6.2 The command and control function of the APS complex

The second question raised in this thesis concerns the presumed function of intra-urban relations among APS. The APS complex would support a « command and control » function in the globalised economy (Sassen, 2016). Why APS embody this command and control function remains empirically unclear (Parnreiter, 2017). One way to understand the command and control function is to observe it in the concrete functioning of a firm. We have twice seen the financial sector stand out within the APS complex, both in its geography (**chapter 3**) and in its central position in the interactions among APS (**chapter 4**). As this sector is undergoing a major transformation, it is through the dynamics of restructuring in this sector that I have chosen to address the function of APS in a globalised economy.

Chapter 5 assessed the role of APS in the restructuring of the banking sector through interviews with banking professionals and the reading of official documents (annual reports, press releases) of the main Belgian banks, trade unions and the banking trade federation. I noted that banking groups have been consolidating since the 1980s by gradually becoming more international. Banks are outsourcing a growing range of activities, some of which are being relocated. There is a growing search for flexibility with a view to reducing costs, which is also being achieved through the automation of processes and the use of digital technologies. This use of digital technologies involves new IT expertise, which is reshaping the bank's business lines. In these restructuring processes, I have identified several roles for the APS.

Firstly, I can see that an increasing number of activities are being reorganised outside the company's limits through outsourcing and offshoring strategies. Outsourcing and offshoring are being carried out on a European scale, with the help of APS for a wide range of specific activities such as IT, HR, trading, data centres. The APS are then external service providers or partners in a joint venture. Nevertheless, the importance of the intra-group hierarchy remains key. APS are used to execute specific production segments but never acquire a position such that they reach the top of the value chain. On the other hand, it can be observed that different players - including some APS - are working together to reorganise the wage policy system: the bank, a law firm, a specialised HR service provider, a recruiter and a brand consulting group. In a way, my case study illustrates that, in particular projects, APS are likely to be brought together for their specific skills.

Secondly, the search for flexibility is aimed at minimising the costs of each segment of the value chain. This minimisation of costs results in the optimisation of each segment of the value chain at the level of the multinational group (Parnreiter, 2017). Such optimisation represents a development potential for specialised companies such as APS. But if this potential exists, this does not mean that APS acquire a position of control of the value chain through their monopoly on strategic points in the chain. The only exception of one activity in which APS seems to take a significant decision-making role is for instance, in the modernisation of an IT infrastructure in terms of cloud computing or cybersecurity which is delegated to the IT company IBM through long-term partnerships.

Thirdly, in parallel with developments in economic globalisation, I have seen the evolution of a financialised economy, i.e. an economy in which financial logic and decision-making by corporate shareholders (Froud, Haslam, Johal, & Williams, 2000) are gradually taking on a more important role. Do APS then play a command and control role or rather a facilitating role, for example in maximising the profit of global corporations and their shareholders? This is more of a question than an assertion, which rephrases the original question about the role of APS in command and control of the economy. At the heart of Sassen's thesis was the dispersal of production functions, which necessitated the strengthening of the command functions of the APS. In the case of Belgian banking restructuring, I observe that the phenomenon of concentration of APS in world cities is indeed increasing. Nevertheless, I suggest that this phenomenon can also be understood as a direct consequence of the internationalisation of banks that are reorganising their activities on a group scale. I therefore highlight the role of the pressures of financialised capitalism on the organisation of APS firms. We could say that APS perform a function in a financialised global capitalism, and are in turn affected by this financialised global capitalism which leads to the restructuring of APS enterprises.

A remark which is also a limitation of the research is to be underlined here. Restructuring a company is not enough to revoke the idea of command and control of APS. The results only partially shed light on how APS exercise their command and control function in the globalised economy. It was found that the APS were involved in the restructuring of one APS in particular, the bank. In these restructurings, control of the company seems to remain located at the head office, which is in itself hardly surprising. One could have supported the idea that, with globalisation, corporate control has become too complex and has shifted to specialised companies (Sassen, 2016). However, this is not the case here. Rather, I suggest that we are facing a change in scale - from a company that becomes a subsidiary of a larger company and whose activities are consistent with the scale of the latter.

In my study, there is no evidence of strong horizontal relationships among APS. However, I cannot completely invalidate this hypothesis, which is one other limitations of this study. While it is true that studying the restructuring of the banking sector makes it possible to approach the role of APS in a concrete case, the bias is that the most logical form of relations within a sector that is restructuring are the vertical relations between a head office and its subsidiaries. It therefore seems logical that vertical relationships are the most visible within this case study. However, the examples of APS interventions that are identified allow a better understanding of the role of APS in a concrete case. This also made it possible not to choose a list of defined sectors, but to leave the possibility for other economic actors to emerge in the analysis, which seemed crucial, all the more so as APS professions evolve and can hardly remain fixed in a sectoral category.

6.3 Brussels in the global economy: towards a contextualisation of the results

My study focused on an increasingly specific subject in a specific context, Brussels after the global crisis of 2008. This is why I would like to recontextualise my study, highlighting on the one hand what we have learnt about Brussels and on the other hand, what degree of generality I can attribute to my findings.

6.3.1 Brussels' intermediate position in the bank

I now turn to what my research can point to for Brussels. The study of the APS complex in Brussels has shown that even global players remain rooted in particular contexts that shape their collaborations, their informal habits, the suppliers linked to a merger-acquisition, all sorts of local differences that mean that APS in Brussels do not necessarily operate in the same way as elsewhere.

Indeed, Brussels is not a typical case of a world city. Brussels is a representative city of intermediate cities in the world city networks (Vandermotten & Noël, 2004). In terms of financial services, Brussels appears as a second-tier financial centre (Hendrikse, van Meeteren, & Bassens, 2019). The specific function of Brussels is rather related to its political and regulatory functions, which attract international legal and lobbying activities, among others (Elmhorn, 2001). Although Brussels may not be as important as London in terms of finance (Wójcik, 2013), finance remains a major employer in Brussels. In banking, Brussels clearly shows a domestic function oriented towards the national economy.

The study of bank restructuring from Brussels sheds light on a process similar to that described in the work of Sassen and Friedman, an increasing dispersion and division of labour on a global scale. It is now at the very heart of the system, within finance, that these processes of dispersion vs. concentration are observed. Indeed, in the processes of outsourcing/offshoring of banking activities, I could observe that 'higher' functions such as trading have been moved to other world cities, while 'lower' functions such as the IT back office have been moved to the southern periphery of Europe or mainly to India. The bank's activities are therefore reorganised according to a value chain logic, which seems to seek optimal locations for each production segment. It is perhaps debatable to consider that all these value chain functions concern the APS functions. Nevertheless at first sight the bank is an APS and if we consider that banks' components are not part of APS work, then APS functions have to be reconceptualised in a different way than by sector.

The result of restructuring processes is a sharp reduction in banking employment in Brussels whereas added value remains high. Whereas EU member states show similar employment and added value declines, the tendency seems particularly marked in Belgium, and thus Brussels. The most surprising aspect of this decline is that the range of banking jobs in Brussels is shrinking in two directions. On the one hand, high-level activities such as trading are moving to Paris, London or Amsterdam. Brussels does not appear to be a strong enough banking centre to prevent these activities from moving to these cities where economies of scale are probably greater than in Brussels. The predominance of foreign groups in the Belgian sector probably accentuates the logic of decision-making from centres abroad. On the other hand, activities such as IT activities are not maintained in Brussels either. Salary levels in Brussels remain high in the banking sector, and seem too expensive to maintain these functions in the services value chain in Brussels. These functions are transferred to low-wage

countries in Europe or Asia, depending on the strategies of the banking groups. IT activities are also being transformed by automation strategies. I conclude that Brussels occupies an intermediate (in-between) position in the international division of labour and that this role is increasingly limited to the coordination of the national market alone.

This observation has two important implications. On the one hand, from a political perspective, it illustrates the limited room for manoeuvre of public authorities wishing to be attractive for high-level international functions. It is clear from my case study that the position of Brussels is structural, it depends on the path taken in the long term, and attractiveness policies do not carry much weight in the face of these structural trends linked to the strategies of large groups within the framework of financialised capitalism (Van Hamme, Waiengnier, Bassens, & Hendrikse, 2020). On the other hand, this same position of Brussels does not, it is true, make it an ideal node for observing the functioning of the highest functions in the global economy. Admittedly, I have been able to observe the global restructuring of banking groups, and thus identify processes that go far beyond the Brussels banks, but conversely the weakness of the highest functions makes it difficult to reach a clear conclusion on the question of the role of the APS complex.

6.3.2 Relationships among APS beyond the Brussels context

I now come back to the general questioning of the processes that structure the geography of APS in the world city of Brussels in a globalised economy. What conclusions can be drawn from the intra-urban relations among APS that can be extended beyond the Brussels context?

The geography of the APS complex in Brussels shows that APS have characteristics of centrality and concentration that distinguish them from other economic activities. Agglomeration economies can therefore be observed well on an intra-urban scale. The search for centrality is relevant for Brussels, but not necessarily for other cities. However, I have shown the relevance of taking into account the local scale and the characteristics of the places in which the global APS actors are inserted in order to understand the interface between global actors and a local place. To understand this interface highlights the role of APS from a particular context.

From the observations, the APS concept has been mobilised to clarify certain aspects of the processes of the globalised economy. The relations among APS in Brussels qualify an APS complex that would be asymmetrical, with some actors interacting more than others, and in which finance would have a predominant place within these relations. The APS complex in Brussels is strongly oriented around finance. The geography of the APS-finance interactions shows a strongly national orientation, and the analysis of the restructurings shows that between the urban and global scale of these global actors, the importance of a European regional scale can be identified. Nevertheless, given the crucial nature of financial activities in the world economy, it is possible that this result is similar to other APS complexes located in other cities.

Can the command and control function of the APS complex in Brussels indicate results that go beyond the Brussels context? What I find in the internal urban spatial logic of the APS, and in particular in the way the APS plays a role in the financial restructuring, is that this logic does not seem to be specific to Brussels. There is a logic of value chains in which decisions depend heavily on the headquarters of large multinational groups active at the European regional level. In itself, the fact that this logic is

expressed on a European scale already allows us to assume that the results are probably not only valid for the Brussels context.

The strategy of geographical fragmentation of multinational groups can provide an interesting basis for more general interpretations. The strategy of geographical fragmentation can be understood from the perspective that multinational groups are looking for an optimal location in terms of costs for their different activities. This optimal location for high-level functions reinforces existing centres such as Paris, Amsterdam or London. Lower-level functions are dispersed to more peripheral locations where they can be performed at lower cost - in Europe or Asia. This strategy of value chain segmentation explains to a large extent the loss of jobs at the banks' headquarters in Brussels. It is a strategy that has been observed for production functions since the 1980s, and is now found at the very heart of command functions such as APS. I believe that this development is representative of a change in the form of capitalism as it stands today. I suggest that the APS is under a double constraint of capitalism. Capitalism exists both in a stable form that has influenced the functioning of enterprises since the 19th century, and today it takes a more global form, driven by the logic of shareholders maximising their dividends. This context places the banks and more generally the APS in a constant search for profitability which at least partially explains the geographical and organisational evolutions of these players.

From my point of view, the paradigm of global networks and APS initiated by the work of Sassen and others, has had a strong tendency to self-validate: conclude to the key role of APS in the globalised economy – key role which was set from start. It is a bit of a different story that I have observed. I see an increasing specialisation of APS with specific skills needed for the functioning of the system as a whole. In this sense, the story of APS is the continuation of tendencies towards international division of labour, but also the possibility of acquiring key or monopolistic positions. This does not confer on these actors a direct role of control and command in the globalised economy, even though it may appear that the combination of these services facilitates increased productivity or tax evasion, for example. Such a conclusion would essentialise a heterogeneous and asymmetric 'complex' of firms. I have indeed observed the centrality of finance, whose strategic position within the capitalist economy has been noticed in the long history. I have also observed the rise of a financialised capitalism whose constraints weight on all APS as much as on other economic activities. I therefore plead for a better articulation between the global networks of APS and financialised capitalism.

CHAPTER 7.

APPENDIX

7.1 List of interviews

Reference	Type of institution	Profession or field of expertise
I	Trade union	Union representative
II	Medium bank	Branch manager
III	Large bank	Private banker
IV	Large bank	Process officer
V	Medium bank	Union representative
VI	Interbank network	Consultant
VII	Large bank	Union representative
VIII	Small bank	HR director
IX	Trade union	General secretary
X	Large bank	HR
XI	Professional federation	General secretary
XII	Large bank	Campaign manager
XIII	Large bank/trade union	Business executive / private banking / union representative
XIV	Small bank	Network sales director
XV	Large bank	Financial optimisation director
XVI	NGO	Researcher
XVII	Large bank	Digital channel advisor / corporate banking
XVIII	Large bank	Program lead digitization
XIX	Large bank / trade union	Business executive / reporting / union representative
XX	Large bank	Executive - Investment IT
XXI	Large bank	Head of operations
XXII	Trade union	Sector representative
XXIII	Large bank	HR
XXIV	Large bank	Lead Product owner
XXV	National bank	Macroprudential supervision
XXVI	NGO	Research
XXVII	Small bank	Computer scientist
XXVIII	Salle des marchés/NGO	Analyst

Overview of the interviews conducted in Brussels between January and April 2018 (15) and June and July 2019 (13).

7.2 Basics for understanding the banking landscape in Belgium

To understand the banking sector in Belgium, it is first necessary to differentiate between the banking brand and the financial group that owns it. For example, the BNP Paribas Fortis group has 4 brands: BNP Paribas Fortis, Bpost, Fintro and Hello bank (50% owned). The groups that own the banks are mainly "*financial conglomerates*" based on a model similar to multinational companies operating in sectors such as the automotive or IT technology industries; with an administrative board, an executive committee and a general assembly of shareholders. This is the dominant model that emerged in Europe from the 1980s onwards with the liberalisation of economic activities. Other ownership models, such as cooperative banks or public savings banks also exist. In Belgium, savings banks have gradually been integrated into the classic bank model.

Secondly, the interweaving of banking activities and the public for whom they are intended makes it difficult to define a "*type of bank*". In relation to their activities, banking institutions may act as banking intermediaries, be credit institutions, specialise in issuing securities, or be payment institutions. If we choose to define the bank on the basis of its clientele and in particular the wealth of its customers, we can then distinguish between "*investment banks*" or "*corporate*", intended for companies; "*private banks*" and "*wealth management*" intended for wealthy and very wealthy individuals, and "*retail banks*" intended for private individuals. Some banks combine a wide range of banking activities and a broad spectrum of customer groups and have gradually become what are known as "*universal banks*".

In Belgium, four banks make up the bulk of the sector in terms of volume of business, employment and value added. They are owned by international private shareholders (BNP Paribas Fortis owned by the French BNP Paribas group, ING Belgium owned by the Dutch ING group), national private shareholders (KBC owned by the Belgian KBC group) or by a public shareholder (Belfius, owned by the Belgian state). The total assets of these banks are estimated at EUR 893 billion (banks' annual reports). The total equity of these banks amounts to €56,117 million (Febelfin 2017 data), i.e. 76% of the sector's equity. These four banking giants are universal banks, in the sense that their customers range from basic savers to governments. They offer banking services to all levels of the customer chain. Each bank addresses the needs of its customers according to their wealth in the segments of retail banking, private banking and wealth management; and a "*corporate*" bank, which offers a similar segmentation ranging from small and medium-sized enterprises to large multinationals (including other banks) and states.

7.2.1 Who are the actors in the Belgian banking landscape ?

Behind a brand is a financial group. The financial group holds shares in the company, so we say that it is a shareholder, and that it owns the company. The majority shareholder in a company weighs the most in the company's decisions. Instead of looking only at the brand, to understand who the players in the Belgian banking world are, we need to identify the group that owns this sign. Most banks today are business conglomerates whose interests are guided by the interests of the group.

Banks are also a sector where corporate mergers and acquisitions are frequent. When one company merges with another, it is also said to incorporate the capital of that company. The result of the merger

may, depending on the shares of capital transferred, be a new company (full merger) or an integration of the shares of the merged company into the capital of the acquiring company (partial merger).

Four groups make up the bulk of the Belgian banking landscape (60% of the market) :

- **BNP Paribas Fortis** was created by the merger between Fortis and the French BNP Paribas group following the bankruptcy of Fortis in 2008. It is now the Belgian subsidiary of this French group. Under the brand name BNP Paribas Fortis you will also find the network of independent agents Fintro, the postal bank (in which BNP Paribas holds 50% of the shares) also made up of independent agents, and hello bank! the 'digital' bank owned by the group, which operates on the basis of the service infrastructure of BNP Paribas Fortis branches. Total assets held by BNP Paribas Fortis reach EUR 277.4 billion in 2018¹⁰⁴. By way of comparison, Belgian GDP in the same year amounted to 450 billion euros¹⁰⁵.
- **ING** is acquired by the Dutch group ING, so it is a subsidiary of the ING Group. ING had two distribution networks: the statutory ING branches and the independent Record Bank branches. ING announced in 2018 it would integrate the independent Record Bank branches into its distribution network. ING Belgium's total consolidated financial assets were EUR 154.4 billion in 2018¹⁰⁴.
- **Belfius** is the name given to the Dexia bank in 2012 when it was taken over by the State. Belfius is the only bank wholly owned by the Belgian State. Its distribution network is composed entirely of independent agents. In 2018, the total financial assets of Belfius were EUR 164.1 billion¹⁰⁴. Dexia Bank, which went bankrupt following the financial crisis of 2008, continues to exist as a "*bad bank*". That is to say that the debts, bought back by the Belgian State, are resold on the market via financial arrangements in order to be amortised.
- **KBC Brussels** is one of the three subsidiaries of the KBC group, together with CBC (present in Wallonia) and KBC (present in Flanders and the German-speaking region). KBC's head office is located in Antwerp. Total financial assets of KBC Bank amounted to 283.8 billion euro in 2018¹⁰⁴.

The rest of the Belgian banking landscape is made up of smaller and generally more specialised players: independent bankers, credit institutions, private banking, asset managers, brokers.

- **Argenta Mutual Savings Bank** is part of the Argenta Bank- en Verzekering group that manages several companies including Argenta Mutual Savings Bank, insurance companies, investment institutions and a cooperative society. The Van Rompuy family remains the majority shareholder. Its network consists mainly of independent agents.
- **Beobank** is a retail bank formerly called Citibank Belgium, subsidiary of the US group Citigroup. It was acquired by the French group Crédit Mutuel Nord Europe in 2013.

104 Source : rapports annuels, 2018

105 Source : Statbel, chiffres-clés 2019 https://statbel.fgov.be/sites/default/files/images/in%20de%20kijker/Chiffrescles_2019_r.pdf

To complete the picture, we have to mention some less visible specialised financial institutions that allow the payment system to be operational globally. For instance SWIFT, providing the infrastructure for exchanging financial messages, or Euroclear, providing securities transactions, both of which are based in Belgium.

7.2.2 Glossary

This glossary is a personal thematic compilation that takes up or is inspired by definitions gathered from various websites, mainly the national bank, wikipedia, investopedia. The list is not intended to be exhaustive. It presents a few concepts that help explain how companies operate in today's banking world and eventually help the reader to understand some of the technical terms used in this dissertation.

A. *Structure of a company*

Branch

The branch represents the geographical extension of a company, as well as an additional department of the company. The branch does not have a separate legal personality. When a branch contracts, it is the parent company that commits itself. See also **subsidiary**.

Dividends

Payment of a company to its shareholders. The amount of this payment is decided by the shareholders at the general meeting.

Group

The group formed by the parent company and its subsidiaries constitutes a corporate group or group. Subsidiaries may control their own subsidiaries, and so on in a cascade. The parent company remains at the head of the group, but does not itself need to hold the majority of the capital of its subsidiaries.

Shareholder

The shareholder invests capital in a company. He then becomes the owner of a fraction of this company, and is remunerated by dividends paid periodically.

Subsidiary

A subsidiary is a company that is majority-owned by a parent company. The subsidiary remains in "control" of the parent company, but has a different legal personality. A subsidiary located in a country other than the parent company will therefore be subject to the legislation of the parent company. See also **branch**.

B. Management of a company: annual accounts

Assets

An asset is an element of the patrimony of a person or a company. This element has a positive economic value for the company: it generates a resource. Ex. land, buildings. See also **liabilities** and **balance sheet**.

Liabilities

A liability is an element of the assets of a person or a business. This element has a negative economic value for the company: it generates a debt towards a third party. Ex. equity, loans
see also **assets** and **balance sheet**.

Annual accounts

The annual accounts describe the management of a company. The annual accounts consist of four parts: the **balance sheet**, the **income statement**, the **annexes** and the **social balance sheet**.

Balance sheet

The purpose of the balance sheet is to summarise at a given time what a company owns. On the one hand, it records what the company owns (assets) and, on the other hand, what the company owes (liabilities). The same item can therefore be an asset for the balance sheet of company A and a liability for the balance sheet of company B. See also **annual accounts**

Social balance sheet

The social balance sheet contains specific information on employment in the company: number of people employed, staff turnover, training courses taken by the staff, etc. See also **annual accounts**

Income statement (annual accounts)

The profit and loss account gives a comprehensive view of the flow of income and expenditure over a given period of time, referred to as an "*accounting period*". A distinction is made in the income statement between operating results, financial results and extraordinary results. See also **annual accounts**

Annexes

In the appendices, various headings of the balance sheet and income statement are broken down and explained in more detail. See also **annual accounts**

C. The types of banks

Universal bank

Bank offering products and services in retail banking, private banking, investment banking, financial markets, asset management and insurance. Customers range from individuals, small and medium-sized enterprises (SMEs), institutions and large companies. See also **specialised bank**

Specialised bank

In contrast to universal banks, which offers banking products to a wide range of customers, specialised banks are concentrated on a specific range of activities. See also **merchant bank**, **private bank**, **wealth management**.

Merchant bank

A bank that specialises in the business fields.

Private bank

Bank whose clientele has a minimum patrimony
ex. Degroof Petercam, Delen

Wealth management bank

Wealth management includes everything related to the management of a client's portfolio (a record that includes all financial assets, investments, etc. of a person or business). Basically, it is the segment of clientele wealthier than in the private bank.

D. Functioning of the banking system

In Europe, the banking system consists of the European Central Bank (ECB) and the national central banks (NCBs) of the euro area Member States.

Credit institution

Credit institutions (commonly referred to as "*banks*", "*savings banks*" or "*securities banks*") are companies that receive deposits of money and grant credit. The pursuit of the activity of a credit institution is subject to obtaining a licence from the National Bank of Belgium.

European Central Bank (ECB)

The European Central Bank sets the key interest rates of the Member States, i.e. the ECB sets the price of money for the banks in the euro zone. Changes in the key rates have a direct impact on the lending rates for European individuals.

Market (money market)

Market on which credit institutions make short-term loans to each other

Payment system

A set of instruments, procedures and, generally, systems for transferring funds between banks to facilitate the circulation of money.

7.2.3 External resources

A. To listen to

« **Comptez-moi la banque** » [FR] by Tiphaine de Rocquigny

Audio series dedicated to banking: the banking profession through time (episode 1), the role of the European Central Bank (episode 2), banks in the financing of the economy (episode 3), the reinvention of banks in the face of online banking (episode 4)

<https://www.franceculture.fr/emissions/entendez-vous-leco/entendez-vous-leco-du-jeudi-31-janvier-2019>

B. To read and listen

European campaign #10yearon #changefinance [ENG]

European campaign mobilised around the date of 15 September 2018, the anniversary of the financial crisis. The texts highlight how a series of societal challenges are created, aggravated and/or exploited by the financial system and its crises.

<http://www.changefinance.org/>

« **Byebye TINA** » campaign [ENG][FR]

Lists texts, films and books to understand finance and its influence on public policy and daily life.

<http://www.byebyetina.be/>

C. To do

« **Lobby tours** » with Corporate Europe Observatory [FR][NL][ENG]

Organises "lobby tours", guided walks through the world of lobbies in Brussels, including the financial lobby.

<https://corporateeurope.org/>

Gesturing lecture « **Chroniques d'une ex-banquière** » by Aline Fares [FR]

The website lists movies, comic books, publications about financialisation

<http://alinefares.net/>

Game « **Comment fonctionnent les banques ?** » of the CADTM toolbox [FR]

Game on the concrete working of the banking system

<http://www.cadtm.org/L-Outil-Comment-fonctionnent-les-banques>

D. To encounter

Belfius est à nous – Belfius is van ons [FR][NL]

Platform of Belgian organisations opposed to the privatisation of the Belfius bank.

<http://www.belfiusestanous.be/>

Désorcèler la finance [FR][ENG]

Artist, activist and researchers' collective gathered around the « de-invoking » of the role of finance in society

<http://desorcelerlafinance.org/fr>

Financité and Fairfin networks [FR][NL][ENG]

Financité and its Dutch-language equivalent Fairfin are associative citizen networks organised around the theme of responsible and solidarity-based finance. They propose public events, debates and publications.

<https://www.financite.be/>

<https://www.fairfin.be/>

ABSTRACT

8.1 [ENG]

In recent decades, advanced producer services (APS) in the fields of accountancy, advertising, finance, legal services and management consultancy, as well as information technology, have been studied as agents in the formation of global urban networks. This empirical orientation of the research on world cities arose from the observation that APS are key actors in the control and command processes of the economy. APS help their clients to develop financial accumulation strategies and ensure the coordination and governance of global production networks. Nevertheless, while global networks have been richly documented by research on world cities, this thesis attempts to understand the less studied processes that structure the geography of APS in world city Brussels. To do so, I re-examine two assumptions that are understudied and remain implicit. On the one hand, it is supposed that APS firms agglomerate and constitute strong collaborative networks of APS firms within cities, an APS complex. On the other hand, whereas global networks of APS firms have been thoroughly documented, the command and control role attributed to world cities often remains assumed to directly stem from these networks. To explore these assumptions, I developed three types of analysis applied to the case of Brussels, a city whose internationalisation is based on its political function and its strong insertion in the APS networks. Firstly, I examine the agglomeration processes of APS on an urban scale. I developed a method to make a conceptual distinction between the processes of centrality and concentration when analysing the geography of APS. I identify that the geography of APS firms is structured by the benefits of intra-urban agglomeration economies, as well as by the advantages of central locations, independently of the nature of APS activities. Second, I attempt to explain the concrete reality of an APS complex by examining the intensity of the relations between APS. I conducted a survey among APS professionals in Brussels to characterise the interactions within and between sectors. Instead of an APS complex based on relatively equal interactions between companies, findings show that finance has a prominent place among APS, revealing close links with legal, accountancy and audit services and IT. Thirdly, I try to better understand the role of APS in the global economy through a case study on concrete collaborations between APS companies in the case of bank restructuring processes. I built a case study on the basis of interviews with banking professionals and the analysis of official documents (annual reports, press releases) of the main Belgian banks, trade unions and banking professional federation. I find APS play a dual role : they have a function in the restructuring itself, and insert in the new value chains that emerges from these restructuring processes. The results of the three analyses bring me to argue that the notion of an APS complex should be nuanced with the idea that finance functions as the central element in the relations between APS with auxiliary sectors around finance, i.e. what could be called a ‘para-financial’ complex. I find that there seems to be a structural dependency between the APS – banking sector restructurings would probably hardly take place without APS. However this explanation does not fully illuminate the notion of control and command of the economy for which I recommend to take into account the constant search for profitability which puts pressure on the organisation of companies. I therefore plead for a better articulation between the global APS networks and financialised capitalism.

To conclude, I discuss how Brussels occupies an intermediate position in the international division of labour and that this role is increasingly limited to the coordination of the national market alone. I suggest my results can be generalised beyond the Brussels context, as I find a logic of value chains in which decisions depend heavily on the headquarters of large multinational groups active at the European regional level.

8.2 [FR]

Au cours des dernières décennies, les services avancés à la production (APS) dans les domaines de la comptabilité, de la publicité, de la finance, des services juridiques et du conseil en gestion, ainsi que de l'informatique, ont été étudiés en tant qu'agents dans la formation de réseaux urbains mondiaux. Cette orientation empirique de la recherche sur les villes mondiales est née de l'observation que les APS sont des acteurs clés dans les processus de contrôle et de commandement de l'économie. Les APS aident leurs clients à développer des stratégies d'accumulation financière et assurent la coordination et la gouvernance des réseaux de production mondiaux. Néanmoins, alors que les réseaux mondiaux ont été richement documentés par la recherche sur les villes mondiales, cette thèse tente de comprendre les processus moins étudiés qui structurent la géographie des APS dans la ville mondiale de Bruxelles. Pour ce faire, je réexamine deux hypothèses qui restent peu étudiées et implicites. D'une part, il est supposé que les firmes APS s'agglomèrent et constituent des réseaux de collaboration de firmes APS au sein des villes, un complexe APS. D'autre part, alors que les réseaux mondiaux de firmes APS ont été minutieusement documentés, le rôle de commandement et de contrôle attribué aux villes mondiales reste souvent supposé découler directement de ces réseaux. Pour explorer ces hypothèses, j'ai développé trois types d'analyses appliqués au cas de Bruxelles, une ville dont l'internationalisation est basée sur sa fonction politique et sa forte insertion dans les réseaux APS. Dans un premier temps, j'examine les processus d'agglomération des APS à l'échelle urbaine. J'ai développé une méthode pour faire une distinction conceptuelle entre les processus de centralité et de concentration pour analyser la géographie intra-urbaine des APS. Je constate que la géographie des entreprises APS à l'échelle intra-urbaine est structurée par les avantages des économies d'agglomération, ainsi que par les avantages liés aux localisations centrales, indépendamment de la nature des activités des APS. Ensuite, je tente d'expliquer la réalité concrète d'un complexe APS en examinant l'intensité des relations entre les APS. J'ai mené une enquête auprès des professionnels APS à Bruxelles pour caractériser les interactions au sein et entre les secteurs APS. Au lieu d'un complexe APS basé sur des interactions relativement égales entre les entreprises, les résultats montrent que la finance occupe une place prépondérante au sein des APS, révélant des liens étroits avec les services juridiques, comptables et d'audit et l'informatique. Troisièmement, j'essaie de mieux comprendre le rôle des APS dans l'économie mondiale à travers une étude de cas sur les collaborations concrètes entre les entreprises APS dans le cas de processus de restructurations bancaires. J'ai construit une étude de cas sur la base d'entretiens avec des professionnels du secteur bancaire et de l'analyse de documents officiels (rapports annuels, communiqués de presse) des principales banques, syndicats et de la fédération professionnelle bancaire belge. Je trouve que les APS jouent un double rôle : ils ont une fonction dans la restructuration elle-même, et s'insèrent dans les nouvelles chaînes de valeur qui émergent de ces processus de restructurations. Les résultats conjoints des trois analyses m'amènent à soutenir que la notion de complexe APS doit être nuancée avec l'idée que la finance fonctionne comme l'élément central dans les relations entre les APS avec des secteurs auxiliaires autour de la finance, c'est-à-dire

ce que l'on pourrait appeler un complexe « para-financier ». Je trouve qu'il semble y avoir une dépendance structurelle entre les APS – les restructurations du secteur bancaire n'auraient probablement pas lieu sans les interventions des APS. Cependant, cette explication n'éclaire pas complètement la notion de contrôle et de commandement de l'économie pour laquelle je recommande de prendre en compte la recherche constante de la rentabilité qui fait pression sur l'organisation des entreprises. Je plaide donc pour une meilleure articulation entre les réseaux mondiaux des APS et le capitalisme financiarisé. Pour conclure, je montre que Bruxelles occupe une position intermédiaire dans la division internationale du travail et que ce rôle se limite de plus en plus à la seule coordination du marché national. Je suggère que mes résultats peuvent être généralisés au-delà du contexte bruxellois, étant donné que je trouve une logique de chaînes de valeur dans laquelle les décisions dépendent fortement des sièges des grands groupes multinationaux actifs au niveau régional européen.

Titre en français : *L'évolution des géographies métropolitaines des services avancés à la production: processus d'agglomération, réseaux professionnels et restructuration des entreprises dans la ville mondiale de Bruxelles*

8.3 [NL]

De afgelopen decennia zijn geavanceerde dienstverleners in sectoren financiële diensten, juridische diensten, boekhouding- en auditdiensten, management consulting, advertising, en ook informatie technologie (IT) bestudeerd als belangrijke actoren in de vorming van wereldwijde stedelijke netwerken. Het wereldstedenonderzoek onstond vanuit het besef dat geavanceerde dienstverleners een sleutelrol spelen in de controle- en beheersprocessen binnen de nationale en mondiale economie. Geavanceerde dienstverleners helpen hun klanten (het bedrijfsleven, in de eerste plaats multinationals) onder andere bij het ontwikkelen en vormgeven van bedrijfsstrategieën, de coördinatie en bestuur van de wereldwijde productienetwerken, en de financiën. Waar mondiale geavanceerde dienstverleners netwerken rijkelijk zijn gedocumenteerd in het wereldstedenonderzoek bestudeert dit proefschrift de processen die de hedendaagse grootstedelijke geografie van APS van wereldsteden structureren. Om dit te doen, bestudeer ik twee hypothesen die onvoldoende bestudeerd zijn en impliciet blijven. Enerzijds wordt verondersteld dat APS-bedrijven agglomereren en sterke samenwerkingsnetwerken van APS-bedrijven binnen steden vormen, een APS-complex. Anderzijds, terwijl mondiale netwerken van APS-bedrijven grondig gedocumenteerd zijn, blijft de controle- en beheersprocessen die aan wereldsteden wordt toegekend vaak verondersteld rechtstreeks uit deze netwerken voort te komen. Om deze hypothesen te onderzoeken heeft dit proefschrift drie soorten analyses ontwikkeld die worden toegepast op de casus Brussel, een wereldstad waar zakelijke agglomeratie en internationalisering is gebaseerd op haar financiële en politieke functies, resulterend in de sterke integratie van geavanceerde dienstverleners netwerken. Eerst is er gekeken naar diverse geavanceerde dienstverleners agglomeratieprocessen op stedelijke schaal. Ik werk een methodiek uit op basis van een bestaande dataset om conceptueel onderscheid te maken tussen processen van centraliteit en concentratie van geavanceerde dienstverleners werkgelegenheid. Ik stel vast dat binnen de Brusselse metropoolregio de geavanceerde dienstverleners georganiseerd zijn op basis van agglomeratievoordelen en voordelen van centrumlocaties, onafhankelijk van de aard van de APS activiteiten. Ten tweede zijn diverse processen geanalyseerd waarop geavanceerde dienstverleners agglomeratie is gebaseerd. Er is een enquête uitgevoerd onder geavanceerde dienstverleners

professionals in Brussel om professionele interacties in kaart te brengen binnen en tussen sectoren. In plaats van een zogenaamd geavanceerde dienstverleners complex dat gebaseerd is op relatief gelijke interacties tussen bedrijven, tonen de bevindingen aan dat financiële diensten een prominente plaats innemen, en welke nauw verweven zijn met juridische diensten, boekhouding- en auditdiensten en IT. Ten derde probeer ik de rol van APS in de wereldeconomie beter te begrijpen door een kwalitatieve studie over concrete samenwerkingsverbanden tussen APS-bedrijven in het geval van bankherstructureringsprocessen. De studie is ontwikkeld middels interviews met professionals en de analyse van officiële documenten (jaarverslagen, persberichten) van de belangrijkste Belgische banken, vakbonden en de bancaire beroepsfederatie. Ik toon dat APS een dubbele rol spelen: ze hebben een functie in de herstructurering zelf, en ze voegen zich in de nieuwe waardeketens die uit deze herstructureringsprocessen voortkomen. De resultaten van de drie analyses brengen me ertoe te stellen dat de notie van een APS complex moet worden genuanceerd met het idee dat financiën als centraal element functioneren in de relaties tussen APS met toeleverende sectoren rond financiën, d.w.z. wat men een ‘para-financiële’ complex zou kunnen noemen. Ik vind dat er een structurele afhankelijkheid lijkt te bestaan tussen de APS – herstructureringen in de banksector zouden waarschijnlijk nauwelijks plaatsvinden zonder APS. Deze verklaring verlicht echter niet volledig het begrip van controle- en beheersprocessen van de economie, waarvoor ik aanraad om rekening te houden met de voortdurende zoektocht naar winstgevendheid, die de organisatie van de bedrijven onder druk zet. Ik pleit daarom voor een betere afstemming tussen de wereldwijde APS-netwerken en het financiële kapitalisme. Het proefschrift concludeert dat Brussel een tussenpositie inneemt in de internationale arbeidsverdeling en dat deze rol zich steeds meer beperkt tot de coördinatie van de nationale markt alleen. Ik stel voor mijn resultaten te veralgemenen buiten de Brusselse context, want ik vind een logica van waardeketens waarin beslissingen sterk afhankelijk zijn van de hoofdzetels van grote multinationale groepen die op Europees regionaal niveau actief zijn.

Nederlandse titel: *De grootstedelijke geografie van geavanceerde dienstverleners: Agglomeratieprocessen, professionele netwerken en herstructurering in wereldstad Brussel*