### The Globalisation of Labour Markets: A Content Analysis of the Demand for Transnational Human Capital in Job Advertisements<sup>1</sup>

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Abstract: This article analyses how globalisation has affected the demand for transnational human capital (foreign language skills, cross-cultural competence, knowledge about other countries and international experiences) over time, across levels of qualification, professional fields and countries. A content analysis of job advertisements in German and Dutch newspapers, as well as Eurobarometer survey data, shows that the demand for transnational human capital, especially in the form of foreign language skills, has increased in recent decades, with that demand being most pronounced among high-skilled jobs in the service sector. Moreover, there are significant national differences in the importance of transnational human capital, determined by a country's level of globalisation and the global diffusion of its official language. Our study shows, however, that there are methodological limits to the content analysis of job postings for determining labour market demand, especially when specific skills and qualifications, e.g. English language skills, are increasingly taken for granted.

### 1. Introduction

Over the last decades, processes of globalisation have led to an increasing interconnectedness between societies around the world (Dreher 2006; Held et al. 1999). Since the 1970 s, the level of globalisation has increased dramatically across the globe, driven mainly by economic integration. The expansion of trade, international labour migration and the internationalisation of companies have had a strong impact, particularly on labour markets, with the result that, presumably, employees are now increasingly required to speak several languages, acquire crosscultural competence and knowledge about other countries and societies (Koehn / Rosenau 2002). We refer to such skills and qualifications as transnational human capital. Gary S. Becker (1993) defines 'human capital' as the collected personal knowledge, skills and qualifications that allow holders to become successful in diverse social fields, for example by accessing higher professional positions or earning a higher income. We define transnational human capital as a specific form of human capital. It comprises foreign language skills, crosscultural competence, knowledge about other countries and institutions and international experiences, which allow individuals to act in social fields beyond their own nation state as well as in internationalised social fields within it, e.g. by working in international research teams or at the reception desk of a hotel.<sup>3</sup>

We assume that labour market demand for transnational human capital has risen due to globalisation. However, there is still a surprising lack of empirical knowledge concerning this matter. Surveying the relevant research literature, there are three shortcomings that warrant

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<sup>2</sup> We defined the concept of transnational human capital more specifically in Gerhards et al. 2017.

<sup>3</sup> There are a number of other terms one can find in the literature – some of which take up Bourdieu's notion of capital (Bourdieu 1986) as their starting point rather than Becker's theory – which try to address and describe similar phenomena, e.g. 'mobility capital' (Murphy-Lejeune 2002; Kaufmann et al. 2004; Brodersen 2014), 'cosmopolitan capital' (Weenink 2008; Bühlmann et al. 2013) or 'intercultural capital' (Pöllmann 2013). However, given our focus in this article on changes in labour market demand in terms of skills and knowledge rather than dispositions or attitudes, the term 'transnational human capital' seems more suitable.

further analysis: First, previous studies look only at contemporary labour market demand or at short-term trends over the past few years. For example in Germany, companies (Lenske / Werner 2000) as well as employees (Schöpper-Grabe 2009; Hall 2012) report placing high importance in transnational competences and qualifications at work, a slight increase since the turn of the millennium (Sailer 2009; Hall 2012; Protsch 2014, p. 131). Employers in the European Union (EU) (European Commission 2010), the United States (Casner-Lotto / Barrington 2006, pp. 49 f.) and the United Kingdom (UK) (Bennett 2002; Felstead et al. 2007, pp. 34 f.; Tinsley 2013) also demand transnational human capital, and expect demand to rise in the coming years. All in all, however, these studies fail to capture the long-term development of labour market demand for transnational human capital since the 1970 s.

Second, there is only scant knowledge about how demand for transnational human capital varies across levels of qualification and professional fields. Most previous studies present some evidence for such a demand only in specific sectors, such as tourism (Zehrer / Mössenlechner 2009), among librarians (Zhang 2008) or in international business (Walters 1990; Grosse 1998). The few more encompassing comparative studies carried out to date point to large cross-sectional differences in the importance of transnational human capital – but only in the form of foreign language skills – in Germany (Hall 2012), the UK (Tinsley 2013) and the EU (Tucci / Wagner 2003).

Finally, there are no theoretically informed cross-country comparisons of labour market demand for transnational human capital, although data from a Eurobarometer survey of employer expectations (European Commission 2010) and the European Community Household Panel (Tucci / Wagner 2003) suggest large inter-country differences in terms of the importance of foreign language skills at work. We expect that country differences in levels of globalisation, as well as other factors such as the degree of global diffusion of a country's official language, significantly influence the demand for transnational human capital.

This study aims to fill these three research gaps. Based on a content analysis of job advertisements in German and Dutch newspapers between 1960 and 2014, it analyses the changing demand for transnational human capital (1) over time, (2) across professional fields and levels of qualification and (3) in cross-national comparison. We chose the Netherlands as a comparative case for theoretical reasons, the general assumption being that demand for transnational human capital should be more pronounced in the Netherlands than in Germany due to their higher level of globalisation and the lesser global diffusion of the Dutch language. We further justify the inclusion of the Dutch case in the corresponding section.

Our analysis proceeds as follows: After a description of the data and methods used, we first focus on the German labour market to analyse longitudinal changes and cross-sectional differences. The results indeed suggest an increasing demand for transnational human capital over time. This demand is particularly strong in high-skilled jobs in the service sector. We then proceed with the cross-national comparison between Germany and the Netherlands. However, the results from this comparison only partially overlap with our theoretical expectations, prompting a discussion of specific methodological problems related to a content analysis of job advertisements. Therefore, we complement the country comparison with an analysis of Eurobarometer survey data (European Commission 2012), which focuses on foreign language proficiency and foreign language use at work among the European population. Finally, the results are summarised and possible consequences of increasing labour market demand for transnational human capital on social inequality are identified.

### 2. Data and methods

In order to sketch the long-term development of labour market demand for transnational human capital as well as possible cross-sectional and cross-country differences, we conducted a content analysis of job advertisements in two German and two Dutch newspapers for the time period 1960 to 2014. Content analyses of job advertisements are a common instrument for the analysis of labour market demand (Alex/Bau 1999). Through job postings, employers express their demand for labour and try to find suitable employees. The job specifications in these advertisements thereby function as filters and signals on the labour market (Spence 1973). Thus, job advertisements provide a good overview of the specific skills and qualifications required by the economy at a specific point in time. Although they do not provide information on which skills employees actually possess and apply in their jobs once hired, they have the important advantage (compared to surveys) that they can be used to reconstruct long-term developments of labour market demand for specific skills and qualifications.

Our sample consists of job advertisements in four national and local newspapers from Germany (Frankfurter Allgemeine Zeitung (FAZ) and Berliner Morgenpost) and the Netherlands (de Volkskrant and Leeuwarder Courant) published in the years 1960, 1980, 2000, 2010 and 2014. This time period captures the marked increase in globalisation in Western Europe since the 1970 s. We have included one point in time before the onset of this process (1960), and globalisation then increases with each 20-year interval. Since globalisation dynamics have not continued in the same way since the year 2000, we decided to look at smaller intervals since then and up to the year 2014 (when our data was collected). The respective newspapers were chosen because they are among the most important local and national newspapers in their respective countries (Dreier 2009; Van der Burg et al. 2011). While national newspapers cater mostly to a highly educated readership, local newspapers attract a more diverse audience, as a survey by the German 'Arbeitsgemeinschaft Media-Analyse' (working group media analysis) (2015) exemplifies: The FAZ readership consists mainly of highly educated people (57% have studied at university), whereas the Berliner Morgenpost is mostly read by people with a high school diploma ('Mittlere Reife') (33%).<sup>5</sup> This difference in readership determines the kind of job advertisements posted in a newspaper, since employers usually choose the most adequate forum for their job postings by taking a paper's readership profile into account. The relationship between readership profile and the qualification requirements of its job postings is confirmed by our data. Thus, by sampling job postings from both local and national newspapers, we are able to assess labour market demand across a wide range of qualification levels and professional fields.

A random sample of 250 job advertisements per newspaper per year – 5,000 advertisements overall – was drawn from issues published in early February or March. Using a coding scheme,

<sup>4</sup> See for instance the Swiss Job Market Monitor (www.stellenmarktmonitor.uzh.ch). Even if not all open job positions are published in a newspaper and not all posts are necessarily filled, job advertisements generally give a good overview of the structure of labour market demand. However, particularly in recent years, a significant share of job openings seems to be posted on the web or suitable candidates are recruited directly via head-hunters. This has important methodological implications which will be discussed later.

<sup>5</sup> The readership of these newspapers has not changed greatly over time.

<sup>6</sup> Across the entire period of analysis (1960-2014), 4.5% of job offerings in the *FAZ* required a low qualification (no high school degree), 38.4% a medium qualification (high school degree) and 57.1% a university degree. In the *Berliner Morgenpost*, in contrast, 27.8% of job advertisements required a low qualification, 66.6% a mid-level and 5.6% a higher-level qualification. Furthermore, the *FAZ* posts mostly job offers for technicians/engineers (29.4%), salespeople (24.6%) and administrators (22.1%). The *Berliner Morgenpost*, in turn, has job offers mostly for manual labourers (25.2%), administrators (23.3%), health workers (16.3%) and salespeople (16.0%).

the job specifications were analysed according to the method of systematic content analysis (Neuendorf 2002). The coding unit is the single advertised position. Thus, one job advertisement could contain one or more job offers. Postings which referred to inaccessible sources (such as the Internet) or offering directorships, trainings, apprenticeships, internships, voluntary services, etc. were not coded.

The coding scheme includes measures of the exact job designation (open code), its professional field and required qualifications as well as the required transnational human capital. We coded four different dimensions of transnational human capital. The first dimension is foreign language skills, which could also be labelled as transnational linguistic capital (Gerhards 2012). Foreign language proficiency enables communication and interaction between individuals who speak different languages. We coded whether or not a job posting asked for a foreign language, and if so, for which one(s). The second dimension of transnational human capital refers to knowledge of or expertise concerning other countries and societies. If people want to live and work outside their nation state or to engage with people from other countries, it is advantageous to know the institutions and laws which apply abroad and to be familiar with different political and economic systems. We used this code when an advertisement demanded specific knowledge about another country, for example of Irish law. The third dimension of transnational human capital is defined as cross-cultural competence. It refers to the openness, understanding and empathy required to properly communicate and interact with people from diverse cultural backgrounds. Postings that asked for such things as 'ability to work in international teams' or 'openness towards other cultures' received this code. International experiences form the fourth dimension of transnational human capital since they help to gain and improve the aforementioned skills and competences, but are also invested with a high symbolic value, given prevalent ideological discourses which favour mobility over stasis (Brodersen 2014). This code was given when advertisements asked, for example, for educational experiences abroad. To reduce complexity, we differentiate between only two aspects of transnational human capital in the presentation of our empirical results below: a) foreign language skills and b) other transnational skills (expertise on foreign countries, cross-cultural competence and international experience).

Finally, apart from transnational human capital, the coding scheme takes into account two further dimensions of the globalisation of labour markets with two indicators each: first, the internationality of the employer (measured in terms of the employer's international orientation and the geographical location of the headquarters) and of the job position in question (referring to whether a job implies foreign business contact, travel and foreign working languages), and second, the language of the job description and of the specific job designation.<sup>7</sup>

The complete coding scheme was only used for the German job advertisements, while the coding of the Dutch postings was limited to the required foreign language skills as the most salient dimension of transnational human capital, as well as the language of the job designation and description. Thus, the country comparison will be restricted to these dimensions only.<sup>8</sup>

<sup>7</sup> More information on the codes and coding procedures can be found in our code book, which is published on the website of the project 'Transnational human capital and social inequality'.

<sup>8</sup> For the Dutch advertisements we used a simpler coding scheme because, in general, the coding of newspaper advertisements, particularly in a foreign language, is a very time consuming activity. Restricting the coding scheme to transnational linguistic capital seems warranted, however, since the analysis of the German job advertisements, as well as pretests for the Netherlands, showed that foreign language skills are by far the most demanded dimension of transnational human capital. Furthermore, in the German case, the demand for foreign language skills is highly correlated to the demand for other forms of transnational human capital.

Furthermore, the content analysis of job advertisements is complemented by an analysis of survey data from the 2012 Eurobarometer, which includes questions about respondents' foreign language use (European Commission 2012). The Eurobarometer (EB) surveys are conducted in the form of face-to-face interviews in all EU member states (as well as accession countries); the sample amounts, per country, to 1,000 interviewees (on average) older than 15 years. With regard to their foreign language skills, respondents in the EB 2012 were asked, first, which foreign languages they speak well enough to have a conversation in and, second, about the situations in which they used these foreign languages. The interviewees could choose from a list containing several items. Our analysis refers to the use of foreign languages at work. This includes having conversations with colleagues, reading and writing emails and letters as well as business travel abroad. The responses were recoded as a dummy variable, acquiring the value '1' for mentioning at least one of these items and the value '0' for mentioning none. Only the answers of currently employed, non-immigrant interviewees were considered.

The following sections present the longitudinal and cross-sectional analyses of the demand for transnational human capital on the German labour market, before turning to the comparison with the Netherlands. Finally, the data from the Eurobarometer on foreign language skills in Europe will be included.

### 3. Labour market demand for transnational human capital in Germany over time

We assume that the labour market demand for transnational human capital has increased over time for two reasons. First of all, the worldwide level of globalisation has risen dramatically over the past decades. This development can be measured using different indicators of globalisation (Lockwood / Redoano 2005; Raab et al. 2008; OECD 2010). One of the best-known ones is the KOF index of globalisation, developed by a research group at the ETH Zürich (Dreher 2006). This includes 23 indicators of political, economic and social globalisation in more than 150 countries since the year 1970, covering, for example, economic flows and trade barriers, social contacts across borders, information flows and membership in international organisations. Figure 1 illustrates the development of the level of economic globalisation worldwide and in the two countries included in our analysis, using the KOF data from 2016. We have chosen to report the development of the index of economic globalisation, since it has a more direct link with the demand for transnational human capital in the labour market than the indices of political or social globalisation. The graph shows an increasing level of economic globalisation across the globe as well as in Germany and the Netherlands since the 1970 s. Over the entire period, the Dutch economy is more globalised than the German one. In fact, the Dutch economy is the fourth most highly globalised one in the world, while Germany takes place 81 worldwide. Both economies peak around the year 2000 in terms of their level of

<sup>9</sup> Concerning the current degree of globalisation of the German labour market, our content analysis of the job advertisements posted in the *FAZ* and the *Berliner Morgenpost* in the year 2014 reveals the following picture. First, regarding the demand for transnational human capital, the most sought-after resource is foreign language skills. In 2014, 20% of all job advertisements posted in the *FAZ* and the *Berliner Morgenpost* required knowledge of foreign languages. Unsurprisingly, the most demanded foreign language is English (in 97% of the job postings), followed by French (5%) (up to three foreign languages per job advertisement were coded). Compared to foreign language skills, other forms of transnational human capital, i.e. cross-cultural competence and international experience, are in less demand (only 7.8% of German job advertisements mentioned at least one of these other transnational competences). Second, regarding the internationality of the employer and the job position, we found that 19.4% of the job openings were either posted by an international employer or offered an international job position, e.g. with a workplace abroad. As for the language of the job description and the job designation, the third indicator for the globalisation of labour markets, 8.6% of job advertisements were either written in a language other than German or included job designations in a foreign language.

globalisation. After that, there is a slight decrease of economic globalisation in Germany, while the level of globalisation of the Dutch economy remains rather stable.

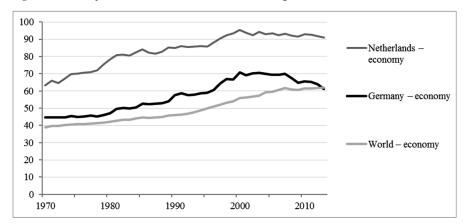


Figure 1: Development of the KOF index for economic globalisation 1970-2013

Source: KOF, own calculation.

This rising level of economic globalisation should increase labour market demand for skills and qualifications that enable employees to communicate and interact across national borders. For example, companies trade with foreign partners, maintain international business contacts, establish subsidiaries and recruit employees from different countries. Macro-economic research has shown that knowledge of foreign languages significantly increases international trade (Egger / Lassmann 2012; Fidrmuc / Fidrmuc 2015). In the realm of science, scientific cooperation across borders has increased over time at the same rate as publishing in English, the global lingua franca (Gerhards 2012, pp. 73 f.). There are similar trends towards internationalisation occurring in other areas of social life as well (Mau / Büttner 2010; Recchi 2015). Thus, with a rising degree of (economic) globalisation, the labour market demand for transnational human capital should increase as well.

Second, parallel to the strengthening of 'real' economic demand for transnational human capital there has also been a rise in the 'symbolic' value of transnational competences and qualifications (Igarashi / Saito 2014). Research inspired by sociological neo-institutionalism has pointed to the capacity of educational institutions to define autonomously certain traits and competences as valuable and not merely in response to economic demand. Over the past decades, these efforts have resulted in a standardised script of 'world citizenship' taught around the world (Meyer 2010):

The individual needs to know a world language – almost certainly English [...]. The individual should be able to function as a supra-national citizen [...], and to reflect from a more universal point of view on local and national history [...]. In other words, the individual student is to become a member of a newly-developing identity called 'humanity' (Meyer 2007, p. 266).

This script of world citizenship, as defined by educational policies, includes an adherence to universal values (Ramírez et al. 2007) and the ability to successfully navigate a globalising world economy. To compete in the global race for jobs, employees are expected to be multilingual, flexible and internationally mobile. The causes for this latter development are not well

<sup>10</sup> We discuss this development more thoroughly in another contribution (Gerhards et al. 2017).

transnational skills

understood, but could stem from the influence of neoliberal ideology on the educational system (Brown / Tannock 2009) and a re-interpretation of education as human capital investment (Münch 2009; Hartong 2012). In any case, the increasing symbolic value of world citizenship should have driven labour market demand for transnational human capital independently of the question of whether or not it is really needed in the workplace.<sup>11</sup>

On the basis of these two reasons, <sup>12</sup> we assume that an increasing level of globalisation and the institutionalisation of 'world citizenship' over the past few decades have both led to increasing labour market demand for transnational human capital over time (hypothesis 1).

Figure 2 represents the results of our content analysis of job advertisements published in the two German newspapers between 1960 and 2014. It shows that all indicators relating to the globalisation of the German labour market feature a similar development over time and thus largely confirm our expectations. The share of international employers and jobs has risen from 7.4% in 1960 to a peak of 35.2% in 2000, but then falls to 19.4% in 2014. The share of job advertisements in a foreign language or containing a job designation in a foreign language has risen from 0.2% (1960) to 10.4% (2010), declining to 8.6% in the year 2014. A similar trend can be observed for the demand for transnational human capital: In 1960, 6.0% of all German job advertisements required foreign language skills; this share peaked around the year 2000, reaching 31.2%, but then dropped to 20.0% in 2014. Other aspects of transnational human capital – expertise on other countries, cross-cultural competence and experience abroad – are less in demand, but gain relevance over time as well: Only 1% of all advertisements asked for such skills in 1960, but 9.6% did so in 2010. Again, there is a slight decrease to 7.8% in 2014.

40% International employer/job 30% THC: foreign language skills 20% - Job designation/ description in 10% foreign language THC: other

Figure 2: Development of transnationality in job advertisements over time, FAZ and Berliner Morgenpost (1960-2014)

1970 Source: Own dataset, own presentation.

1980

1960

2000

2010 2015

1990

<sup>11</sup> The increased symbolic value of transnational human capital might also affect the wording of job advertisements in terms of the language in which job designations and descriptions are written. The use of job designations in a foreign language (e.g. using the English word 'consultant' instead of the German term 'Berater') can be interpreted as a sign of the emergence of isomorphic job classifications across the globe.

<sup>12</sup> There is an additional reason why transnational human capital as well as other forms of human capital have become more important over time. Due to the technological revolution, human capital in general has become an ever more important resource in Western economies since the 1970s. Their main economic activity has shifted from industrial mass production to the service sector and the 'knowledge economy' (Bell 1973; Powell / Snellman 2004; Castells 2010), generally requiring higher skills and qualifications of the workforce.

If one compares how both the degree of economic globalisation and the demand for transnational human capital in Germany evolved over time, one notices a largely parallel development: Until the year 2000, the continuously rising level of economic globalisation goes hand in hand with an increasing demand for transnational human capital in the German labour market. Then, following a slight decline in the level of globalisation after 2000, the demand for transnational human capital also decreases. However, the declining demand for transnational human capital in German job advertisements is far too pronounced to be put down to the stagnating or slightly declining level of globalisation. How can this trend be explained?

There are two possible answers. First, job postings are now published more frequently and at much lower cost on the Internet than in newspapers (Klarer / Sacchi 2007). We can conjecture that it is mostly job offerings for the highly skilled and those that require a higher amount of transnational human capital that are no longer found in newspapers, since these advertisements are also targeted towards an audience with a higher digital competence. This might partly account for the apparent decline of the demand for transnational human capital in print advertisements over the past decade: This trend simply reflects the rising share of high-skilled jobs being published online. This assumption is supported by empirical data. First, the total number of job advertisements published in the *FAZ* and the *Berliner Morgenpost* has declined sharply in the last 15 years. In both newspapers, the number of advertisements in 2014 is less than a third of the number in 2000.

Furthermore, we have analysed data from the German Socio-Economic Panel (SOEP, see Wagner et al. 2007 for more information) in which respondents were asked which sources they had used to find their current job. The results show a decline in the number of people who reported to have found their current job through a newspaper advertisement since about the year 2000. While between 1985 and 2000, the share of respondents who had found their current job this way was constantly between 14% and 17%, it has decreased continuously since then, reaching less than 8% in 2013. During the same period, the share of jobs found through internet advertisements has increased from 1% to 13%, while other ways of finding a job (e.g. through friends and relatives or through recruitment agencies) have not changed much in relevance since 1985. This change is most pronounced for high-skilled jobs, as figure 3 clearly shows. In 2013, 9% of jobs that require only a low qualification were found through newspapers ads and 9% were found through the Internet, but only 5% of jobs that require a high level of education were found through newspaper ads, while 20% were found through the Internet.

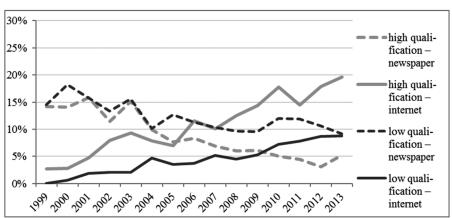


Figure 3: Share of people who found their present job via newspaper advertisements and online over time, according to level of qualification

Source: SOEP 30, own calculations.

Second, there might be a more general methodological problem when using content analyses of job advertisements for determining labour market demand. Skills and qualifications which are generally taken for granted might simply go unmentioned in job advertisements. For example, job postings from the 1950 s still sought skills like 'good spelling' or a 'good general education'. These are skills that are considered fairly common today and no longer fulfil a necessary filtering function in attracting suitable candidates. Something similar might have happened to English skills, for example, over time. In Germany, English is a compulsory school subject, beginning in primary school, so employers may no longer need to mention good English skills in their job advertisements. In fact, our analysis of the survey data from the 2012 Eurobarometer 77.1 shows that 83% of 15- to 24-year-olds and 70% of 25- to 34-year-olds in Germany claim to speak English well, while only slightly above 60% of those between 35 and 54 years of age do so (see figure 8 in section 5). Among those between 55 and 64 years, less than half speak English and only about 30% of those 65 years and older. Thus, knowledge of English has become quite common among younger cohorts which have entered the labour market since about the year 2000. These methodological problems will be addressed again in the subsequent section on country differences in the demand for transnational human capital.

# 4. Labour market demand for transnational human capital in Germany in cross-sectional comparison according to level of qualification and professional field

Besides this longitudinal development, we expect cross-sectional differences in labour market demand for transnational human capital for two reasons. First, globalisation does not affect every economic sector to the same degree. In the 'information age' (Castells 2010), the production of knowledge and expertise is tightly interlinked on a global scale. Researchers, IT specialists and bankers are more internationally connected than, for example, construction workers or farmers. Second, the relevance of transnational human capital increases with the qualification level required for a job. Managers surely have more contact with international partners and customers than lower-skilled employees. Thus, we assume that the demand for transnational human capital rises with the level of qualification and varies across professional fields (hypothesis 2).

This assumption is supported by the fact that there are marked differences between newspapers targeted towards readerships with different educational backgrounds. Over time, the demand for transnational human capital is much higher in job advertisements published in the FAZ (34.7%) than in the Berliner Morgenpost (6.5%). Accordingly, the employers and advertised positions in the FAZ are far more international (41.9%) than in the Berliner Morgenpost (3.7%). The same holds true for the language of the job designation and description: These are much more often written in a foreign language in the FAZ (11.3%) than in the Morgenpost (1.2%).  $^{13}$ 

To analyse cross-sectional differences in the demand for transnational human capital systematically, we look at the immediate relationship between the level of qualification for the advertised job and the demand for transnational human capital. As figure 4 indicates, only 3.7% of those job postings that do not require a formal educational degree ('low qualification') ask for foreign language skills and none of them ask for other forms of transnational human capital. These shares increase to 14.6% (foreign language skills) and 3.4% (other transnational skills) among those advertised positions that require at least a high school diploma ('medium qualification'), whereas university graduates are expected to have foreign language skills in 35.3% of all cases and other transnational skills in 9% ('high qualification'). The demand for transnational human capital is thus clearly related to the qualification level of a job.

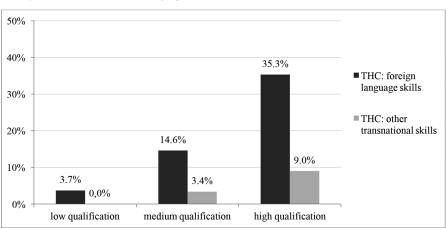


Figure 4: Demand for transnational human capital according to the qualification requirements of the job, FAZ and Berliner Morgenpost (1960-2014)

Source: Own dataset, own presentation.

However, demand for transnational human capital varies not only according to the qualification level of a job. It also depends on the professional field. Figure 5 demonstrates that only 0.6% of job advertisements for manual labourers (craftspeople, construction workers, non-skilled workers, cleaners and farmers) ask for any form of transnational human capital. Demand is similarly low in the health sector (physicians, nurses, physiotherapists, pharmacists), whereas job postings in consultancy, administration and trades, sales and marketing require it

<sup>13</sup> Similar differences, albeit on a lower level, can be found in the Netherlands. While 10.9% of the job offerings in the national newspaper *de Volkskrant* required foreign language skills, only 6.0% did so in the local *Leeuwarder Courant*. Likewise, 6.5% of the job advertisements in *de Volkskrant* contained job designations/descriptions in a foreign language, with only 1.9% in the *Leeuwarder Courant*.

in an average number of cases – about one in four advertisements in these professional fields asks for foreign language skills, and between 2% and 8.5% ask for other transnational skills. Among all professional fields, demand for transnational human capital is highest in the finance industry and law, with more than 40% of advertisements asking for foreign language skills and more than 10% asking for other transnational skills. <sup>14</sup>

10% 20% 30% 40% 50% Law Banks/financial services/insurance Research Media/public relations Consultancy Trade/sales/marketing Administration Technology/engineering Education/training Hotels/gastronomy/tourism ■THC: foreign language skills Healthcare ■ THC: other transnational skills Manual labour

Figure 5: Demand for transnational human capital according to professional field, FAZ and Berliner Morgenpost (1960-2014)

Source: Own dataset, own presentation.

Of course, these differences are in part due to the specific levels of qualification required in different fields. For instance, most jobs in law require high qualifications and most jobs in manual labour require only a low level of qualification, while a much wider range of qualifications is in demand in trade, sales and marketing. However, the differences in demand for transnational human capital between professional fields hold even when the level of qualification is controlled for. For instance, more than half of all jobs that require a high qualification in law, finance or marketing ask for foreign language skills, but less than 5% of all highly-qualified jobs in the health sector.

In addition, there are some differences between professional fields in terms of the development of demand for transnational human capital over time. Although our data does not allow us to analyse these dynamics for all professional fields due to the limited number of cases in some professions for single years of our sample, we are able to carry out such analyses for selected fields with high numbers of cases. Figure 6 compares the development of the demand for transnational human capital over time for jobs in manual labour and technology / engineering. These two fields were chosen because they differ in the level of qualification they require and the degree to which they can be expected to be affected by processes of globalisation. Moreover, contrary to most other fields, the level of qualification demanded for these jobs is almost constant over time. As can be expected, manual labourers practically face no change in demand for transnational human capital over time. Although their jobs may be affected by other aspects of economic globalisation (such as a dislocation of jobs to low-wage countries), there is no increase in the amount of transnational human capital required of them.

<sup>14</sup> We are aware of the fact that each sector is highly differentiated internally. Unfortunately, we are unable to distinguish between different subsectors due to the limited number of cases.

transnational skills

Neither foreign language knowledge nor other transnational skills are in demand. On the other hand, jobs in the field of technology and engineering mirror the processes of globalisation since the 1970s (see figure 1) quite closely. There is a sharp increase in the demand for foreign language skills until the year 2000. Since then, this demand seems to stagnate, which again mirrors the stagnation of economic globalisation in Germany after 2000. However, other transnational skills have still gained relevance, albeit on a lower level.

Technology/
engineering: foreign
language skills

Manual labour:
foreign language
skills

Technology/
engineering: other
transnational skills

→ Manual labour: other

Figure 6: Demand for transnational human capital in two professional fields over time, FAZ and Berliner Morgenpost (1960-2014)

Source: Own dataset, own presentation.

1970

1980

1990

1960

To sum up, there are not only cross-sectional differences in the demand for transnational human capital according to the qualification level of jobs, but also with regard to the professional field to which they belong. These results confirm our second hypothesis. Demand for transnational human capital seems to be most pronounced among high-skilled jobs in the service sector which points to a German labour market clearly segmented along levels of globalisation.

2000

2010

## 5. Labour market demand for transnational human capital in cross-national comparison

All in all, the longitudinal analysis confirmed a growing demand for transnational human capital on the German labour market over time, paralleling processes of globalisation. One can gain additional insights into the effect of globalisation on labour markets by cross-national comparisons. Since content analyses of job postings is a time-consuming method, we were able to choose only one additional country case, the Netherlands, which, however, provides an interesting comparison with Germany for two theoretical reasons. First, labour market demand for transnational human capital is likely to be stronger the higher the level of globalisation of a country is. This, of course, depends on a host of factors that cannot all be discussed here. Among these are a country's level of modernity which in turn furthers its international functional integration (Stichweh 2000), its colonial past, its geographical size which determines the probability of external contacts (Katzenstein 1985; Geser 1992) and the factor endowment of an economy which leads to the adoption of liberal or protectionist policies

(Rogowski 1989).<sup>15</sup> Germany and the Netherlands differ along many of these dimensions. For example, the Netherlands were historically a more important colonial power than Germany, and the Dutch economy is traditionally highly reliant on foreign trade, the volume of which is currently 154% of its GDP.<sup>16</sup> This leads to the Netherlands generally being more globalised than Germany (Figure 1).

Besides a country's level of globalisation, there is a second factor that should affect the country-specific demand for transnational human capital, particularly in the form of foreign language skills – the global diffusion of a country's official language. The need to master a foreign language essentially depends on the so called 'communication value' of one's mother tongue. This communication value of a language is a function of the number of its speakers globally (De Swaan 2001). The fewer people speak one's own language, the lower its communication value and the higher the importance of learning another language to communicate and interact with others (Gerhards 2012). For example, the likelihood of a Latvian speaker to encounter somebody abroad who speaks Latvian is much lower than for a Spanish speaker, since Spanish is more commonly spoken around the world. Now, compared to Dutch, German is much more widespread and is also much more popular to learn as a foreign language (Table 1). 17 The lower communication value of Dutch is also evident and impacts on the likelihood to translate foreign media products. Translation and dubbing is only worth the expense if the audience is of a certain size. If the audience size is small, such as in the Netherlands, then foreign media tends to be left in its original language and is distributed with subtitles (Gerhards 2012). Accordingly, the share of media products distributed in the original language is considerably higher in small countries (e.g. the Netherlands) compared to that in big countries (e.g. Germany).

Taken together, the Netherlands' higher level of globalisation and the lower international diffusion of the Dutch language should lead to higher labour market demand for transnational human capital compared to Germany (hypothesis 3).

Since we only used a reduced coding scheme for the Dutch case, as stated in the data and methods section, our country comparison with regard to the demand for transnational human capital focuses on foreign language skills only – the most important and most common form of transnational human capital. The results of this comparison can be seen in figure 7. Two observations are remarkable and call for a thorough interpretation.

<sup>15</sup> For further details, see, for example, Milner (1999) who deals with the extensive debate within the discipline of international political economy as to the causes of international trade integration.

<sup>16</sup> According to data from the World Bank online accessible under: http://data.worldbank.org/indicator/ NE.TRD.GNFS.ZS?locations=NL (last access: 10 February 2017).

<sup>17</sup> The exact number of people who speak the language is difficult to measure. Currently, there are at least 78 million people who speak German and 22 million who speak Dutch as their first language (Lewis et al. 2015). Concerning their diffusion as a foreign language, German is the third most widely spoken foreign language in Europe, according to the Eurobarometer (European Commission 2012).

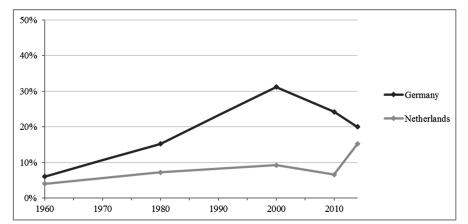


Figure 7: Demand for foreign language skills in German and Dutch newspapers over time

Source: Own dataset, own presentation.

1) Throughout the entire period of analysis, the demand for foreign language skills in Dutch job advertisements was much lower than in the German ones, despite the Netherlands' higher level of globalisation and the lower communication value of the Dutch language. Overall, only 8.4% of Dutch advertisements require foreign language skills, while 19.3% of German ones do. This result thus directly contradicts our initial expectations. How can this finding be explained?

Recalling the argument from the German case, where demand for foreign language skills in job advertisements has declined in recent years, we assumed that foreign language skills may have become so common that they are now simply taken for granted and are no longer explicitly mentioned in job advertisements. This does not necessarily mean that such skills are in less demand or use, but that this demand no longer shows up in job advertisements. Unfortunately, there are no longitudinal data available to confirm or reject this hypothesis, but cross-country survey data are available to see whether the assumption holds in the case of the Netherlands. In fact, our analysis of data from a 2012 Eurobarometer survey shows that foreign language skills are much more common among the Dutch population than they are in Germany (figure 8). 93.5% of the Dutch speak one or more foreign languages, while, in comparison, the share of Germans who speak at least one foreign language is only 65.6%. Also, 61.7% of the Dutch report using a foreign language at work, while only 37.2% Germans report the same. Since almost the entire Dutch population possesses transnational linguistic capital, it is not necessary to ask for these skills in job advertisements, as applicants and future employees will probably have them anyway. In Germany, on the other hand, it makes more sense to mention these skills since a relevant share of the population (and potential job applicants) does not speak foreign languages. Generally, it seems that content analyses of job advertisements do not necessarily deliver a valid picture of the real labour market demand for those skills and qualifications that have become very common among the population, meaning that this method has to be treated with great care.

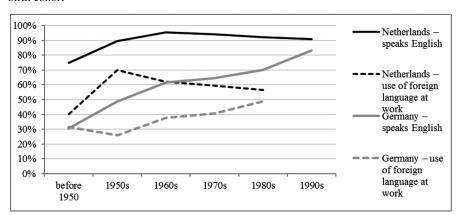


Figure 8: English skills and foreign language use at work in Germany and the Netherlands by birth cohort

Source: Eurobarometer 77.1, own calculations.

2) The development over time of the Dutch demand for foreign language skills observed in figure 7 is difficult to explain. Contrary to Germany, we do not observe an ongoing decline in demand after 2000, but rather a renewed increase between 2010 and 2014. There could be several reasons for this development. First, the level of globalisation of the Dutch economy did not decline as fast after the year 2000 as it did in the German economy. Second, foreign language proficiency and foreign language use did not increase significantly among younger Dutch age cohorts compared to older ones. The Eurobarometer data shows that, in contrast to Germany, all Dutch age cohorts have an almost similar foreign language proficiency and use (figure 8). Therefore, foreign language skills can be taken for granted among all age cohorts which means that this factor should not have an influence on the development of foreign language demand as expressed in newspaper advertisements. And third, the number of job advertisements in the Dutch newspapers we analysed did not decline as much as in Germany. This indicates that there is not as much of a shift away from newspaper ads to internet advertisements of jobs which could mean that jobs that demand foreign language skills can still be found to a significant amount in the newspapers. However, and unfortunately, we cannot test empirically whether these factors can really explain the surprising development in the Netherlands.

Leaving aside the development over time, and coming back to the average country differences, our theoretical expectations as to the effects of country differences in levels of globalisation and the communication value of a country's official language on the demand for transnational human capital might not need to be discarded altogether. As the aforementioned Eurobarometer data suggest, transnational human capital in the form of foreign language proficiency is much more widespread in the Netherlands than in Germany, which is, after all, in line with what we were expecting theoretically. Since the Eurobarometer includes data on all EU member countries (27 in 2012), it also allows for a more systematic test of the relationship between a country's level of globalisation and the communication value of its official language, on the one hand, and the use of transnational human capital in the form of foreign language skills at work on the other. Following our previous argument, we assume that the demand for transnational human capital is stronger the higher a country's level of globalisation (hypothesis 3 a) and the less widespread its official language (hypothesis 3 b) are.

Table 1 indeed supports these hypotheses. Citizens of those countries that are most globalised and whose official language is not English – the most widespread language in the world – use

foreign languages at work most frequently. In the eight least globalised European countries, only 29.7% of employees use foreign languages at work. This share is 51.8% among the employees of the eight most highly globalised countries in the EU. Reconcerning the relationship between the communication value of a country's official language and foreign language use at work, only 19.6% of the employees in English-speaking countries report using a foreign language, compared to 35.4% in countries with an official language that has a medium communication value and 34.3% in the rest of the EU. This relationship is not completely linear and is blurred by the fact that the group of countries with similar levels of globalisation and communication value are quite diverse since countries belonging to the same group differ in other characteristics. For instance, both Germany and Romania can be found among the least globalised countries in Europe in terms of their economies. Nevertheless, both hypotheses concerning the effect of country differences on the use of foreign language skills seem to be largely accurate.

Table 1: Employees' foreign language use at work according to a country's level of economic globalisation and official language

Economic globalisation (KOF) (2012)	Foreign language use at work	N	Communication value of official language	Foreign language use at work	N
Low	29.7%	4,124	Low	34.3%	9,270
Medium	31.1%	5,273	Medium	35.4%	2,420
High	51.8%	3,333	High	19.6%	1,040

Source: Eurobarometer (2012), own calculation.

### 6. Summary and conclusion

This article set out to analyse how processes of globalisation have affected labour market demand for transnational human capital over the last decades. The term *transnational human capital* refers to individual skills and resources such as foreign language skills, cross-cultural competence, knowledge about other countries and institutions and international experiences, all of which enable people to act in transnational social fields. A content analysis of job advertisements in German and Dutch newspapers, published between 1960 and 2014, confirmed that the rising level of economic globalisation and the increasing institutionalisation of a 'world citizenship' script have led to increasing labour market demand for transnational human capital over time, especially in its most sought-after form, i.e. foreign language skills.

However, globalisation processes do not affect all labour markets in the same way, since countries, economic sectors and professional fields are integrated in global and transnational connections to differing degrees. Accordingly, we assumed that the demand for transnational human capital varies according to professional fields and rises with the level of qualification required for a job. Our data confirm these hypotheses: the higher the educational level of a position is, the stronger the demand for transnational human capital. Also, whereas manual labour jobs require transnational human capital in only a very few cases, such demand is highest in the fields of law and finance.

<sup>18</sup> The eight least economically globalised EU countries are (in ascending order): Romania, Germany, France, Italy, Greece, Poland, Slovenia and the UK. The eight most highly globalised EU countries are (in descending order): Ireland, Luxembourg, the Netherlands, Malta, Belgium, Estonia, Hungary and Finland.

<sup>19</sup> EU countries with English as an official language are the UK and Ireland. Countries with an official language of moderate diffusion are Germany, Austria, Spain, France and French-speaking Belgium.

Furthermore, we compared German and Dutch job advertisements in order to see if there are country differences in the demand for transnational human capital depending on the level of globalisation and the communication value of the official language. Since the Netherlands are a more globalised country than Germany and its official language is less widely spoken globally, we assumed that demand for foreign language skills would be much higher there. This hypothesis could not be confirmed on the basis of job postings which led us to question the validity of content analyses of job advertisements for determining labour market demand. Apparently, this validity is limited when certain competences and qualifications become increasingly taken for granted in a society which seems to be the case with foreign language proficiency in the Netherlands. However, by looking at Eurobarometer data instead, we were able to find the expected differences in the professional use of foreign languages between Germany and the Netherlands. Furthermore, based on Eurobarometer data, the general hypothesis on the relationship between a country's level of globalisation and the importance of its official language on the one hand, and the demand for transnational human capital on the other, could also be confirmed.

In general, the results show that transnational human capital, particularly in the form of foreign language skills, has indeed become a relevant resource in labour markets. Job applicants who do not command such resources presumably have a much smaller chance of succeeding in their professional career. This is also reflected in recent studies that show that English skills as a specific form of transnational human capital yield greater profits in terms of job positions and earnings (Díez Medrano 2014; Di Paolo / Tansel 2015; Stöhr 2015). Consequently, globalisation and subsequent changes in the labour market may give rise to new forms of social inequality. After all, the acquisition of transnational human capital mainly depends on a person's social background. Using the example of international student exchange, we were able to show in another study that this specific form of acquiring transnational human capital is mostly reserved for the upper middle classes, because, at least in the German case, it requires a considerable degree of private investment (Gerhards / Hans 2013). Thus, if possession of transnational human capital indeed determines access to higher professional positions and income, then this will lead to a new dimension of social inequality based on the distribution of transnational human capital across society.

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