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Managing and governing commodity chains: the role of producer service firms in the secondary global city of Hamburg

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Abstract

This paper is motivated by the observation that our understanding of global cities in Germany and beyond is limited because the practices through which producer service firms (PSFs) are involved in managing and governing their clients' global commodity chains (GCCs) have barely been studied. Based on interviews with representatives of PSFs in the secondary global city of Hamburg, the paper scrutinises whether and how service professionals contribute to the functioning and the control of their clients' cross-border operations. It also analyses why clients choose global PSFs located in Hamburg, and it discusses which place Hamburg occupies in the network of German global cities. The paper concludes that because PSFs fulfil management functions for their clients' global operations Hamburg is, beyond the role of its port, a critical node in many GCCs. Secondly, PSFs influence their clients' decision-making processes. They are part of economic governance processes, though this impact cannot be straightforwardly equated with 'command and control'. The paper also confirms that (and explains why) the world city network is the spatial correlate of a globalising economy. Finally, there is no such a thing as a 'global city hierarchy' because the division of labour between the offices of PSFs is functional. As regards further research, a first task is to verify this paper's findings through interviews with clients of PSFs to consolidate our knowledge on the role of PSFs in GCCs. Secondly, the contention that the world city network is flat has to be re-examined against the backdrop of an evident clustering of PSFs in specific cities. Finally, the discussion of whether and how PSFs are involved in the governance of their clients' GCCs needs to be continued and deepened.

Zusammenfassung

Dieser Artikel geht von der Beobachtung aus, dass unser Wissen über Global Cities in Deutschland und darüber hinaus beschränkt ist, weil die Praktiken, durch welche unternehmensorientierte Dienstleistungsfirmen (UoDF) an Management und Steuerung der globalen Güterketten (GGK) ihrer Klienten beteiligt sind, kaum untersucht wurden. Gestützt auf Interviews mit VertreterInnen von UoDF in der zweitrangigen Global City Hamburg untersucht der Aufsatz, ob und wie unternehmensorientierte DienstleisterInnen zum Funktionieren und zur Steuerung grenzüberschreitender Aktivitäten ihrer Kunden beitragen. Der Aufsatz untersucht auch, warum Kunden globale UoDF mit Büro in Hamburg auswählen, und er diskutiert, welchen Platz Hamburg im Netzwerk von Global Cities in Deutschland einnimmt. Der Aufsatz kommt zu dem Schluss, dass Hamburg über die Rolle seines Hafens hinaus ein wichtiger Knoten in vielen GGK ist, weil UoDF Managementfunktionen für die globalen Operationen ihrer Kunden übernehmen. UoDF beeinflussen auch Entscheidungsprozesse ihrer Kunden. Sie sind also Teil von wirtschaftlichen Steuerungsprozessen, auch wenn diese nicht direkt mit 'command and control' gleichgesetzt werden können. Der Aufsatz untermauert auch, dass und warum das *world city net-*

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work die räumliche Entsprechung einer globalisierten Wirtschaft ist. Schließlich zeigt der Aufsatz, dass das *world city network* nicht hierarchisch strukturiert ist – die Arbeitsteilung zwischen den Büros der UoDF ist funktional. Für künftige Forschung ist eine erste Aufgabe, die Ergebnisse dieses Textes durch Interviews mit den Klienten der UoDF zu überprüfen, um unser Wissen um die Rolle von UoDF in GGK zu vertiefen. Zweitens muss die Aussage, das *world city network* sei flach, vor dem Hintergrund offensichtlicher Cluster von UoDF in bestimmten Städten überprüft werden. Letztlich muss die Diskussion ob und wie UoDF in die Steuerung der GGK ihrer Kunden involviert sind, fortgesetzt und vertieft werden.

Keywords Producer service firms, global commodity chains, global cities, governance, Hamburg

1. Introduction

Discussing the contributions to a Special Issue of *Raumforschung und Raumordnung* on 'German Cities in the World City Network', *Beaverstock* (2011) criticises that most of the papers rely too comfortably on the well-tested GaWC methodology¹, which is why they fail to advance the understanding of German world cities beyond the quantitative dimension of inter-city relations. Due to the reluctance to focus on agency in the making of world city networks, "quite a frustrating absence from this compilation of papers ... is the lack of forthright, process-based findings" (*Beaverstock* 2011: 216).

Yet, the plea to focus on agency in global city² formation is not new. Rather, a key concern of *Sassen's* The Global City has been to redirect attention from formal power of large corporations to "the *practice* of global control: the work of producing and reproducing the organization and management of a global production system and a global marketplace for finance" (*Sassen* 2001: 6, original emphasis). Though this notion is frequently quoted, little empirical effort has been dedicated to analyse the work that allows producer service firms (PSFs) becoming key agents in the management and governance of economic globalisation. While this lack of evidence is used by radical opponents of the global city concept to reject the whole notion of command and control functions because "one cannot infer interaction, coordination, command, control, domination and subordination from the mere existence of office networks" (*Smith and Doel* 2011: 27), my contention is that the problem is an empirical rather than a conceptual one: So far, the role of PSFs in global commodity chains (GCCs³) has not been analysed profoundly (*Brown et al.* 2010; *Parnreiter* 2010, 2014).

This paper seeks to contribute to overcoming this weakness by scrutinising the role of global PSFs in Hamburg in the management and governance of their

clients' GCCs, defining governance as "authority and power relationships that determine how financial, material and human resources are allocated and flow within a (commodity; *C.P.*) chain" (*Gereffi* 1994: 97). After a brief introduction into the literature on global cities in Germany, an equally brief overview of Hamburg's producer service sector and an outline of the research design, I focus on the question whether and how professionals contribute, through the services they provide, to the smooth functioning and the control of their clients' (cross-border) operations. Secondly, I also address the question why clients choose global PSFs with a local office in Hamburg, a city which is neither Germany's economic nor financial centre nor its political capital. Finally, I discuss which place Hamburg occupies in the network of German global cities.

2. Global cities in Germany

Studies on global cities in Germany can be, similar to the general literature (*Parnreiter* 2013), subdivided into three strands: Firstly, within the urban studies approach the main topics are the impact of globalisation on economic, labour and real estate market transformations (e.g. *Schamp* 2001; *Oßenbrügge* 2011; *Schipper* 2013), on urban politics (e.g. *Keil and Ronneberger* 2000) and on the built environment (e.g. *Helbrecht and Dirksmeier* 2009). Secondly, within the network approach, the GaWC methodology is applied to explore the integration of German cities into the world city network (e.g. *Hoyle* 2011a, 2011b) and the network strategies of knowledge-intensive firms (e.g. *Lüthi et al.* 2010). Thirdly, within the economic geography approach, both Frankfurt/Main (e.g. *Hoyle and Pain* 2002; *Beaverstock et al.* 2005) and Berlin (e.g. *Krätke* 2001) have been subject to case studies. As regards Hamburg, analyses of port-related services and their importance for the functioning of GCCs (*Hesse* 2006; *Verhetsel and Sel* 2009; *Jacobs et al.* 2010) have been connected to the global city literature only loosely.

While these studies have enriched our understanding of urban transformations resulting from as well as facilitating economic globalisation, and of the cross-border, inter-city connections into which German cities are embedded, they have, with very few exceptions (Krätke 2001; Hoyle and Pain 2002), not focused on management and governance functions of PSFs. Yet, because even in these studies practices of economic control remain underresearched, little has been said on how the professionals in financial, insurance, accountancy, legal, advertising and business consultancy firms in German cities contribute to the management and control of GCCs. Our knowledge of global cities in Germany is, therefore, still limited.

3. Hamburg's producer service sector

Hamburg has the largest producer service sector in German cities as regards output, and the second largest as regards employment. In 2011, Hamburg's 290,000 employees in financial, insurance, real estate and business services generated an output of nearly 30 billion € or 35 % of the city's total gross value added (GVA). This share corresponds to the sector's relative size in Munich, but is substantially below Frankfurt/Main's value (44 %). A quarter of the city's employees work in producer services, which is less than in Munich (29 %) and, in particular, in Frankfurt/Main (36 %). However, as regards

productivity, Hamburg outperforms both Munich and Frankfurt/Main, being second in Germany, behind only Bonn (Figs. 1, 2, 3)

Notwithstanding its size, Hamburg's producer service sector's global integration is comparatively weak. According to GaWC's global network connectivity (GNC⁴), Frankfurt/Main is, with a GNC of 56.9, Germany's best-connected city (16th worldwide), followed by Munich (41.5) and Hamburg with a GNC of 38.4 (Fig. 4). On a world scale, Hamburg is the 54th best connected city, comparable to Cairo, Dallas or Düsseldorf. Differentiating between the subsectors of producer services, Hamburg has rather big clusters in legal services, accountancy and management consultancy, while its embeddedness in the networks of financial service firms is somewhat weaker (Hoyle 2011a, 2011b; Taylor et al. 2011).

Yet, instructive as these data might be, they are insufficient to assess global city functions in Hamburg, because the existence of a large and globally embedded producer service sector does not per se tell us whether and how PSFs' professionals are involved in the management and governance of cross-border economic activities. To gather such relational "process-based findings" (Beaverstock 2011: 217) a shift towards qualitative methods and to an inquiry of the practices of PSFs' international professional activities is required.

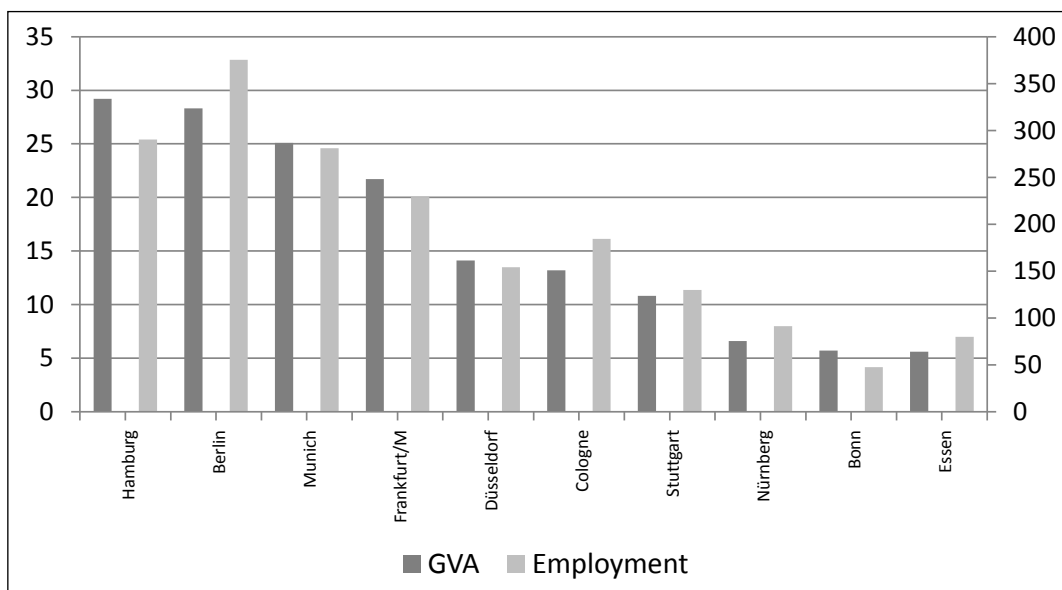


Fig. 1 GVA and employment in financial, insurance, real estate and business services in German cities, 2011; GVA in billion € (left), employment in 1,000 (right); own illustration, based on Arbeitskreis 2013

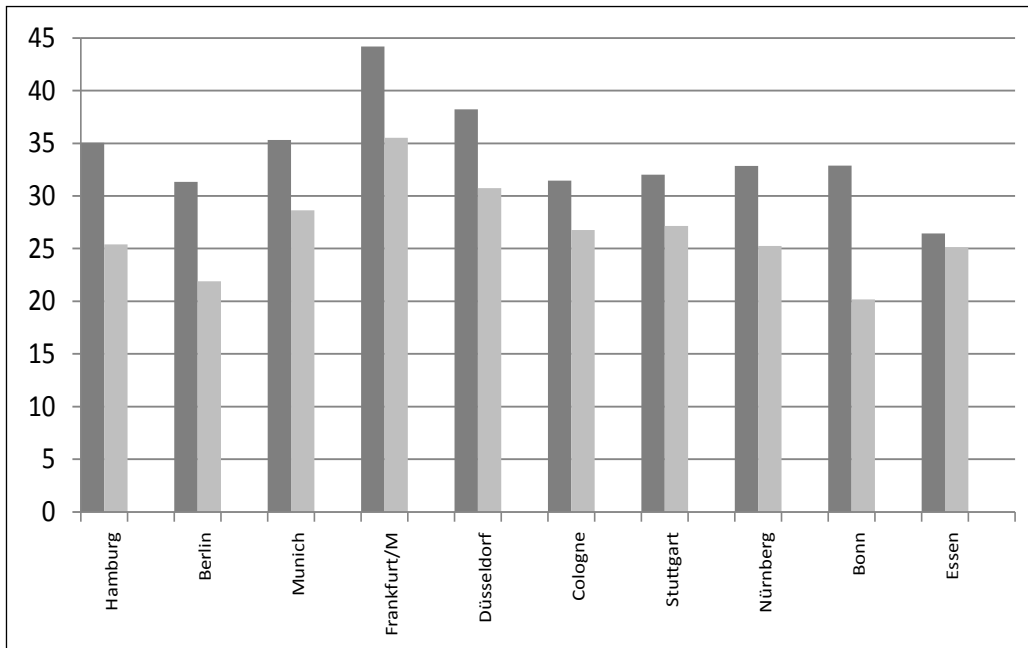


Fig. 2 Share of GVA and employment (%) in financial, insurance, real estate and business services in total GVA and employment in German cities, 2011; own illustration, based on Arbeitskreis 2013

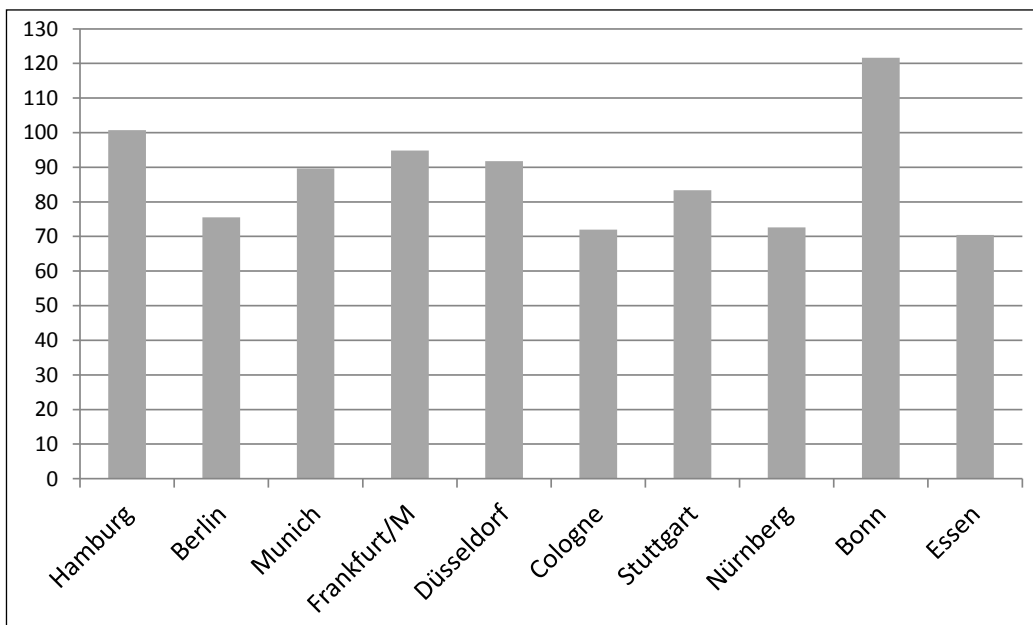


Fig. 3 GVA in financial, insurance, real estate and business services per employee in German cities, 2011 (1,000 €); own illustration, based on Arbeitskreis 2013

4. Research design

Hamburg as case study was chosen, firstly, because its producer service sector is the largest in Germany. The relatively weak integration of Hamburg into the world city network constitutes the second reason

for choosing it as a case study, because management and, in particular, governance functions of PSFs are less expectable here than in an alpha world city such as Frankfurt/Main. Thus, if such functions could be documented for Hamburg-based PSFs, the support for key assumptions of the global city concept would

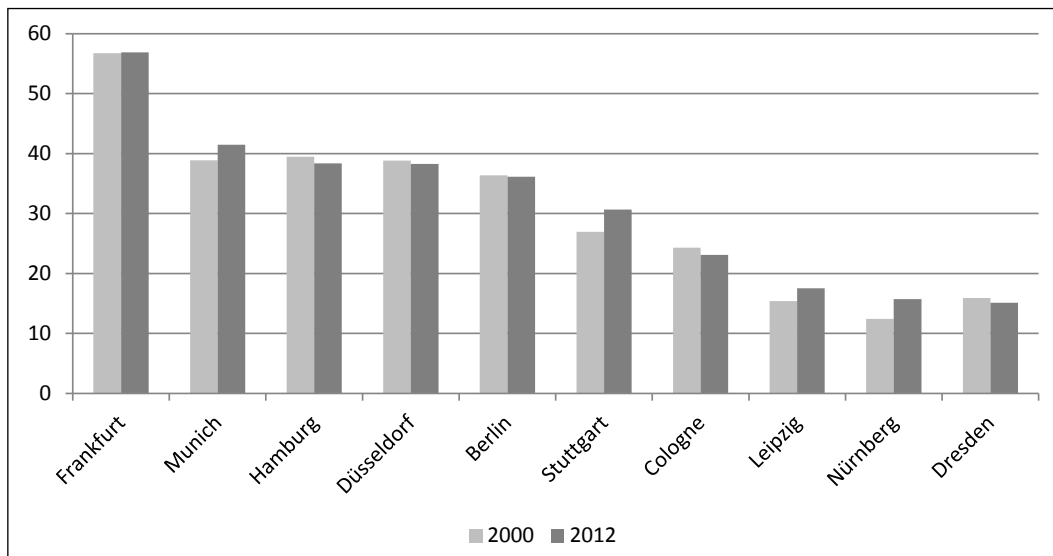


Fig. 4 Global network connectivity of German cities, 2000, 2012; own illustration, based on GaWC 2014

be even stronger than in the case of Frankfurt/Main. Thirdly, Hamburg is the 14th biggest container port in the world and Europe’s second biggest (World Shipping Council 2013). It is, thus, a crucial hub in many trade routes and therefore a critical node in numerous GCCs (Hesse 2006). Moreover, Hamburg is one of the world’s ‘prime locations’ (Jacobs et al. 2010: 101) for maritime-related producer services, and the city houses headquarters of large shipping companies (e.g. Hapag-Lloyd, Hamburg Süd). It is, therefore, behind Hong Kong but ahead of New York, the world’s second important ‘world maritime city’ (Verhetsel and Sel 2009) from where container shipping companies make decisions.

The research is based on interviews with professionals of global PSFs in Hamburg, drawn from the GaWC list and covering all subsectors (accountancy, advertising, finance and insurance, legal services and management consultancy). Of the 54 firms contacted, 19 firms granted an interview (see Table 1). As compared to their representation in Hamburg, law firms are somewhat over- and advertising and management consultancy firms are slightly underrepresented in my sample. For most of the firms interviewed, clients with cross-border operations make the lion’s share of their business, with many catering to the DAX-30 corporations as well as to other big German and foreign companies. Amongst the clients of the interviewed firms are also many SMEs exporting to or coming from foreign markets. The semi-structured, open-ended interviews were conducted between May and September 2013, mainly in the offices of the respondents (three via phone). Interviews lasted

from 30 to 65 minutes (with an average of 43 minutes) and were tape-recorded and fully transcribed. All interviews were conducted in German; quotes here have been translated by the author.

5. Hamburg’s PSFs and the management of GCCs

As indicated above, the fundamental quality of a global city is not the existence of a (sizeable) cluster of (global) PSFs, but rather if “coordination and specialized servicing of global firms and markets is taking place” (Sassen 2001: 361). One of the interviews’ central questions was, thus, whether respondents consider the services they provide as necessary for the smooth functioning of their clients’ cross-border activities. Not surprisingly, most professionals approve this notion, with a typical answer coming from the managing partner of a law firm: “the tendency is clear ... (producer services) become more important. ... our clients go abroad, our clients come to Germany from abroad, that means there is crossing borders and they (our clients) always want consultancy” (I 17). Two interviewees, however, qualified the “yes” regarding the assumption of a constantly increasing demand for externally provided PS. The managing director of an advertising firm indicated, for example, that “there are many companies which act very fluctuantly ... and that certainly depends on who is leading a firm ... and also from the actual position of the firm in the market” (I 4).

Yet, examples given for the service input provided refer to all stages of GCCs, beginning with market re-

Table 1 Interviewees: subsector, position and field of work, and essential characteristics of clients of interviewee's firm

	Subsector	Position, field of work of interviewee	Structure of clients
I 1	Management consultancy	Area manager, retirement	90 % cross-border operations
I 2	Management consultancy	Branch head, application services	Mostly cross-border operations
I 3	Accountancy	Partner, audit, tax	About a third cross-border operations
I 4	Advertising	Managing director	Majority cross-border operations
I 5	Accountancy	Partner, audit, tax	About 10 % with cross-border operations
I 6	Advertising	Finance director	50 % with cross-border operations
I 7	Accountancy	Principal, management consulting	Majority with cross-border operations
I 8	Accountancy	Partner, board member, audit, tax	Two thirds with cross-border operations
I 9	Finance, insurance	Branch manager; business development manager	90 % with cross-border operations
I 10	Accountancy	Partner, international corporate tax	80 % or more with cross-border operations
I 11	Advertising	Managing director	n/a
I 12	Finance, insurance	Group leader	Mostly with cross-border operations
I 13	Legal services	Partner, employment law, acquisitions, group reorganisations, closures	90 % with cross-border operations
I 14	Finance, insurance	Head of business center	n/a
I 15	Legal services	Office managing partner, intellectual property and information technology	Majority with cross-border operations
I 16	Finance, insurance	Human resources and financial manager	Majority with cross-border operations
I 17	Legal services	Managing partner, employment law	n/a
I 18	Legal services	Business development	n/a
I 19	Accountancy	Head of markets, sales & communications	40 % with cross-border operations

Interviews are sorted in chronological order. Structure of clients according to estimations of respondents, in most cases referring to the firm's turn-over

search carried out by management consultancy, accountancy and advertising firms for clients who seek to expand business abroad. Once a decision whether and whereto expand business is emerging, one of the first problems to be solved is the legal form of the unit in a foreign country. Since this issue is, amongst other things, tax-sensitive, accountancy and law firms usually get involved. At the same time, a number of legal and risk assessments become necessary. Respondents avowed that providing information on corporate law, tax and tariff laws or criminal laws in the target market belongs to their core business, because clients want to know: "What is the legal framework? Anything in particular to pay attention to? Any issues related to branding? Any compliance issues?" (I 15). In a similar vein, if foreign firms channel goods through the port of Hamburg, a number of tax regulations are touched which require the involvement of a specialist: "Say, Indian foods, a spice trader ... looks for a logistic firm or a port-related service, to store things, and

in this moment the legal imperative for paying sales taxes leads to the legal requirement to register here, to get a VAT registration number, to apply a reverse charge mechanism to the fiscal authorities to get the input tax ... That does the logistic firm (for the spice trader), and we do that for the logistic firm" (I 3).

Financial institutions 'grease' GCCs and make goods flow by balancing, for example, a client's liabilities and receivables at a global scale. Shipping products from Asia to Europe might last four to six weeks, and "what does a company in the meantime? ... We reflect upon how to ensure that the liquidity (of our client) becomes free" (I 14). PSFs also provide risk management along the clients' GCCs, what requires granting a global standard as well as meeting different local requirements. In the automotive industry, for example, a lead firm needs a worldwide goods in transit insurance for each and any of the parts being ex- and imported along the whole GCC, and it needs many local property in-

surances against fire and other hazards for the places where the parts are being processed or stored. To organise all that for the client requires specialised and worldwide operating professionals – that “is our value added, so to speak, I mean, at first such insurances are the very condition for acting globally” (I 16).

Another example of how PSFs contribute to the functioning of GCCs is human resource management, which includes activities from attraction and recruitment of professionals over performance management, engagement programmes, mobility management for expatriates and rewarding, to health care and retirement administration of employees. Doing that for a firm with global businesses implies the need to settle the tension between a firm’s wish to have standardised procedures and rules, on the one hand, and diversity and complexity resulting from operating in different jurisdiction and working cultures. As human resource management becomes more centralised in the clients’ headquarters (in order to homogenise it), the need for specialised support increases. “And (the client) then requests ascertained services from us, in fact, the whole spectrum ... As a matter of fact, the whole range from recruitment, expatriates, engagement, talent, executives is provided by us and that globally” (I 1).

Advertisers point to the need to create product and corporate design for the new market and to communicate it, and they emphasise the necessity to organise the flow of information to local retailers who face many new challenges with today’s well-informed consumers. Moreover, better informed and therefore in their purchasing behaviour more volatile consumers increase a firm’s necessity to invest in their clients’ loyalty. The finance director of an advertiser working amongst others for a car company emphasises the need for steady customer relationship management and stresses in particular the challenge to reach target groups day and night: “Here online communication to mobile devices is critical: How do I reach the client at the point of sales with offers tailored to his needs? ... We try to define which groups of costumers have which requirements? ... Who drives our client’s compact car? ... Where can I reach them? Online, in the internet, on TV, via email? And this we run through from A to Z for all models, target groups and media” (I 6). The managing director of another advertiser points to the need for after-purchase communication, which is of particular importance in the growing online markets. A typical task is, thus, “to assure that you (the consumers) are used as a positive messenger to

influence others’ purchasing decision because the first thing we all do is to google ... Today, it is (important) to try very hard via social media to guarantee that in all these fora, from facebook to *gutefrage.net* or whatever, that people with positive experiences talk about. ... So, the first thing we do is to try to make sure that if you google that our client becomes visible” (I 11).

All the organisational tasks mentioned need sophisticated IT systems. Though usually hidden and probably not considered as being strategic, “such (IT-related) activities are the basis that our clients can run their value chain anyway” says the branch head for application services of a management consultancy firm (I 2). A case in point is a transport management system to be implemented in 130 countries by one of the major global logistic companies, on whose development 50 employees of the interviewee’s firm have been working for years. “Everything that is transported on ships or planes ... is planned, coordinated and controlled there ... a good part of our clients’ business depends on the (new) system” (I 2). Another example for the need for “very, very sophisticated technology” (I 14) is, according to the head of business centre of a financial firm, managing the cash balance in a company’s global network. Yet, despite being a “very physical example” (I 14) of a service, cash management is far from being trivial – if it is not achieved properly “for a company this can be, say, not a threat to existence, but it can be one of the very fundamental problems” (I 14).

To sum up: From market research to after-purchase communication, from a legal due diligence to the management of cash flows, from opening up a bank account to retirement administration, PSFs in Hamburg supply many services which are needed by their clients to successfully run their businesses. As the partner of a law firm puts it: “I really believe that we create added value for our clients, because otherwise they wouldn’t pay us. ... They want an answer to a question which is important for operational processes on the basis of which they can continue to work” (I 13). However, what in particular makes the difference between buying certain services from a global PSF as compared to getting them from a local service provider or even supplying them in-house?

6. Why global producer service firms?

Sassen (2001) argues that because the rising sophistication of operations in a global market has made economic management and control so complex, com-

panies have begun to outsource highly specialised services. Respondents concur with this notion to an extent that they sometimes wonder about a question with such a self-evident answer. As the managing partner of a law firm smirks: "Why do we need lawyers at all? ... Why do we need ophthalmologists? Can we all fix our eyes ourselves?" (I 17). Summarising the answers, one can conclude that PSFs have become critical because acquiring the very specialised knowledge required by the many non-routine tasks resulting from complicated businesses in inadequately known environments is what "the client doesn't want to do, because it is not at all his core business" (I 16).

Two complexity challenges resulting from doing global businesses are frequently mentioned in the interviews. Firstly, due to their newness, size, technological sophistication, geographical reach and speed, many economic activities demand a very specialised know-how. Respondents agree that not even big firms with sizeable in-house legal, insurance, tax or IT departments can provide such non-routinised and thus labour-intensive services at reasonable costs. It is, thus, a key advantage of PSFs to develop economies of scale even for rare and multifaceted projects, because they always can rely on previous work with other firms. Moreover, having dealt with other clients gives the PSF professional a competitive advantage over equally well-trained in-house experts: "Many clients also want know-how from the business environment. ... Our staff switches between clients in the same industry, and thus we often have ... a know-how edge, while our clients' employees can be very rooted in their own processes" (I 2).

The second complexity challenge stems from operating in a foreign market with different, partly or largely unknown languages, business partners, regulatory frameworks, institutions and working cultures. To begin with, language skills are, prosaic as they seem, critical – "as a matter of fact, the most important issue" (I 12), says the group leader of a financial firm. Problems continue with further seemingly simple issues such as hiring people for everyday jobs: "As a German, as an external, how will you check whether he (an accountant) has the proper qualification? Do you know the Chinese educational system?" (I 8). The more complex matters become the more necessary it is to rely on specialised professionals. While supplying such expert knowledge is often beyond the scope even of big companies, for SMEs the so-called make-or-buy decision is, as the partner of an accountancy firm puts the example, only the decision between let "the audit be

done (by my accountancy firm) or shall I (do it myself and) close my eyes and hope for the best" (I 5).

Respondents also underscore the need to cope with cultural differences. The business development manager of a law firm asserts that what at his firm's level makes the difference is not professional competence (which is taken for granted), but social skills: "In the first place it is about communication, that you master the legal business ... is assumed. ... The first direct contact, if you take for example a Chinese investor, is a partner of our firm, who converses locally (in China), whereby, I assume, the cultural balance is somewhere just there, it's more likely that he (the client) feels understood. ... Because the partner is also Chinese! Because he knows what makes him (the client) tick, well, at all events better than someone trying that from Germany" (I 18).

As this example reveals, operating in a worldwide network is seen as a strategic advantage of global PSFs vis-à-vis both in-house solutions and local service providers. Respondents forcefully point out that relying on partners in foreign countries allows for dealing with the clients' requirements more quickly and in more consistent ways. Servicing the client everywhere with the same quality standards also includes delivery time: "Through the network we can govern ... our local partner firms. ... Well, we can say: ... He (the client) needs an answer from you within 48 hours. Sit down and do that!" (I 8). In addition, a client entering a new market can be offered a first, quasi-familiar, contact – a partner in the PSF's global network –, which psychologically facilitates entrance. Moreover, the partners in the network allow for accessing resources otherwise not or not easily available. Tacit knowledge in legal affairs, for example, is critical because "each legal culture has somehow preferences how a (service) product ... should look like. Of course, to meet these expectations is easier for someone who knows this legal cultural environment better than for someone who knows it less" (I 15). Finally, working in a cross-border network eases cultural translations, which are normally "based on a long-running cooperation, that such a thing (cross-border communication) is well attuned and can work efficiently. ... they are a good team ... where you can really say: one firm" (I 18).

7. Hamburg's PSFs and the governance of GCCs

Though the idea that global cities are "highly concentrated command points in the organization of the

world economy" (Sassen 2001: 3) is widely accepted and reproduced in the literature, it is empirically inadequately established and therefore highly contested (Parnreiter 2014). Against this backdrop, it has been one of the goals of this research to provide evidence to buttress the notion that PSFs not only enable their clients to manage their (part of) GCCs, but also have an effect on how clients govern their economic activities. The question is, thus, whether firms relying on the support of PSFs can improve their position in GCCs vis-à-vis competitors, suppliers and customers, and stakeholders such as governments or unions? Is Hamburg a place from where PSFs impact on the ways in which value in GCCs is created and distributed?

Seeking pointed statements, I asked the respondents whether they agree with a lawyer in Mexico City, who in an interview (quoted in Parnreiter 2010: 44) suggested that despite the undisputable fact that formally it is the clients' CEOs who take the decisions, in reality "the one who makes the strategy, it's the partners of the law firm". Answers to this question differ, both between respondents and depending on the client and/or service an interviewee refers to. The account of the branch head of a management consultancy firm captures the respondents' ambivalence properly: "Well, I wouldn't put it that simply, but neither would I say that we don't have any influence. ... I'd say we have influence, but in the end it is the clients who assume responsibility and who take the decisions" (I 2).

Several arguments are brought up in the interviews to qualify the contention that PSFs have much bearing on their clients' decision-making processes. Firstly, respondents stress that business cases have too many aspects to allow one specific input (such as a legal or tax advice) making the critical difference in business orientation. Secondly, whether a PSF has an impact and how important this influence is, depends, according to the respondents, on the client's firm size: "Bigger companies want to be advised, while smaller ones really use us as decision-makers sometimes" (I 15). Thirdly, firm culture also matters, for example as regards how much know-how a company wants to retain in-house. Referring to a big manufacturer from France, the finance director of an advertiser says that in this case he has little influence because "well, if we look, the country is very centralised, and so are the corporations, very centralised, in the sense that decisions are taken very centrally" (I 6). Fourthly, how much influence on corporate decision making is allowed or sought for by the clients can also be subject to the market posi-

tion of the client – the better positioned in an area, the less room to manoeuvre has the PSF. Last but not least, PSFs' influence on clients' decision-making depends critically on the service provided. Book-keeping, building and maintaining an IT infrastructure, running an ad campaign or issuing a standard insurance policy are considered as purely supportive tasks. Even many tax or legal advices and financial services are, according to the interviewees, just day-to-day business without much bearing on strategic business decisions.

Nevertheless, affirmative answers to the question whether PSFs have a bearing on their clients' GCCs governance come from a majority of respondents and from all sectors. As the most obvious case of PSFs' influence, interviewees frequently referred to corporate governance, which in its narrowest sense is about compliance. Professionals, mainly from accountancy and law firms, stress that it belongs to their core business to monitor whether their clients operate according to the law. "We are to a certain extent an outsourced branch of the tax authority, we are obliged to do that, and that makes clear that at least in this aspect governance functions are fulfilled", says the partner of an accountancy firm (I 3). Though probably seen as banal, compliance has much to do with governance in *Gereffi's* (1994) sense, because there is always more than one way of adhering to the law. Hence, compliance is about decisions, each of which must be read against the different and sometimes opposing interests in the complex internal and external networks of a firm. As the partner of an accountancy firm says, "well, we try to interpret the law in our client's sense and just highlight rooms to manoeuvre, which present themselves, just because the law is unclear" (I 10).

Moreover, corporate governance goes beyond compliance. It entails all "procedures and processes according to which an organisation is directed and controlled. ... (It) lays down the rules and procedures for decision-making" (OECD 2005). Specifying the relationships between a company's board, managers, creditors, investors, shareholders and employees, corporate governance is about the distribution of power, accountability and means within a firm or, to quote again *Gereffi* (1994: 97), about "how financial, material and human resources are allocated and flow within a chain". The principal of an accountancy firm gives an example, referring to a client with three plants with each having its own suppliers: "Of course you can say: Wouldn't it be reasonable to pool buying power ...? That might have positive effects for the one or another plant, but it

might also have negative effects for one of the plants. Now, corporate governance has to intervene and say very clearly: I have to put other objectives (than a local manager might have)" (I 7).

In addition to corporate governance, respondents brought up several issues in which they see PSFs' influence on GCC governance: strategic business orientation and locational choices, tax issues, labour legislation, risk management, and entry barriers. What the areas have in common is that in each field the service provided aims to generate "a certain competitive advantage" (I 12) over competitors (that is, other firms seeking access to the same [segment] of a GCC), business partners in backward or forward linkages (suppliers, customers) or other stakeholders such as governments or unions. As a respondent affirms: "We say (to our client): if you structure your supply and value chain as follows, you'll have the following advantages" (I 7).

In sum, the interviews support the notion that PSFs have a bearing on their clients' economic decision-making. Hamburg is, thus, a city wherefrom companies' governance processes are supported and thereby also influenced through service provision. Yet, this impact of PSFs seems not to be straightforward, for which reason talking about 'command and control' might be too simplifying (see below).

8. And why Hamburg?

If clients draw on the support of global PSFs for the above-mentioned reasons, the question nevertheless emerges why they choose offices in Hamburg? Put the other way round, why do so many global PSFs maintain offices in Hamburg, which is neither economically nor politically Germany's centre? The most frequent answers to this question combine to different degrees a historical and a geographical aspect, namely Germany's 'grown' polycentric urban system and the importance of being close to clients: "Well, it is our principle to attend to clients from the nearest local office, if possible. ... Normally, these are long-term customer relations which we have established and which we develop further" (I 2).

History matters yet in another, pretty prosaic, way. Many of the offices of global PSFs became part of the network through acquisitions or reorganisations of already existing (local) firms. Asked why for his firm being in Hamburg is important, the partner of a law

firm says: "I have never asked whether it is really important, it resulted historically. ... Well, there are some (big law firms) which deliberately came to Hamburg because of the strength and the international orientation of the city's economy ... (but other) big offices here already were big offices which then did not belong to a global network, which have grown here in their own right as local firms" (I 13).

Yet, most respondents underscore that being in Hamburg matters because geographical proximity matters to their business. Co-locating counts because it facilitates the acquisition of clients, e.g. through organising small round-tables on specific issues: "And then of course you bring people quickly together, locally. ... Well, that (geographical proximity) is in fact, as regards relationship management and what ultimately leads to the acquisition of specific projects, definitively yielding a return" (I 18). Others stress that geographical proximity is critical for keeping customers because in the end it is personal relations which tie clients to a PSF: "They probably don't care which name is on it (the PSF), decisive is that they know the consultant and trust him, and insofar that (geographical proximity) is very important" (I 10). Geographical proximity promotes confidence building, a more comprehensive knowledge of the client's business and, in consequence, deeper and more stable customer relations. As the head of business centre of a financial and insurance firm suggests: "In talking about banking it still makes a difference, it's still a barrier, whether I call from Frankfurt someone in Hamburg or whether I'm able to meet at the face. ... It simply plays an important role whether I can call, saying: I'd got something I'd like to talk about with you, would it work today in the afternoon? ... Then you walk over. ... It is promptness, quality, it is, you have talked about services, yet it is servicing" (I 14).

Yet, some respondents qualify the argument that co-location matters, suggesting that the need for geographical proximity has decreased with today's communication and transport technologies. Others indicate that firm size plays a decisive role, because "with smaller mandates that (proximity) is very, very relevant" (I 19). One case in point is the so-called "*Sofa-Reeder* ('sofa ship-owner') who acts with relatively small fleets from the sofa. ... With whom you might sit down actually on a Sunday afternoon and, so to say, from private talks you come to business conversation. That's not the rule with bigger units. There it's a clear, a technical dealing" (I 5). Yet, even respondents

who reject the notion that co-location matters remain ambiguous. While the human resources and financial manager of a finance and insurance firm says that “personally, I think that (the need for geographical proximity) is nonsense because that (our clients) is big corporations operating internationally, they don’t need personal support at every turn”, the interviewee also affirms that “mental closeness is important, and here it’s much about personal networking. And winning and dining is still central” (I 16). In a similar vein, the managing director of an advertiser who suggests that, theoretically, business could be done from everywhere acknowledges that “it is not beneficial to a customer relation because I do think that personal contact is also the key to success in a relation, but theoretically it would work” (I 4).

Moreover, it is striking that even the firms whose representatives suggest that geographical proximity loses importance keep offices in Hamburg’s top locations. Why aren’t they in Pinneberg⁵, for example, where rents are substantially lower? The managing partner of a law firm laughs: “We have frequently asked that ourselves. ... (But) clients do not want this, well, clients want that their lawyers are for free but they should be in representative locations, well, nobody wants to say: Well, my lawyer is in Pinneberg ... Let’s put it like this: Pinneberg gives rise to doubts on the quality” (I 17). That a good address “is definitively not unimportant” (I 19) applies also as regards employee motivation: “It makes a difference when a competitor of us sits in, let it put me this way, shabby offices in the City Nord, employees go out for lunch break and stand in front of a concrete jungle and find themselves happy that there is a bratwurst stand on the corner, that makes a difference when you’re in the City” (I 19). Location, thus, matters as regards the clients a PSF wins and as regards attracting knowledge workers. The managing director of an advertiser combines both aspects when he says that “there are only two creative capitals left, Berlin and Hamburg, and you’ll simply find the best advertiser there. And clients who go in for quality want to have an agency from these locations. ... You simply don’t get creative people, who in our business still count much, you don’t get them to Wolfsburg. ... Thus, for out-of-town clients Hamburg as location is a signal for strength, size, competence. That means that Hamburg is a good brand? Exactly” (I 11). The same applies for professionals probably considered as being less sexy than advertisers. Mathematicians for insurance reports, for example, “you normally won’t get these people into the Ruhrgebiet. ... The

good people whom we want, they simply come from certain university cities, and they want to stay there ... and that is why we said, no matter where they are, the main thing is that we get them’ (I 1).

9. Hamburg’s position in firm and world city networks

Since *Taylor* (2001) introduced the ‘interlocking network model’ to measure inter-city connectivity, global city research has been characterised by quantitative studies. ‘List mania’ has become common, where all that matters is rankings, and where, moreover, rankings are confused with hierarchies (*Derudder and Parnreiter* 2014b). Yet, drawing on *Jacobs’s* (1970) idea that cities need the exchange with each other to become economically dynamic, *Taylor* (2004, emphasis added) rejects the idea of hierarchical city systems and developed therefore the idea of a ‘world city network’. The interviews clearly support *Taylor’s* notion that higher centrality in the world city network, resulting from more and/or bigger PSF offices, cannot be translated into a hierarchical relationship in the sense of successive ranks with each level subordinate to the one above.

Asked about the division of labour between their firm’s offices in Germany, all respondents concur in two interrelated points. Firstly, respondents agree that the existing differences in the offices’ size, which are the base for differences in GaWC’s GNC, stem from the size of the market in a given city or country and do not reflect weights and, even less, hierarchies. Attending a client is usually organised through a head of account, and this head of account usually comes from an office close to the client. If a Chinese investor seeks to do business in or through Hamburg, then “we (the Hamburg office of the PSF) would work as subcontractor of the colleagues in Shanghai. They would have the direct mandate from their Chinese client and we would effectively support them” (I 10). Thus, who has the saying in the relationships between PSFs’ offices might shift daily, depending on where the client comes from.

Respondents describe, secondly, the relationships between their firm’s offices as flat and functional. While all regional offices provide a broad portfolio of more or less standardised services, specialised fields of knowledge are offered through thematic groups which are represented in fewer cities. Such regional specialisations have emerged historically, according to Germany’s economic geography: The Frankfurt/Main offices are traditionally strong in finance for

which reason the head of business centre of a financial firm admits that “to be fair, it has to be said that the really big (firms), the DAX-30, we don’t attend them here, in Hamburg, we attend them in Frankfurt” (I 14). Munich has more high-quality professionals in IT-related issues, Stuttgart is strong in automotive industries and Hamburg in shipping companies. Though the thematical groups have a head at the national, regional and global levels, respondents see neither a hierarchy between the specialisations nor a general regional hierarchy in the sense that a professional in Frankfurt/Main could command colleagues in Hamburg. A hierarchical order would be, as the office managing partner of a law firm explains, contradictory, because “internationality, globality are important (for us), and networking within the firm, ... the transfer of the firm’s know-how from one country to another, and so forth, we want to facilitate that by not creating internally structures which could give any incentive to obstruct this transfer of knowledge” (I 15).

10. Conclusions and further research

This paper has been motivated by two interrelated observations. Firstly, and on a general level, the fact that practices and processes that underlie global city formation (namely the management and governance of cross-border economic activities) have received much less attention than the measuring of inter-world city relations undermines the strength of the global city argument. The lack of empirical support for the claim that global cities are organising nodes of a global economic system is, as argued elsewhere (Parnreiter 2014), today’s Achilles heel of global city research. Secondly, and more in particular, our knowledge on global cities in Germany is limited by the same shortcoming. While quite a few studies have analysed the impact of globalisation on various aspects of urban development in Germany as well as the role of specific German cities or firms in cross-border networks, only a handful of studies have applied the global city concept in its economic geography spirit. Thus, our understanding of how PSFs in German cities and their professionals contribute to the management and control of their clients’ GCCs is still rudimentary.

Against this backdrop, the paper’s concern has been to shed some light on the practices that trigger global city formation in Germany. The analyses presented lead to four principal conclusions and allow for identifying further lines of inquiry:

- From the respondents’ perspective it is obvious that the services they provide support their clients in conducting global businesses. According to the interviewees, without the support of PSFs clients would fare worse or even would not be able to go global. Interviews confirm, thus, that professionals of global PSFs in Hamburg fulfil ‘management functions’ for their clients’ global operations and that is why Hamburg is, beyond the role of its port, a critical node in many GCCs.
- As regards the notion that global cities are ‘highly concentrated command points in the organisation of the world economy’ (Sassen 2001: 3), the interviews do provide support for the claim that PSFs have an impact on the governance of their clients’ GCCs. Most respondents agree that servicing the clients bears influence on decision-making processes, and they give a number of examples where this is the case. Yet, it is equally important to recall that the interviewees qualify the notion of ‘control’ in two important aspects: Firstly, whether PSFs exercise influence on the governance of their clients’ commodity chains depends critically on the kind of service provided as well as on the client firm (e.g. size, firm culture, market position). Secondly, respondents are clear in rejecting the idea of ‘command and control’ in a narrow interpretation: According to them, there is no authoritative order – it is finally the clients who take decisions and that not only formally. It is nevertheless fair to conclude from the interviews that Hamburg is a place where GCCs are not only ‘greased’ through PSFs’ inputs, but where PSFs also shape “how financial, material and human resources are allocated and flow within a chain” (Gereffi 1994: 97). Thus, the claim that global cities are centres for economic governance can be substantiated – even for a secondary global city such as Hamburg.
- Thirdly, the paper confirms that – and to a certain extent explains why – the world city network is the spatial correlate of a globalising economy. Today’s cross-border activities of firms have become extremely complex, partly because of the business cases’ own features (e.g. geographical reach, speed, size or newness), partly because of the conditions resulting from operating in partly or largely unknown markets. To tackle the consequential challenges requires a combination of very specialised know-how, access to tacit knowledge in many different places and proximity to the cli-

ent. This requirement can only be met by PSFs that operate globally (which, of course, implies operations in many different places), in a cross-border network in which information flows easily. Global PSFs obtain their edge over both local service providers and in-house service departments because they develop economies of scale even for rare and multifaceted projects.

- Fourthly, respondents clearly perceive the world city network as being flat. Following their statements, one can conclude that there is no such a thing as a 'global city hierarchy', for which reason the diverse rankings bear little – if any – explanatory power. Differences in office sizes – which are the bases for different GaWC connectivity values (and hence for some 'rankings') – simply result from the market size and do not imply any chain of command.

Yet, despite the fact that the two decisive criteria for a global city – PSFs fulfil management and governance tasks for their clients' GCCs – are by and large satisfied for the case of Hamburg, the results presented also call for a deepened research. In particular, I emphasise three issues:

- Firstly, since this paper is based on the interviewed professionals' viewpoints on their contribution to the managing and governing of clients' commodity chains, a critical assessment of the findings is needed. Interviewees may have overestimated their roles, they may have seen their importance in different areas than clients would do, or they may even have downplayed their influence (suggesting, for example, that professionals in other services impact on governance processes, whilst they themselves do not). What is required as a next step is, thus, to conduct interviews with clients to consolidate our knowledge on the role of PSFs in commodity chains.
- Secondly, the finding that respondents perceive their intra-firm relations as being flat – which implies that the world city network is flat – challenges the notion that the world's uneven development is both created through and reflected in hierarchical relations between firms and social groups in cities (Parnreiter 2014). Moreover, since the head of account tends to come from a city close to the client (see above), it is clear that some cities will have more heads of account than others, simply because

they have more dynamic economies with more globalised firms. Thus, while in the office networks of PSFs there is no general chain of command, the service world seems to be not flat, neither. Might this, at the end of the day, not create unevenness or even hierarchical relations between a PSF's offices?

- Thirdly, the discussion of whether and how PSFs are involved in the governance of their clients GCCs needs to be continued and deepened. According to the ways in which interviewees have qualified the notion of 'control', I suggest two lines of future research: Firstly, it is important to classify firms as well as services as regards the potential of PSFs for influencing chain governance. As to the firms, it seems apt to follow the evidence brought up in the interviews and to systematise the relationship between the size, culture and market position of the client firm and external influence. As regards a specification of services, the most promising way is not to group them into sub-branches (e.g. legal services have more impact than accountancy), but rather to classify them by (relative) scarcity: One could hypothesise that what generally applies in GCCs – "the scarcer the asset the greater the bargaining power it conveys" (Coe et al. 2008: 276) – holds true also for the relationship between PSF and client. Accordingly, the more complex, knowledge-intensive and non-routine services are the more shaping influence professionals of PSFs might have. Such a specification of services and their 'governance potential' would, not at least, contribute to the debate on the merits and shortcomings of the 'interlocking network model' (Derudder and Parnreiter 2014a). The 'GaWC method' does not distinguish between different services which might be rather problematic in some cases because, as Kleibert (2014) points out for the case of Manila, in a 'third world' city the global producer service sector might be basically an offshore service sector, which has little to do with the notion of advanced producer services.

The second line for deepening the research on global cities and economic control is to conceptually advance our understanding of governance. While one could well argue that PSFs support their clients in governance processes (because they strengthen their clients' positions in GCCs and influence thereby the ways in which value is created and distributed), it has to be made clearer why and how professionals providing this support are converting themselves into agents

of economic governance. One way of proceeding is to connect to the literature on projects (Grabher 2002) and its proposition that firm boundaries become fluid: "A project, of course, is a project for a particular client. To an important extent it is also a project *with* a client" (Girard and Stark 2002: 1939, original emphasis). Yet, if professional and client temporarily form a team, then the professional ceases to be 'external' for the time and/or the scope of a project: he/she eventually becomes part of a project team designing governance strategies. It is in that context that the reasoning of the interviewees becomes critical that the quality of their work stems from intimate knowledge of the client's business, from great economic empathy. The challenge is, says the business development manager of a law firm, to provide high quality legal advice and to "still thinking economically" (I 18) as regards the clients' business strategies. PSFs' professionals have, thus, to acquire a very deep understanding of the client's corporate structures, goals and strategies, and they have to embrace them. In order to grasp this unfolding relationship, it seems to be useful to substantiate what "embedded governance" might mean – a term proposed by Sassen (2010: 158) to suggest indirect forms of decision-making in which strategic concerns melt into the concrete servicing such as lawyering or accounting. Services, thus, become impregnated with the interest of the client, and it is in that context that "the category governance assumes substantive meaning and operational meaning, and it intersects with major power logics" (Sassen 2010: 158).

Notes

- ¹ 'The' GaWC methodology is the 'interlocking network model' (Taylor 2001). For a discussion of its merits and shortcomings see Derudder and Parnreiter 2014a.
- ² For the purpose of this article, the conceptual differences between 'world' and 'global' cities are of less importance. I adopt the terminology of an author I refer to. Where I allude to the general debate, I stick to 'global cities'.
- ³ For the purpose of this article, the conceptual differences between 'global commodity chains', 'global value chains' and 'global production networks' are of less importance. The terms are used here synonymously to refer to the cross-border organisation of production.
- ⁴ GNC is the sum of a city's connections created by PSFs to all other cities in the world city network (Taylor 2004). The fact that German cities have relatively low GNCs results from the polycentric structure of the German urban system.

- ⁵ Pinneberg, some 20 kilometres northwest of Hamburg's CBD, is a 40,000 inhabitants town belonging to Hamburg's metropolitan region.

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References

- Arbeitskreis Volkswirtschaftliche Gesamtrechnungen der Länder (Hrsg.) 2013: Bruttoinlandsprodukt, Bruttowertschöpfung in den kreisfreien Städten und Landkreisen der Bundesrepublik Deutschland 1992 und 1994 bis 2012. – Reihe 2, Band 1. – Herausgegeben im Auftrag der Statistischen Ämter der 16 Bundesländer, des Statistischen Bundesamtes und des Bürgeramtes, Statistik und Wahlen, Frankfurt a. M. vom Statistischen Landesamt Baden-Württemberg. – Stuttgart. – Online available at: https://www.destatis.de/DE/Publikationen/Thematisch/VolkswirtschaftlicheGesamtrechnungen/VGRderLaender/VGR_KreisergebnisseBand1.html;jsessionid=A56A5BA429A0275B3092019BD56A23C1.cae4_19/01/2014
- Beaverstock, J.V. 2011: German cities in the world city network. Some observations. – *Raumforschung und Raumordnung* **69** (3): 213-217
- Beaverstock, J.V., M. Hoyler, K. Pain and P.J. Taylor 2005: Demystifying the euro in European financial centre relations: London and Frankfurt, 2000-2001. – *Journal of Contemporary European Studies* **13** (2): 143-157
- Brown, E., B. Derudder, C. Parnreiter, W. Pelupossy, P.J. Taylor and F. Witlox 2010: World city networks and global commodity chains: towards a world-systems' integration. – Special Issue: World city networks and global commodity chains. – *Global Networks* **10** (1): 12-34
- Coe, N.M., P. Dicken and M. Hess 2008: Introduction: Global production networks. Debates and challenges. – *Journal of Economic Geography* **8** (3): 267-269
- Derudder, B. and C. Parnreiter (eds.) 2014a: Special issue: The interlocking network model for studying urban networks. – *Tijdschrift voor economische en sociale geografie* **105** (4): 373-506
- Derudder, B. and C. Parnreiter 2014b: Introduction: The interlocking network model for studying urban networks: outline, potential, critiques, and ways forward. – Special issue: The interlocking network model for studying urban networks. – *Tijdschrift voor economische en sociale geografie* **105** (4): 373-386

- GaWC 2014: The world according to GaWC 2012. – Online available at: <http://www.lboro.ac.uk/gawc/world2012t.html>, 01/11/2014
- Gereffi, G. 1994: The organization of buyer-driven global commodity chains: How U.S. retailers shape overseas production networks. – In: Gereffi, G. and M. Korzeniewicz (eds.): Commodity chains and global capitalism. – Westport: 95-122
- Girard, M. and D. Stark 2002: Distributing intelligence and organizing diversity in new-media projects. – Environment and Planning A **34** (11): 1927-1949
- Grabher, G. 2002: Cool projects, boring institutions: Temporary collaboration in social context. – Regional Studies **36** (3): 205-214
- Helbrecht, I. and P. Dirksmeier 2009: New Downtowns: eine neue Form der Zentralität und Urbanität in der Weltgesellschaft. – Themenheft: New Downtowns. – Geographische Zeitschrift **97** (2/3): 60-76
- Hesse, M. 2006: Global chain, local pain: Regional implications of global distribution networks in the German North Range. – Growth and Change **37** (4): 570-596
- Hoyler, M. and K. Pain 2002: London and Frankfurt as world cities: changing local-global relations, 1998-2001. – In: Mayr, A., M. Meurer und J. Vogt (Hrsg.): Stadt und Region: Dynamik von Lebenswelten, Tagungsbericht und wissenschaftliche Abhandlungen. – 53. Deutscher Geographentag, Leipzig, 29. September bis 5. Oktober 2001. – Leipzig: 76-87
- Hoyler, M. 2011: German cities. – In: Taylor, P.J., P. Ni, B. Derudder, M. Hoyler, J. Huang and F. Witlox (eds.): Global urban analysis. A survey of cities in globalization. – Oxford: 224-230
- Hoyler, M. 2011: External relations of German cities through intra-firm networks. A global perspective. – Raumforschung und Raumordnung **69** (3): 147-159
- Jacobs, J. 1970: The economy of cities. – New York
- Jacobs, W., C. Ducruet and P. de Langen 2010: Integrating world cities into production networks: the case of port cities. – Special Issue: World city networks and global commodity chains. – Global networks **10** (1): 92-113
- Keil, R. and K. Ronneberger 2000: The globalization of Frankfurt am Main: core, periphery and social conflict. – In: Marcuse, P. and R. van Kempen (eds.): Globalizing cities: a new spatial order? – Oxford: 228-248
- Kleibert, J. 2014: On the map, but in which capacity? Exploring relations of power and control in Manila's offshore service industry. – Paper presented at the ARL Summer School – Global Urban Networks, Loughborough, 2 September 2014
- Krätke, S. 2001: Berlin: Towards a global city? – Urban Studies **38** (10): 1777-1799
- Lüthi, S., A. Thierstein and V. Goebel 2010: Intra-firm and extra-firm linkages in the knowledge economy: the case of the emerging mega-city region of Munich. – Special issue: World city networks and global commodity chains. – Global Networks **10** (1): 114-137
- OECD 2005: Glossary of Statistical terms. – Online available at: <http://stats.oecd.org/glossary/detail.asp?ID=6778>, 01/11/2014
- Oßenbrügge, J. 2011: Der Wirtschaftsraum Hamburg im Globalisierungsprozess – Gegenwärtiger Strukturwandel und Globalisierungspolitik. – In: Parnreiter, C. (Hrsg.): Stadt und Globalisierung. – Hamburger Symposium Geographie **3**. – Hamburg: 27-44
- Parnreiter, C. 2010: Global cities in global commodity chains: exploring the role of Mexico City in the geography of global economic governance. – Special issue: World city networks and global commodity chains. – Global Networks **10** (1): 35-53
- Parnreiter, C. 2013: The global city tradition. – In: Acuto, M. and W. Steele (eds.): Global city challenges. Debating a concept, improving the practice. – Basingstoke: 15-32
- Parnreiter, C. 2014: Network or hierarchical relations? A plea for redirecting attention to the control functions of global cities. – Special issue: The interlocking network model for studying urban networks. – Tijdschrift voor economische en sociale geografie **105** (4): 398-411
- Sassen, S. 2001: The global city. – 2nd ed. – Princeton et al.
- Sassen, S. 2010: Global inter-city networks and commodity chains: any intersections? – Special issue: World city networks and global commodity chains. – Global Networks **10** (1): 150-163
- Schamp, E.W. 2001: Der Aufstieg von Frankfurt/Rhein-Main zur europäischen Metropolregion. – Geographica Helvetica **56** (3): 169-178
- Schipper, S. 2013: Global-City-Formierung, Gentrifizierung und Grundrentenbildung in Frankfurt am Main. – Zeitschrift für Wirtschaftsgeographie **57** (4): 185-200
- Smith, R.G. and M.A. Doel 2011: Questioning the theoretical basis of current global-city research: Structures, networks and actor-networks. – International Journal of Urban and Regional Research **35** (1) 24-39
- Taylor, P.J. 2001: Specification of the world city network. – Geographical Analysis **33** (2): 181-194
- Taylor, P. 2004: World city network. A global urban analysis. – London
- Taylor P.J., B. Derudder, M. Hoyler, K. Pain and F. Witlox 2011: European cities in globalization. – In: Taylor, P.J., P. Ni, B. Derudder, M. Hoyler, J. Huang and F. Witlox (eds.): Global urban analysis. A survey of cities in globalization. – Oxford: 114-136
- Verhetsel, A. and S. Sel 2009: World maritime cities: From which cities do container shipping companies make decisions? – Transport Policy **16** (5): 240-250
- World Shipping Council 2013: Top 50 world container ports. – Online available at: <http://www.worldshipping.org/about-the-industry/global-trade/top-50-world-container-ports>, 01/11/2014