MACRO-ENVIRONMENTAL MAPPING OF INTERNATIONAL BRANCH CAMPUS ACTIVITIES OF UNIVERSITIES WORLDWIDE*

March 2014

Anna Kosmützky and Georg Krücken
International Centre for Higher Education Research (INCHER), University of Kassel, Germany

ABSTRACT

The paper provides an initial international comparative empirical assessment of international branch campuses (IBCs) worldwide. Building on neo-institutional theory and organizational ecology, it sheds light on the new organizational form by analyzing their founding age of the home university and IBC mortality. Furthermore the paper analyzes the organizational form of home institutions that establish such an international branch abroad, in terms of size, age, ranking positions and range of disciplines, and peeks into an educational hub with a high density of international branch campuses. The analysis shows that all forms of universities maintain branch campuses, none is more likely to establish a branch, but the age of the universities that establish a branch campus increases the likelihood of the survival of the branch in times of increased competitive pressures. Additionally, the analysis reveals that educational hubs are very narrow competitive environments of program offers for a diversity of home institutions. These results point to the conclusion that home institutions adopt the strategy of establishing an international branch campus even when the environment is highly competitive and the strategy appears unlikely to succeed.

Keywords: International Branch Campuses, Educational Hubs, Neo-Institutional Theory, Organizational Ecology

I. Introduction

There is broad consensus that higher education is undergoing a process of globalization. Universities worldwide are increasingly engaging in international and cross-border activities in recent years, and the number and types of international relationships among universities related to research and educational functions are growing (Deardorff et al. 2012; King et al. 2011, Rumbley et al. 2012). Despite a certain level of ambiguity regarding the actual dimension and transformative effects on higher education institutions (Marginson 2011, Ziguras 2012, Knight 2012), global activities of universities like the recruitment of international students, strategic research networks, international branch campuses (IBCs), and – most recently and publicly visible – MOOCS testify to their emerging diversification. The elements of globalization in higher education are widespread and multifaceted, and the higher education market is well established as a global phenomenon (Hemsley-Brown and Oplatka 2006).

But not all aspects of globalization are entirely new to higher education and universities in particular. Universities have a long tradition of combining different spatial orientations. Since the beginning of its history the university is committed as a local organization - usually even associated with a particular city and its name. But at the same time the university was an equally international or transnational institution that has always served the transfer of universal knowledge, and had appropriate curricula and “internationally mobile” teachers and students. An additional national integration of universities has initially developed — at the latest with the emergence of the modern research university in the 19th century - through nationally oriented curricula and examination practices (state exams) and training of civil servants (de Ridder Symoens 1992, Stichweh 2001, Rüegg 2004, Scott 2011, de Witt and Merx 2011).

To capture different dimensions and paces of change, Edelstein and Douglass (2012) have recently outlined a heuristic classification for international or global activities of higher education institutions. They describe different modes of engagement and present a conceptualization of seven clusters of activity. Modes of engagement within their cluster “individual faculty initiatives”* In collaboration with Daniela Krollpfeffer, University of Kassel, who assisted us with the data collection. For comments on an earlier draft of this paper, we are grateful to John W.Meyer, Richard Edelstein and John A. Douglass. This ROPS contribution is part of a cooperative CSHE and The International Centre for Higher Education Research (INCHER) – University of Kassel research project, Universities Going Global.
e.g. have a long-standing tradition dating back to the origins of the European university, whereas transnational activities of universities on the organizational level have emerged most recently and have been strongly enforced within the past decade. One of the modes of engagement within their cluster “transnational engagement,” which refers to organizational level activities of higher education institutions, are international branch campuses. International branch campuses are offshore entities of higher education institutions operated by those institutions, or through a joint venture in the name of a foreign institution that usually award the degrees (Lane and Kinser 2012).

While the global expansion of higher education is not an entirely new phenomenon, international branch campuses are a more recent strategy of universities as organizations to engage transnationally. Nevertheless, the roots of branch campuses can be traced back to the beginning of the 19th or even 18th century, depending on the ancestor one accepts, but higher education literature usually refers to the international branch campus of the Johns Hopkins University, which was established in 1950 in Italy. However, the pace of further development was slow. Up to the 1970s, only five international branch campuses were founded, and not much more occurred in the 1980s and 1990s (Krollpfeiffer and Kosmützky 2012). Currently, however, about 200 universities worldwide maintain an international branch campus according to data provided by the C-Bert research team. These branch campuses are selectively distributed in certain parts of the world (Asia and the Middle East) and basically concentrated in a handful of host-countries, like the US, UK, Australia, India and France (C-Bert 2013). Unlike traditional faculty initiatives for study abroad programs etc., international branch campuses are usually initiated by university leadership and administrators rather than by faculty (Wilkins and Huisman 2012). Thus, we define international branch campuses as transnational activities of universities as organizations, and thereby specify the definition of branch campus by Lane and Kinser (2012). Our perspective is an organizational one, particularly focused on the development of the overall populations of international branch campuses and on organizational characteristics of home institutions of international branch campuses and of branch campuses, and the linkages between both.

These conceptual considerations are routed in macro-sociological and organizational concerns rooted in neo-institutional theory and research (Krücken and Drori 2009, Meyer and Bromley 2013, Hasse and Krücken 2013) and the organizational ecology approach as initially introduced by Hannan and Freeman (1974, 1977, 1989). Based on these conceptual considerations, the central questions in this paper are: How did the population of international branch campuses develop? What kinds of universities opt for establishing an international branch campus as transnational activity? How sustainable are branch campuses within educational hubs? To answer these questions we provide an initial empirical comparative assessment of universities expanding beyond their national borders and their corresponding branch campuses abroad.

The article is structured as follows: In the following, we begin with a brief review of the state of research on international branch campuses and outline the conceptual framework for the empirical assessment of host universities as well as their branch campuses. Section three presents the methodology, hypotheses that guided our research and data basis for our empirical investigation. In the subsequent section, the results of the analysis of the founding age of the home university and IBC mortality, of organizational form of home institutions of international branch campuses, and of home institutions and international branch campuses, which populate an organizational niche are presented. The article concludes with a reflection on international branch campuses as strategy of universities for going global and the sustainability of the overall population of the new type of higher education institution.

II. State of Research and Conceptual Framework
Research on the internationalization and globalization of higher education has increased in the last decade in general (Kuzhabekova et al., 2012), and also international branch campuses are – at least in quantitative terms – already a well-studied phenomenon. Nearly 200 publications on the topic were retrieved in a recent literature study for the years from 2000 onward (Krollpfeiffer and Kosmützky 2012). The studies that have been published so far are conceptual, descriptive, single case studies or focused on single aspects of international branch campuses or even just largely anecdotal success (and very few failure) stories. They can be thematically classified into four areas (Krollpfeiffer and Kosmützky 2012): First, models and trends and quantitative overviews (e.g., Verbik and Merkely 2006, Becker 2009, McBurnie and Ziguras 2011); second, management and leadership challenges associated with creating and sustaining international branch campuses and with strategic planning (e.g., McBurnie and Pollock 2001, Schuman 2009, Lane and Kinser 2011); third, student choice, student recruitment, and student needs (e.g. Shams/Huisman 2012; Wilkins and Huisman, 2010, Wilkins and Balakrishnan 2012); forth, faculty and aspects of academic life at the branch (e.g., Nickerson and Schaefer 2001, Wolfe and Strange 2003, Smith 2009); and fifth, publications that focus on the sustainability of international branch campuses and their ability to adapt to different local environments (e.g., Altbach 2010, Soulsas 2011, Wilkins and Huisman 2012).

Although this relatively recent phenomenon provides an ideal basis to study the multinational activities of universities and, thus, to examine the relationships between universities as organizations and their increasingly globalized environment, international
comparative empirical studies on the home institutions or on the overall population of the new type of higher education institution so far do not exist. Hence, Edelstein and Douglass (2014 – forthcoming: 2) speculate: “many institutional efforts appear to be launched without a clear idea of best practices or how specific activities might be productive and meaningful for a particular institution. Empirical knowledge of how and why institutions expand these activities, and when they are successful, remains largely anecdotal.”

Wilkins and Huisman (2012) have provided an analysis of motivations of universities for establishing international branch campuses on the basis of institutional theory and a secondary data analysis, which basically focuses on university management’s considerations and aspects of legitimacy as well as on the institutional distance between home countries and host countries. They argue that regulatory forces, financial opportunities and favorable conditions for foreign branches offered by such host countries are an important trigger and opportunity structure for home institutions to take the risk to establish an international branch of their own, and they offer a lot of convincing examples for this argument on the basis of a secondary data analysis. Although institutional settings clearly shape and facilitate the environmental conditions for the establishment of international branch campuses, this nevertheless does not explain what kind of universities go abroad and what kind do not, because it does not cover organizational characteristics of universities nor their branches. Thus, in an attempt to compensate for this omission, the aim of our paper is to provide an initial comparative assessment and mapping of the development of the landscape of international branch campuses and the organizational characteristics of universities and their international branch campuses worldwide.

The part of neo-institutional research, which is particularly focusing on the link between macro-sociological and organizational dynamics, is of great importance to our analysis. Following the work by John Meyer and others, modern society is characterized by the expansion of formal organizations that incorporate broader cultural principles of global society like rationality, purposeful action, and the idea of progress (Krücken and Drori 2009; Meyer and Bromley 2013). From this point of view, modern actors, be they individuals, organizations, or nation-states, are not taken-for-granted units of analysis, but results of ongoing construction processes. A modern actor is “a goal oriented, bounded, integrated, technically effective entity” (Meyer 2009: 38) that is nevertheless not an autonomous decision-maker. Instead, modern actors can be understood only by reconstructing “their practical embeddedness in taken-for-granted culture and relationships” (Meyer 2009: 39). Contemporary organizations have to be seen as purposive actors, not passive bureaucracies which lack internal motivation and leadership (Meyer and Bromley 2013). “Unlike the classic firm or bureaucracy that is obedient to an external sovereign or owner, the modern organization has sovereignty (and accountability) and makes decisions in light of its own purposes” (Meyer and Bromley 2013: 378). Organizational actors are linked to their environments by cultural expectations, not functional requirements. As such, they enact broader societal scripts like the meta-narrative of being a purposive actor and related formal structures like mission statements, professionalized departments and elaborated organizational charts.

Such a broader macro-sociological and cultural perspective on organizations is particularly suited to the analysis of universities. Traditionally, universities were conceptualized as loosely coupled expert organizations characterized by the absence of strong leadership and internal decision-making power (for an overview see Musselin 2007). Instead, the contemporary university is increasingly “turning into an organizational actor” (Krücken and Meyer 2006), i.e., an integrated and purposive actor with leadership and management roles and an increasing number of offices and organizational subdivisions that are not just the result of functional requirements but are part of its attempts to be granted legitimacy by the wider social environment. Especially during the last decade many new positions have been created in fields like planning, student services, quality control, and public relations, i.e., in fields that contribute to the concept of an integrated, goal-oriented entity that is deliberately choosing its own actions (see Sporn and Rhoades 2002 for the United States, Krücken et al. 2013 for Germany).

According to this perspective, international and global activities of universities like the creation of branch campuses are neither functional requirements nor the result of idiosyncratic decision-making. They have to be seen against a broader trend of constructing purposive organizations that in the case of universities contradicts traditional accounts and allows for adopting a “business model” that is more akin to the dynamic and expanding image of business firms than that of locally situated higher education institutions.

The second source of inspiration for our analysis comes from the population ecology of organizations approach as initially defined in papers by Hannan and Freeman (1974, 1977). In these publications they have outlined a perspective on organizations that borrows from ecology and uses human life cycle principles and, thus, does not restrain to the “view of a single organization facing an environment” (Hannan and Freeman 1977: 933). Organizational ecology is concerned with issues of age, size and density of organizations and has had a two-fold focus on both ecological processes (population dynamics in terms of the founding age of the home university and mortality, niche width, and density dependence) and demographic processes (age and size differences, organizational change) (Baum and Amburgey 2001). Hannan and Freeman based their approach on the principle of
isomorphism (due to optimizing selection processes organizations are isomorphic to their environments), which they complement by a competition theory, because they consider “competition as a mechanism that produces isomorphism” (Hannan and Freeman 1977: 940). But not all organizations compete with each other, rather organizations have a similar organizational “DNA-profile.” Comparable to the DNA of any species, organizational ecology has introduced the blueprint analogy for the adaptive behavior of organizations and described it as a form of an organization (Hannan and Freeman 1977).

To find the blueprint or form of an organization, Hannan and Freeman suggested to look for “qualitative differences among forms,” focusing on organizational activity and organizational characteristics like formal structure, particularly the size of an organization, and in the normative order of an organization (history, politics and social structure), among the latter they considered age of particular importance (Hannan and Freeman 1977: 935). We follow Hannan and Freeman’s initial approach (1977) and specify organizational form by size, age, ranking positions and disciplinary profile respectively range of disciplines covered. According to Hannan and Freeman (1977: 178), in “the early stage of the development of a new organizational form, growth in numbers legitimizes the organizational from itself, thereby decreasing the mortality rate. But as density continues to increase, competitive pressures overwhelm the legitimation effects, increasing mortality rates.” Thus, the age of the home university promises to provide insights into international competitive pressure in higher education and the fitness of the international branch campus, which has been defined as the probability of an organizational form to persist in a certain environment.

According to this conceptual framework, we focus on the population dynamics in terms of the founding age of the home university and mortality of international branches, on the form of organizations that establish a branch campuses and the fitness of a population within a specific niche, and we have built an international comparative dataset on characteristics of universities worldwide that maintain an international branch campus as well as on the branch campuses themselves.

With our focus on the number of organizations and their characteristics, we do not ignore the fact that university leadership optimizes organizational performance and can stimulate change – something that appears to be discounted by organizational ecology. And as Baum and Amburgey stress, “the capacity of individuals to change their organization successfully is of great importance. Ecological approaches do not remove individuals from responsibility for or influence over their organization’s success and survival – individuals do matter. (...) Leaving aside that their actions are intelligent or foolish, planned or improvised, individuals can clearly influence their organizations’ futures” (Baum and Amburgey 2001: 307). In line with this view, we clearly see that university leadership has to take some strategic action to establish a branch of its university abroad, which can also evoke resistance by faculty as a recent example at NYU demonstrates (Krieger 2008, Stripling 2012, Aviv 2013). As Edelstein and Douglass (2014 – forthcoming) describe it, “the initiative of entrepreneurial university leaders and faculty, and now a growing network of consultants, seem to drive strategy and activities, thus far.” We agree with Wilkins and Huisman (2012: 639) that “a mix between macro-social forces and individual or organizational agency influences strategic decision making in universities in general and, thus, the likelihood of universities to establish international branch campuses, but our focus in this paper is on the role of the organization. Thus, we complement Wilkins and Huisman’s (2012) analysis of opportunity structures (funding sources, cooperation partners or emerging educational hubs), and strategic decisions by university leadership as well as considerations on the sustainability of international branch campuses (e.g. Vien and Selverajah 2008, Altbach 2010, Becker 2010).

III. Methodology, Hypotheses and Data
The term macro-environmental mappings that we use for the empirical analysis does not refer to a specific methodology, but rather highlights our aim to analyze the landscape of universities expanding beyond their national borders by establishing an international branch campus. Studies within organizational ecology usually collect empirical data about life histories of organizations over very long time spans and perform a modeling of the data built on non-linear equations like the Logistics and Lotka-Volterra equations (see for empirical examples Hannan and Freeman 1989, Singh and Lumsden 1990, and Baum and Amburgey 2001). Although we have also collected data on the history of home institutions and their branches, our approach is statistically less sophisticated and we basically utilize descriptive statistics for the analysis. The common denominator of all universities included in the analysis is the existence of an international branch campus.

Hypotheses

1) Foundings and Mortality of international branch campuses - According to Hannan and Freeman (1977) growth in numbers legitimizes the organizational from itself, which is accompanied by low mortality of organizations, and vice versa an increase in the mortality of organizations indicates increased competitive pressures which overwhelm the legitimation effects. Since we know that international branch campuses have a history dating back to the 1950s and their establishments has boomed recently, we assume that branch campuses are both an increasingly legitimated strategy of universities for going global and objects of increasingly competitive pressures. Key theoretical and empirical concerns regarding the history of organizations within organizational ecology go back to theoretical considerations by Arthur
Organizational form of home institutions (size, age, ranking position and range of disciplines) -

2) Size (Number of Students) of Home Institutions: Hannan and Freeman (1984: 158) have suggested that organizational inertia increases with size, which might influence the capability of organizational innovation. Thus, larger universities might be more likely to stick to organizational routines rather than establishing campuses overseas. This consideration allows us to assume that middle-size and smaller universities might be more likely to establish an international branch campus.

Age (Founding Year) of Home Institutions: Related to the above mentioned liability-of-age argument, we furthermore assume that old, traditional universities might have more difficulties to adapt to the global higher education market and might be less likely to establish a branch abroad. As Singh and Lumsden (1990: 177) highlight: “One important implication of imprinting arguments is that the behavior of contemporary organizations continues to be influenced by differences in founding conditions, and these differences are another way in which organizations differ from each other.”

Ranking Positions of Home Institutions in International Rankings: Formal and standardized rankings and ratings of performance and success contribute to the self-perception of universities as a competitive organizational actors and, thus, to the transformation of universities into competitive organizational actors (Hasse and Krücken 2013). Furthermore, Wilkins and Huisman (2012: 639) have argued that middle-ranking institutions might prefer to “strengthen their legitimacy by improving their home operations before venturing overseas,” while highly reputable institutions like NYU might have the “desire to gain control and influence as a major player on the international higher education market.” If so, our data analysis should reveal a concentration of either high-ranked or non-ranked institutions.

Range of Disciplines of Home Institutions: Organizational ecology has been concerned with the distinction between organizations with a generalist (or polymorphic) focus and organizations with a specialist focus (Hannan and Freeman 1977: 947). Related to different levels of environmental variability (stable vs. unstable; coarse-grained vs. fine-grained), the influence of generalism vs. specialism on the ability of organizations to adapt to their environment has been studied (Singh and Lumsden 1990). Without going into detail on their considerations here, we would like to emphasize generalist profiles of universities with a full range of academic disciplines, university profiles with a broad range of academic disciplines and specialist university profiles with a small range of academic disciplines or even with only one academic discipline as potential descriptors for organizational forms. Our assumption is that universities with a small specialized and more application-oriented focus, e.g. on technology, engineering, business, medicine or education, are more likely to establish a branch overseas than universities with a full range of disciplines, because of their pronounced ability to adapt to environments abroad.

Organizational niches and its population - From an organizational ecology perspective, hubs are niches with a specific spatial population density. A population of organizations is defined as the composition of organizations with the same form and interactions among each other within a specific niche. “Each population occupies a distinct niche” because different forms are dependent on different sets of environmental resources (Hannan and Freeman 1977: 947). But there is also interaction and competition among populations for the same limited resources. Because different forms organizations are dependent on different sets of environmental resources (Hannan and Freeman 1977: 947), different forms can co-exist in a hub. Form and niche are defined relationally: “Niche defines forms and forms define niches” (Hannan and Freeman 1989: 50). A population of organizations is then defined as the composition of organizations with the same form and interactions among each other within a specific niche. Thus, we expect a diversity of different types of home institutions operating an international branch campus within the same hub and, thus, population diversity within the hub.
Data

The initial data source that we use consisted of data compiled by the C-Bert research team (C-BERT, 2013). Currently, C-Bert lists 189 universities worldwide with international branch campuses, 22 of these institutions have meanwhile been closed down. We added two recently established branches of German universities, thus our initial data consisted of 168 branch campus institutions that are still in operation and 116 different home institutions that maintain branch campuses. We named the countries of these universities as home countries, and, correspondingly, the countries in which the international branch campuses are located are referred to as host countries. For the further empirical analysis, we enhanced the data in a first step with further publicly available indicators (university websites, publicly available sources) for structural organizational features of the home institutions: size (number of students), age (founding year) and ranking positions (in the Center of World-Class Universities of Shanghai Jiao-Tong Universities Ranking, in the Times Higher Education World Universities Ranking, CWTS Leiden Ranking) and range of academic disciplines.

In a second step, we added indicators on international branch campuses that are available on the international branch campuses website. This included: 1) Type (public, private, non-profit/for-profit), 2) size of international branch campuses (number of students), 3) age of international branch campuses, and 4) range of disciplines/subjects. Most of the international branch campuses provide international websites in English, but nevertheless this has been a tedious exercise. Specifically, the information presented on websites international branch campuses in China and India turned out to be confusing and often unclear. Aside from this complication in general numbers of students, information about the type of institution were scarcely found. Thus, we merely ended up with data for the indicators age, range of disciplines and very sketchy data for the size.

Tables 1 and 2 and figure 1 provide a description of our source data by country and continents as compiled by C-Bert. We will leave the country level analysis in our empirical investigation as presented in section III due to our focus on organizations, but will refer to the data description based on a country level of comparison as presented in 1 and 2.

As table 1 shows, 23 different home countries are represented in our data; on the one hand, the data shows a concentration on only very few countries with the US being the absolute frontrunner, followed by the UK and Australia and India which build the top group. On the other hand, there are a lot of home countries with only one or two branch campuses. Table 2 shows the distribution of international branch campuses by host countries. International branch campuses of universities are located in 57 different countries around the world. One the one hand, 31 countries have only one branch campus and, one the other hand, there is a dense concentration of international branch campuses in the Middle East and in Asia, particularly Dubai, Qatar and the United Arab Emirates as well as in Singapore, followed by China and Malaysia.
III. Empirical Investigation

In this section, we present the results on the founding age of the home university and mortality of international branch campuses, indicators on organizational forms of home institutions, and last but not least we seek into a population within a niche as represented by the educational hub “Dubai International Academic City” (DIAC) within United Arab Emirates (UAE). Due to our focus on international branch campuses as organizational strategy, we leave the country comparison level of the data section and focus instead on universities as organizational actors.

1) The founding age of the home institution increases the likelihood of the survival of the branch in times of increased competitive pressures - As we have mentioned in the introduction of this paper, international branch campuses have a tradition dating back to at least the middle of the past century. Figure 1 illustrates this tradition and indicates that the pace of growth of international branch campuses has been very slow until the 1980s, and still slow in the 1990s, but then peaked around the turn of the century. 85 of the currently existing international branch campuses were founded between 1999 and 2009, which accounts for almost 50 percent of the population. Our data furthermore shows the founding period in certain educational hubs, where home institutions launch their branch in the same city or even on the same site like Education City in Qatar, Global Schoolhouse in Singapore or Knowledge Village in Dubai (Knight and Morshidi 2011, Douglas et al. 2013). Educational hubs in Malaysia, Qatar, Singapore and Dubai and in the United Arab Emirates account for 50 % of the international branches that have been established in the years 1999 to 2009 (almost 60%).

Figure 1 furthermore points to increased competitive pressures: the boom is accompanied by an increased mortality of international branch campuses. The die out of international branch campuses is a usual outcome of competitive selection processes and not all newly established international branches are able to survive. C-Bert data does not report any shut downs of international branch campuses until 1999, but presumably the US-initiative for educational ventures in Japan in the 1980s (Chambers and Cummings 1988) and related establishment and close-downs have not been included to the data systematically.6

However, the increased mortality accompanies the boom and both can be interpreted in terms of increased competitive pressures. Thus, our conclusion here is that shutdowns of international branch campuses are a usual outcome of a competitive selection process. Not all newly established international branches are able to survive and some of them will die out. Moreover, we found that the average founding year of home institutions of international branch campuses that have been closed down is 1950 compared to 1912 for the overall population. Thus, our data suggest a liability-of-age tendency: the founding age of the home institution increases the likelihood of the survival of the branch in times of increased competitive pressures.

This allows for first speculations on historical sustainability. We assume that a transfer of an image of sustainability through history causes this effect from the home institution to the branch. It seems that they transfer their historical sustainability and...
All forms of universities maintain international branch campuses - To provide empirical evidence for our assumptions related to organizational forms, we first classified our home institutions by size. Contrary to our expectations, we found a similar share of home institutions of all sizes, except very small institutions (figure 2). Very large institutions like the Bologna university with about 100,000 students, large institutions like Boston University with 31,000 students, mid-size institutions such as the Lancaster university with 12,000 students and small institutions like the Stockholm School of Business with 3,500 students maintain an international branch of their own institution.

In a second step we classified all home institutions according to their range of their disciplines in mono-disciplinary, small range, wide range and full range of disciplines organizations. We did not use any national classification (e.g. based on institutional typologies like community colleges, Fachhochschulen or former Polys-technics, research universities etc.), since our home institutions form an internationally inhomogeneous group. Also contrary to our initial assumption, our results show that whatever profile a home institution has, it does not seem to influence its likelihood to establish an international branch. As table 3 shows, home institutions with all four disciplinary profiles maintain international branch campuses to an almost equal extent.

Coming to ranking positions, we found a lot of universities that maintain an international branch campus among the “world class universities” as represented by international rankings (Salmi and Altbach 2011, Shin et al. 2011, Hazelkorn 2011). From the 116 home institutions represented in our mapping, 37% (43) are covered by the Shanghai ranking (table 4). This, in turn, means that two thirds of our home institutions do not belong to this group. Table 4 furthermore shows the distribution of home institutions by countries. Not surprisingly, the US holds the largest share, followed by the UK and Australia.

But if we focus on the share of home institutions with ranking positions with international branch campuses per country, the US-based home institutions have a smaller share in international rankings than those in Europe and Australia. Furthermore, there is a larger reputational variety among US-based home institutions than among home institutions in Europe and Australia. At the same time, however, there are also a lot of top tier research universities among the US-home institutions (figure 3). Differing slightly between the three rankings, we found five to seven US-based home institutions ranked among the top 50, and eight or nine ranked among the top 100.

Also in contrast to this conceptually driven assumption that older universities might be less likely to establish an international branch campus, we found a lot of old and traditional universities among the universities that have established an international branch campus (figure 4). Both Bologna (1088) and Sorbonne (1253) have been excluded from the presentation in the figure for reasons of clarity.
Among our 116 home institutions, only three institutions were established after 2000, but a lot of older institutions were founded even in the 18th and 19th century. But we also found a concentration of home institutions that have been founded during the reform era from the 1950s to the 1970s: 30% of the home institutions that have established an international branch campus were founded in this period.

In sum, we conclude from the results presented in this section that all organizational forms of universities are operating on the international branch campus market, and we would like to emphasize the distinctiveness of the kinds of universities that establish and maintain a branch. Establishing a branch is obviously as strategy for going global for all kinds of universities, but just from a few countries as our source data by C-Bert (as shown in table 1 and 2 and in the data section) demonstrates. Branch campuses predominantly come from Australia, the US, UK and they do not come much from Continental Europe.

Wilkins and Huisman (2012) present three convincing reasons for this dominance of US, UK and Australian higher education institutions on the global market: 1) Due to English as the language of instruction, these countries have the advantage of language, which has made it easier to export educational offers 2) the neo-liberal philosophy and New Public Management (NPM) reforms in these countries, which have made higher education institutions in these regions more conducive for going on the global market, and related to the NPM reforms 3) a decreased level of state funding, which forced higher education institutions to seek for new sources. Although there is a high demand for higher education in Africa, the continent is
not much populated by international branch campuses so far. Most of the international branch campuses are located in Asia. Wilkins and Huisman (2012) explain this fact by difficulties for home institutions to generate revenue in African countries due to their low-income structure, whereas Asia is a prospering higher education market with promising revenue options.

3) Educational hubs are very narrow competitive environments of program offers for a diversity of home institutions - To accomplish our results and considerations on founding and mortality the fitness of the overall population of branch campuses and the organizational forms of home institutions, we peek inside the educational hub “Dubai International Academic City” (DIAC), which, together with Abu Dhabi and Ras al Khaima, is one of the emirates within United Arab Emirates (UAE) that are very active in recruiting international universities (Knight and Morshidi 2011). Aside from Dubai International City, there are two more sites where international branch campuses are located: Dubai Health Care City and Dubai Financial City. On these three sites Dubai has hosted 26 international branch campuses from eleven different countries (from the US, the UK, Australia, India, Canada, Russia, France, Ireland, Lebanon, Belgium and Sri Lanka) from 2000 onwards. Five of them have meanwhile closed down, but other ones have announced to open soon or to move over from other hubs, probably because of more conducive environmental conditions. Wilkins and Huisman (2012) provide several illuminating examples of incentive structures provided by local governments to facilitate this population density – from free taxes and subsidized infrastructure to completely government-funded campus development. And Knight and Morshidi (2011), who have studied the rationales and strategies for the establishment of three hubs in the Middle East and three hubs in South East Asia, clearly state that the presence of a national plan and investment is a salient feature to enable the country to serve as an education hub. This distinguishes hubs from “initiatives in larger countries like China, India or the United States where specific geographic areas are being promoted as hubs, not the country as a whole” (ibd.: 594).

As figure 5 shows, the establishment of international branches within the hub took place in a highly concentrated period of five years from 2004 onwards and Dubai International Academic City currently hosts 21 international branch campuses. The die out of five branches within the hub, indicating a highly competitive environment within the hub, has accompanied the boom. But the mortality of certain international branch campuses does not result in an extinction of the population, neither of the population in a specific spatial niche like in an educational hub nor of the overall international population.

As figure 5 furthermore shows, the founding of home institutions within the hub mirror the overall founding of home institutions. Home institutions of all founding ages are represented within the hub. Nevertheless, international branch campuses utilize their home institutions’ history and sustainability for their own organizational image as the self-descriptions on their websites indicate. We did not study this aspect explicitly, but our search on the home pages branch campuses in the hub indicates that they rely heavily on institutional specificities of their home institutions. Whoever has a history makes use of it,
as the following quote illustrates: “With over 180 years’ provision of world-renowned education in the UK, Heriot-Watt was the first British university to open a campus in Dubai” (Heriot-Watt University Dubai, Website, About us).

Regarding the range of disciplines of home institutions, we again found institutions of all kinds in the hub. There is an equal distribution of mono-disciplinary institutions, institutions with a small range of disciplines and full and wide range of disciplines (table 5). But the range of disciplines of the international branches in the hub, however, is remarkably small. They deliver only a very limited range of programs in Dubai, regardless of their home institutions’ range of disciplines. Most of the international branch campuses in Dubai are mono-disciplinary higher education institutions focused on management/business, law, fashion or medicine. Among them is a strong concentration on business and management education, and ten of the thirteen mono-disciplinary branches offer programs in business only. Overall, 14 of the 21 branches in the hub offer MBA programs, half of them offer only MBA programs, half also offer undergraduate programs in fields related to businesses and management, and two offer a doctoral degree in business (DBA). The branch campuses that do not have a mono-disciplinary orientation but rather represent at least a small range of disciplines concentrate on applied sciences like engineering, nano- and biotechnology, media and communication and computer sciences and information technology or architecture and arts. None of the branch campuses in the hub offer programs in the humanities or traditional science disciplines. Some mention PhD education, although they do not offer any specific programs. Aside from the two DBA programs, the University of Exeter offers a doctoral degree program, their only local program, in education (EdD). Typically, one finds announcements like the following: “Currently, the University of Bradford delivers only one programme in Dubai - Executive MBA. The rest of the courses are taught in the UK” (University of Bradford Dubai, Website). The narrowness of focus of programs is striking and contrasts the diversity of the home institutions that have established these branches, and thus, our analysis reveals in sum a very limited competitive environment of program offers within the hub.

We found a similar picture for the size of home institutions and their branches. Home institutions of all sizes are represented in the hub (but very large and very small universities are in the minority), but most of their branch campuses do not indicate their student numbers. Thus, we can only estimate on the basis of numbers provided by Bardsley (2008, in Knight and Morshidi 2011), who found that 11,000 students from 102 nationalities were enrolled in branch campuses in the hub in 2008, enrollment rates of about 500 students on average per branch campus. But the campuses might differ regarding the internationality of their student composition. On the basis of our other results that indicate a diversity of forms of home institutions within the hub as well as considerations by Hawawini (2012), we can merely speculate to find a diversity regarding the student body of branches in the hub: e.g. a mixture of multicampus higher education institutions (which basically have local students on their campuses), multinational higher education institutions (which do not have more than 50% of international students on their campuses), transnational higher education institutions (about 75% of their students and faculty are non-locals) and metanational higher education institutions (which have a cosmopolitan student body and faculty on all of their campuses) might co-exist in the hub. As we know from organizational ecology, diversity is the best remedy for population dying, and this would as increase the diversity of the branches at least a little and thus the likelihood of branches to survive, and thus the overall fitness of the population within the hub. However, further research on the configuration of competitive environments within population niches like in the educational hub in Dubai is necessary.

IV. Conclusion and Discussion
Aiming at an international comparative macro-environmental mapping of home institutions and their international branches, we shed some initial light on the development of the overall population of international branch campus and analyzed the organizational forms of universities that establish such an international branch. Furthermore, we took a closer look at the populations of home institutions and international branch campus within one of the educational hubs.

Building on the data provided by C-Bert, our analysis shows that most of the currently existing international branch campuses have been established in the past 15 years, and there has been a wave of newly founded international branch campuses since about 2000. Regardless if one focuses on the amplified growth of their number or on the still very small number compared to the number of about 10,000 universities worldwide (according to IAU) and to the worldwide expansion of multinational enterprises (see e.g. Dunning and Lundan 2008), and this development indicates in general that the university is less tied to a specific location than in the past. Particularly Singapore, Dubai, the Arab Emirates and Qatar are popular hosts for international branch cam-

| Table 5. Range of Disciplines of Home Institutions and Branch Campuses in the Hub |
|---------------------------------|-----------------|
|                               | Home Institutions | Branch Campuses |
| Mono-disciplinary/ very small   | 6                | 13               |
| Small                          | 7                | 8                |
| Broad                          | 1                |                  |
| Full                           | 7                |                  |
puses and hubs of the global higher education market and responsible for this growth. But as our analysis reveals, the growth is immediately followed by a decline of similar extent, and, furthermore, the decline is accompanied by an increased mortality of international branch campuses. Both symptoms indicate of increased competitive pressures.

Our analysis furthermore shows that very different forms of universities, colleges and schools in terms of their range of disciplines, size, founding age and reputation opt for a branch campus as a mode of engaging transnationally. The overall global population of 116 home institutions is multifaceted, no type or form of institution dominates the picture. There are also a lot of "world class universities" (as indicated by international rankings) among those home institutions, although none the world’s most prestigious universities maintain a branch abroad. Places like Oxford, Cambridge, and Harvard are obviously more bonded to a spatial exclusiveness to maintain their elite status. As shown by Wilkins and Huisman (2012), taking the risk to actually establish a branch of its own by a university is basically induced by financial and legal circumstances and conditions and leadership action.

In addition and complementary to their analysis, maintaining an international branch is an increasingly legitimated strategy for all kinds of university organizations as our results indicate.

Focusing on one of the educational hubs in the United Arab Emirates, which currently host 21 international branch campuses on one local "campus," we again see a distinct diversity among the home institutions operating international branch campuses. According to organizational ecology, at times, and in environments of increased competitive pressure, diversity is an important factor for the fitness of the population international branches within a hub. But we found a quite homogenous population of branch campuses within the hub. Though their home institutions are highly diverse, there is a clear tendency towards monodisciplinary branch campuses, focused on administration, business and management and/or small range disciplinary branches focused on management and business and applied sciences like engineering and (bio- or nano-)technology or communication and information technology. Thus, it is certainly not surprising that some of the branches within the hub have already died out and probably more will do so – depending on the opportunity structures within the hub (Wilkins and Huisman 2012). In general, the density and narrowness of the competitive environment with the hub points to both: the organizational strategy of establishing an international branch campus gets adopted by the home institution even when the environment is highly competitive, and the strategy thus seems ill advised and not properly thought out. Thus, the fitness of the overall population it not very high and it seems that is does not indicate a pronounced sustainability.

Using indicators that we drew from the organizational ecology approach, it became apparent that in particular universities with a long history create branch campuses with a higher sustainability, in particular when we compare branches that are not part of an educational hub. History matters, also for universities and their branches. Furthermore, we see a huge variety in the organizational characteristics of the home universities in contrast to the characteristics of their branches that are far more homogeneous. Following the organizational ecology approach, the former might lead to increased sustainability as organizational ecology sees diversity as a key to long-term success of organizational forms, while the latter is all the more problematic. These finding add to the research literature on branch campuses as the organizational perspective we employed is rarely used.

Furthermore, we made use of that part of neo-institutional theory, which is particularly focusing on the link between macro-sociological and organizational concerns. Following that strand of theorizing, we see that branch campus activities indicate the organizational turn in higher education as such activities are most typically not driven by bottom-up initiatives of individual faculty, but rather by the organization itself. In this, the construction of the university organization as a purposive actor with related leadership and management capabilities becomes evident. In line with neo-institutional theory and our data, however, one can challenge and further expand the notion of competition we employed from organizational ecology. As our analysis shows, competition as a driving-force underlying the creation of branch campuses is a dubious notion, given the high mortality and uncertain rewards of branch campuses. Therefore, and related to the neo-institutional idea of the organizational actor as a constructed entity, one should further develop the idea that competition is itself not objectively given, but the result of ongoing construction processes in which certain strategies – e.g., creating a branch campus – become legitimized independent from the outcome of such strategies. In the case of branch campuses, such strategies may even be detrimental to the competitiveness of the organizations involved. Exploring the social construction of both competition and organizational actors is an important task for future neo-institutional research in higher education (Hasse and Krücken 2013).

Though predictions for the future of the population are not at the core of our research interest, our results suggest that a further peak of founding might occur with the emergence of new educational hubs, e.g. in India, if the regulations for awarding degrees change, or in Azerbaijan, which is currently attempting to develop into a technology hub for the Caucasus region. Knight and Morshidi (2011), who have analyzed the rationales and strategies for positioning oneself as regional education hubs used countries in the Middle East and South East Asia, come to a similar conclusion. But on the basis of our results we can furthermore predict that the intensification of competition within and across the hubs will be accompanied by an increase of dying international branches. But regardless of whether individual branch campuses in certain parts of the world might be sustainable or not, and
even if one might agree with Altbach (2011), who sees an international branch campus bubble in the making, from our macro-environmental perspective, we do not expect that the existence of an international branch and franchise landscape will remain a fashion and fad and international branch campuses will die out completely. International branch campuses have their own remarkable history with diverse routes and rationales for their establishment.

Nevertheless, hubs create certain types of international branches, and at the same time a competitive selection, which then results in a die out of some branches, this does not affect the overall population. Creating a branch campus has become a legitimate strategy, independent from its outcome, and even when the results show how inappropriate a branch campus strategy is. But due to such issues of legitimacy, probably the branches of older institutions will have better chances to survive in an environment that increasingly takes organizational actorhood and competition in higher education for granted.

REFERENCES


E.g. the State University of New York founded a branch right across the Canadian border already in 1816, or the Parson School of Design founded a branch in France in 1921 (both are compiled in the C-Bert list).

C-Bert research team has established an online listing of international branch campuses worldwide that we utilize for the analysis in this paper (see: http://www.globalhighered.org/branchcampuses.php).

Although Hannan and Freeman sporadically referred to universities as examples and interesting cases in their founding work, to our knowledge none of the empirical studies within the approach’s core has so far focused on universities.

Organizational ecology has developed into a central area of research in organizational studies, with a lot of empirical studies and conceptual refinement and improvement to the initially introduced concepts (for overviews for the development of the overall approach in different decades, see Hannan and Freeman 1984, Singh and Lumsden 1990, Baum and Amburgey 2001). Nevertheless, although there has been a shift towards organizational-level research (Baum and Amburgey 2001: 326) and community-level research (Freeman and Audia 2006) in recent organizational ecology, we will be using both older considerations and new concepts as heuristic for the envisaged macro-environmental mapping of organizations, because of its perspective on organizational characteristics.

Not included in the data for figure 6 are the following home institutions, which are listed in the C-Bert list: founding 1816 (Potsdam New York State University in Canada), founding 1921 (Parsons School of Design in France) as well as the envisaged founding of the Xiamen University in Malaysia in 2015.

Chambers and Cummings (1988) report that over 100 American universities have explored the establishment of branch campuses in Japan, and they list a number of institutions that have actually established a branch campus there (e.g. the University of Maryland, Tempe University, Michigan State). Such campuses were located on U.S. military bases under contract with the U.S. Department of Defense or provided courses in such fields as teacher education and liberal arts to selected overseas American communities under contract with overseas International Schools or American Chambers of Commerce.

Home institutions with a mono-disciplinary or very small range of disciplines are typically business schools, arts schools or medical schools; home institutions with a small range of disciplines focus on three, four or five disciplines within the spectrum of education, business and management, technology, languages, sports, nursery and arts and do not offer any studies in the sciences; home institutions with a wide range of disciplines offer studies in many disciplines, including engineering, but not the full spectrum and often have a focus on technology and sciences, often they developed to this broader spectrum from a mono-disciplinary tradition; home institutions with a full range of disciplines are typically large and traditional universities, usually not including engineering, but rather medicine.

Dubai International Academic City (DIAC) was established by the investment corporation TECOM in 2007 as successor of Dubai Knowledge Village. All higher education institutions were moved from Knowledge Village site to the new site International Academic City, which is an 18 million sq ft campus (DIAC Website).

DIAC itself reports on its website at the end of 2013: “DIAC is host to a community of over 20,000 students from 125 nationalities and have access to over 400 Higher Education programmes” (DIAC website).