

Longitudinal Research in the International Business Research Tradition

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Introduction

International business (IB) is a broad research field that entails several research topics. Many of these topics have their origins in other fields, which make the IB research field multidimensional (see e.g. Wright & Ricks, 1994). Numerous IB studies address a process of change or development, an event, a phenomenon over time. By nature, studies focusing on processes and changes could be expected to be approached longitudinally, i.e. in a manner that acknowledges time (Avital, 2000, 672). There is a raising interest in the methodologies used in IB, and the Handbook of Qualitative Research Methods for International Business by Marschan-Piekkari and Welch (2004) is an important example.

This research addresses methodological issues in the field of IB, and focuses on analysing the various longitudinal researches in the IB field. A systematic literature review of four core IB journals for a period of six years (2000–2005) uncovered altogether 141 longitudinal studies from 710 published articles. The results are based on the review of merely four top journals, and thus have to be interpreted cautiously. However, these journals are regarded as the top journals and should represent the contemporary top quality IB research as well as what is the nature of the main stream longitudinal research approaches in the field of IB.

The main purpose of this research is to analyze longitudinal research topics and approaches in the field of IB. The aim of the study is twofold. Firstly, the study attempts to unveil the IB topics, research trends, and research areas that longitudinal approaches have been applied to study, i.e. *which research topics have been studied longitudinally*. Secondly, this study analyses the longitudinal research strategies, i.e. *which research methods have been applied*. Consequently, this research analyses the potential, opportunities and challenges longitudinal research has to offer to the IB field in order to inspire and encourage researchers to approach IB topics with various longitudinal and process approaches. (cf. Goldstein, 1979; Miller & Friesen, 1982; Pettigrew, 1990; Leonard-Barton, 1990; Menard, 1991; Van de Ven, 1992; Halinen & Törnroos, 1995; Bergh & Holbein, 1997; de la Torre & Moxon, 2001).

The IB research tradition

The international business (IB) field can be considered as an umbrella for a broad spectrum of research topics that originate from other fields, such as economics, finance, organization, management, strategy, entrepreneurship, business policy, marketing, sociology, education, human and industrial relations, and so on (Wright & Ricks, 1994; Buckley & Chapman, 1996; Toyne & Nigh, 1998; Peng, 2004; Shenkar, 2004). Buckley and Chapman (1996, 233), by quoting Casson (1988), accordingly state that international business “...has been considered as a test case for a unified social science approach.” It could be expected that the IB research would be interdisciplinary. However, IB has been dominated by the extension of core disciplines into the international arena (e.g. international marketing, international finance etc.), which have fed back new concepts and empirical work in the core discipline, but have led to only modest amount of cross-fertilization with other

“international” subjects. (Buckley & Chapman 1996, 233.) The development has been vertical rather than horizontal¹.

The dominant question in the IB field has over the years shifted from the foreign direct investment decision to the conditions conducive to the existence and growth of multinational firms, and finally to the firm’s role in a network of interdependent entities (Weisfelder 2001, 38). The IB research tradition include the industrial-organization theory, internalization theory, the eclectic theory of international production, transaction-cost theory, and the internationalization model and network theory of Nordic research (Weisfelder 2001, 16).

The past major topics in IB research have been successfully tackled by researchers; i.e. explaining the flows of FDI, explanation of existence, strategy and organizations of MNEs, and internationalization to globalization “new forms” of IB (Buckley 2002). It has been suggested that the IB research agenda has been running out of steam. The next big questions would include among other M&As, knowledge management, geography and location, globalization, fragmentation and new institutions. (Buckley 2002, 369–370.) A more recent review on emerging themes in IB research found out in a literature review over the time period 1996–2006, covering 112 most frequently cited articles, that cotemporary research topics fall into: business dynamics and strategy (41.9 %); culture, conflict and cognition (13.4 %); consumer behaviour and supply chain management (11.6 %); marketing, strategic human resource management, and industrial relations (9.8 %); economics and political economy (8.9 %); comparative capitalism, institutions, and international business (5.3 %); organizations and management (4.5 %); technology and innovation (2.7 %); and entrepreneurship and new ventures (1.8 %).

¹ *Original source:* Buckley, P.J. (1991) The frontiers of international business research. *Management International Review*, Vol. 31, 7-22.

In the IB field, the change, development, and evolutionary processes of organisations from various perspectives and in numerous contexts have been of interest for several decades. The evolutions and establishment of the field has covered several areas of interest that are time-bound. The following provides some examples. In the 1950s the research concentrated on trade and foreign direct investment activities, in the 1960s, when the international business field has been considered to be born (for a review, see e.g. Björkman & Forsgren, 1997; 2000), the export development process and the organisational life-cycle thinking together with strategic decision-making over time were popular. In the 1970s the internationalization process of a firm and multinational enterprise, as well as cultural studies, were in hype, whereas in the 1980s the networking development, management, and behaviour of firms was in focus. In the 1990s, in turn, studies concentrated e.g. on technology transfer, economic development, the emergence of regions and clusters, and the rise of globalization, and in the 21st century e.g. the information transfer and alliance building between companies and the virtual nature of firms were studied, and the state and direction of IB research, and the field in general, were sought for. (Buckley, 1991; Wright & Ricks, 1994; Buckley & Chapman, 1996; Björkman & Forsgren, 2000; Buckley, 2002; Peng, 2004; Shenkar, 2004; Buckley & Lessard, 2005.)

Several notions on the nature of IB research topics have indicated the importance of acknowledging time in the research settings, and studying IB topic from a longitudinal perspective is not a new invention. For example in internationalisation and joint venture research, longitudinal, process-oriented studies have been applied for some time (e.g. Johanson & Vahlne, 1992; Buckley & Chapman, 1996; Björkman & Forsgren, 1997; Caves, 1998; Büchel, 2000).

According to Jones and Khanna (2006; see also Boddewyn & Iyer, 1999, 170), the history of a company has a crucial influence on the competences and performance of a company, which invites the acknowledgement of time through path dependence in such a research. Wright and Ricks (1994, 697) also found in their study that economic and business history on different levels of analysis has emerged a distinguished research area. Glaum and Oesterle (2007, 315), in turn state that "...the field of International Business...would greatly benefit from more in-depth field research, that is, "clinical" case studies...Ideally, such research should be longitudinal in nature..." and they encourage IB researchers to employ more longitudinal studies. Similar implications suggesting increased use of longitudinal data and approaches have been presented by numerous authors and researchers (e.g. Buckley & Chapman, 1996; Caves, 1998; Boddewyn & Iyer, 1999.; Chandler & Lyon, 2001; Jones & Khanna, 2006; Glaum & Oesterle, 2007). Wright and Ricks (1994, 698) also acknowledge that IB researchers lag behind in their tools and concepts to approach properly the multidimensional IB field, but they also acknowledge that overcoming this barrier would require more support, resources, better access to studied topics, and more developed researcher skills.

Defining longitudinal research

Longitudinal research has been employed in several fields of research, but has always been a minority design (Pettigrew, 1990; Halinen & Törnroos, 1995; Avital, 2000). One reason for this is that it is often perceived as too costly and laborious. Nevertheless, several researchers have, at the end of their articles, recommended the use of a longitudinal design to further analyse the results they have received from cross-sectional studies. Numerous academicians have proposed different approaches

to conduct such a research (e.g. Goldstein, 1979; Miller & Friesen, 1982; Pettigrew, 1990; Leonard-Barton, 1990; Menard, 1991; Van de Ven, 1992; Halinen & Törnroos, 1995; Bergh & Holbein, 1997; de la Torre & Moxon, 2001). The trends in longitudinal research seem to follow the general trends in the academic field, and there has been a shift from a positivist approach (e.g. Goldstein, 1979) to a postmodernist and pluralistic approach (see e.g. Pettigrew, 1990; Van de Ven, 1992; Teddlie & Tashakkori, 2003).

Longitudinal studies have been conceptualized in several ways and the longitudinal design encompasses a number of different types of studies (e.g. Miller & Friesen, 1982; Menard, 1991; Pettigrew, 1990; Leonard-Barton, 1990; Van de Ven, 1992; Dawson, 1997). Consequently, studies have been conducted in an attempt to identify the main problems of longitudinal research e.g. in respect of statistical analysis, (LaTour & Miniard, 1983; Bergh, 1995; Bergh & Holbein, 1997), or challenges in qualitative field research (Pettigrew, 1990; Van de Ven, 1992; Dawson, 1997). Defining longitudinal research approach is a challenging task, as the existing literature demonstrates a wide variety of applications. According to Kimberly (1976), longitudinal research can be defined as “those techniques, methodologies and activities, which permit the observation, description and/or classification of organisational phenomena in such a way that process can be identified and empirically documented” (see also Miller & Friesen, 1982). According to another definition, in longitudinal research data is collected on two or more distinct time periods, the units of analyses are the same or comparable from one period to the next, and the analysis involves some comparison of data between or within periods (Menard, 1991).

Longitudinal research is seen to be applicable in research focusing on change, development or process (cf. Kimberly, 1976; Leonard-Barton, 1990; Pettigrew, 1990; Van de Ven, 1992; Bergh & Holbein, 1997). According to Goldstein (1979) longitudinal studies are, in the broadest sense, researches where data is collected from the informants at two or more points in time, and, in the narrow sense, researches where research objects are measured on more than one occasion. The distinction between the broad and the narrow definition is the idea of a well-defined set of occasions, i.e. narrow time intervals. (Goldstein, 1979.) What differentiates longitudinal studies from cross-sectional ones is that a longitudinal design enables the observation of changes in relationships over time (cf. Bergh, 1995).

There is a lot of discussion of what type of research is considered “truly” longitudinal and what studies are not usually regarded as longitudinal (c.f. Menard, 1991; Taris, 2000). A *minimum requirement* for any truly longitudinal research design is that it should permit the measurement of differences or change in a variable from one period to another. (Menard, 1991, 4). According to this definition, several types of research may be regarded as longitudinal. However, there have been disagreements which types of research can be regarded as “truly” longitudinal, and according to a narrower definition longitudinal research is strictly defined as research where data is collected for each unit of analysis for two or more distinct time periods (cf. Menard, 1991, Baltes & Nesselroade, 1979; Wall & Williams, 1970). The so-called “pure” longitudinal study refers studies where it is planned that every individual should be measured on every single occasion. Studies, where individuals are not designed to be measured on all occasions, are also referred to as “mixed” studies. In social sciences the concept panel study has been viewed synonymous to longitudinal study. (Goldstein, 1979, 2)

It has to be noted, that *longitudinal research is a research design, to which the researcher has to be committed from the beginning*. Longitudinal research using data, such as national census data that may have been collected for other purposes than measuring change, encounter problems in terms of changes in how units or events are defined and counted. In some cases, changes in the definitions of variables and methods of collecting data may render some or all data sets unsuitable for use in longitudinal research. (Menard 1991, 21). In general, cross-sectional data cannot be routinely used to model dynamic, longitudinal relationships (Menard, 1991, 65).

In general, longitudinal research is best understood by contrasting it with cross-sectional research (c.f. Goldstein, 1979; Menard, 1991; Taris, 2000). Longitudinal data presents information about what happened to a set of research units during a series of time periods. On the other hand, cross-sectional data refer to the situation at one occasion or at only one point. (Goldstein, 1979, 1; Taris, 2000, 1). While truly longitudinal research permit the measurement of differences or change in a variable over time, in pure cross-sectional research, the measurement occurs once for each individual, subject, country or case in the study. Moreover, the measurement of each item, concept, or variable applies to a single time interval or period, while the measurement for each case occurs within a sufficiently narrow span of time so that the measurements may be regarded as contemporaneous, i.e. occurring within the same period for all variables and for all cases. It has to be noted that a period may be defined in terms of seconds, days, months or years c.f. laboratory experiments. On the contrast, longitudinal research is defined in terms of both the data and the methods of analysis that are used in the research. (Menard, 1991, 4) Consequently, the principal distinction between longitudinal and cross-sectional data collection is that in longitudinal research (by definition) data are collected on each variable for at least

two periods (Menard, 1991, 32). Moreover, in longitudinal research the temporal ordering of a relationship may be argued with more certitude than in cross-sectional studies (Menard, 1991). Longitudinal research serves two primary purposes, first to describe the patterns of change, and second, to establish the direction and magnitude of causal relationships (Menard, 1991, 5).

Some studies do not fall clearly under the definition of longitudinal or cross-sectional research. In studies, where measurement occurs at different variables, and each variable is measured only once for each case, data cannot be applied for the simplest true longitudinal analysis. These studies may be defined as *time-ordered cross-sectional design*. (Menard, 1991, 22 -23.)

Longitudinal research designs

Longitudinal designs adopting a quantitative approach are usually seeking to identify the temporal relationship between two causally related variables. On the other hand, a longitudinal design allows taking a number of time-spaced sequential snap-shots in order to depict more general trends. (Dawson, 1997.) However, the results of a repetitive cross-sectional study, where data is collected from the same or comparable units of analysis twice or more within a distinct time period, are basically descriptive and would only show whether there has been a change, but would not explain why or how such change occurred (Van de Ven, 1992). Accordingly, the fundamentals of quantitative longitudinal analysis are the analytical assumptions of longitudinal analysis and the stability and form of empirical relationship over time (Bergh, 1995; LaTour & Miniard, 1983; Bergh & Holbein, 1997). Longitudinal designs encompass various studies (cf. Dawson, 1997, 393), also qualitative case study approaches that are using multiple methods and focusing on process and strategy research (e.g.

Leonard-Barton, 1990; Pettigrew, 1990; 1997; Van de Ven, 1992; Dawson, 1997). In process research, longitudinal research is defined as an ongoing dynamic process that may comprise real-time and/or retrospective elements (see Van de Ven, 1992; Pettigrew, 1990; 1997). Studies focusing on processes and change attempt to provide detailed descriptions of social settings often through a relatively subjective approach. These studies often adopt a qualitative research approach using narratives in producing temporal accounts on interaction and change. (Dawson, 1997). Consequently, qualitative designs are often “hands-on” research, which requires important tacit fieldwork knowledge in order to be successful (Dawson, 1997).

Taris (2000) presents six basic design strategies, which some are regarded as “truly” longitudinal and some are not usually regarded as longitudinal. These design strategies are the simultaneous cross-sectional study, the trend study, the invention study, the panel study and the retrospective study. Simultaneous cross-sectional study, the focus is in examining change in e.g. different age groups, but doesn't result in data describing change across time. In typical trend studies, the researcher(s) are not interested in examining change at the individual level, but at the aggregate, or research unit, level. Time series analysis refers to studies where repeated measurements are taken from the same set of participants, and allows the assessment of intra-individual change. On the other hand, the intervention study involves an experimental and a control group, and the effects of a particular intervention are studied by comparing the pre-test–post-test scores of the experimental and control group. In the panel study, a particular set of data is repeatedly collected with the same interviews or questionnaires. Finally the retrospective study refers to researches where the data is collected through asking questions about the past. (Taris, 2000, 5 -16.)

Consequently, longitudinal research can be defined based on the paradigm chosen behind the research design. Some research designs may favour triangulation, e.g. mixed method approach, to enhance the validity and reliability of the study (cf. Eisenhardt, 1989; Leonard-Barton, 1990). Accordingly, Miller and Friesen (1982) have identified five types of longitudinal studies; 1) qualitative research within one single organisation, 2) multivariate, quantitative study of a single organisation, 3) narrowly-focused quantitative studies of multiple organisations, 4) multivariate, qualitative studies of multiple organisations, and 5) multivariate, quantitative studies of multiple organisations (Miller & Friesen, 1982). This categorisation appears to be an appropriate definition for a universalistic conceptualisation of longitudinal research, and was also a source of inspiration for the literature review conducted in this paper. It has to be noted that longitudinal data does not necessarily imply longitudinal research design, and vice versa (Taris, 2000, 1).

Several studies, though clearly being longitudinal, do not use the term longitudinal in describing their study. The longitudinal nature of studies is often implicit and seldom defined, or it is merely mentioned as a temporal factor. Consequently, a number of different types of research designs can be included in the definition of longitudinal research. Hence, longitudinal study as a concept refers to a methodological approach, including choices about the ontology, logic and reasoning, paradigm, time, methodology (in data collection and analysis), and unit of analysis. The working definition of longitudinal research applied in this study is:

Longitudinal research is a study that employs longitudinal data and/or a longitudinal research design to solve a dynamic research problem.

Consequently, not all lengthy research processes are longitudinal (see e.g. Menard, 1991, 22-24). Longitudinal researches often focus on change, development or process

(e.g. Kimberly, 1976; Miller & Friesen, 1982; Leonard-Barton, 1990; Pettigrew, 1990; Van de Ven, 1992; Halinen & Törnroos, 1995) and are thus continuous and ongoing. Moreover, requirements regarding the stability of the empirical analysis should be met (c.f. Menard, 1991; Bergh, 1995; Bergh & Holbein, 1997). Furthermore, according to George and Jones (2000) time plays an important role in theory and theory building, "...because it can change the ontological description and meaning of a theoretical construct and of the relationships between constructs". Thereupon time is an important factor that should be included in the theoretical and methodological framework (cf. Van de Ven & Poole, 1995; Halinen & Törnroos, 1995; Avital, 2000; Ancona et al., 2001).

The purpose of this research is not analyze which studies are "truly" longitudinal or not, but rather to analyze what sort of topics in IB have been approached with a longitudinal research design and how, i.e. what type of designs. The literature review will focus on the temporal nature of the data and the data collection method. The data can be either retrospective, real-time or future related, whereas the data collection can be timed into three different modes: sequential, episodic, and continuous. The conducted literature review is described in more detail in the following section.

The empirical research

To obtain a comprehensive view of the contemporary longitudinal research in international business, a literature review was conducted in four leading international business journals. All volumes of four top international business journals were reviewed between January 2000 and December 2005. The argumentation for choosing this particular time period is the volition to cover a relatively current time period and to obtain topical data. The journal selection is based on the journal listings by Werner

(2002) and Harzing (2007). The chosen journals are the leading journals of the field, and thus considered relevant for the study, as they, in a sense, set the research standards in international business (see also Griffith, Cavusgil & Xu, 2008).

The articles to be part of our study were to conform to certain requirements that simultaneously form the limitations of our study:

- All published papers that were identified to be articles, were included. Notes, comments, editorials and introductions to volumes were excluded.
- The data and methodology used in the article needed to be reported with such clarity and extend that an analysis was possible to conduct.
- Those articles that were identified, by both authors, to be longitudinal, were included in the analysis.

The number and distribution of the longitudinal articles forming the research dataset is illustrated in table 1.

Table 1: Journal selection and division of articles

JOURNAL	No of longitudinal articles 2000-2005	Total no of published articles 2000-2005	Share of longitudinal articles from all (%)
International Business Review	37	217	17.1%
Journal of International Business Studies	61	225	27.1%
Journal of World Business	19	158	12.0%
Management International Review	24	110	21.8%
TOTALS	141	710	19.9%

The systematic search for relevant articles was conducted by scanning all the journal volumes and issues, and systematically reading all the published articles within the six-year time period with the help of three bibliographical databases, *EbscoHost Research Databases*, *Elsevier ScienceDirect*, and *ABI Inform ProQuest Direct*. Altogether 141 longitudinal studies were found among the total amount of 710 published articles.

The used bibliographic database may set limitations to the study as it is possible that not all articles published in the journals during 2000-2005 were available in the database. In these cases we turned to university libraries to obtain the original printed journals. However, all articles were available and easily accessible for this literature review.

Previous reviews indicate that the majority of researches use a cross-sectional single-snapshot data collection method, while only 10 % used other methodologies enabling the observation and data collection over time (cf. Avital 2000, 666). Based on the results, nearly 20 % of reviewed the journal articles were longitudinal studies. All the journals and articles were read and analysed by both the researchers. Cases of disagreement or unclarity were discussed until agreement was reached.

Results and discussion

The analysis of the data was conducted by using theme templates. The themes focused firstly on identifying the longitudinal nature of the study based on its data, method, and/or research approach. Secondly, the focus was directed to the research topic, problem statement, and theoretical framework of the studies to identify their area of interest and contribution. The theme template with categorisations is illustrated in table 2. The general research categorisation regarding the IB research areas and topics is adapted from Wright and Ricks (1994, 690) and Griffith et al. (2008).

Table 2 Categorisation of IB Research Areas and General Research Topics

Main IB Research Area	General Research Topics	Number of Articles
International Management	Management Practices, Methods, Corporate Governance Systems	34
	Organisational Reform, Restructuring, Change	
	Negotiation Processes	
	Cross-Border Mergers and Acquisitions, Ownership Changes	
	Experience, Management Team, CEO Characteristics	

	Expatriation, Succession, Career Paths, HRM Policies, Turnover	
International Banking and Finance	Stock Market Fluctuations, Volatility	12
	Stock Listing, Returns, Valuation	
	Exchange Rate Movements	
	Government Substitution	
	Loan Determinants, Debt Financing	
	Equity Ownership, Shareholders	
International Trade Theory	Market Integration, Convergence, Agglomeration	38
	Transition Economies, Emerging Markets, Privatisation	
	Market Mechanisms, Equilibrium	
	Globalisation, Politics, Risk Assessment	
	Codes of Conduct, Corruption	
	Intellectual Property, Knowledge Sharing, Transfer, Sourcing, Diffusion	
	International Production, Infrastructure	
	Industry, Branch Development	
	Technological, R&D Evolution	
International Strategy	Competitive Advantage, Performance, Competence, Positioning	21
	Domestic vs. Foreign Markets	
	Diversification, differentiation, localization, standardization	
	Resources, Company Size Effects	
	Strategy Orientation Effects	
	Environment, Circumstances, Situational Factors	
	Timing, Speed	
International Business Operations	Risk-Taking, Uncertainty, Trust in Internationalisation	34
	Growth, Expansion	
	Foreign Operation Mode, Location, Market Choice, Internationalisation	
	Cultural, Country Differences, Geographical Specialisation, Dispersion	
	Franchising, Exporting, Importing	
	Networking, Relationships, International Joint Venture, Alliance Formation	
	Market Entry, Greenfield, Subsidiaries, Clustering, FDI	
International Marketing	International Retail Operations, Pricing	2
	Trade Intermediaries	
TOTAL		141

To start the analysis, a few words on the formulation of the categorisation are in place. Dividing the IB field in clear-cut themes and categories is challenging from the inductive perspective. The challenge originates from the fact that studies examine an empirical topic that can be positioned under several research traditions, themes, and theories. This is the case also here. As a result, the formed categories in table 1 are relatively broad to enable unambiguous categorisation.

The research areas the longitudinal studies dealt with ranged from management, banking and finance, trade, business operations, strategy, and marketing. Majority of the studies fell within the international trade theory category (26.9 %), after which came management (24.1 %) and business operations (24.1 %) with equal shares. The third largest group were studies focusing on strategies (14.8 %). Banking and finance (8.5 %), as well as marketing (0.14 %) formed the smallest categories. These findings can be explained by three issues: the formation and broadness of the analysis categories, the trends in IB research arena during the research period, and the mission statements of the studied IB journals. Firstly, the categories of international trade, management, business operations, and strategy are very extensive and partially overlapping as they cover several, more focused sub-streams that are interconnected with other streams. Secondly, business operations, strategy, trade, and management are popular themes year after year, and particularly topics such as organisational change, M&As, expatriation, internationalisation, emerging markets, globalisation, intellectual property, competitive advantage, foreign direct investment, and growth have been widely studied during the research period. Thirdly, the modest shares of marketing and banking and finance articles can be explained by the fact that these topics have their own top journals, despite the topics can be seen to strongly connect to IB and the development of the research field.

During the analysis, several overarching research themes and terminology emerged. In general, the found longitudinal studies dealt with change, relationships between different phenomena, processes, and events. The changes were most often related to organisations, market dynamics, and political and economic geography. The relationships between mostly two phenomena dealt with the influence one phenomenon had either purposefully or accidentally on another. Words such as effect,

association, influence, consequence, impact, contribution, linkage, outcome, benefit, challenge, and affect were often employed in stating the research problem and aim. The studied processes often concerned the proceeding of a phenomenon from one stage to another over time. These processes were often depicted with expressions such as path, pattern, trend, growth, increase, adaptation, transformation, continuance, decrease, escalation, convergence, project, development, evolution, volatility, integration, and change, to name but a few. Events of different length were also often in the focus of a study. A few examples of these events included transactions, mergers and acquisitions (M&As), negotiations, and the beginning or ending of an era, epoch, or a period. The research aims in the examined longitudinal studies ranged from describing, exploring, and explaining different phenomena to theory testing, model building, and estimation of different phenomena.

Attention was also dedicated to the research methods employed in the longitudinal studies. Table 3 illustrates the methods applied in connection to different IB research areas.

Main IB Research Area	Data Time Orientation				Data Source and Type					
	Retro-spective	Real-time	Mixed orientation	Total	Primary, qualitative	Primary, quantitative	Mixed method	Secondary	Mixed source	Total
International Management	21	12	1	34	6	4	3	14	7	34
International Banking and Finance	11	1	-	12	-	-	1	10	1	12
International Trade Theory	36	2	-	38	-	-	-	37	1	38
International Strategy	17	3	1	21	2	3	-	13	3	21
International Business Operations	28	6	-	34	3	2	1	23	5	34
International Marketing	1	1	-	2	-	1	-	1	-	2
Total	114	25	2	141	11	10	5	98	17	141
%	80.9	17.7	1.4	100	7.8	7.1	3.5	69.5	12.1	100

Table 3 Categorisation of IB Research Areas and Methods

The longitudinal studies are categorised in the table 3 according to the temporality, source, and nature of the employed data. The data time orientation describes the temporal nature of the data, i.e. whether the data is retrospective and covers a time period in the past, is collected in real-time as the studied topic evolves, or applies a mixture of these two types of time orientation in terms of data. The data type refers to the methods used to collect data, i.e. qualitative, quantitative, and mixed methods. The data source, in turn, refers to the use of data from primary, secondary, or mixed sources. A note should be made here that the mixed source category includes only studies that mix secondary source data with either qualitative or quantitative primary data. Studies that applied a mixed method approach, despite also using a mixed source approach, are included in the mixed method category. This choice was made, because such studies fitting the both mixed categories were only a handful, and as in many cases secondary data was used to merely complement the primary data.

The longitudinal time frame in the studied articles varied from seven days to 130 years. This shows well that the period can be defined broadly ranging from days to years (cf. Menard 1991, 4). 80.9 % of the articles studied the research topic from a retrospective perspective, 17.7 % in real-time, and only a few papers mixed retrospective and real-time data. Majority of the papers, namely 69.5 %, used secondary data. Primary data was used in 14.9 % of the articles, and 12.1 % applied source triangulation. In all the research area categories the most typical longitudinal study was based on retrospective secondary data. The use of real-time data was most often applied in international management studies, whereas in other areas it was rather marginal. Secondary data was most often used in international banking and finance and it equalled 83 % of the studies within this area. The international trade and

international business operations and strategy studies, being the most studied areas, followed mostly the retrospective secondary data approach with nearly 60 % of these studies representing this approach. Mixing time orientations and methods was relatively rare, whereas mixing data sources was observable in 12.1 % of the 141 studies.

These results imply that the use of research methods within the longitudinal research strategy tend to be one-sided. However, many issues related to resources in terms of time and money, and access to data may explain this “convention” in the field of IB. Moreover, the preferences of the editors and mission statements of the journals may also explain this, and provide a biased overview on longitudinal research in the field of IB. On the other hand, it can be concluded that the top IB research seems to appreciate more retrospective quantitative longitudinal approaches.

Regarding these findings, the spectrum and type of longitudinal studies is broad and covers nearly the entire established IB field. This supports the notion of employing longitudinal approaches in increasing knowledge about IB topics and developing the field. Regarding the pool of all the reviewed 710 articles and the identified main research areas and topics, there were no observable differences between longitudinal and other studies. However, only approximately 20 % of the published studies in the four top journals during the six-year period were longitudinal. In turn, this findings supports the notion of many researchers that longitudinal research is extremely arduous and requires intense resource commitment from researchers, and occasionally also from the studied objects. The aims and ambitions of the researchers’ truly play a significant role here, as the decision of doing a longitudinal study lay on the shoulders of the researchers, as the research topics would support the longitudinal approach.

Buckley and Chapman (1996) stated in their articles that seeing quantitative studies and longitudinal case studies as opposites would be taking a too black-and-white view of the matter. The most open-minded researchers would use both (Buckley & Chapman 1996, 236), in addition of putting more emphasis on building on existing theories (e.g. Buckley & Lessard 2005). Moreover, it has been argued that IB researchers lag behind in their tools and concepts to approach properly the multidimensional IB field (e.g. Wright & Ricks 1994, 698). Longitudinal qualitative studies or studies combining both quantitative and qualitative methods may provide more holistic understanding of many of the IB phenomena.

Conclusions

The longitudinal research in IB field covers many topics. The research areas, where the majority of the found longitudinal studies can be positioned, were the broadest and most studied research areas of IB, namely international trade, international management, and international business operations. Over 75% of all the longitudinal studies were categorised to these three research streams.

The longitudinal IB topics found in this research are relatively similar to the general IB topics found by Griffith et al. (2008) in their literature review. The major differences were that Griffith et al. (2008) found no articles on finance, and cultural issues were relatively scarce in the longitudinal topics. Reasons for the differences can be explained e.g. by the different literature review method, as Griffith et al. (2008) focused on 112 most frequently cited articles out of 1995 different articles published over the time period 1996-2006.

This research revealed various longitudinal research methods employed in the IB field. Based on the results nearly 20 % of the researches identified used a longitudinal

research strategy. There were altogether only 141 longitudinal studies among the 710 reviewed articles. However, the use of methods within the 141 articles identified was relatively one-sided, as nearly 60 % employed readily available secondary data retrospectively to observe a process, relationship, or a change over time. Real-time studies employing primary data or source triangulation were in clear minority, and perhaps mostly due to their laboriousness and more extensive resource needs.

This research argues that the IB field could greatly benefit from the application and adaptation of longitudinal approaches in research, as the gained results could convey a more truthful image of the phenomenon, and as the accumulated more reliable and richer knowledge could strengthen the field and support its further development and establishment. However, longitudinal research design is very challenging for various reasons; especially real-time longitudinal research may require important resources and long term commitment from both the researcher and the research subjects involved (cf. Leonard-Barton 1990, 263). As a result, the ambitions, skills, and resources of the IB scholars studying processes and other phenomena touching upon time, by and large, influence the decision, whether a topic is studied longitudinally or cross-sectionally. Concluding, hopefully this paper will encourage more academic discussion on the methodologies and research methods employed in the IB field and inspire more rigorous research in the future.

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