

## The changing landscape of JIBS authorship

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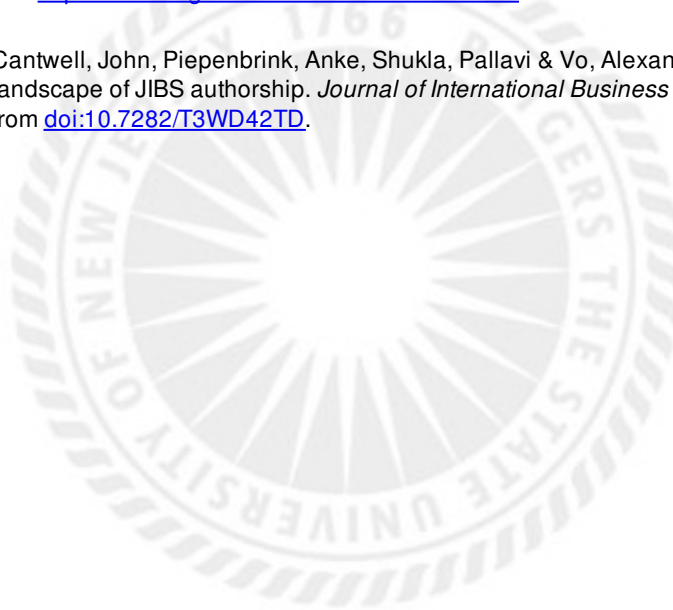
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**The changing landscape of *JIBS* authorship**

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## **The changing landscape of *JIBS* authorship**

### **ABSTRACT**

In this study, we examine the landscape of *JIBS* authorship over time to assess - (1) the accessibility of *JIBS* to new contributors, and (2) the diversity of authors contributing to *JIBS*. Our analysis of author data from 1972 to 2014 shows that *JIBS* is becoming more accessible, as indicated by the high and sustained proportion of first-time contributors to the journal. This is also evident from the recent decline in the share of authors with multiple past *JIBS* publications. With regard to diversity, our findings show that *JIBS* has a much wider geographic scope of authors on its landscape in comparison to previous decades. This may be attributed partly to increasing travel and communication in scholarly communities, and partly to the increased migration of scholars in the recent decades. Our analysis of migration patterns of *JIBS* authors suggests that about 51 percent of prominent international business scholars are employed outside their country of birth. Of the 49 percent employed in their country of birth, 12 percent are return migrants. In our sample, China, South Korea and Canada have the highest number of returnees. The USA, the UK, Germany, the Netherlands and China have the highest number of natives, whose country of birth, country of PhD-granting institution and country of university affiliation are identical.

Keywords: research collaboration; geographic diversity; migration; mobility; first-time author

## INTRODUCTION

The Academy of International Business (AIB), which is the leading association of international business (IB) scholars, has 3,188 members in 88 countries around the world, according to the AIB website as of February 2016. The number of new members joining AIB annually has grown almost tenfold since 1980 (see Table A.1 in the appendix for details). This growth has been accompanied by an increase in the geographic spread of the AIB membership as well (see Figure A.1 and Table A.2 in the appendix for details). Just as the membership of the AIB has become more diverse and geographically dispersed, so has the authorship landscape of *JIBS* - the official publication of the AIB. In 1972, *JIBS* published 10 articles by authors, all but one of whom were located in the U.S. In 2014, by comparison, *JIBS* published 54 articles by authors located in 28 countries. This gives us some indication of how the composition of *JIBS* authorship has changed in the last few decades, which have also seen a rising trend in the number of articles published (see Figure A.2 and Table A.3 in the appendix for details).

Is *JIBS* equally accessible to first-time authors as it is to well renowned, more established scholars? As the Editor-in-Chief of *JIBS*, the first author has encountered this question at conferences and meetings numerous times, and therefore this study was long overdue. To seek an answer to this question, we assess the accessibility of *JIBS* along two dimensions – (1) first-time authorships and (2) multiple repeat authorships. When a scholar who has never published in *JIBS* publishes for the first time in *JIBS*, he or she is referred to as a first-time author. A repeat author, on the other hand, is one with multiple *JIBS* publications. With regard to first-time authorships, in this investigation, we examine the percentage of first-time contributors to the journal from 1995 to 2014 using author data from 1972 to 1994 as the inherited stock of authors that have published in *JIBS*. To further assess the openness of *JIBS*, we examine how the share of articles by repeat authors has varied over time. Since *JIBS* has been striving to be open and accessible to new scholars and new disciplines, we examine the trend in the number of multiple repeat authors over time. To this end, we recorded the number of previous publications in *JIBS* for each author-year pair for all authors since 1980.

The last two decades have witnessed an increase in international scholarly travel and communication enabled by technologies with faster connectivity, both virtual and physical, between regions that span the globe. This has facilitated, among other things such as a rise in the quality and quantity of business schools worldwide, an increase in international co-authorship not only in the social sciences, but also in the sciences, arts and humanities (Choi, 2012). Many formerly unknown authors have thus emerged on the authorship landscape of *JIBS*. As *JIBS* publishes insightful, impactful, and innovative research on firms that cross political boundaries and often, although not always, operate in different institutional environments, we examine how international is the research community that dedicates its efforts to this field. Two decades have passed since a similar question was tackled by Thomas et al. (1994), and so we seek to reassess where we stand in terms of the geographic spread of *JIBS* authors. Thus, in this study, we examine the diversity of *JIBS* contributors in terms of their geographic dispersion across the *JIBS* landscape. For this purpose, we analyze *JIBS* author data from 1972 to 2014 to determine the geographic location of authors who collaborated on research projects. We use the university affiliation of an author to determine his or her geographic location.

Lower cost of global communications and lower cost of travel has facilitated human mobility across long distances and has enabled temporary and permanent people flows. Increased human mobility, in turn, has enabled scientists to expand their human and social capital through participation in international knowledge networks (Edler, Fier, & Grimpe, 2011). International Business (IB) scholars, like natural scientists, partly due to the nature of the business they are in, tend to be quite mobile and this makes them more likely to form collaborations across the globe. To improve our understanding of this phenomenon, we examine the migration patterns of *JIBS* contributors. For this purpose, we use biographical information of the authors who published in *JIBS* between and including 2008 to 2014. To map the migration patterns of a scholar, we use his or her country of birth, country of PhD-granting institution and university affiliation (as given on the publication). We use the terms country of birth and country of origin interchangeably.

Our analysis shows that *JIBS* has become more open and has a much wider geographic scope of authors. By open, we mean that it is as accessible to new authors as it is to established or already recognized authors. Our analysis of *JIBS* author data reveals that roughly sixty percent of authors publishing in *JIBS* are first-time contributors. We also find a discernible declining trend in the percentage of multiple repeat authors from 2010 onwards, suggesting that in the term of the current editorial team since 2011 the journal has become relatively more accessible to new scholars. Consistent with the findings of other studies that have focused on the science and engineering (S&E) disciplines, we also find that there has been an increase in the number of authors per article published in *JIBS*. With regard to the diversity of *JIBS* contributors in terms of their geographic dispersion, we find that the research community of *JIBS* is more geographically dispersed worldwide than ever before. Authors from the United States continue to be the largest contributing group to *JIBS*. In the last decade, however, there has been a dramatic increase in the number of authors publishing in *JIBS* from China, Canada, Netherlands, Australia, Singapore and Germany.

An examination of the migration patterns of *JIBS* authors from 2008 to 2014 reveals that a little over half of all international business scholars are employed outside their country of birth. Of those who are employed in their country of birth, approximately 12 percent are return migrants i.e. persons who left their country of birth to seek PhD education abroad and later returned. We find that there is a higher proportion of natives among authors whose PhDs were obtained outside the US, as compared to those whose PhD granting institution is in the US. Of the total number of PhD-seeking migrants, approximately one-third have US-PhDs; this suggests that scholars who pursue a PhD degree in the US tend to stay in the US and possibly help build new bridges of scholarship between their country of origin and country of residence. We also find that China has the highest number of returnees, followed by South Korea. This provides further evidence to the notion of brain circulation (Saxenian, 2005); return migrants also help bind their countries of origin into international knowledge networks, and *JIBS* is a vehicle for this.

## ***JIBS* AUTHORSHIP LANDSCAPE**

To examine the composition of *JIBS* authorship, we began by collecting data containing detailed information on all articles published in *JIBS* from 1980 to 2014 from Thomson Reuters' Web of Science (WoS) database, which contains data from 1980 onwards. For the remaining years (i.e. 1970 to 1979), we collected the articles from *JIBS* archives. In addition to this, we downloaded electronic versions of all articles published in *JIBS* since 1970. This was done to collect author affiliation and PhD granting institution information from the biography included in the articles. For the cases where this information was missing, we used online sources to complete the dataset. We excluded the articles for 1971 and 1972 from our study, as these articles did not contain affiliation information and so country assignment for these articles was not possible.

As the WoS assigns editorials, review articles, book reviews etc. to the type "article", and that is not consistent with *JIBS* categories, we manually assigned each publication to categories used by *JIBS*. Thus, research notes and perspectives were included as articles, while book reviews were excluded (see Table A.4 in the appendix for details). In all, our database included 1,564 *JIBS* manuscripts from 2,197 unique authors affiliated with institutions from 66 countries for our observation period. Authors' last and first name or initials defined unique authors. For each last name with multiple first names or initials, we checked uniqueness based on the initial of the first name and affiliation. Until 2007, the WoS data lists all author affiliations, it does not provide one-to-one correspondence between author and affiliation information; therefore, we manually mapped the affiliation information using the information provided in the corresponding journal article. We extracted the country of residence from the affiliation information of the authors. If an author was affiliated with institutions located in more than one country, we assigned all the countries to the author. Where the country information was missing, we manually assigned the country based on the identification of the institution. For 2008 onwards, the affiliation for each author and the country of residence information was extracted from WoS data. All calculations and analysis were performed using the statistical software R (RCoreDevelopmentTeam, 2015).

Preliminary data analysis revealed an overall increasing trend in the numbers of authors per paper for our observation period. Figure 1 shows the average number of authors per paper per year for articles published in *JIBS* from 1972 to 2014. The corresponding data for Figure 1 is provided in Table A.5 in the appendix. As shown in Figure 1, the trend line for the period from 1972 to 1995 has a slope of 0.0190 ( $p < 0.001$ ) while the period from 1995 to 2014 has a slope of 0.0402 ( $p < 0.001$ ), which means that the speed of increase in the average number of authors of an article has doubled between the two time periods. This finding is consistent with other studies that also provide empirical evidence for increased knowledge production in teams. The solid squares in Figure 1 show the average values per paper when *all* papers are included, while the white squares show the average values per year *without* the outlier papers (five papers had more than nine authors, similarly four papers had more than nine countries of residence represented, based on author affiliations). Our chart is consistent with, for example, Wuchty, Jones and Uzzi (2007), who examined 19.9 million papers over five decades and 2.1 million patents to show that solo authors or individual inventors are being gradually displaced by teams in the creation of new knowledge, where a team is defined as having multiple authors on a paper or research output. Adams, Black, Clemmons and Stephan (2005) examined the trends in *scientific* teams in U.S. research universities from 1981 to 1999 to find that team size increased by 50% over the observation period.

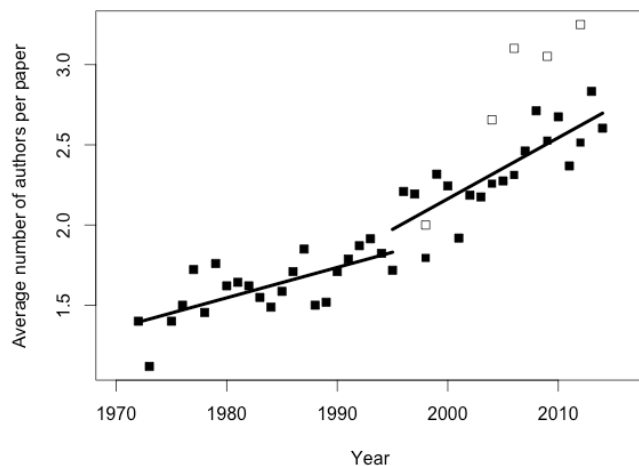


Figure 1: The average number of authors per *JIBS* article from 1972 to 2014



In sum, Figure 1 suggests that scholars are increasingly collaborating with others, and are part of research teams as opposed to being sole-authors on publications.

## ACCESSIBILITY OF JIBS

### First-time authors

To improve our understanding of the relative openness (or lack thereof) of the journal, we first examined the proportion of first-time authors publishing in *JIBS*. All authors who had published in the journal up until the end of 1994 were flagged as ‘already published in JIBS.’ Author data for 1995 onwards was then used to determine the percentage of first-time authorship. Figure 2 shows the percentage of first-time authors for 1995 to 2014, whereby all authors who published before 1995 are counted in the inherited stock of existing authors. Figure 2 shows that on average about 60 percent of the authors publishing in *JIBS* are first-time authors (white squares represent the values when outliers were excluded). The data corresponding to Figure 2 is provided in Table A.6 in the appendix.

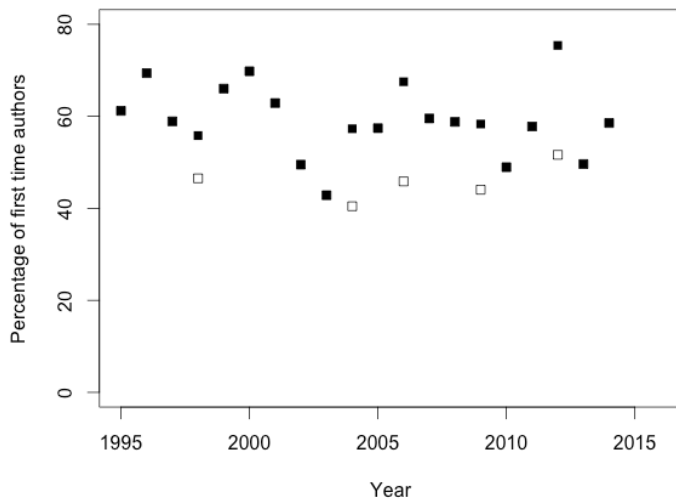


Figure 2: The percentage of first-time authors from 1995 to 2014

While not a perfect measure, we use the AIB membership count to represent the potential pool of authors who are likely to publish in *JIBS*. Figure 3a shows the number of AIB members from 1995 to 2015. Figure 3b shows the potential pool for first-time authors, which is the pool of all AIB members

reduced by those members who have already published in *JIBS*. Figure 3b shows that the prospective pool of first-time authors is shrinking as the number of new authors is on average higher than the increase in membership. The data for Figures 3a and 3b is provided in Tables A.7a and A.7b in the appendix. For 2009 to 2014, we find that around 50 percent of first-time authors are AIB members (see Table A.8 in the appendix for details) at the time of the publication, and since there is no clear trend away from this proportion it suggests that changes in the AIB membership provide a reasonable proxy for changes in the overall pool of potential first time *JIBS* authors. Thus, if the share of first time *JIBS* authors has remained roughly stable over time (Figure 2), while the approximate pool of potential first time authors in the existing IB scholarly community has been slowly shrinking (Figure 3b), this suggests that the journal is becoming gradually more open to first time authors breaking into the group of those that have published in *JIBS*.

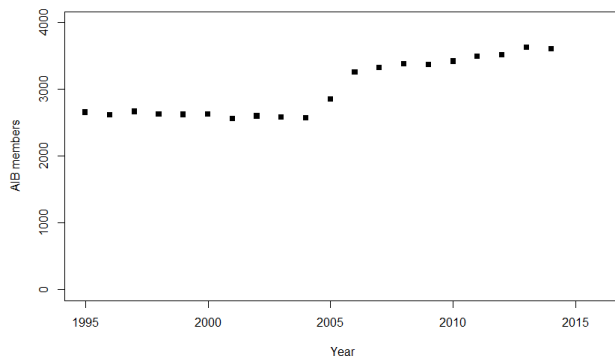


Figure 3a: AIB membership from 1995 to 2015

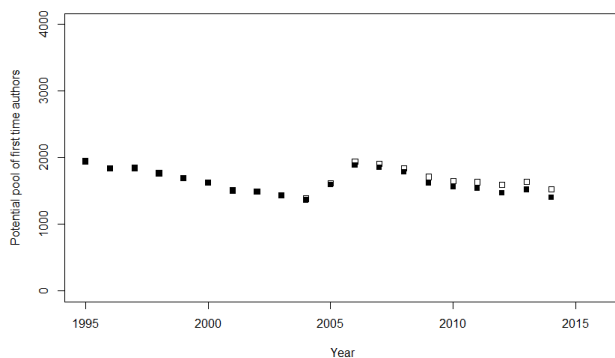


Figure 3b: Potential pool of first-time authors using AIB membership data

## Repeat authors

To further assess the accessibility of *JIBS*, we examined how the share of repeat authors has varied over time. Since *JIBS* has been aiming to be open to new scholars, one might hope to observe a declining trend in the number of multiple repeat authors over time. For this purpose, we first coded the number of previous publications in *JIBS* for each author-year pair for all authors since 1980. Then, for each year, we calculated the percentage of authors who have at least three previous publications in *JIBS*. Figure 4 shows how the percentage of authors with at least three previous publications in *JIBS* has varied over time. Corresponding data for Figure 4 is shown in Table A.9 in the appendix. Clearly, there was a rise in the percentage of multiple repeat authors in the early years of the journal until about 2008. By using a polynomial fit to mimic the trend appropriately in Figure 4, the fitted line had reached a plateau at around 15 percent of authors with three or more previous *JIBS* articles from 2005-2010. However, the fitted line in Figure 4 shows a discernible declining trend in the percentage of multiple repeat authors from 2010 onwards. This trend suggests that in the term of the current editorial team since 2011, the journal has indeed become relatively more open to new scholars compared to already established *JIBS* authors. This is quite a convincing plotted change of direction, since the number of previously papers is naturally rising over time relative to the number of current articles, and so there has been a continued increase in the number of authors who have crossed the threshold of publishing three or more previous articles in *JIBS*.

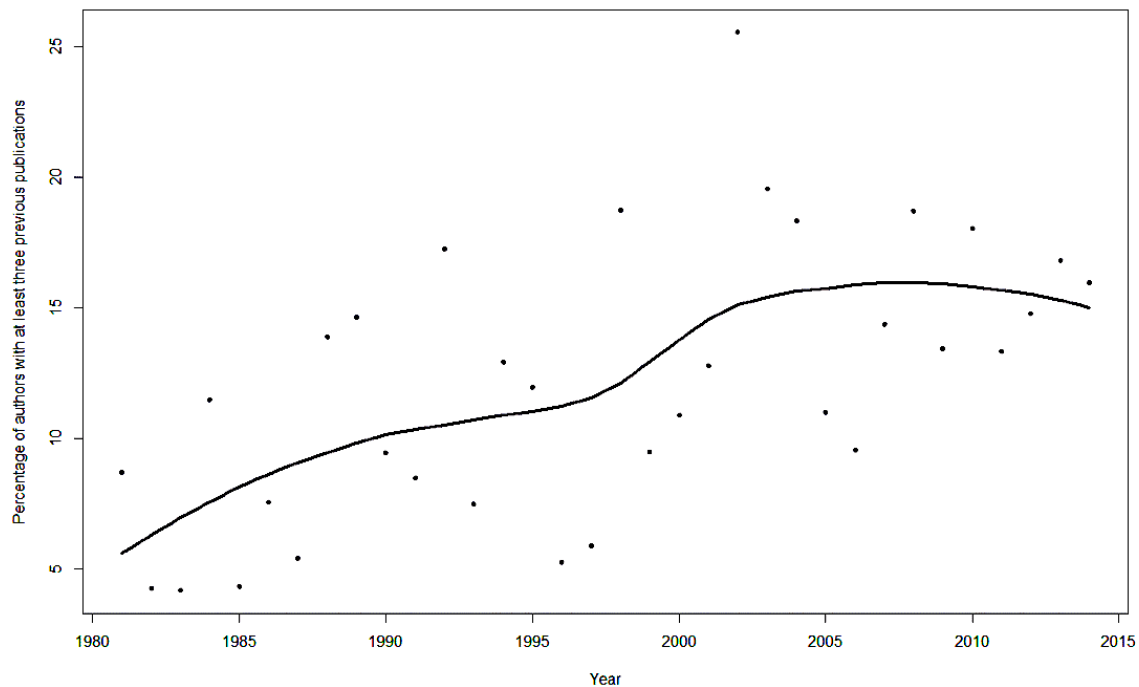


Figure 4: Percentage of authors with at least three previous publications in *JIBS*

As junior scholars can often write with established IB scholars, and quite commonly with their PhD advisor, we analyzed the data on previous publications for *JIBS* authors to be able to see how often first-time authors' co-authors are themselves repeat authors. For this purpose, we split the data on *JIBS* articles by the number of co-authors per publication. 235 articles with sole first-time authors were not included in this analysis. All other publications were grouped by the number of co-authors per publication. We identified 471 *JIBS* articles that were co-authored by two authors, at least one of whom was a first-time author. We then examined the number of publications for the other author(s) of these 471 articles. Table 1 shows the frequency distribution of the number of publications of a first-time authors' co-author. As shown in Table 1, 243 articles or nearly 50 percent of the articles in this category were comprised of author teams consisting of two authors, both of whom were publishing in *JIBS* for the first time. This suggests that while half of the first-time authors publishing in *JIBS* work with repeat-authors, the other half work with fellow first-time authors.

Number of Previous Publications	Frequency	Percentage
0	243	51.59
1	106	22.51
2	47	9.98
3	23	4.88
4	17	3.61
5	6	1.27
6	7	1.49
7	4	0.85
8	3	0.64
9	5	1.06
10	3	0.64
11	2	0.42
12	2	0.42
13	2	0.42
14	1	0.21

Table 1: Frequency distribution of previous publications of first-time authors' co-author(s), 1980-2014

Similarly, we analyzed publications with three co-authors, when at least one author was a first-time author. Of the 297 articles, 107 articles (36%) had all three authors as first-time authors, and 114 (38%) had two first-time authors. In other words, the majority of the papers with three authors had at least two first-time authors.

### **DIVERSITY OF JIBS CONTRIBUTORS**

Collaboration often leads to more impactful research by bringing together the expertise and experience of different individuals on a research team. As countries have become increasingly specialized in technological knowledge, new knowledge creation requires sourcing of knowledge from locations around the world (Cantwell & Vertova, 2004). This trend has been facilitated by the advent of the internet and related telecommunication products that have made it easier to communicate and coordinate tasks across global teams. In the natural sciences, approximately 74 percent of the papers published are products of collaborative efforts of several institutions; in addition, over a third of the papers are *internationally coauthored* (The Royal Society, 2011). For S&E journal articles more widely, the number of internationally coauthored articles has grown from 8% in 1988 to 16% in 1997, and then to 25% by

2012 (National Science Board, 2014). We find a similar trend increase for *JIBS*, but in the case of *JIBS* there is an even more impressive rise in the proportion of internationally coauthored articles, to around two-thirds of the total. The number of internationally co-authored articles for *JIBS* has grown from 16.7% in 1988 to 32.3% in 1997, and then to 66.7% in 2012. Figure 5 shows the average number of countries of residence of authors per paper per year for articles published in *JIBS* from 1972 to 2014. We calculate the average number of countries represented per paper first, and then use these numbers to calculate the average for the entire year; these averages are provided in Table A.10 in the appendix. The solid squares in Figure 5 show the average values per paper when *all* papers are included, while the white squares show the average values per year *without* the outlier papers (five papers had more than nine authors, similarly four papers had more than nine countries of residence represented, based on author affiliations). The average number of countries of residence represented (indicated by author affiliations), per paper showed an overall rising trend.

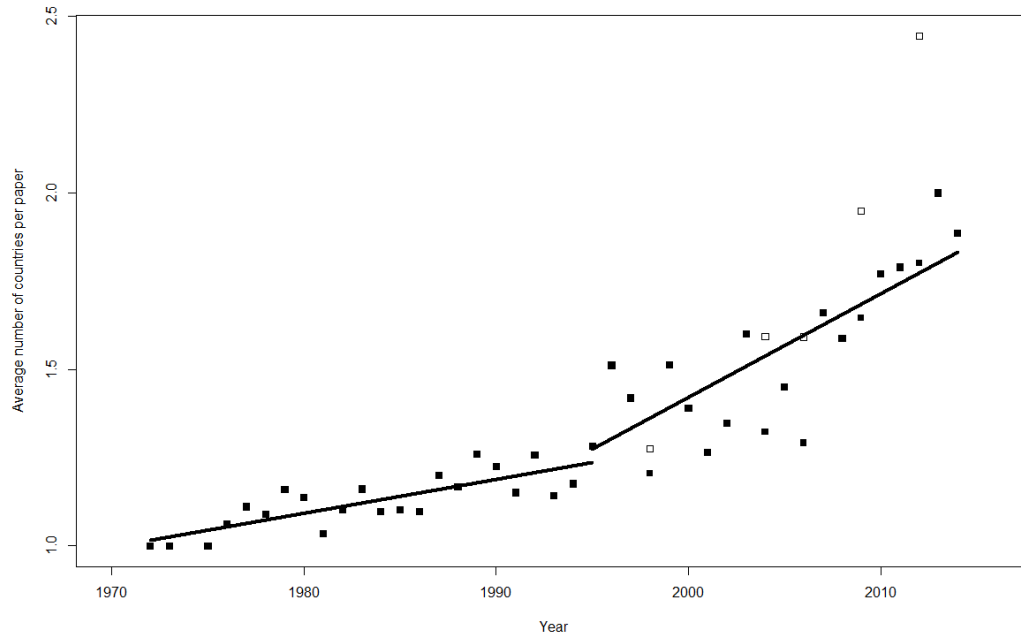


Figure 5: The average number of author countries of residence per *JIBS* article from 1972 to 2014

The two lines in Figure 5 show the slope based on simple regression estimations for the two periods. The slope is 0.0096 ( $p < 0.001$ ) for the first period (i.e. 1972 to 1995) and it is 0.0304 ( $p < 0.001$ )

for the second period (i.e. 1995 to 2014). While the slope in the second period doubled for the average number of authors, it triples for the average number of countries of residence of these authors. This demonstrates that an increasing internationalization of research collaborations has occurred above and beyond the increasing number of authors per research collaboration. Furthermore, the average number of countries per paper is approaching the level of two, which suggests that internationally co-authored articles have become the norm. This is corroborated by the median of two countries of residence per paper since 2010.

### **Geographic spread of authors**

To examine the geographic spread of *JIBS* authorship, we relied on the country of the university with which an author was affiliated. Figure 6 shows the percentage distribution of authors from North America, Europe, Asia-Pacific and the remaining countries (shown as ‘Other’). The data corresponding to Figure 6 is provided in Table A.11 in the appendix. As shown in figure 6, the percentage of authors from North America has declined considerably since the journal began in 1970. A rising share of authors from the Asia-Pacific region and the European region has accompanied this declining trend in authors affiliated with North American institutions. As the growth in the number of business schools (and thus the expectation to publish in major journals), in several countries around the globe, may be contributing to the increased geographic dispersion of the *JIBS* authorship landscape, we looked at the regional distribution of business schools for comparison purposes. A comparison of the geographic distribution of the authors of *JIBS* articles (as shown in Table A.11 in the appendix) with the equivalent shares of the top 100 business schools by region (see Table A.12 for details for corresponding years) shows that the former is higher for Europe and Asia, but it has fallen lower for North America. This suggests that the rise in the number of *JIBS* authors affiliated with universities in Europe and Asia-Pacific is more than the rise in the number of business schools in the respective regions.

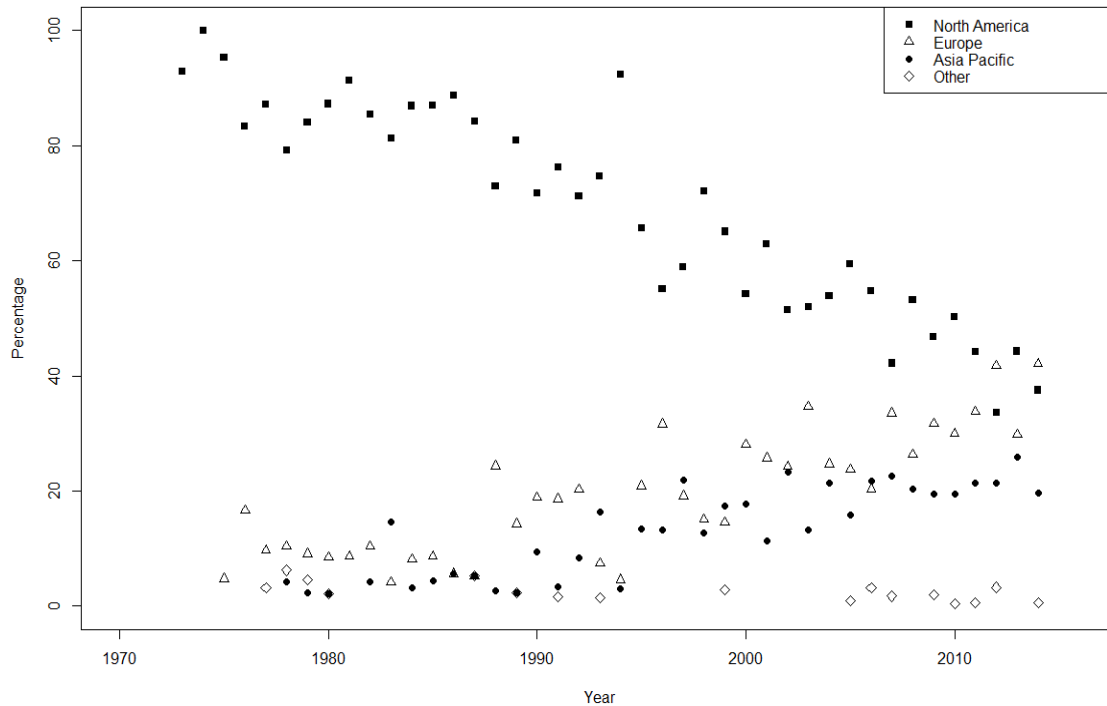


Figure 6: Percentage distributions of authors from North America, Europe, Asia-Pacific and Other

Following Thomas et al. (1994), we examine the frequency distribution of author affiliations by country in order to investigate which countries have emerged on the authorship landscape of *JIBS* since 1995. Table 2 shows the top twenty countries ranked by the number of author affiliations by country for *JIBS* articles published during the last twenty years (1995-2004 and 2005-2014). A comparison of the list of countries for 1995-2004 period as shown in Table 2, with the frequency of author affiliations by country for 1970-1993 period from Table 2 of Thomas et al. (1994) reveals that authors from China, Denmark and Finland entered the author landscape of *JIBS* during the 1995-2004 period. The increase in the number of *JIBS* authors affiliated with Chinese universities is especially noteworthy. While no authors affiliated with universities in China appeared on the landscape of *JIBS* authors for the 1970-1993 period (Thomas et al., 1994: 681), our results show that they are the third largest contributor for the 1995-2004 period. For the 2005-2014 period China moved up further to become the second largest country of residence of *JIBS* authors. While the USA continues to have the largest number of authors in absolute



terms in both time periods as shown in Table 2, other countries such as China, Canada, Netherlands, Australia, Singapore and Germany have seen a multifold increase in the last ten years in comparison to the 1995-2004 period. Table 2 shows that on average, authors from five countries – namely the USA, China, Canada, the UK and the Netherlands – have dominated the *JIBS* landscape for the 2005-2014 period. Figure 7 shows how contributors from these five countries have varied over time.

1995-2004			2005-2014		
Country	Authors	% distribution	Country	Authors	% distribution
USA	480	55.24	USA	656	41.84
UK	96	11.05	China	152	9.69
China	77	8.86	Canada	139	8.86
Canada	53	6.10	UK	136	8.67
Netherlands	25	2.88	Netherlands	90	5.74
France	24	2.76	Australia	68	4.34
Sweden	17	1.96	Singapore	38	2.42
Australia	14	1.61	Germany	37	2.36
Denmark	12	1.38	Sweden	34	2.17
South Korea	12	1.38	France	31	1.98
Singapore	11	1.27	Finland	28	1.79
Taiwan	10	1.15	Denmark	26	1.66
Finland	6	0.69	Belgium	25	1.59
Norway	6	0.69	Spain	25	1.59
Spain	5	0.58	South Korea	20	1.28
Israel	5	0.58	Italy	17	1.08
Japan	5	0.58	Taiwan	13	0.83
Germany	4	0.46	Israel	12	0.77
Belgium	4	0.46	Japan	11	0.70
Italy	3	0.35	Norway	10	0.64
Total	869	100%	Total	1568	100%

Table 2: Top twenty countries by frequency of author affiliations for 1995-2004 and 2005-2014

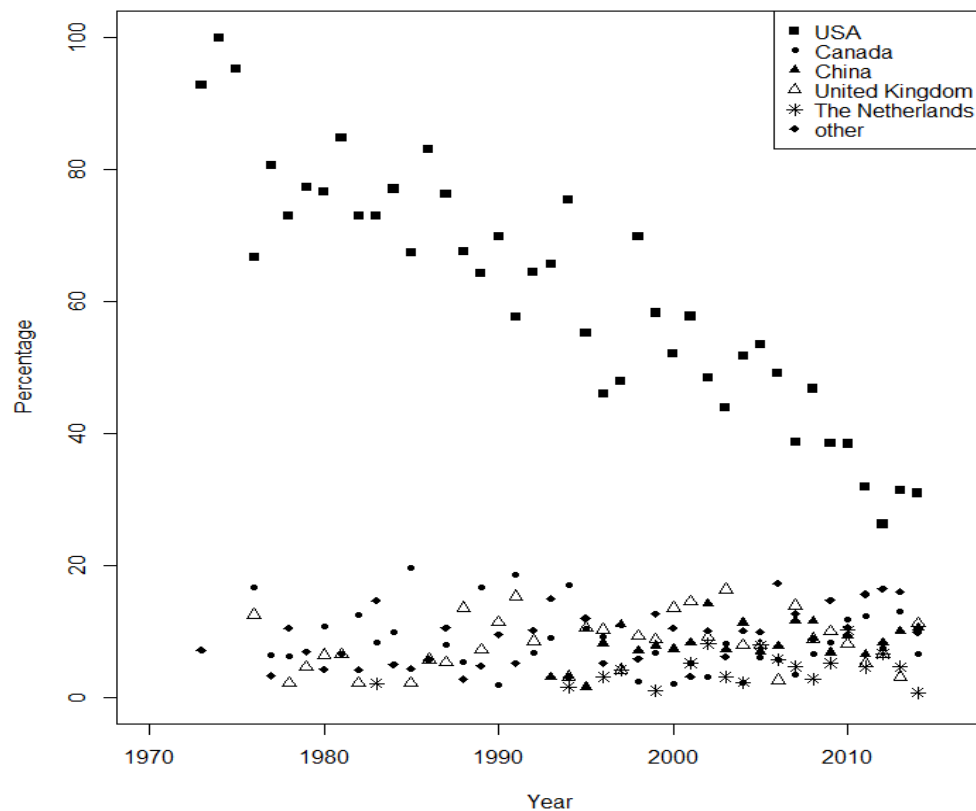


Figure 7: Percentage distributions of authors from the USA, Canada, China, the UK and the Netherlands

To improve our understanding of the regional distribution of *first-time authors*, we plotted the shares of first-time authors from the North American, Asian Pacific and European regions, the counterpart of Figure 6 for this subset of authors. Figure 8 shows the regional distribution of first-time authors for these geographic regions<sup>1</sup>. The corresponding data for this figure is provided in Table A.13 in the appendix. When compared to Figure 6, this shows how the influx of first time *JIBS* authors has for some time been relatively more equally dispersed across the major international regions, relative to the established *JIBS* author base. This comparatively even international spread of first time *JIBS* authors between North America, Europe and Asia has been accentuated since 2011.

<sup>1</sup> We excluded ‘Other’ regions from this graph for clarity; however the graph with all four regions is available to interested readers upon request.

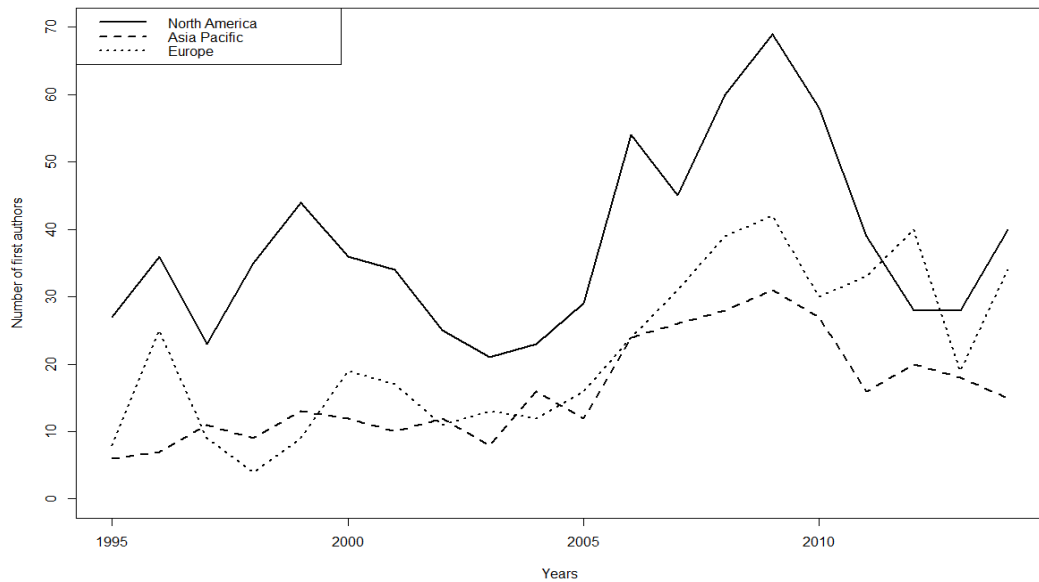


Figure 8: Regional distribution of first-time authors

### Mobility

The increase in the geographic spread of research collaborations can be attributed partly to the increased migration of scholars and scientists across borders. For example, Scellato, Franzoni and Stephan (2014) find that foreign-born scientists as well as return scientists tend to have co-authorship networks that are larger than those of native researchers without international background. Return scientists catalyze production of knowledge in their country of origin (Choudhury, 2015, Wang, 2015), and this knowledge is often of higher quality (Perri, Scalera, & Mudambi, 2015). Foreign-born scientists help build new bridges of scholarship between their countries of origin and residence. More than a third of foreign-born scientists have research partnerships with their counterparts in their countries of origin (Scellato, Franzoni, & Stephan, 2014). Cross-border partnerships have become more functional and practical in the last few decades, in part due to advances in information, communication and transportation technologies.

While “broadband penetration had a significant impact” (Choi, 2012: 39) on the co-authorship networks in research collaborations, it is not a defining factor (Choi, 2012). In today’s highly connected

world, face-to-face contact is necessary (as opposed to online contact only) for the *initiation* of collaboration ties (Choi, 2012). The foundation for collaboration ties are more likely to be laid through face-to-face contact of a scholar with other scholars in an organizational setting. These include but are not limited to universities, educational institutions, professional associations, and research labs to name a few. One would expect, therefore, that the greater is the cross-border geographical dispersion of institutions attended by scholars, the greater is the likelihood of increased participation in international collaborations. For this investigation, we used the biographical details of authors who have published in *JIBS* from 2008 to 2014<sup>2</sup>. We relied primarily on the country of birth, country of the PhD-granting institution, and the country of the university affiliation (associated with the publication) for categorizing *JIBS* authors into the following five groups – (1) Natives, (2) PhD-seeking migrants, (3) Job-seeking migrants, (4) Returnees and (5) Nomads.

Scholars whose country of birth, country of PhD-granting institution and country of university affiliation (associated with the publication) are the same, we term *natives*. Scholars whose country of birth is different from their common country of PhD-granting institution and their country of affiliation, we term *PhD-seeking migrants*. Scholars whose country of PhD-granting institution and country of affiliation are different, we name *job-seeking migrants*. Scholars with the same country of birth and affiliation, but a different country of PhD-granting institution are referred to as *returnees*, a term frequently used in the migration literature. And lastly, scholars whose country of birth, country of PhD-granting institution, and country of affiliation are all different, we describe as *nomads*. To illustrate this with an example, if a *JIBS* author born in India completed her PhD education in India and was employed at a university in India, we assigned her to the native category. As another illustration with regard to more than one assignment (aka dual role), if an author, who had published in *JIBS*, while being a native, moves to another country and has yet another publication in *JIBS*, then he or she will be in our database twice –

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<sup>2</sup> *JIBS* began collecting these data from 2008 onwards; therefore our mobility analysis is restricted to this time period.

once as native, and once as a job-seeking migrant. Table 3 shows the categories of *JIBS* authors based on their mobility patterns; a check mark (✓) represents common countries, whereas a cross (X) indicates a country that is different from the others for that category.

<b>Category name</b>	<b>Country of origin (or birth)</b>	<b>Country of PhD-granting institution</b>	<b>Country of university affiliation</b>
<b>Natives</b>	✓	✓	✓
<b>PhD-seeking migrants</b>	X	✓	✓
<b>Nomads</b>	X	X	X
<b>Returnees</b>	✓	X	✓
<b>Job-seeking migrants</b>	✓	✓	X

Table 3: Categories of *JIBS* authors based on mobility patterns

Our initial data set consisted of 915 authors, who had published in *JIBS* from 2008 to 2014. For mobility analysis, we focused only on those authors who were affiliated with a unique university at a given point in time. For this purpose, we 31 excluded authors with multiple affiliations; this reduced our sample to 884 authors. Of these 884 authors, we discarded additional 104 authors. While many of these 104 authors were missing biographical information, some of these authors were students and so they did not have a work university affiliation. Thus our final sample consisted of 780 authors. As six authors had dual roles during our observation period, Table 4 shows 786 roles for the 780 authors. As noted earlier, dual roles occur when for example, natives go abroad later in their career, or job-seeking migrants move to another country thereby becoming a nomad by our definition, or if a scholar returns to her home country after being a nomad. As there is a (somewhat close to) one-to-one correspondence between individual authors and author roles (only six authors have dual roles), we calculate the percentage of authors that belong to each category in order to shed further light on the mobility patterns of IB scholars. Table 4 shows that, of the authors who have published in *JIBS* since 2008, about 39 percent were natives; 28 percent were PhD-seeking migrants, or in other words their country of origin and country of PhD granting institution are different; and 14 percent were nomads, meaning that their country of origin, country of PhD granting institution and country of (work) university institution affiliation were all

different. Returnees constituted about 12 percent of all authors in our observation period and job-seeking migrants constituted the lowest share – approximately 7 percent of our sample.

Table 4 also shows that academic mobility has reinforced the trend towards the greater internationalization of the population of *JIBS* authors, away from natives born, educated and employed in the US. About two-fifths of *JIBS* authors with US PhDs were PhD-seeking migrants, and most PhD-seeking migrants found their opportunity in the US. Meanwhile, over four-fifths of job-seeking migrants had non-US PhDs, authors who found their employment opportunity in another country (which was sometimes in the US) after completing their PhD.

Mobility Category	Author Roles			Percentage of <i>JIBS</i> authors
	Total	Non-US PhDs	US-PhDs	
Native	303	173	130	39
PhD-seeking Migrant	219	63	156	28
Job-seeking Migrant	56	46	10	7
Returnee	98	46	52	12
Nomad	110	56	54	14
Total	786	384	402	100

Table 4: Mobility categories of *JIBS* authors using 2008 to 2014 data

Furthermore, these *JIBS* author mobility patterns are not merely reducible to foreign scholars seeking better opportunities in the US. While scholars seeking PhDs in the US are greater in number (402), those who sought PhDs in other countries (primarily European countries) are nearly as high in number (384). According to Table 4, non-US PhDs had a higher number of natives (173) who chose to stay in their country of origin as compared to US PhDs (130). Table 5 shows the distribution of *JIBS* authors in the five categories organized by country of PhD-granting institution. Table 5 allows us to see in greater detail the geographic distribution of authors in our sample. While most PhD-seeking migrants were in the US, other quite popular choices were the UK, Canada and Australia. With regard to natives, the USA has the highest number as noted earlier, but scholars in several other countries also tend to stay in their country of origin; these include Germany (21), the UK (21), Netherlands (17) and China (17).

	Job-seeking Migrants	PhD-seeking Migrants	Natives	Nomads	Returnees
Australia	1	10	11	3	1
Austria	3	0	3	0	0
Belgium	2	1	5	1	2
Brazil	0	0	1	0	0
Bulgaria	0	0	0	0	0
Canada	2	16	15	19	14
China	4	0	17	0	0
Croatia	0	0	1	0	0
Denmark	1	2	7	2	0
Finland	4	1	13	0	0
France	1	0	1	2	3
Germany	5	1	21	1	1
Greece	1	0	0	0	0
India	1	0	2	0	0
Ireland	0	2	1	0	1
Israel	0	0	3	0	0
Italy	3	0	3	0	0
Japan	0	0	1	0	0
Lithuania	0	0	1	0	0
Mexico	0	0	1	0	0
Netherlands	3	2	17	2	1
New Zealand	0	0	1	1	2
Norway	0	2	3	0	0
Portugal	1	0	3	1	0
Russia	2	0	0	0	0
Singapore	0	0	1	1	2
Slovenia	1	0	3	0	0
South Korea	0	0	3	0	0
Spain	1	1	5	2	2
Sri Lanka	1	0	0	0	0
Sweden	3	1	9	1	0
Switzerland	2	1	0	1	0
Turkey	1	0	0	0	0
UK	3	23	21	18	17
Ukraine	0	0	0	0	0
USA	10	156	130	54	52

Table 5: Geographic distribution of *JIBS* contributors in five categories by the country of their PhD

Next, we organized these data by country of origin of authors to see which countries receive the highest number of returnees. Table 6 shows the returnees by country of origin and country of PhD

affiliation of authors. We find that China has the highest number of returnees (57) in our sample. This may partly explain the increase in the number of authors affiliated with Chinese universities on the *JIBS* landscape in the 2005-2014 period. Other countries with a high number of returnees include South Korea (11), Canada (9) and the UK (8).

Country of origin	Country of PhD												Total
	Australia	Belgium	Canada	France	Germany	Ireland	Netherlands	New Zealand	Singapore	Spain	UK	USA	
China	1	0	10	2	0	0	0	1	4	0	12	27	57
South Korea	0	0	1	0	0	0	0	0	0	0	0	10	11
Canada	0	0	0	0	0	0	0	0	0	0	0	9	9
UK	0	0	5	1	0	1	0	1	0	0	0	0	8
Italy	0	1	0	0	1	0	0	0	0	1	1	0	4
Singapore	0	0	1	0	0	0	0	0	0	0	0	3	4
Taiwan	0	0	0	0	0	0	0	0	0	0	1	3	4
Turkey	0	0	1	0	0	0	0	0	0	0	0	3	4
Germany	0	0	0	0	0	0	1	0	0	0	2	0	3
Australia	0	0	0	0	0	0	0	0	0	0	2	0	2
France	0	0	0	0	0	0	0	0	0	0	0	2	2
Greece	0	0	0	0	0	0	0	0	0	0	2	0	2
India	0	0	0	0	0	0	0	0	0	0	1	1	2
Japan	0	1	0	0	0	0	0	0	0	0	0	1	2
Brazil	0	0	0	0	0	0	0	0	0	0	0	1	1
Colombia	0	0	0	1	0	0	0	0	0	0	0	0	1
Guatemala	0	0	0	0	0	0	0	0	0	0	0	1	1
Ireland	0	0	0	0	0	0	0	0	0	0	1	0	1
Netherlands	0	0	0	0	0	0	0	0	0	0	0	1	1
Pakistan	0	0	1	0	0	0	0	0	0	0	0	0	1
Philippines	0	0	0	0	0	0	0	0	0	1	0	0	1
South Africa	0	0	0	0	0	0	0	0	0	0	0	1	1
USA	0	0	1	0	0	0	0	0	0	0	0	0	1

Table 6: Returnees by country of origin (in descending order of count) and country of PhD affiliation

We also organized these data for PhD-seeking migrants, as shown in Table 7; the rows represent the country of origin of scholars, while the columns represent both, the country of PhD-granting institution as well as their place of work. Scholars from China (77), India (44), South Korea (17), Turkey (11) and Japan (9) rank the highest in this category. In other words, scholars from these countries of origin are most likely to take up a job in their country of PhD-granting institution. A comparison of returnees and PhD-seeking migrants by their country of origin (as shown in Table 6 and 7 respectively) depicts some interesting migration patterns. For instance, India has only 2 returnees, but 44 PhD-seeking migrants, suggesting more out-migration from India, as opposed to return migration. For those 44 PhD-



seeking migrants from India, the main destinations are USA (38), Australia (3), UK (2) and Canada (1), as shown in Table 7. China, on the other hand, has 77 PhD-seeking migrants, but also has a higher number of returnees (57). The main destinations for PhD-seeking migrants from China are the USA (48), Canada (15), the UK (8) and Australia (3).

Country of origin	Country of residence														Total
	Australia	Belgium	Canada	Denmark	Finland	Germany	Ireland	Netherlands	Norway	Spain	Sweden	Switzerland	UK	USA	
China	3	1	15	1	0	0	0	1	0	0	0	0	8	48	77
India	3	0	1	0	0	0	0	0	0	0	0	0	2	38	44
South Korea	0	0	0	0	0	0	0	0	0	0	0	0	0	17	17
Turkey	0	0	0	0	0	0	0	0	0	0	0	0	0	11	11
Japan	0	0	0	0	0	0	0	0	0	0	0	0	0	9	9
Spain	0	0	0	0	0	0	0	0	0	0	0	0	0	8	8
Bulgaria	0	0	0	0	0	0	0	1	0	0	0	0	0	6	7
Canada	0	0	0	0	0	0	0	0	0	0	0	0	1	6	7
Greece	0	0	0	0	0	0	0	0	0	0	0	0	5	2	7
Russia	0	0	0	0	0	0	0	0	0	0	0	0	1	6	7
Germany	1	0	0	0	0	0	1	0	0	0	0	0	2	2	6
Israel	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6
Poland	0	0	0	0	0	1	0	0	0	0	0	0	2	3	6
Romania	0	0	1	0	0	0	0	0	0	0	0	0	0	4	5
UK	1	0	0	0	1	0	1	0	1	0	0	0	0	1	5
Belgium	0	0	0	0	0	0	0	0	0	1	0	0	0	3	4
Czech republic	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4
Singapore	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4
Sweden	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4
Thailand	0	0	1	0	0	0	0	0	0	0	0	0	0	2	3
Vietnam	1	0	0	0	0	0	0	0	0	0	0	0	0	2	3
Algeria	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
Iran	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
Kazakhstan	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
Kenya	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
Mauritius	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
South Africa	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Uruguay	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
Australia	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Austria	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Bangladesh	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Belarus	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Brazil	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Chile	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Denmark	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Ecuador	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Ethiopia	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
France	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Hungary	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Indonesia	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Iraq	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Italy	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Latvia	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Mexico	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Netherlands	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Portugal	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
Puerto Rico	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Sri Lanka	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Tanzania	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Trinidad & Tobago	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Tunisia	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Ukraine	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Venezuela	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1

Table 7: PhD-seeking migrants by country of origin and country of residence

Lastly, we organized these data for job-seeking migrants (see Table A.14 in the appendix for details) and for nomads (see Table A.15 in the appendix for details). The USA (10), Canada (5), China (5), Finland (5), Germany (5) and Russia (5) rank the highest in job-seeking category of scholars. In other words, scholars from these countries complete their PhD in their country of origin and then take up a position in a foreign country. These numbers are relatively smaller than the numbers for both, returnees and PhD-seeking migrants. Finally, in the nomad category of scholars, we find that China (21), India (21), South Korea (13), France (11) and Germany (11) rank the highest, as shown in Table A.15 in the appendix.

As mobile inventors tend to be more productive than non-movers (Hoisl, 2007), we investigated whether a similar relationship exists for IB scholars as well. For this purpose, we calculated the average citation score for each of the five categories mentioned above. The scores for each of the five categories are as follows – Native 15.99, PhD-seeking migrant 17.3, Job-seeking migrant 16.87, Returnee 17.11 and Nomad 12.58. The pairwise t-test indicates, however, that there are no significant differences between these five categories. This could be related to the fact that an article often has a mix of author roles and contributions, so we may not be capturing the true productivity of an individual author.

## CONCLUSIONS

Consistent with the editorial policy of *JIBS*, the journal is now more open and accessible than at any time in its history. To assess the accessibility of *JIBS* and the diversity of *JIBS* contributors, we collected and mapped *JIBS* author data from the early years of the journal to 2014. Our analysis revealed that *JIBS* is indeed becoming more *open*, as indicated by the rising proportion of first-time contributors to the journal compared to already well established *JIBS* authors. We have found that approximately 60 percent of the authors contributing to *JIBS* are those who have never published in *JIBS* before. In addition to that, we have found that the percentage of repeat authors, specifically those with three or more publications in *JIBS*, has been for the first time on a discernible downward trend since 2010.

Consistent with the findings of studies that have observed an increase in international co-authorship since the 1990s in the S&E disciplines, we have also found that international research

collaborations are on the rise for *JIBS*. Since increased mobility of scientists facilitates increased international research collaborations (Choi, 2012, Luukkonen, Persson, & Sivertsen, 1992, Scellato, Franzoni, & Stephan, 2014), we also investigated the mobility patterns of *JIBS* authors. Our analysis of these patterns of authors, who have published in *JIBS* from 2008 to 2014, suggests that a little over half (51 percent) of all international business scholars are employed outside their country of birth. Of those who are employed in their country of birth (49 percent), 12 percent were return migrants.

### **LIMITATIONS**

While the original intent was to include the data for all years since the journal came into existence in 1970, we had to exclude 1970 and 1971 from our analysis, because authors' affiliation information was not included in the journal articles at that time. However, this led to a rather small distortion in the pool of incumbent authors. With regard to mobility analysis, we were restricted to data from 2008 onwards, as *JIBS* only recently began collecting biographical information of authors. As a result, we have been unable to discern trends over time in our migrant categories of *JIBS* authors. Furthermore, we had to discard approximately ten percent of the observations as important biographical information was missing for these authors. Lastly, we excluded 31 authors with multiple affiliations to avoid a mix of mobility roles for individuals. However, it must be noted that these represented a very small percentage of the observations in our sample.

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## APPENDIX

**Table A.1**

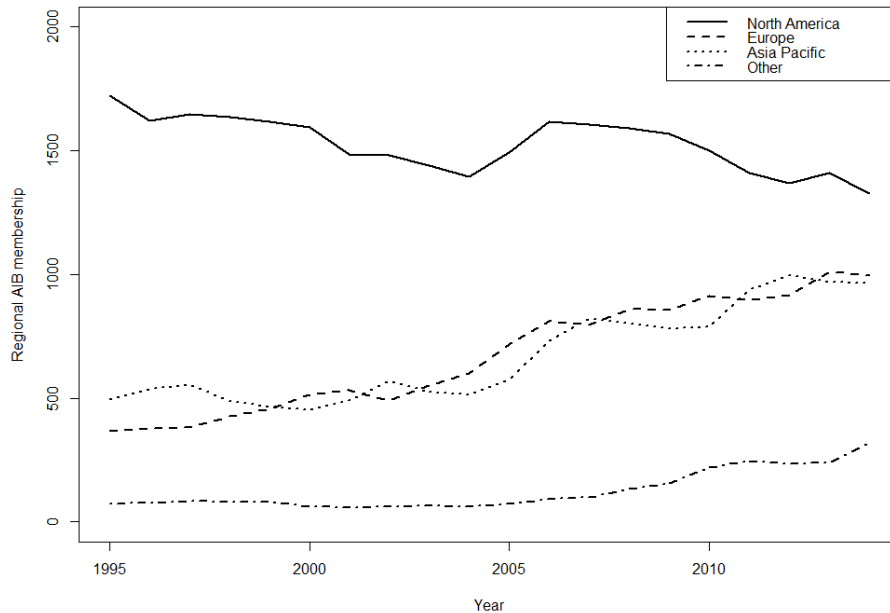
The following table shows the new membership counts for various years for the Academy of International Business, since 1980.

New AIB Members by Year	
Year	Count
1980	66
1985	80
1990	236
1995	556
2000	472
2005	583
2010	650
2015	627

Source: <https://aib.msu.edu/statistics.asp>

**Figure A.1**

The following figure shows the increased geographic dispersion in AIB membership since 1995



Source: Academy of International Business

**Table A.2**

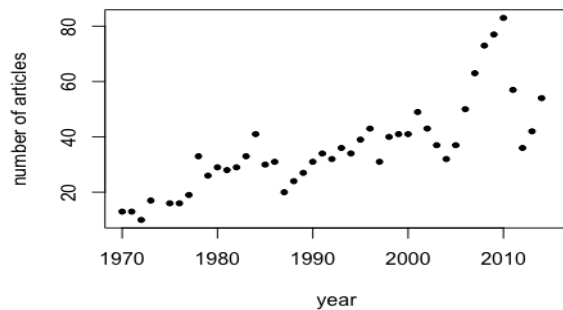
The following table shows the geographic distribution of AIB membership since 1995

Region	North America	Europe	Asian/Pacific	Other	Total
1995	1722	368	495	71	2656
1996	1621	379	537	78	2615

1997	1647	383	554	83	2667
1998	1636	427	486	79	2628
1999	1619	459	464	80	2622
2000	1595	513	455	62	2625
2001	1485	532	492	56	2565
2002	1480	490	569	62	2601
2003	1442	553	526	64	2585
2004	1394	599	515	60	2568
2005	1493	718	574	71	2856
2006	1618	810	734	92	3254
2007	1605	798	824	100	3327
2008	1590	859	800	134	3383
2009	1570	856	783	157	3366
2010	1501	913	789	218	3421
2011	1409	897	938	247	3491
2012	1370	916	997	234	3517
2013	1409	1011	971	238	3629
2014	1326	997	964	316	3603

**Figure A.2**

The following chart shows the number of articles published in *JIBS* from 1970 to 2014. Note that these include commentaries, essays, introduction to special issues, notes and perspective articles.



Source: JIBS archives

**Table A.3**

The following table shows the variation in the number of *JIBS* articles published over time (or Figure A.2 in table format)

Year	Article count	Year	Article count
1972	10	1994	34
1973	17	1995	39
1975	15	1996	43

1976	16	1997	31
1977	18	1998	40
1978	33	1999	41
1979	25	2000	41
1980	29	2001	49
1981	28	2002	43
1982	29	2003	40
1983	31	2004	32
1984	41	2005	40
1985	29	2006	49
1986	31	2007	65
1987	20	2008	73
1988	24	2009	77
1989	27	2010	83
1990	31	2011	57
1991	33	2012	36
1992	31	2013	42
1993	35	2014	53

**Table A.4**

The following table shows the distribution of various categories for downloaded data from 2004 to 2014:

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Article</b>	23	34	45	59	64	71	65	44	32	38	52
<b>Commentary</b>	2	0	3	3	1	0	4	1	0	0	0
<b>Essay</b>	0	0	1	0	0	0	0	0	0	0	0
<b>Special Issue Introduction</b>	1	0	0	0	1	1	3	1	0	0	0
<b>Note</b>	0	0	0	0	1	3	9	8	4	4	2
<b>Perspective</b>	6	3	1	1	6	2	2	3	0	0	0

**Table A.5**

The following table shows the average number of authors per paper per year from 1970 – 2014:

Year	Full sample			Excluding outliers		
	Author count	Article count	Average author count per article	Author count	Article count	Average author count per article
1972	14	10	1.40	14	10	1.40
1973	19	17	1.12	19	17	1.12
1975	21	15	1.40	21	15	1.40
1976	24	16	1.50	24	16	1.50
1977	31	18	1.72	31	18	1.72
1978	48	33	1.45	48	33	1.45
1979	44	25	1.76	44	25	1.76

1980	47	29	1.62	47	29	1.62
1981	46	28	1.64	46	28	1.64
1982	47	29	1.62	47	29	1.62
1983	48	31	1.55	48	31	1.55
1984	61	41	1.49	61	41	1.49
1985	46	29	1.59	46	29	1.59
1986	53	31	1.71	53	31	1.71
1987	37	20	1.85	37	20	1.85
1988	36	24	1.50	36	24	1.50
1989	41	27	1.52	41	27	1.52
1990	53	31	1.71	53	31	1.71
1991	59	33	1.79	59	33	1.79
1992	58	31	1.87	58	31	1.87
1993	67	35	1.91	67	35	1.91
1994	62	34	1.82	62	34	1.82
1995	67	39	1.72	67	39	1.72
1996	95	43	2.21	95	43	2.21
1997	68	31	2.19	68	31	2.19
1998	80	40	2.00	70	39	1.79
1999	95	41	2.32	95	41	2.32
2000	92	41	2.24	92	41	2.24
2001	94	49	1.92	94	49	1.92
2002	94	43	2.19	94	43	2.19
2003	87	40	2.18	87	40	2.18
2004	85	32	2.66	70	31	2.26
2005	91	40	2.28	91	40	2.28
2006	152	49	3.10	111	48	2.31
2007	160	65	2.46	160	65	2.46
2008	198	73	2.71	198	73	2.71
2009	235	77	3.05	192	76	2.53
2010	222	83	2.67	222	83	2.67
2011	135	57	2.37	135	57	2.37
2012	117	36	3.25	88	35	2.51
2013	119	42	2.83	119	42	2.83
2014	138	53	2.60	138	53	2.60

**Table A.6**

The following table shows the percentage of first-time authors from 1995-2014



<b>Year</b>	<b>Author count</b>	<b>First-time author count</b>	<b>Percentage of first-time author count</b>	<b>First-time author count (excluding outliers)</b>	<b>Percentage of first-time author count (excluding outliers)</b>
1995	67	41	61.19%	41	61.19%
1996	98	68	69.39%	68	69.39%
1997	73	43	58.90%	43	58.90%
1998	86	48	55.81%	40	46.51%
1999	103	68	66.02%	68	66.02%
2000	96	67	69.79%	67	69.79%
2001	97	61	62.89%	61	62.89%
2002	99	49	49.49%	49	49.49%
2003	98	42	42.86%	42	42.86%
2004	89	51	57.30%	36	40.45%
2005	101	58	57.43%	58	57.43%
2006	157	106	67.52%	72	45.86%
2007	173	103	59.54%	103	59.54%
2008	216	127	58.80%	127	58.80%
2009	252	147	58.33%	111	44.05%
2010	237	116	48.95%	116	48.95%
2011	154	89	57.79%	89	57.79%
2012	122	92	75.41%	63	51.64%
2013	131	65	49.62%	65	49.62%
2014	152	89	58.55%	89	58.55%

**Table A.7a**

The following table shows AIB membership information from 1995 to 2014

<b>Year</b>	<b>AIB membership</b>
1995	2656
1996	2615
1997	2667
1998	2628
1999	2622
2000	2625
2001	2565
2002	2601
2003	2585
2004	2568
2005	2856
2006	3254
2007	3327
2008	3383
2009	3366

2010	3421
2011	3491
2012	3517
2013	3629
2014	3603

**Table A.7b**

The following table shows the potential pool of first-time authors from 1995 to 2014

<b>Year</b>	<b>Potential pool of first-time authors</b>
1995	1948
1996	1839
1997	1848
1998	1761
1999	1687
2000	1623
2001	1502
2002	1489
2003	1431
2004	1363
2005	1593
2006	1885
2007	1855
2008	1784
2009	1620
2010	1559
2011	1540
2012	1474
2013	1521
2014	1406

**Table A.8**

The following table shows the percentage of JIBS authors that are AIB members

<b>Year</b>	<b>Percentage of JIBS authors who are AIB members</b>
2009	50.25
2010	46.18
2011	46.42
2012	65.87
2013	50.81

**Table A.9**

The following table shows the percentage of authors with prior publications

<b>Year</b>	<b>Author count (excluding outliers)</b>	<b>Authors with at least three JIBS publications</b>	<b>Percentage of authors with at least three JIBS publications</b>
-------------	--	--	--

1981	46	4	8.70%
1982	47	2	4.26%
1983	48	2	4.17%
1984	61	7	11.48%
1985	46	2	4.35%
1986	53	4	7.55%
1987	37	2	5.41%
1988	36	5	13.89%
1989	41	6	14.63%
1990	53	5	9.43%
1991	59	5	8.47%
1992	58	10	17.24%
1993	67	5	7.46%
1994	62	8	12.90%
1995	67	8	11.94%
1996	95	5	5.26%
1997	68	4	5.88%
1998	80	15	18.75%
1999	95	9	9.47%
2000	92	10	10.87%
2001	94	12	12.77%
2002	94	24	25.53%
2003	87	17	19.54%
2004	70	13	18.57%
2005	91	10	10.99%
2006	111	11	9.91%
2007	160	23	14.38%
2008	198	37	18.69%
2009	192	25	13.02%
2010	222	40	18.02%
2011	135	18	13.33%
2012	88	13	14.77%
2013	119	20	16.81%
2014	138	22	15.94%

**Table A.10**

The following table shows the average number of countries of residence of authors per paper per year

Year	Average for all articles	Average for all articles (excluding outliers)
1972	1.00	1.00
1973	1.00	1.00
1975	1.00	1.00
1976	1.06	1.06
1977	1.11	1.11

1978	1.09	1.09
1979	1.16	1.16
1980	1.14	1.14
1981	1.04	1.04
1982	1.10	1.10
1983	1.16	1.16
1984	1.10	1.10
1985	1.10	1.10
1986	1.10	1.10
1987	1.20	1.20
1988	1.17	1.17
1989	1.26	1.26
1990	1.23	1.23
1991	1.15	1.15
1992	1.26	1.26
1993	1.14	1.14
1994	1.18	1.18
1995	1.28	1.28
1996	1.51	1.51
1997	1.42	1.42
1998	1.28	1.21
1999	1.51	1.51
2000	1.39	1.39
2001	1.27	1.27
2002	1.35	1.35
2003	1.60	1.60
2004	1.59	1.32
2005	1.45	1.45
2006	1.59	1.29
2007	1.66	1.66
2008	1.59	1.59
2009	1.95	1.64
2010	1.77	1.77
2011	1.79	1.79
2012	2.44	1.80
2013	2.00	2.00
2014	1.89	1.89

**Table A.11**

The following figure shows the percentage of authors from North America, Europe, Asia-Pacific and Other regions from 1990 – 2014

<b>Year</b>	<b>North America</b>	<b>Europe</b>	<b>Asia Pacific</b>	<b>Other</b>
1973	92.86	0.00	0.00	0.00
1974	100.00	0.00	0.00	0.00
1975	95.24	4.76	0.00	0.00
1976	83.33	16.67	0.00	0.00
1977	87.10	9.68	0.00	3.23
1978	79.17	10.42	4.17	6.25
1979	84.09	9.09	2.27	4.55
1980	87.23	8.51	2.13	2.13
1981	91.30	8.70	0.00	0.00
1982	85.42	10.42	4.17	0.00
1983	81.25	4.17	14.58	0.00
1984	86.89	8.20	3.28	0.00
1985	86.96	8.70	4.35	0.00
1986	88.68	5.66	5.66	0.00
1987	84.21	5.26	5.26	5.26
1988	72.97	24.32	2.70	0.00
1989	80.95	14.29	2.38	2.38
1990	71.70	18.87	9.43	0.00
1991	76.27	18.64	3.39	1.69
1992	71.19	20.34	8.47	0.00
1993	74.63	7.46	16.42	1.49
1994	92.31	4.62	3.08	0.00
1995	65.67	20.90	13.43	0.00
1996	55.10	31.63	13.27	0.00
1997	58.90	19.18	21.92	0.00
1998	72.09	15.12	12.79	0.00
1999	65.05	14.56	17.48	2.91
2000	54.17	28.13	17.71	0.00
2001	62.89	25.77	11.34	0.00
2002	51.52	24.24	23.23	0.00
2003	52.04	34.69	13.27	0.00
2004	53.93	24.72	21.35	0.00
2005	59.41	23.76	15.84	0.99
2006	54.78	20.38	21.66	3.18
2007	42.20	33.53	22.54	1.73
2008	53.24	26.39	20.37	0.00
2009	46.83	31.75	19.44	1.98
2010	50.21	29.96	19.41	0.42
2011	44.16	33.77	21.43	0.65
2012	33.61	41.80	21.31	3.28
2013	44.27	29.77	25.95	0.00
2014	37.50	42.11	19.74	0.66

**Table A.12**

The percentage of business schools by region for 2013-2016 (data for other years was not available)

<b>Region</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
<b>Asia-Pacific</b>	14.14%	14.14%	15.15%	16.16%
<b>Europe</b>	25.25%	27.27%	27.27%	29.29%
<b>North America</b>	56.57%	55.56%	56.57%	52.53%
<b>Other</b>	4.00%	3.00%	1.00%	3.00%

Source: Financial Times MBA ranking for Top 100 Business Schools

**Table A.13**

The following table shows the regional distribution of first-time authors

<b>Year</b>	<b>North America</b>	<b>Europe</b>	<b>Asia Pacific</b>
1995	27	8	6
1996	36	25	7
1997	23	9	11
1998	35	4	9
1999	44	9	13
2000	36	19	12
2001	34	17	10
2002	25	11	12
2003	21	13	8
2004	23	12	16
2005	29	16	12
2006	54	24	24
2007	45	31	26
2008	60	39	28
2009	69	42	31
2010	58	30	27
2011	39	33	16
2012	28	40	20
2013	28	19	18
2014	40	34	15

**Table A.14**

The following table shows Job-seeking migrants by country of origin and country of residence

Country of origin	Country of residence														Total					
	Australia	Belgium	Canada	China	Denmark	Finland	France	Germany	Ireland	Italy	Japan	Netherlands	Peru	Singapore		Switzerland	Taiwan	UAE	UK	USA
USA	0	0	3	2	0	1	1	0	0	0	0	0	0	1	0	0	0	2	0	10
Canada	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	4	5
China	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	4	5
Finland	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	1	1	5
Germany	0	1	0	0	1	0	1	0	0	0	0	0	0	0	1	0	0	1	0	5
Russia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	1	5
Italy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	4
Austria	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	3
Belgium	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	3
Netherlands	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
Sweden	1	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	3
UK	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	3
Switzerland	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2
Australia	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Denmark	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
France	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Greece	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
India	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Portugal	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Slovenia	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Spain	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Sri Lanka	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Turkey	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1

**Table A.15**

The following table shows Nomads by country of origin and country of residence

Country of origin	Country of residence																			Total		
	Australia	Austria	Canada	China	Costa Rica	Denmark	France	Israel	Malaysia	Netherlands	New Zealand	Russia	Saudi Arabia	Singapore	South Korea	Spain	Switzerland	Taiwan	UAE		UK	USA
China	0	0	12	0	0	0	0	0	1	1	0	1	0	3	1	0	0	1	0	0	1	21
India	2	0	8	1	0	0	1	0	0	1	0	0	0	1	0	0	0	0	0	2	5	21
South Korea	0	0	3	4	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	1	13
France	0	0	1	0	0	0	0	0	0	9	0	0	0	0	0	0	1	0	0	0	0	11
Germany	2	0	1	1	0	1	0	0	0	0	1	0	0	2	0	2	0	0	0	0	1	11
UK	0	0	2	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	1	8
Russia	0	0	1	0	0	0	0	0	0	4	1	0	0	0	0	0	0	0	0	0	0	6
Taiwan	0	0	3	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	5
Tunisia	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	2	5
Turkey	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	4
Belgium	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	3
Italy	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	3
Japan	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	3
Netherlands	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
New Zealand	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Norway	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Romania	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	3
South Africa	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Greece	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2
Sri Lanka	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
USA	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
Argentina	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Brazil	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Bulgaria	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Canada	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Finland	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Guatemala	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Indonesia	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Iran	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Israel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Malaysia	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Mauritius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Nepal	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Pakistan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Portugal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Tanzania	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Thailand	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Ukraine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1