

Case Study Selection: An Overview of Key Issues for International Business Researchers

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Abstract

The case study method has been used extensively in order to investigate numerous topics in International Business (IB). These topics relate to the internationalisation process of the firm, international strategy, entry modes in international markets, INVs and MNCs; as well as comparative and cross-cultural phenomena. Despite, the extensive application of this approach in the IB context, research practice reveals a lack of understanding on one of the key aspects of case study research, notably the *selection of case studies*. The purpose of this paper is to discuss key challenges and common misconceptions with respect to the selection of case studies for IB research. Anchored into key methodological literature and best case study practices in IB, the authors attempt to provide researchers with operational insights in terms of selecting case studies that are theoretically appropriate to their particular research aims.

1. Introduction

The case study approach has been commonly used in International Business (IB) research, albeit not without scepticism. For instance, in recent review paper Yang et al. (2006, p. 612) consider the case study as a form of secondary data instead of *a research strategy that investigates a phenomenon in its in its real-life context, relating it to theory and seeking to understand what the empirical phenomenon is a case of in theoretical terms* (cf. Piekkari, Plakoyiannaki and Welch, in press(a); Piekkari, Welch and Paavilainen, in press(b)). Case studies are typically considered to be qualitative studies, although they can be qualitative, quantitative or mixed methods that combine numerical with non-numerical data This article elaborates on the notion of qualitative case study that is characterised by “researchers spending extended time on site, personally in contact with activities and operations of the case, reflecting and revising” (Stake, 2000, p.450).

The widespread adoption of case studies among qualitative researchers in IB can be justified since they appear to offer in-depth contextual insights by taking into

consideration “environment characteristics, resource constraints, and cultural traits” (cf. Thomas 1996, p. 497). In other words, case study research allows IB scholars to reach a deeper cross-cultural understanding of investigated phenomena. This minimises cultural bias and ethnocentric assumptions compared with the practice of using survey instruments. As a result, this method has been used extensively in order to investigate numerous topics in IB including the internationalisation process of the firm (Johanson and Valhne, 1977), international strategy (Porter, 1990), international growth (Penrose, 1960) entry modes in international markets such as exporting activities (Ellis and Pecotich, 2001), INVs (Coviello, 2006) and MNCs (Bartlett and Ghoshal, 1987); as well as comparative and cross-cultural phenomena.

Numerous definitions of case study research have been proposed in the methodological literature reflecting different ontological orientations (e.g. positivistic, realism, interpretivism etc) associated with this research practice. Those who take a positivistic approach to case study research (e.g. Eisenhardt, 1989; Yin, 1984) consider case study research as a structured process that aims primarily at theory building and embrace criteria from quantitative research for evaluating the quality of case study findings. For instance, Yin (2003) states that cases studies can be exploratory, descriptive or explanatory, whereby deep insights are sought and is concerned with theory generation and building, through pattern matching, rather than theory testing.

Alternatively, those who view case study research through the lenses of critical realism or interpretivism acknowledge its emergent nature and its power to build logical argumentation for theory building and theory testing purposes (Hillebrand,

Kok and Biemans, 2001). An in-depth case study approach offers “thick” descriptions of the investigated phenomena and their context. It aims at investigating what is happening in the totality of each situation, providing holistic rather than fragmented explanations (Pettigrew, 2002). This conforms to an interpretivist paradigm, which recognises that business situations are complex, unique and a function of a particular set of circumstances and individuals (Saunders, Lewis and Thornhill, 2003).

Case study research may combine interpretivist, positivist, inductive and deductive approaches (Hyde, 2000). Eisenhardt (1989) points out that some features of the process can adopt a positivist approach, for example using prior theory for problem definition and construct validation, which is also recommended by Yin (2003); Miles and Huberman (1994) and Perry (1998). Other processes such as within-case analysis and theory building can be highly case-oriented, inductive processes which are highly iterative and linked to data (Eisenhardt, 1989).

Despite the lack of consensus of what constitutes a case study, it is a common theme in relevant literature that central to building or testing theory through case study research is the process of sampling. This is evident in the words of Hakim (1987, p. 61) who suggests that “case studies take as their subject one or more selected examples of a social entity” rendering the issues of sampling and sample size inherent to case study research. Kates (2007) points out that selection of case studies constitutes a challenge for case study researchers who purposefully choose information-rich case studies that promise to extend, reformulate or challenge theory by achieving theory-grounded explanations and identifying causalities. Diachronically, authors who have taken different approaches to case study research

(e.g. Dyers and Wilkins, 1991; Easton, 1995; and Siggelkow, 2007) have associated case selection with the development of coherent, credible and memorable stories from case research. Therefore, sampling constitutes a key tenet of case study research viewed from different ontological positions that its implications are reflected in the course of the case study project and quality of case study findings.

However, the application of the case study approach in the IB context reveals a lack of understanding on one of the key aspects of case study research, notably the *selection of case studies*. Indeed, Malhorta, Agarwal and Peterson (1996) point out that IB researchers in pursuit of case study research encounter difficulties in describing their sampling strategies in sufficient detail, which makes interpretation of findings difficult and affects replication of the study. The case study approach offers flexibility in terms of the justification of sampling choices, the number of investigated cases and sampling techniques. This flexibility in sampling combined with the lack of shared meaning and terminology of sampling techniques, may be confusing for case study researchers who employ this methodology to address IB problems.

With reference to the key methodological literature, this article discusses key challenges and common misconceptions with respect to the selection of case studies in IB research. In doing so, we aim at enhancing the knowledge of case study researchers by providing an overview of key issues that need to be considered during the course of the case investigation rather than making prescriptive statements on how sampling in case study research *should* be conducted. The paper is structured as follows. Following the introduction, the *second section* of the article discusses issues relevant to the selection of case studies including sampling strategies; purposeful,

selective and theoretical sampling; purposeful vs. random sampling; and selection bias. The *third section* of the article elaborates on the number of case studies and raises the issue of single vs. multiple case study research. The *fourth section* of the paper presents and discusses the unit of analysis. The paper concludes by summarising the key challenges encountered by IB case study researchers when selecting case studies.

2. Selection of Case Studies

Sampling strategies

Researchers have generally agreed that the purpose and aims of the particular study should guide how cases are selected (Dubois and Gadde, 2002; Ghauri, Gronhaug and Kristianslund 2002; Patton, 2002). Case study research is concerned with gaining deep insights into complex social and organisational processes (Saunders et al., 2003; Pettigrew, 1979, 1992). Theory building entails theoretical or analytical generalisation, namely findings are transferable to other cases, and generalisable to theoretical propositions not across populations as with quantitative research (Miles and Huberman; Yin, 2003; Eastman, 1998). Thus, qualitative sampling is about appropriateness, purpose and access to good information rather than representative and random/probability sampling as with quantitative studies (Coyne, 1997; Hillebrand, Kok and Biemans, 2001).

Sampling is a complex issue in case study research as there are many variations of sampling strategies described in relevant literature and much confusion about what each technique entails (Coyne, 1997). Patton (2002) identifies 18 different sampling strategies that may be employed in case study research; two forms of random

sampling (simple random sample; and, stratified and cluster samples) and 16 forms of purposeful sampling, recommending that the selection of cases involves purposeful not random selection. The types of purposeful sampling identified by Patton are: *theoretical/theory-based/operational-construct, convenience, extreme/deviant/outlier, intensity, maximum variation, homogenous, typical, critical, snowball, criterion, confirming and disconfirming, stratified purposeful, opportunistic, purposeful random sample* (small size), *politically important, combination/mixed purpose* (see table 1 for a description of each).

Samples can be selected in advance or evolve once fieldwork begins. Sampling involves the initial selection of the case(s); and, within-case sampling in terms of choosing informants, observations, documents etc. For instance, Lye and Hamilton (2000) employ a multiple case study approach in order to examine formation and performance of exporter-importer dyad. The selection of case studies is based on the rationale of maximum variation sampling that seeks “to incorporate as much diversity as possible into the research design” (Lye and Hamilton, 2000, p. 178). Within-case sampling is conducted with the purpose of maximising the insights gleaned from fieldwork by choosing informants involved in exporter-importer dyadic relationships, with specialised knowledge on partner selection.

In the context of nursing research, Marshal (1996) refers to naturalist sampling (which takes account of individual characteristics and the context; temporal, spatial and situational) and distinguishes between convenience (the least credible method), purposeful (or judgemental) and theoretical. Marshal identifies a further type as “key informant” which adds to Patton’s list. Stake (2002) identifies three forms of case

study research; intrinsic (where the case is selected because it is of special interest), instrumental (where there is special interest in an issue or to redraw a generalisation), multiple or collective case study which is an instrumental case extended to several cases. Yin (2003) distinguishes between a single case study, which can be critical, extreme/unique or revelatory, and multiple case studies, selected to enable replication and extension (single and multiple case studies are considered further below in section 3). The main types of sampling strategies identified and how they have been defined are presented in table 1.

Purposeful, Selective and Theoretical sampling

The distinction between purposeful, selective and theoretical sampling often lacks clarity in the literature. As a result, these terms are viewed synonymously and used interchangeably even though they are defined differently (Coyne, 1997). Purposeful sampling is an “umbrella concept” that embraces the strategies of selective and theoretical sampling (see table 1).

Patton (2002) identifies theoretical sampling as one of three theoretically driven aspects of purposeful sampling; theoretical sampling, theory based sampling and operational construct sampling. In agreement with Miles and Huberman (1994), Patton (2002) defines theoretical sampling as what grounded theorists define as “sampling on the basis of emerging concepts with the aim of being to explore the dimensional range or varied conditions along which the properties of concepts vary” (Strauss and Corbin, 1998, p. 73). Such an approach to case study selection supports the constant comparative method of analysis, which involves systematically examining and refining variations in emergent and grounded concepts. Theory based

sampling occurs on the basis of the potential manifestation or representation of important theoretical constructs in the sample, which becomes representative of the phenomenon of interest. Operational construct sampling (and multi-operationalism) involves the study of real-world examples of constructs that are of interest.

Miles and Huberman (1994) suggest sampling must be theoretically driven either pre-specified up front or emerging progressively as the researcher proceeds with the case study project. Miles and Huberman refer to the latter as conceptually driven sequential sampling, describing the process whereby initial choice of informants lead to the selection of new, for example, informants ;observing one class of events can invite comparison with another; and, understanding one key relationship in the setting reveals facets to be studied in others.

Coyne (1997, p. 628) distinguishes theoretical sampling derived from grounded theory and selective sampling, which “refers to a decision prior to beginning a study to sample subjects according to a preconceived, but reasonable initial set of criteria”. Initial samples may be chosen at the early phases of the investigation (selective sampling), then others can be selected according to categories emerging from the data (theoretical sampling).

Purposeful vs. random sampling

Patton (2002) distinguishes between and “purposeful” and “representative” random sampling and suggests that in some case study research (for example evaluation studies) “the credibility of systematic and randomly selected case examples is considerably greater than personal, ad-hoc selection of cases” (Patton, 2002, p. 241).

However, Patton highlights that “purposeful random sampling” is used to enhance credibility; it is not a representative random sample for generalisations. Lieberman (2005, p. 447) supports this distinction, referring to “random case selection strategy” but argues that although it can lead to less investigator bias, for example, in comparative cross national studies where scholars may lack the technical skills for carefully readings of country data, researchers most will likely opt for a deliberate, non random approach to the selection of cases.

Eisenhardt argues that random sampling of cases is neither necessary nor preferable (see Marshal 1996 for a discussion of why random sampling is not appropriate for qualitative research). Although, it has been argued that when case studies are used to test theory (for example when combined with quantitative research), random sampling is required (Eisenhardt, 1989; Lieberman 2005; Coppadge, 1999). Thus in qualitative sampling the focus is in selecting information rich cases for study in-depth. Sampling is “purposeful” whereby “information rich cases are those which one can learn a great deal about issues of central importance to the purpose of the study the inquiry” (Patton, 2002, p. 230). To illustrate, Szulanski and Jensen (2006) examine the transfer of franchise knowledge across borders relying on a single case study. The rationale for selecting the research setting was to enhance richness, validity and depth of information obtained while establishing transferability of the case study findings to other contexts.

Case-oriented vs. variable-oriented research and selection bias - Selection on the dependant variable.

Comparative case studies often rely on a practice known as selecting on the dependent

variable or outcome. This technique involves choosing some phenomenon of interest, gathering data on occurrences of the phenomenon, then determining what characteristics the occurrences have in common (Dion, 1998). Lijphart (1975) describes the process of comparing two groups that differ in outcome (dependant variable), and attempting to locate the differences in the conditions between them (independent variables). However, its application to case study research has been criticised (Goldthorpe, 1996; King, Keohane and Verba, 1994; Achen and Snidal, 1989) as observations selected based on the value of the dependent variable may result in selection bias (for example an over-representation in positive cases), which can be rectified by the introduction of control variables.

Researchers have argued that such criticism stemming from the viewpoint of large number, variable oriented research, is based on a mis-understanding of the case-oriented research from a perspective of theory testing (Ragin, 1997; Ragin and Becker, 1992). For example in case-oriented research, cases can be selected where there is little or no variation in the outcome (e.g. “positive cases”). Ragin argues that cases need to be selected that are alike enough to permit comparison across dimensions so that variation is not caused by extraneous variables. The case-oriented researchers’ task is to address causal forces, with special attention to similarities and differences, it is not necessary (or possible) to explain all variation in case-oriented (and variable-oriented) research.

Case-oriented scholars use flexible analytical frames, where sample cases can be revised, with emphasis on concept formation. In-depth study offers important insights into diversity, which offers rich material for theory development and refinement.

Viewed in this light, Dubois and Gadde (2002, p. 58) argue that “if the research problem is focused on comparison of a few specific variables, the natural choice would be to increase the number of observations compared, in these situations the study should be designed for statistical inference ... when the problem is directed towards an analysis of inter-dependant variables in complex structures, the natural choice would be to go deeper into one case instead of increasing the number of cases”. In support Dion (1998) highlights that selecting cases on the dependant variable for qualitative, case-oriented small number research is well-known in comparative politics, where it is perfectly admissible if one is evaluating necessary (as opposed to sufficient) conditions.

Mahoney and Goertz (2004) provide support for choosing cases where the outcome is known and is purposeful sampling, for example; research should focus on cases where the outcome is possible (excluding irrelevant cases to avoid a waste of resources) and exclude cases that lack cause and outcome (otherwise results will be inflated and too many irrelevant cases will result in erroneous causal inferences). Where the outcome is impossible a case should be regarded as uninformative and irrelevant.

3. Number of Case Studies

Single vs. multiple case designs: Depth vs. replication logic

A primary distinction in designing case studies is between single and multiple case designs. Yin (2003) suggests four types of case study design, namely, holistic single case, embedded single case with multiple units of analysis; and, multiple cases with one or multiple units of analysis (for a discussion on the units of analysis see section 4). Yin advocates caution in the selection of a single case design, with careful

consideration of the potential case in order to minimise the chances of misrepresentation, and to ensure that access can be gained to the case study evidence. Where a study contains more than one case a multiple-case design is used, which allows the researcher to extend the analysis (and potential for generalisability) and to search for cross case patterns and themes (Eisenhardt, 1989; Miles and Huberman, 1994). However as Yin (2003) points, a multiple case study can require extensive resources and time.

Researchers following the (positivistic) logic of Miles and Huberman (1994) (e.g. Yin 2003; Eisenhardt, 1989; Sutton 1997) argue that multiple cases are preferable to single case designs since “good theory is fundamentally the result of rigorous methodology and comparative multi-case logic” (Sutton, 1997, p. 627). Similarly, Yin (1984) argues that the evidence from multiple cases is more robust. In terms of practical constraints, where access and resources may be limited, Yin (2003, p. 53) states “even if you can study only a “two-case” case study, your chances of doing a good case design will be better than doing a single-case study” and the external generalisation of the finding will be increased, results are found for predictable reasons (Perry, 1998).

Eisenhardt and Graebner (2007) argue that while a single case can richly describe the existence of a phenomenon, multiple case studies typically provide a stronger base for theory building as they permit replication and extension among individual cases. *Literal replication* is where similar results are found amongst cases for predictable reasons or *theoretical replication* where contrary results are found for predictable reasons (Perry, 1998). Eisenhardt and Graebner (2007) further explain that multiple

case studies enable comparison that clarify whether an emergent finding is idiosyncratic to a single case or consistently replicated by several case studies and create robust theory because propositions are more deeply grounded on varied empirical data.

Johnston et al. (2000) support the argument that evidence from multi-case designs are thought to be more compelling and credible, making the overall study more robust. The authors recognise that although there are instances where it is only possible to conduct single cases designs, they argue that the benefits of multiple cases far outweigh the added resources and time required. Halinen and Törnroos (2005) note that a single case study is appropriate for providing holistic and “thick” description, whereas multiple case studies allow case comparison and are preferred for theory generation. They suggest it is easier to find a single special case and to gain access to a single company that the researcher studies in depth, rather than find an array of multiple companies to select from.

It should be noted that numerous scholars embracing alternative ontological orientations (e.g. critical realism and interpretivism) seem to disagree that multiple cases are better and highlight the merits of single case, and the depth-breadth trade-off. To illustrate, Dubois and Gadde (2002, p. 558) conclude “it is difficult to comprehend how a little depth and a little width could contribute to the analysis of any problem”. In a similar vein, Ragin and Becker (1992, p. 83) point out “researching greater number of cases with the same resources means more breadth but less depth”. Easton (1995) argues where researchers employ multiple case design in a

way that relies on a notion of statistical significance, there will be disadvantages in terms of loss of depth.

As far as empirical evidence from a single case study is concerned, Dyer and Wilkins (1991) propose that insights from a case study should be contextualised and a single deep single case study is the optimum form of case study research. Single cases can offer rich description and partial support for theory (Easton, 1995; Dubois and Gadde, 2002). Hillebrand, Kok and Biemans (2001) argue that a single case study can be used as the basis for theoretical generalizations and offer an explanation for the relationship between investigated variables. Yin (2003) argues that a single case is analogous to a single experiments, when selecting multiple cases replication logic is analogous to multiple experiments and each case should serve a purpose. When viewed as experiments, a single case can be valuable to theory testing and development (Halinen and Törnroos, 2005).

Number of cases

Sample size – Adequacy of sample size in case study research is relative and dependent on the purpose of the study, where different sample strategies require different minimum sample sizes (Sandelowski, 1995). According to Dubois and Gadde (2002), the type of the research question guides the choice of number of cases (Dubois and Gadde, 2002). For example, when the case study researcher is mainly concentrating on the use of contrasting/differing observations for advancement of propositions and replication of findings in various settings a multi-case approach appears to be appropriate. Alternatively, if the case study researcher is concerned with

the development of idiographic explanations and deep contextualisation of case study evidence a single case study approach may be adopted (Dyer and Wilkins, 1991).

The former approach is manifested in the article of Coviello (2006) that investigates network dynamics in INVs. Following the arguments of Eisenhardt (1989) and Yin (2003), the author demonstrates the replication power of case study research by collecting data from three organisations (INVs); and performing within and cross case study analysis with the purpose of developing a set of propositions for future research. The latter perspective is evident in the article of Alajoutsijärvi, Klint and Tikkanen (2000) who investigate the importance of customer relationship strategies in smoothing business cycles in a global sector. The authors employ a single case study design associated with the interpretive paradigm and draw empirical evidence “through intensive research work and long term professional experience” (Alajoutsijärvi et al., 2001, p. 489). Their findings are largely idiosyncratic to the single case encapsulating the emic perspective: “we have written the case study description as it would have been related by managers themselves” (p. 489).

Single cases - Yin (2003) identifies five reasons for using a single case; 1. a *critical case* used in testing well formulated theory, to determine whether a theory's propositions are correct or whether some alternative set of explanations might be more relevant, 2. an *extreme or unique case*, where any the phenomenon is so rare that it is worth documenting and analysing, 3. *representative or typical case*, where the objective is to capture common place situations, 4. a *revelatory case* where there is the opportunity to observe and analysing a phenomenon previously inaccessible to

investigation and 5. a *longitudinal* study where the case is studied at different points in time.

Stake (2007) points out that case study research is a concentrated enquiry into a single case and advocates the selection of anomalous cases, where research contexts are unusual and exceptional. Anomalous cases are not satisfactorily explained by extant theory, and can extend, reformulate and challenge theory, thus providing insight into social reality and the reconstruction of theory. Platt (1988) discusses the role of a single case which demonstrates features that may exist in other cases and suggests that it can be taken into account for the formulation of general propositions. Representativeness is not important, and this function can be performed by extreme or atypical cases. Thus, individually specific or commonly ignored factors can be found to be important in the particular case.

It has been argued that one case is enough to generalise, not to a population, but *analytical* generalisation to theoretical propositions, based on real world discovery. Relevant scholars (Easton, 1998; McKeown, 1999) highlight that where a phenomenon is in question only a single case is required to show that it does exist. A single case can give alternative accounts of causation, clarify obscure theoretical relationships in a particular setting, and theory construction. McKeown (1999) suggests that a counterfactual approach is suitable where theories are relatively immature, it can extend our understanding and provides a sensible revision of poor understanding. In some circumstances, for example due to context specificity and historical background in network research, it may be difficult to compare cases (Halinen and Törnroos, 2005). Dubois and Gadde (2002, p. 588) describe the

advantages of a single embedded study, where variations were better understood as they were studied in a single setting, stating “The fact that they were not independent increased their individual contribution to the total case”.

Multiple case study design - There are no precise rules as to the number of cases that should be selected in multiple case study research. Eisenhardt (1989, p. 545) suggests that four to ten cases work well, with fewer than four it is difficult to generate theory. Miles and Huberman (1994) suggest the number of cases selected depends on how rich and complex the within-case sampling is. With high complexity, a maximum of 15 cases is recommended by Miles and Huberman (1994). With too many case studies the data becomes thinner and depth will be lost (Miles and Huberman, 1994).

Multiple cases are chosen for theoretical reasons such as replications, extension of theory, contrary replication and elimination of alternative explanations (Eisenhardt and Graeber, 2007). Although single cases typically exploit opportunities to explore a phenomenon under rare or extreme cases, a theoretical sampling approach in multiple case studies can be used where “polar types” are selected where researchers sample extreme cases in order to more easily observe contrasting patterns of data (Eisenhardt and Graeber 2007). A theoretical framework is usually needed a priori to make case comparisons possible (Yin, 2003; Eisenhardt, 1989; Miles and Huberman, 1994; Halien and Törnoos, 2005). Cases should be added until there is theoretical saturation and information redundancy (Perry, 1998).

Multiple cases also enable comparison that clarify whether an emergent finding is idiosyncratic to a single case or is consistently replicated by several studies. Miles and

Huberman (1994) discuss three sampling strategies which aid multiple case research. Typical cases are helpful in the early stages of a project to establish what is typical or average (also Patton, 2003). Negative or disconfirming cases give the maximum variation and limits to conclusions. Exceptional instances allow the researcher to qualify findings and specify variations or contingencies in the main patterns observed. Table 2 presents a summary of characteristics of single and multiple case study design to be considered when selecting a sampling strategy.

4. The Selection of the Unit of Analysis

The definition of the unit of analysis is a fundamental element of case study research. This is demonstrated in the words of Stake (2000, p.443) who suggests that “case study is not a methodological choice but a choice of what is to be studied” equating in effect the case with the unit of analysis. Similarly, Patton (2002) indicates that a key factor in selecting and making decisions about the appropriate unit of analysis is to decide what unit it is that the researcher wants to be able to say something about at the end of the evaluation. He argues that “each unit of analysis implies a different kind of data collection, a different focus of analysis of the data, and a different level at which statements about findings and conclusions would be made” (Patton, 2002, p. 228).

The unit of analysis may be classified in four overlapping categories:

- 1) social units may be an individual/ or individuals, a role, a group, an organisation, a community, social interactions (dyadic relationships),
- 2) temporal units may be an episode or encounter, an event or a period of time,
- 3) geographical units may be countries, towns, states,
- 4) Artefacts (books, photos, newspapers; technological artefacts).

The unit of analysis is the major entity that is being analysed in the study. It is the 'what' or 'whom' that is being studied. This is not to be confused with the unit of observation or the empirical unit, i.e. the unit(s) on which the researcher collects data. The unit of analysis is context-specific depending on the research questions, research propositions and research setting of the study (i.e., firm, nation, culture etc). For instance, the purpose of Coviello's (2006, p. 714) article "to assess network dynamics in INVs" is reflected on the unit of analysis, namely the network from the perspective of INVs; and the units of observation, i.e. managers, owners and founders directly involved in new venture's relationships and the evolution of the firm.

A case study may involve the examination of a single unit of analysis (holistic case study) or more than one unit of analysis (embedded case study) (Yin, 1984). Whereas a single case study examines only the global nature of an organisation, a holistic design is used, however when sub-units are analysed in a single setting, an embedded single case study approach is used (Dubois and Gadde, 2002). To illustrate, even though a case study might be about a single organisation, data collection and analysis as well as presentation of findings occurs in multiple levels including the individual, sub-groups of individuals or/and strategic business units. The use of embedded units of analysis suggests that an equal emphasis should be place on both the sub-units of the study and the case as a whole (Yin, 2003).

The embedded case study design is evident in the article by Ellis and Pecotich (2001, p. 120) who concentrate on the role of social dynamics on export initiation by exploring "the proposed relationship between antecedent social ties and the perception

of export opportunities” through the means of an embedded ex post case study. In order to address the purpose of the study, the authors defined the case as the SME and collected data within and across cases at multiple levels (individual and firm level). Although there were eight exporting firms in the sample, 31 export initiations were observed each of which constituted an embedded unit of analysis within the investigated firms. In accordance with relevant studies, the authors equated the SME firm with the case that incorporated subunits for observation and discussion, notable each export initiation defined as a product-market entry. The multiple levels of analysis were manifested in the discussion of the findings that unfolded at firm and export initiation level.

As demonstrated in the examples above, the unit of analysis is associated with the research questions of the study and assists the researcher in delineating the boundaries of case study research. On the one hand, relevant methodological literature implies that the unit of analysis and, hence, the boundaries of the case are specified a priori at early phases of the case study project (cf. Eisenhardt, 1989; Yin, 1984). According to this approach, the unit of analysis and the boundaries of the case study are clearly distinguished and remain seemingly stable in the progress of the case study investigation. This approach is manifested commonly in IB studies that rarely question case study boundaries and treat the unit of as a de facto element (cf. Piekkari et al. in press(b)).

On the other hand, there are case study researchers who acknowledge the emergent nature of the case study process and highlight the difficulty in identifying the unit of analysis and boundaries of the case study. As Dubois and Araujo (2004, p. 210) put it

“the task of the case study researcher is often to progressively construct the context and boundaries of the investigated phenomenon. The unit of analysis may reveal itself gradually to the researcher.” The open-ended nature of the case is also encapsulated in the process of “casing” (Ragin, 1992, p.218) notably, the iterative theoretical and empirical choices that the researcher makes in the course of the case study project, which may include the reconsideration of the focus of the study, the unit of analysis; and, hence the case study boundaries. One important aspect of the process of casing, i.e. the evolving case, can be found in Welch (1994), who employs the case study approach in the theme of International Human Resource Management (IHRM). The author notes: “... while the initial focus of the investigation was on IHRM activities, the use of an exploratory qualitative methodological approach allowed the examination of the process of the expatriate management” (Welch, 1994, p. 139). It may be inferred that, neither the phenomenon under investigation nor its context are necessarily known prior to starting the research. Instead, they are brought into light gradually in the investigation often constituting the most important findings emerging from the case study project (Ragin, 1992).

5. Concluding Remarks: Challenges for Case Study Researchers in IB.

Case study research is well suited to IB research where cross border and cultural settings increase complexity, even though a great deal of IB research has been quantitative. The purpose of this paper is to discuss the salient issues related to selection of cases in the IB context. These issues included: sampling strategies; purposeful, selective and theoretical sampling; purposeful vs. random sampling; selection bias; number of case studies; and definition of the unit of analysis. A review

of case study research in IB journals found that case studies were the most common form of qualitative research, albeit case study sampling in the IB context appears to be problematic (Piekkari et al., in press(b)). Indeed, the issues discussed above viewed in an IB context present important challenges for case study researchers. These challenges may be grouped into three categories:

➤ *One challenge* identified by researchers in comparative research is the *problem of having many variables*. It has been recommended that researchers can minimise the problems by increasing the number of cases (implying a statistical approach to analysing the cases), reducing the space/categories, restricting analysis to key variables and choosing cases with similar characteristics (Lijphart, 1975; Reynolds et al., 2003). Lijphart (1975) suggests comparative cases are selected to maximise variance of independent variables but minimize control/confounding variables. Selecting comparable cases will reduce the problem of too many variables and achieve a large measure of control as a result of their comparability (Lijphart, 1975). Case-orientated comparative research requires the selection of cases alike enough to permit comparison, so that the researcher can be confident that variation is not caused by extraneous/confounding variables (Ragin, 1997, Halinen and Törnroos, 2005).

➤ A *second challenge* is connected to *case comparison in an IB context*. There have been calls for more cross-national research in some aspects of IB and cross-cultural international marketing research (Cavusgil and Das, 1997; Sin, Cheun and Lee, 1999). For example, in the emerging field of enquiry into

rapidly internationalising small firms, although research is typically exploratory and qualitative in nature, generally involving case study research, it often conducted in a single location (Loane, Bell and McNaughton, 2006). Sampling issues for IB researchers include decisions on selecting the company and informant and, in cross national research, the country. In conducting qualitative cross national research care must be taken to ensure cross-cultural equivalence (Sinkovics, Penz and Ghauri 2005; Sin, Cheun and Lee1999; Cavusgil and Dias, 1997). Sin et al. (1999) highlight the problem of measuring constructs in another country, the need for construct equivalence and a common measurement. Sinkovics, Penz and Ghauri (2005) state the importance of comparability between selected locations in terms of culture, economic, social and political circumstances and technological developments. Cavusgil and Das (1997) call for a selection framework that is matched not random, recommending matched samples across cultures, and the description of the sample characteristics in detail, with reference to those factors which may impact the results of their interpretation. Sin, Cheun and Lee (1999) refer to sampling equivalence, whereby the sample for each country is comparable such that the cross cultural differences could not be attributable to dissimilar sample characteristics. They suggest this is achieved by employing similar sampling frames in all cultural groups.

- A *third challenge* concerns the *definition of the unit of analysis* and *case study boundaries*. As illustrated in the fourth section of the paper, the unit of analysis is an emergent and context specific element of case study research. For instance, the concept of entrepreneur is deeply embedded in a temporal

context and adheres to cultural, political and economic factors permeating different countries (Peng, 2001). Therefore, researchers embarking on a case study project in an IB context may be open to the possibility that the unit of analysis can hold different meanings in different cultures, countries or regions or changes over time. Again, the importance of selecting conceptually (or culturally) equivalent definitions of the unit of analysis is promoted as a solution to address context specificity of the unit of analysis. However, the development of widely accepted definitions for most concepts seems to be an elusive task (for relevant discussion see Lim and Firkola, 2000), which leaves the researcher with the choice of adopting widely referenced definitions for the needs of their study. Complexities associated with the definition of the unit of analysis in IB affect, in turn, the identification of case study boundaries. Viewed in this light, the study of IB phenomena occurs in blurring boundaries whereby practices and concepts become transfused among cultures and countries to a degree that differentiating the idiographic, which describes phenomena unique to a country or/and culture, from the nomothetic, which describes universal cultural aspects, becomes difficult.

Despite these challenges, cross national and comparative case methods may facilitate thorough analysis of dynamic social phenomena such as international endeavours of firms and individuals (Lijphart, 1975). This requires the development of cross cultural collaboration amongst researchers, the use of pre-existing knowledge of countries and good research networks within them when selecting case studies (cf. Loane, Bell and McNaughton, 2006). Each researcher presents his/her own perspective that is different

from the other. Through joined efforts, all the different subjective perspective can be combined to a larger and more focused view of IB phenomena.

6. References

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Table 1: Strategies of Purposeful Sampling Applied to Case Study Research

Strategies of Purposeful Sampling	Description	Key References
<p>Purposeful sampling includes the selection of information-rich cases for study in depth. Information-rich cases are those from which the researcher can learn a great deal about the purpose of the study and investigated phenomena of the study. A review of relevant literature puts forward different strategies for purposefully selecting information-rich case studies (Patton, 2002) .These strategies are presented below:</p>		
Theoretically -Driven Sampling (theoretical sampling, theory-based sampling and operational construct sampling)	Theoretical sampling includes “sampling on the basis of emerging concepts” in order to explore the dimensional range or varied conditions along which the properties of concepts vary. Theory-based sampling aims at finding manifestations of a theoretical construct of interest so as to elaborate and examine the construct and its variations; and supports the constant comparative method of analysis. Operational construct sampling involves the study of real–world examples of constructs that are of interest.	Glaser and Strauss, (1990, p. 177); Patton, (2002); Strauss and Corbin, (1998)
	“Theoretical sampling is the process of data collection whereby the researcher simultaneously collects, codes and analyses the data in order to decide what to collect next”	Coyne (1997, p. 625)
	the rationale of theoretical sampling is to select cases that are likely to replicate or extend the emergent theory, or to fill theoretical categories and provide examples of polar cases.	Eisenhardt (1989)
Extreme deviant or outlier sampling	focuses on the selection of cases that are rich in information because they are unusual or special in some way. The logic of this sampling strategy lies on lessons learned about unusual conditions or extreme outcomes manifested in the case.	Patton (2002)
Maximum variation sampling	aims at selecting cases demonstrating diversity in terms of the dependent variable or predicted outcomes linked to the case. It documents diverse variations and identifies common patterns encountered in the case. Maximum variation sampling has been also linked to the deliberate study of negative cases.	Patton (2002); Guba and Lincoln (1989); Mahoney & Goertz (2004)
Homogeneous sampling	concentrates on picking homogeneous cases or studying in-depth sub-groups with homogeneous characteristics.	Patton (2002)
Typical cases sampling	includes the selection of typical cases. These cases can be helpful particular in early stages of a case project and can be selected with the cooperation of key informants.	Patton (2002)
Selective Sampling	refers to decisions made prior to beginning a study to sample subjects according to a preconceived but reasonable initial set of criteria.	Sandelwoski et. al. (1992)
Critical case sampling	focuses on the selection of cases that can make a point quite dramatically or are particularly important for meeting the purpose of the study. Such cases permit logical generalisation and maximum application of information to other cases.	Patton (2002) see also Miles & Huberman (1994)

Table 1: Strategies of Purposeful Sampling Applied to Case Study Research (cont'd)

Strategies of Purposeful Sampling	Description	Key References
Snowball or chain sampling	aims at locating information-rich informant within a case or critical cases. It identifies cases of interest from people who know people who know what cases are information-rich.	Patton (2002) see also Miles & Huberman (1994)
Criterion sampling	concentrates on selecting cases that meet a set of pre-determined criteria that are important to the study. This sampling strategy has been also labelled as selective sampling that refers to selection of cases or respondents based on an initial set of criteria.	Patton (2002) see also Sandelowski et. al. (1992)
Confirmatory and disconfirming cases	the former set of cases fit to already emergent patterns, they confirm and elaborate on previous findings and/or theories adding richness, depth and credibility; the latter set of cases disconfirm and alter findings or/and theories leading to alternative interpretations of emerging empirical evidence.	Patton (2002) see also Perry (1998)
Sampling politically important cases	includes the selection of cases that are politically sensitive.	Patton (2002)
Convenience sampling	concentrates on the selection of cases which are easily accessible. This sampling technique saves resources but often at the expense of information and credibility.	Patton (2002) see also Miles & Huberman (1994)
Opportunistic sampling	involves taking on the spot decisions or taking advantage of new opportunities during the data collection process regarding the selection of information-rich settings.	Patton (2003)
Intensity sampling	concentrates on selecting case studies that manifested the investigated phenomenon intensively.	Patton (2002) see also Miles & Huberman (1994) and Kuzel (1992)
Stratified purposeful sampling	facilitates the selection of different sub-groups for investigation or levels of analysis with a case study project or across different cases	Patton (2002) see also Miles & Huberman (1994) and Kuzel (1992)
Key informant sampling	includes the selection of subjects with special expertise. May be applied within a case study project or across case.	Marshall (1996)
Random Purposeful Sampling	includes the selection of case studies in a probabilistic manner and may facilitate confirmation of theories through case research. However, the rationale for random selection of cases is not the development of a representative sample as it is in survey research. It aims at minimising the investigator's bias often the expense of selecting information-rich cases.	Lieberman (2005), Patton (2002)
Combination/ Mixed Purpose Sampling	blends purposeful with random purposeful sampling. For example, when an extreme group or maximum heterogeneity approach may yield an initial potential sample size that is still larger than the study can handle. The final selection then may be made randomly - a combination approach.	Patton (2002)

Table 2: Single vs. multiple case study selection

Single case design	Multiple case design
Deep insights (more depth)	Replication logic (more breadth)
Emphasis on thick descriptions – “better stories”	Emphasis on better constructs
Can be highly context specific	More opportunity for generalisability and external validity
Emphasis on within-case analysis	Emphasis on cross-case analysis
High level of flexibility	Less flexibility
More likely to be interpretivist approach, using inductive, iterative processes	More likely to adopt positivist approach to some aspects e.g. following a structured process and seeking for construct validation
Highly case-oriented	May have a more variable orientated approach
Theorising is on tracing the causal process in specific context	May be concerned with development of testable hypothesis and generalisable theory across settings
More opportunity to use theoretical, conceptually driven sequential & constant comparative methods of sampling	More likely to use purposeful sampling strategies where cases and informants are predetermined
Less resources are required but requires extensive access to single case evidence	Highly resource intensive
Risk of case study selected not representing phenomenon	May need to modify design where parallel cases for literal replication may turn out not to be s

Source: The authors