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Service Offshoring and Cultural Differences: Evidence from a US Financial Services Multinational's Operations in Three EU Countries[1]

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Abstract

The growing phenomenon 'service offshoring' has attracted increasing attention from the popular media, policy-makers and academic researchers. Cross-national cultural differences have been identified as a potentially significant influence on the location and effective performance of offshored services but this issue has received only limited treatment in the literature to date. To contribute to the emerging literature on service offshoring, this paper investigates the existence, nature and extent of differences in the culturally-determined work-related values of staff working at a US financial services multinational in Europe. Specifically, Hofstede's values survey module questionnaire was completed by staff working in this firm's 'retirement service centres' in Ireland, Portugal and Germany, which were involved in existing or potential bilateral intra-firm work offshoring relationships. The study identified significant differences in work-related values between the three country groups on several of the Hofstede dimensions. However, some of the results were surprising in that they contradicted the anticipated direction of cultural differences based on the published Hofstede country dimension scores. Some potential implications of these findings for the firm in question, for managerial practice more generally, and for policy-makers in different national contexts are discussed.

[1] The empirical data within this paper was collected by Paul McCoy, an Executive MBA graduate of Queen's University Management School (Belfast, Northern Ireland) as part of his MBA dissertation research. Paul was employed by 'Fincorp' at the time and was therefore able to secure significant 'buy-in' for the research from senior managers within Fincorp. Thanks are due to Fincorp, its senior managers and the individual employees who completed the online survey. Anonymity of these parties was guaranteed in return for access. Data are used in this paper with the kind permission of Paul McCoy.

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INTRODUCTION

The last decade in particular has witnessed the rapid emergence of a new form of international business activity known as 'service offshoring' – broadly speaking, the relocation by a firm of certain 'white-collar' service activities, processes, or tasks from one country (typically the firm's home country) to another country (often but not always a less developed country). This dramatic trend has been variously dubbed a 'tradability revolution' (UNCTAD, 2004), the 'second global shift' (Bryson, 2007) and the 'next industrial revolution' (Blinder, 2006). It has attracted significant attention in the popular business press (e.g. Business Week, 2003), in policy circles (e.g. UNCTAD, 2004) and from consultancy firms (e.g. Forrester Research, 2004; A. T. Kearney, 2008), and has proven politically controversial in developed countries. Perhaps belatedly, service offshoring has also been recognised as an important topic for research in international business (Griffith et al, 2008; Kenney et al, 2009), as well as related disciplines such as strategic and operations management. Thus, over the past five years, scholars have begun to map out and address the many interesting research questions provoked by the service offshoring phenomenon (e.g. Youngdahl and Ramaswamy, 2008; Bunyaratavej et al, 2011). This body of work represents something of a new departure in IB research since services have hitherto been largely neglected in the field (Doh et al, 2009).

Reflecting the embryonic nature of the service offshoring research stream, several recent papers have been concerned with issues of conceptualisation (Doh, 2005; Youngdahl and Ramaswamy, 2008; Kedia and Mukerjee, 2009; Bunyaratavej et al, 2011). Empirical research

evidence to date is rather thin on the ground and somewhat patchy in coverage. There has been a tendency to focus on the United States and India as the leading 'sending' and 'receiving' countries respectively. However, these countries accounted for less than 60% of all sent and 30% of all received offshoring service projects globally since 2002 (Doh et al, 2009), so there remains a need for research on other offshoring destinations. In keeping with the IB tradition, one of the key research questions in the emerging literature concerns the location decisions of firms engaged in various types of service offshoring, and the impact of various country attributes on offshoring success (e.g. Bunaratavej et al, 2007; Doh et al, 2009). Research on offshoring motivations and location choices has tended to emphasise cost considerations and human capital/skills as the key drivers (Lewin and Peeters, 2006; Doh et al, 2009; Bunyaratavej et al, 2011). Another factor that is often acknowledged to be important is culture - i.e. cultural distance and compatibility between the 'sending' and 'receiving' countries (Doh, 2005; Stringfellow et al, 2008; Youngdahl et al, 2010; Bunyaratavej et al, 2011). However, in terms of empirical research, the role and significance of cultural factors in service offshoring has so far received quite limited attention, for example in a handful of recent quantitative modelling studies (e.g. Bunyaratavej et al, 2007; Doh et al, 2009; Hahn and Bunyaratavej, 2010) or qualitative case study enquiries (e.g. Metters, 2008; Winkler et al, 2008). To date, few studies have sought to measure cultural differences and their impact within the context of specific firms or offshoring relationships. In addition, some papers on offshoring largely overlook the issue of cultural distance (e.g. UNCTAD, 2004; Youngdahl and Ramaswamy, 2008; Kedia and Mukerjee, 2009).

This paper aims to make a small contribution to the growing body of research on service offshoring by investigating and reporting on the existence, nature and extent of culturally-determined differences in work-related values between different country sites within one US

multinational operating in the outsourced financial services space (dubbed ‘Fincorp’ to protect the identity of the firm). Specifically, the study sought to explore the issue of cultural differences via an application of Hofstede's values survey module research instrument to staff working in this finance multinational's ‘retirement service centres' (RSCs) in three different European countries (Ireland, Portugal and Germany). These three RSCs were of interest because they were involved in various bilateral intra-firm offshoring relationships, notably between the Irish and Portuguese RSCs and more recently between the German and Portuguese RSCs. Anecdotally, managers in the firm in question had become concerned that certain operational difficulties in these offshoring relationships might be attributable to cultural factors (mismatches or misunderstandings) and were keen that the issue be investigated further. This gave the study an ‘action research' dimension but the study also hoped to engage with wider ongoing academic debates about service offshoring, including those concerned with offshoring location choice.

Following a review of the relevant literature, the paper first describes the case context for the research, then outlines the methodology, before presenting empirical evidence on the existence, nature, and extent of cultural differences between staff in the three EU countries. Significant differences are identified between the culturally-determined work-related values of the three country groups on several of the Hofstede dimensions. However, some of the results are surprising in that they contradicted the anticipated direction of cultural differences based on the published Hofstede country dimension scores. Some potential implications for the firm in question, for managerial practice more generally, and for policy-makers in different national contexts are then discussed.

LITERATURE REVIEW: SERVICE OFFSHORING AND CULTURE

Service offshoring

One recent definition describes service offshoring as "the transnational relocation or dispersion of service related activities that had previously been performed in the home country" (Bunyaratavej et al, 2011, p.71). The literature has drawn a key distinction between two different modes of offshoring: captive offshoring and offshore outsourcing (UNCTAD, 2004; Sako, 2006). Whereas offshoring implies a geographical location decision (typically polarised into home country versus overseas, or onshore versus offshore), the distinction between the captive offshoring and offshore outsourcing models hinges on a firm boundary decision. In the former case, a firm may set up a wholly-owned subsidiary in the overseas location, with this captive centre then providing services back to the home country; this involves foreign direct investment and results in intra-firm international trade in services. In that case, a firm contracts with an independent firm in the overseas location, who is typically a specialist in the particular service activity being outsourced; no foreign direct investment is involved but inter-firm international trade in services results.

UNCTAD (2004) identified three main categories of offshored services that were leading the 'global shift in services': customer contact centres, shared services centres; and IT/software development centres. These categories highlight an important distinction between so-called 'front office' customer-facing service activities (for example, contact centres) and 'back office' services that are provided on a business-to-business basis (in offshore outsourcing) or an intra-firm basis (in the captive model). Several authors have attempted to isolate the characteristics of service jobs and activities that are most susceptible to offshoring. The suggested attributes include: high (codifiable) information content, able to be transmitted via

ICT, low requirement for face-to-face contact with the customer, and routine and standardisable tasks (Apte and Mason, 1995; Jensen and Kletzer, 2007). Recently, Doh et al (2009) have specified 'interactivity', 'repetitiveness' and 'innovativeness' as three key criteria for distinguishing different types of offshored services, and used these attributes to show why the locational preferences of different offshored services may vary.

Culture and international business

> "Cultural differences are the most significant and troublesome variables encountered by the multinational company. The failure of managers to comprehend these disparities fully has led to most international business blunders." (Ricks, 1999, p.54)

Culture and cross-cultural management issues have been a long-standing research theme within international business and international management studies (Leung et al, 2005). The foremost study providing guidance about the cultural characteristics of countries is Geert Hofstede's (1980) study of cultural differences. Hofstede compared the work related values and culture of employees within over forty different national subsidiaries of one large multinational business organisation (IBM) over the period 1967-1978. Hofstede defined culture as, "the collective programming of the mind which distinguishes members of one category of people from those of another" (1980, p.12). His initial study delineated four 'cultural dimensions' evident in each culture, namely power distance (PDI), uncertainty avoidance (UAI), individualism (IDV) and masculinity (MAS). A fifth dimension known as long-term orientation (LTO) or Confucian dynamism was explored in later studies (e.g. Hofstede, 1988). Hofstede's framework has been favoured by scholars for a number of reasons, including the limited availability of alternatives, convenience, popularity, and simply habit (Tapas et al, 2009). In a wide-ranging review of 121 different instruments used for

measuring culture within management studies, Tapas et al (2009) found that 97.5% of all reviewed measures contain at least some dimensions that came from Hofstede or were conceptually similar to those introduced by Hofstede; very few models, normally those from non-management literature, were found to contain no links to Hofstede's work. These authors also found very close conceptual and empirical correspondence between Hofstede's dimension scores and those obtained using other instruments for measuring culture.

Globalisation, organisations and national culture

Whilst Hofstede argues that cross-national cultural differences are quite resilient over time, other authors have suggested that a set of process under the banner of 'globalisation' have been progressively breaking down barriers between countries and may be eroding some of the differences between national cultures. For example, Giddens (2002) describes globalisation as a socio-cultural (as well as economic) force that is making the world 'smaller every day' and affecting culture, traditions, families, and politics. Within sociology and anthropology such arguments are controversial. Authors such as Horton (2000) and Pieterse (2009) describe three competing theses on the cultural consequences of globalisation: homogenisation, which proclaims that global culture is becoming standardized around a Western or American pattern; polarisation, wherein national cultures are resilient; and hybridisation, where cultures mix, generating new differences. The debate between these positions is said to be unresolved and short on empirical substantiation. From an international business point of view, arguments for diminished cultural distance (homogenisation) might carry most credibility in the case of educated white-collar 'service class' employees, where employees are most mobile, most exposed to globalisation pressures, and where organizational and professional cultures might act as a counter-weight to national culture (Stringfellow et al, 2008). Some authors in the IB literature have suggested that firms might be able to counter some of the effects of cultural

distance by developing effective organizational cultures (e.g. Zhao, 2004). Overall, however, the notion of cultural convergence is still seen as controversial in the IB literature and has been questioned (Leung et al, 2005). It has been suggested that any cultural convergence resulting from globalization is likely to occur very slowly, so the effects of cultural distance will remain an important consideration in international strategy for the foreseeable future (Hitt et al, 2006).

Service offshoring and culture

It has been observed that the significance of culture in international strategy is likely to be amplified by the increasing importance of the people-intensive service industry within international business activities (Hitt et al, 2006). Consistent with this observation, it is notable that several recent studies of the service offshoring phenomenon have drawn attention to the possible importance of cultural factors, for example as a consideration in offshore location choice or as a potential risk factor for effective operation offshore service strategies. Thus, Youngdahl et al (2010) comment that "research as well as numerous anecdotal examples suggest that cultural differences can and do impact the effectiveness of offshore service operations" (p.801). Certain high-profile failures in services offshoring have also been attributed, at least in part, to difficulties encountered as a result of cultural differences between the sending and receiving countries (Metters 2008). Survey evidence has also suggested the potential importance of culture in service offshoring. An A. T. Kearney (2008) executive survey found that cross-border culture and communication issues were reported as the second most important problem encountered in offshoring, and were flagged as such by 100% of firms deemed as the best performers. And a lack of 'cultural fit' was cited as second biggest perceived risk in offshoring in an 'Offshoring Research Network' survey (Lewin and Peeters, 2006).

Empirical studies on issues raised by cross-national cultural difference within service offshoring relationships are still rather few in number. Thematically, these empirical studies have been primarily concerned with either cultural factors as a potential influence on offshoring location choice or the potentially negative impacts of cultural differences on offshoring success. Both types of study have found support for the importance of cultural issues in service offshoring. It is notable that many of these studies have adopted Hofstede's framework, in whole or in part, to guide their empirical investigations (Table 1). For example, Hahn and Bunyaratavej (2010) included four Hofstede dimensions in their multivariate modelling of offshoring location choices and found significant effects for UAI, IDV and PDI. Also note that Stringfellow et al (2008) incorporated two Hofstede dimensions (PDI and IDV) along with other constructs (including two from Trompenaars) in their conceptual discussion of 'invisible costs' in offshoring services work.

Two gaps in the empirical literature to date concern: (1) the tendency for studies focus on the United States as a sending country and India as a receiving country of offshored service projects – European locations have received relatively little attention; (2) few studies appear to have sought to quantify the nature and extent of cross-cultural differences within specific offshoring relationships. A third observation concerns an apparent tendency in the literature to downplay the significance of cultural factors within back-office services, by comparison with customer-facing service activities (e.g. Lewin and Peeters, 2006; Stringfellow et al, 2008). It is suggested here that this may be misleading and there may be a risk of underestimating the potential problems associated with cross-cultural communications between 'back offices' within the same firm (captive offshoring model) or between firms and their 'back office' offshore outsourcing partners. This study hoped to address some of these gaps.

CASE STUDY CONTEXT: FINCORP'S 'RETIREMENT SERVICE CENTRES' IN IRELAND, PORTUGAL AND GERMANY

The firm under investigation in the empirical study is a US headquartered multinational enterprise with over 18,000 employees and operations in over 40 countries worldwide, including many European countries. The company is a provider of financial consulting, outsourcing and investment services to corporate clients. One key strand of the business involves the provision of strategic and compliance-related pensions advice and actuarial services to companies and pension scheme trustee boards to support the overall financial management of pension plans. These services are delivered by a network of 'Retirement Service Centres' (RSCs) around the world, some of which are located in what might be termed 'nearshore' locations. For example, the firm's office in Belfast, Northern Ireland, provides back-office actuarial services for the firm's UK business, which is headquartered in London.

In recent years, within the European region, certain back-office calculations for services being provided by an office in one country began to be passed to an office in another country for completion – i.e. effectively they were offshored within the firm (captive model). Previously, all work would have been completed in the country of origin. This study was focused on a series of bilateral working relationship between RSCs in three EU countries - Ireland, Portugal and Germany (Figure 1). Since 2004, offices in Ireland (located in Belfast, Dublin and Cork) have been passing work to an equivalent office in Portugal for completion. Subsequently, in 2009, a pilot programme was launched for sending similar work from Germany to the Portuguese RSC in Lisbon for completion. At the time of the study, there was

also a potential for work originating in Germany to be passed to offices in Ireland for completion and vice versa. There were two primary motivations for these work transfers: first, the achievement of cost reductions (particularly in the case of the Portuguese office, where labour costs were lower and suitable graduates were in good supply); and, second, for capacity management reasons (since offices in each country would tend to have different busy times during the year depending on dates for financial disclosure). Competitors of the multinational have also incorporated similar offshoring arrangements in their strategies, thus increasing the momentum for such movements.

The type of work being transferred from one country to another involves financial calculations and procedures, which are similar but not identical across European nations. This is relatively skilled or technical back-office work, which demands high levels of employee numeracy and IT literacy, typically requiring tertiary education. A level of experience within the field is also necessary and new employees undergo rigorous training programmes. Although the work is complex, a level of standardisation can be applied to the calculations and procedures being passed from one country to another but the potential complexity and variability of the tasks involved means a 'one size fits all' process is inappropriate. Employees are required to exercise some judgement in performing the work, including the application of tacit knowledge and the ability to handle exceptions.

The initial motivation for the study came from within the company. Specifically, senior managers within Fincorp had expressed practical concerns – based on anecdotal evidence and employee feedback - about the potential effects of cultural differences on the working relationships between the offices in the various EU countries. Thus the primary research question in the empirical study was to ascertain the existence, nature and extent of any

comparative differences in culturally-determined work-related values between the employees of the firm's Irish, Portuguese and German RSCs, using Hofstede's five dimensions framework. The aim was to better inform senior managers about any cross-cultural issues that might impact upon cross-border (offshored) work transfers between the three RSCs, and to provide a basis for taking appropriate managerial decisions on this issue – such as guidance on the cultural risks involved in current and future work transfers and the likely steps required to mitigate these.

METHODOLOGY

This study used Hofstede's (1980; 1991; 1994) cultural dimensions framework to examine the existence, nature and extent of cultural differences between employees of Fincorp's in three EU countries: Ireland, Portugal and Germany. Specifically, the study was interested in exploring cultural differences within the existing bilateral offshoring relationships between the Irish and Portuguese and German and Portuguese RSCs, as well as the potential relationship between the German and Irish centres (Figure 1). The various hypotheses under examination are detailed in Table 2. The instrument used in this study was Hofstede's Values Survey Module 1994 (VSM-94). The VSM-94 is an inferential survey that aims to establish a relationship between variables (scores on the different dimensions) and concepts (existence of cross-national cultural differences). The independent or predictor variable is therefore nationality and the dependent variables are the scores on each dimension. The VSM-94 was used instead of the more recent VSM-08 as Portuguese and German translations of the latter were not available at the time of the study. Hofstede's (1994) recommendations guided many aspects of the research.

The VSM-94 instrument

The Values Survey Module 1994 (VSM 94) is a 26-item questionnaire developed for comparing culturally determined values of people from two or more countries or regions. It originated in and is derived from Hofstede's (1980) study of IBM. The questionnaire allows scores to be computed for five dimensions of national or regional culture (Power Distance; Individualism; Masculinity; Uncertainty Avoidance; and Long-term orientation) on the basis of responses to four questions per dimension (total of 20 content questions). The calculation of the five dimension scores is explained in Table 2. Of the twenty content questions, eight deal with work goals, four with values, two with perception of organisational climate, and six with beliefs. Most questions use a five-point Likert scale and the remainder use alternative-choice questions. The other six questions in the questionnaire are concerned with demographic characteristics of the respondent (Hofstede, 1994).

The VSM instrument has been subjected to comprehensive assessment and critique of its validity and reliability over many years, which is said to have helped to eliminate biases related to its use (Hofstede, 1991; Sondergaard, 1994; Kelleher, 1996). Hofstede's (1980) study has been widely replicated by researchers in international and cross-cultural management. An analysis of replication studies by Sondergaard (1994) showed that the cross-national differences predicted by Hofstede's dimensions were largely confirmed. However the generalisability of Hofstede's study has been criticised, for example on the grounds that there may have been built-in bias as the employees in question may have been hired on the basis of their bi-culturality, and also because the respondents were drawn almost exclusively from male middle-managers in marketing and services departments of IBM (Robinson, 1983).

Practicalities and procedures

Versions of the VSM-94 in Portuguese and German were obtained directly from Geert Hofstede via email correspondence. These versions had been used in previous replications and were provided with the understanding that the translations could not have accuracy guaranteed. With the assistance of fluent bilingual colleagues a process of 'back translation' was employed where the Portuguese and German surveys were translated back into English. From the back translated version, certain questions in both the Portuguese and German versions were revised when, in collaboration with the translators, a question was deemed to be potentially confusing or worded improperly. It should also be noted that one of the demographic questions in the VSM-94 was amended in the version issued to staff in the Belfast office. Given the turbulent history of Northern Ireland and its gradual emergence from a complex ethno-political conflict, Question 25 concerning nationality was potentially controversial and might have provoked a range of responses including 'Irish', 'British', 'Northern Irish', 'British and Irish' and 'Ulster'. This question was therefore amended to 'What is your nationality (if not from Northern Ireland)?'.

To maximise the response rate, a web-based survey tool, developed in-house by the multinational under observation, was used for the collection of data. This method of questionnaire has become commonplace (Couper et al, 2001). The survey tool supported the use of the three languages concerned, allowing invitations and online directions to be issued in the appropriate language. A further benefit of the tool was that it did not allow recipients to skip or leave out any questions, ensuring there were no invalid returns or missing values. The questionnaires were first delivered during July 2009, with one reminder being sent approximately two weeks later. The survey was closed four weeks after the initial distribution. In terms of ethical considerations, the organisation under observation was fully

aware of the nature and purpose of the research, and all participants were given the necessary information with which to make an informed, voluntary decision to participate. Confidentiality and anonymity were guaranteed with all individual responses being anonymous.

The populations under study were the employees of Fincorp in Ireland, Portugal and Germany. The sample units were the business sections of Fincorp that were engaged in the bilateral offshoring relationships in question, in Ireland, Portugal and Germany. The questionnaire was issued to all employees working within the business section engaged in offshoring in the offices located in Belfast, Dublin and Lisbon. Given the relatively small sizes of the equivalent section in Cork, the questionnaire was extended to all professional employees there. In Stuttgart certain sections of professionals were surveyed, dependent on permission to conduct the survey being given by relevant section heads. Due to the lack of information available on individual employees in each office prior to distribution of the questionnaire, it was not possible to target the questionnaire to a stratified sample. Also, screening for consistency with criteria for inclusion had to be carried out after the completed questionnaires were received. Thus, a total of 46 respondents were excluded from the analysis because their nationality was different from that under observation (i.e. they were foreign nationals in the country being surveyed). This primarily affected the Irish offices where a total of 39 foreign nationals (12.7% of respondents) had to be excluded (covering 20 different nationalities). Four foreign nationals were also excluded from the Portuguese sample (2 Brazilians, a Pole and a Venezuelan) and three from the German sample (Croat, Pole and Turk). Although Hofstede (1994) recommends that the VSM questionnaire be applied to well matched samples, no ‘up front’ matching of samples was possible due to the absence of

information to allow sample stratification and the desire to achieve sample sizes near to the optimal suggested size of 50 from the Portuguese and German offices[2].

Response rates and sample characteristics

Questionnaires were sent to a total of 650 email addresses across three countries; 522 in Ireland, 56 in Portugal and 72 in Germany (Table 4). Five email addresses were found to be no longer valid. A total of 407 responses were completed, giving an overall response rate of 62.6%; response rates varied from 52% in the Cork office to 93% in Lisbon. After excluding 46 responses on nationality grounds (as per above), a total of 361 usable responses were obtained; including 267 from Ireland, 48 from Portugal and 46 from Germany. Importantly, the number of valid responses obtained from each of the five offices was close to or above the ideal number of 50, as suggested by Hofstede (1994).

The key characteristics of the samples are detailed in Table 4. In terms of gender, 45% of all respondents were males and 55% female. In aggregate, the three Irish offices mirrored this split, whereas the German office had a small majority of males (59%). The Portuguese sample was quite different with 75% of respondents being female, however, with only 56 staff in the Lisbon office, and a response rate of 93% to the survey, this potential bias was unavoidable. In terms of age, a majority of respondents in the Irish and Portuguese offices were between 25 and 34 (56% and 71% respectively compared to only 32% in Germany). German respondents were slightly older on average, with 55% being aged 40 and over compared to only 21% in Ireland and 4% in Portugal. Finally, in terms of level of employment, the three country

[2] The accuracy and reliability of the VSM-94 survey is dependent on the number of respondents as reported by Hofstede (1994, p.1); "the minimum number of respondents per country or region to be used in comparisons is 20. Below that number, the influence of single individuals becomes too strong. The ideal number is 50".

samples were broadly similar, with academically-trained professionals and managers making up the vast majority of staff. Academically trained professionals (but not managers) accounted for 62% of respondents in Ireland, 69% in Portugal and 59% in Germany. Managers accounted for 24% of respondents in Ireland, 25% in Portugal and 26% in Germany. Since, Hofstede (1991) recommended that replication studies using the VSM should be directed by well matched samples (i.e. similar samples in all respects except nationality), the different gender and age characteristics of the country samples may give some grounds for caution in interpreting the results. However, the fact that all respondents were employees of the same firm and from broadly similar levels of employment, should allow some confidence in the comparability of the three country samples. The matching issue may also be less of a concern in this study given the focus on identifying the existence, nature and extent of culturally-determined differences in work-related values between offices that are engaged in bi-lateral offshoring relationships, rather than making wider generalisations about cultural differences between the three countries.

RESULTS: OBSERVED DIFFERENCES IN CULTURALLY-DETERMINED WORK-RELATED VALUES BETWEEN IRELAND, PORTUGAL AND GERMANY

Since the Irish operations of Fincorp were dispersed over three office locations, the first requirement was to look for cultural differences between these offices. The dimension scores for the three Irish offices, calculated using the method described in Table 2, are shown in Table 5a. Eyeballing this data suggests the three offices are very similar on all dimensions, except masculinity. The null hypothesis (H_10) stated that there should be no significant differences between these offices on Hofstede's five dimensions (Table 3). If the null hypothesis was rejected it would not be valid to treat these Irish offices as representative of a

single national culture and as a single entity for comparison with the Portuguese and German offices. Given the political divide between the north and south of Ireland, and the possible existence of regional differences within Ireland, there was thought to be a possibility that cultural differences might be found (H_1A). To statistically examine the data further, one-way analysis of variance (ANOVA) tests were conducted to test for differences between the means of the three groups on each dimension score. The results of these tests, shown in Table 5b, show no statistically significant differences at 5% level between the means of the three groups on any of the five dimension scores (in all cases the F statistic was below the critical F value). Since H_1A is rejected, we can assume that three Irish offices are drawn from the same national culture and therefore pool the responses from all three Irish offices into a single group for subsequent comparisons with the Portuguese and German samples.

The remaining hypotheses (H_2A, H_3A, H_4A and H_5A) were concerned with the possible existence of differences in culturally-determined, work-related values ('cultural differences') between the employees of Fincorp in Ireland, Portugal and Germany, as measured by each of the five Hofstede dimension scores (Table 3). Dimensions scores for the three country samples were calculated as per the procedure in Table 2, and are shown in Table 6a. Eyeballing the data shows that there were indeed some clear differences between the three country samples on four of the five dimensions, perhaps most notably on UAI, but not on IDV. To statistically examine the data further, one-way analysis of variance (ANOVA) tests were first conducted to test for differences between the means of the three groups on each dimension score (H_2A). The results of these tests, shown in Table 6b, show statistically significant differences between the means of the three country groups on four of the five dimension scores. Specifically, there were significant differences (i.e. the F statistic was above the critical F value) for PDI, UAI and LTO at the 1% level, and for masculinity at the

weaker 5% level. IDV was the only dimension where no significant difference was found between the means of the three country samples (Table 6b).

Having established that there were significant differences between the three country samples, two-tailed t-tests were then employed to examine these further in the context of the various bilateral offshoring relationships within Fincorp. The outcomes of these various t-tests are reported in Tables 7a-7c[3]. In addition to these statistical tests, comparisons are also made with the official Hofstede country scores for each cultural dimension. Hofstede (1994) cautions against detailed comparison of the scores generated from different surveys but, since the objective of the VSM is to measure the relative position of countries on each of the dimensions, it is possible to compare the direction of any observed differences within the Fincorp study against the direction of differences 'predicted' in the official Hofstede country scores (see Tables 7a-7c). Below the results for each pair of countries (involved in an existing or proposed bilateral offshoring relationship within Fincorp) are discussed in turn.

Ireland versus Portugal

Recall that within Fincorp, there has been an established offshoring relationship between the Irish and Portuguese offices for several years. Hence, the results for this bilateral relationship are of the most immediate relevance for Fincorp's managers. According to the t-test results, the mean dimension scores for the Ireland and Portugal samples are significantly different at the 1% level for UAI and LTO (i.e. H_4A is accepted). Although the dimension scores for PDI and MAS are also noticeably different between the two country samples, this difference was only very weakly significant at the 10% level in the t-tests, so H_40 cannot be confidently rejected for these two dimensions. Turning to the comparison with the official Hofstede

[3] Full details of the t-tests are not reported here due to space constraints but are available on request.

scores, we see some interesting and surprising contrasts (Table 7a). Notably, only UAI shows a significant t-test result and cultural difference of the direction and magnitude predicted by the Hofstede scores; i.e. Portugal had much higher score for UAI than Ireland. On other dimensions, however, the results from Fincorp are not consistent with those that might have been expected. For example, the significant difference found for LTO, with Ireland having the higher score, was not predicted. Also, the PDI and MAS scores from Fincorp, whilst not significantly different for the two countries, are in the opposite direction to the Hofstede scores; the PDI score for Portugal and the MAS score for Ireland were both much lower than expected on the basis of the Hofstede data.

Germany versus Portugal

Within Fincorp, the German and Portuguese offices were in the early stages of a pilot offshoring arrangement at the time of the study. Hence the results for this bilateral relationship were of potential interest to Fincorp's managers in assessing the pilot. According to the t-test results, the mean dimensions scores for the Germany and Portugal samples are significantly different at the 1% level for PDI and MAS (Table 7b). However, the surprising finding on these two dimensions is that the direction of the observed differences are in the opposite direction to those predicted by the official Hofstede scores; largely because the Portuguese PDI score and the German MAS score are both much lower than expected (Table 7b). None of the other three dimensions show a significant difference in means under the t-test, although the dimensions score for UAI and LTO both follow the predicted direction as per Hofstede (i.e. Portugal has higher UAI and Germany has higher LTO). Finally, the predicted difference on IDV (higher for Germany) was not observed since the Portuguese IDV score was much higher than suggested by the Hofstede data.

Ireland versus Germany

Finally, recall that there was no existing offshoring relationship between the Irish and German offices at the time of the study, although a future relationship had been mooted. Thus, the results for this relationship might help better inform managers in Fincorp about the possibilities here. The t-test results suggest significant differences between the means of the Irish and German samples on four of the five dimensions; UAI and LTO at the 1% level and PDI and MAS at the 5% level (Table 7c). Three of these differences were in the direction predicted by the Hofstede scores (PDI, UAI and LTO) but the result for MAS was unexpected; the two countries had similar masculine scores in the Hofstede data but were both much lower in the Fincorp study with the German score being significantly lower and feminine.

DISCUSSION

The paper aimed to contribute to the small empirical literature on cultural differences in the context of service offshoring by investigating the existence, nature and extent of culturally-determined differences in work-related values between three inter-related country sites within one US financial services multinational's European operations, using Hofstede's VSM instrument. The study of Fincorp has yielded some interesting results, some of which were expected and others which were surprising. At a high level, the study has found evidence of culturally-determined differences in work-related values between the employees of Fincorp in Ireland, Portugal and Germany. Significant differences were identified on at least two Hofstede dimensions in each of the three bilateral relationships under investigation; thus H_3A, H_4A and H_5A were all partially accepted. In terms of the specific findings, however, note that significant differences were not found on all five Hofstede cultural dimensions and

differences were not found for the same dimensions in each bilateral relationship. In light of the existing and potential intra-firm offshoring relationships between these three offices, these cultural differences should be taken seriously by the senior managers within Fincorp as they have the potential to impact upon the effectiveness of working relationships in a number of ways. The evidence here suggests a complex set of implications for the management of Fincorp and means that any response or action on their part would have to be tailored to each specific bilateral offshoring relationship.

Overall, the results suggest that 'uncertainty avoidance' and 'long-term orientation' are the biggest areas for potential cross-cultural difficulties in the offshoring relationships under examination, since there significant differences (at 1% level) on these dimensions in both the Ireland-Portugal and Ireland-Germany relationships (but not Germany-Portugal). Consistent with the published Hofstede country scores data, Portugal was by far the most uncertainty averse of the three countries studied, followed by Germany then Ireland. High uncertainty avoidance scores indicate less tolerance for uncertain situations, with the associated cultural norms being, 'less risk-taking', 'fear of failure', 'preference for clear requirements and instructions' and 'conflict in organisations is undesirable' (Hoppe, 1990, p.43). Here this may flag up to the offices in Ireland that exact and detailed descriptions of requirements and in-depth process directions should be provided when offshoring services to either Portugal or Germany; lower UAI cultures such as Ireland are said to have a 'preference for broad guidelines' (Hofstede, 1984, p.132). Conversely, the Portuguese and German offices could be made aware that the direction to complete processes from Ireland may not be provided with the depth of detailed instruction expected. LTO produced some slightly unexpected results; although Germany had the highest LTO score, as predicted, Ireland was found to have a higher LTO than Portugal, contra the published Hofstede country scores. High LTO societies

will more easily accept that good results take time to happen, and not expect quick results from their efforts. This dimension may be of particular interest within an offshoring arrangement as both countries involved may have differing perspectives on what constitutes 'success' (Hofstede, 1994).

Some surprising results were found for the remaining three dimensions and the managerial implications are less clear-cut. 'Individualism', which Hofstede's country scores had suggested might be an issue in the Ireland-Portugal and Germany-Portugal relationships, was not found to vary significantly in any of the t-tests or ANOVA tests, and therefore does not seem to be an issue of major concern for Fincorp's management. The main reason is that the Portugal IDV score was much higher than predicted by the Hofstede data, implying (tentatively) that modern Portugal is a much more individualistic society than has traditionally been assumed, and more akin to its western European neighbours in this respect. In terms of 'power distance', Portugal unexpectedly returned the lowest score of the three countries studied. Portugal has traditionally been portrayed as a high power distance society but in this study it seems the biggest concern for managers would concern the power distance gap between Germany (medium) and Portugal (low). This difference could highlight issues with the formation of trust between cross-cultural groups in the offshoring context, with higher power distance implying a propensity for lack of trust in others (Doney et al, 1998). Higher PDI scores also imply a higher dependence on superiors outside the group, while lower scores would imply a desire for a higher degree of independence. With the need to have a fluid working relationship between countries involved in offshoring, this friction on the degree of independence of cross-national committees or steering groups could be a problem. PDI seems less likely to be an issue in the bilateral relationships involving Ireland, although the potential relationship with Germany might require caution on this dimension.

Finally, the mean scores on the 'masculinity' dimension demonstrated some radical departures from the published Hofstede country scores in the cases of Ireland and Germany, with both countries registering much more feminine (i.e. lower) scores than expected. In the case of Germany, this finding is consistent with a similar result in Rotondo Fernandez et al (1997). As a result, the managers of Fincorp might wish to consider the possible implications of differences on the masculinity dimension in the pilot Germany-Portugal relationship in particular. Employees in workforces with low MAS scores, indicate a departure from more masculine values, such as aggressiveness towards: concern with having good working relationships with direct superiors; working in cooperative relationships with one another; and quality of life (Hofstede, 1980). In an offshoring context an awareness of potentially different conflict resolution styles may be of use, with societies showing low masculinity tending to be more focused on compromise and negotiation, in contrast to a more 'masculine' desire for decisiveness.

CONCLUSION AND IMPLICATIONS

This study has sought to contribute to the emerging literature on service offshoring by investigating the existence, nature and extent of culturally-determined differences in work-related values between three inter-related country sites within one US financial services multinational's European operations. The study has found evidence of significant differences in work-related values between the three country groups on several of the Hofstede dimensions. These results seem to provide confirmation that cultural differences should be an important consideration in decisions offshoring location choice and in maximising the effectiveness of offshoring relationships. The study can be regarded as a small-scale

replication of Hofstede's earlier work but, distinctively, we believe it to be the first such study conducted in the context of intra-firm service offshoring relationships.

In considering the wider implications of this study, it is important to consider its limitations. First, as the study is effectively a case study of a single organisation, there are the usual concerns about the generalisability of its findings. Although Hofstede's (1980) study was also conducted in one multinational firm, his sample sizes were much larger. Whilst, Hofstede's framework assumes that the observed work-related values are influenced by underlying national cultural values, it might not be wise to generalise the findings here to other industry sectors or to the wider Irish, Portuguese or German populations, due to the small sample sizes and possible influence of organisational culture and industry-specific factors. This study has looked at the situation in a particular set of intra-firm service offshoring relationships in the financial services sector and within Europe. The evidence presented here is therefore of potential interest to managers operating in the service offshoring area, notably in situations involving technically-complex back office processing tasks where the communication of instructions and requirements between the sending and provider locations is intrinsic. Future research should examine different national contexts, for different industry sectors and work activities, and for other types of offshoring relationship (e.g. offshore outsourcing).

Second, some caution is required in reading too much into the findings of this study since the country samples were not perfectly matched on all potentially relevant factors (as recommended by Hoftsede, 1994). The samples were well matched by occupation type and came from the same multinational firm but there was some variation between the country groups by gender and age. A larger number of respondents would have enable better matching of samples by gender, age and job description but this was not possible due to the number of

staff in the Portuguese and German RSCs. Third, this study has focused on investigating the existence, nature and extent of cultural differences within offshoring relationships but has not sought to examine the effects and consequences of these difference on the effectiveness of these relationships. Future studies might wish to address this deficit. Fourthly, this study has relied on quantitative survey methods but qualitative methodologies have the potential to contribute much to our understanding of the effects of cultural difference in service offshoring relationships.

Implications for practice

The study has a number of tentative implications for managerial practice, both within Fincorp and more widely. The scenario in the case has echoes of Metters' (2008) assertion that "management – particularly US management – continue to make service offshoring decisions ignoring or minimizing the inevitable cultural conflict" (p.727). The evidence presented here strongly supports the view that managers in service offshoring situations ought to take the issue of cultural compatibility more seriously, even in operations decisions that seem devoid of cultural content (e.g. offshoring of non-customer facing, back office processing roles), since observed cross-national variations in work-related values present a 'cultural risk' factor. In the existing offshoring relationships, this might mean taking proactive actions to manage and minimise the negative consequences of 'cultural mis-match' between the work-related values of employees in the offshore centre and its onshore client (i.e. receiver and sender locations). Here the information systems literature, which is at a more advanced stage of development on the offshoring question due to the longer history of offshore software development, offers some useful insights and suggestions (e.g. Krishna et al, 1994; Winkler et al, 2008). For example, Krishna et al (2004) advance the following practical steps that managers can take to mitigate and cope with cross-cultural challenges in service offshoring

relationships: using coordination/control systems to harmonize between offshore centre and its onshore client; encouraging a 'negotiated culture' of cross-cultural teams and developing a compromise 'working culture'; and using 'cultural bridging staff' and exchange mechanisms.

More fundamentally, it can argued that, when planning future work transfers to offices in different countries, it might be prudent to analyse the cultural sensitivity of those specific activities and identify the requisite cultural attributes, then seek to match these to the most culturally compatible overseas location within the firm. For example, in the Fincorp case, the existence of significant cultural differences on four of the Hofstede dimensions suggest the need for caution in developing any future working relationship between the Irish and German offices (Table 7b). Finally, firms and managers might need to take cultural factors into consideration when making initial offshore location choices (e.g. potentially avoiding certain locations on the basis of cultural distance and the likely barriers this might create to effective operation of the offshoring relationship). For example, Youngdahl et al (2010) propose that firms seeking to offshore service activities should identify the requisite cultural attributes for that specific activity, and assess the cultural compatibility of potential offshore locations as part of their location choice decision-making process.

Policy implications

As a result of the 'shift to services' in global FDI flows (UNCTAD, 2004), many regional/national economic development and investment promotion agencies are now trying to attract mobile services FDI projects. In pursuing this strategy, the evidence in this paper suggests that these agencies might be advised to:

(a) Develop a more nuanced understanding of the requisite cultural characteristics for particular types of offshore service activity, and seek to identify the most appropriate types of project to target in light of their regional/national cultural traits;

(b) Seek, in their investment promotion and marketing efforts, to emphasise the cultural compatability (lack of cultural distance) of their location to key sending countries;

(c) Focus their attempts to attract offshore services FDI projects from the most culturally compatible sending countries, since such projects are most likely to prove successful and therefore sustainable.

REFERENCES

A. T. Kearney (2008) The Offshore Culture Clash, Executive Agenda, Volume XI, Number 2. Available from: http://www.atkearney.com/index.php/Publications/the-offshore-culture-clash.html (last accessed 29/01/2011)

Apte, U. M. and Mason, R. O. (1995) Global disaggregation of information-intensive services, Management Science, Vol.41, No.7, 1250-1262.

Aron, R. and Singh, J. V. (2005) Getting offshoring right, Harvard Business Review, Vol.83, 135–143.

Blinder, A. S. (2006) Offshoring: The next industrial revolution? Foreign Affairs, Vol.85(2), 113-128.

Bryson, J. (2007) The 'second' global shift: the offshoring or global sourcing of corporate services and the rise of distanciated emotional labour, Geografiska Annaler, Series B, Vol.89, 5–11.

Bunyaratavej, K., Doh, J. P., Hahn, E. D., Lewin, A. Y. and Massini, S. (2011) Conceptual issues in services offshoring research: A multidisciplinary review, Group & Organization Management Vol.36, 70-??. [originally published online 15 December 2010, DOI: 10.1177/1059601110390996]

Bunyaratavej, K., Hahn, E. D., Doh, J. P. (2007) International offshoring of services: A parity study, Journal of International Management, Vol.13(1), 7-21.

Business Week (2003) Is Your Job Next? (cover story), 3 February. Available at: http://www.businessweek.com/magazine/toc/03_05/B3818magazine.htm

Couper, M. P., Traugott, M. W. and Lamais, M. J. (2001) Web survey design and administration, Public Opinion Quarterly, Vol.65(2), 230-253.

Doh, J. P. (2005) Offshore outsourcing: implications for international business and strategic management theory and practice, Journal of Management Studies Vol.42(3), 695-704.

Doh, J. P., Bunyaratavej, K., Hahn, E. (2009) Separable but not equal: The location determinants of discrete services offshoring activities, Journal of International Business Studies, Vol.40, No.6, 926-943.

Doney, P. M., Cannon, J. P. and Mullen, M. R. (1998) Understanding the influence of national culture on the development of trust, Academy of Management Review, Vol.23(3), 601-620.

Giddens, A. (2002) Runaway World: How Globalisation is Reshaping Our Lives, 2nd Edition. Profile Books, London.

Griffith, D. A., Cavusgil, S. T. and Xu, S. (2008) Emerging themes in international business research, Journal of International Business Studies, Vol.39, 1220–1235.

Hahn, E. D. and Bunyaratavej, K. (2010) Services cultural alignment in offshoring: the impact of cultural dimensions on offshoring location choices, Journal of Operations Management, Vol. 28, 186–193.

Hitt, M. A., Franklin, V. and Zhu, H. (2006) Culture, institutions and international strategy, Journal of International Management, Vol.12, 222-234.

Hofstede, G. (1980) Culture's Consequences: International Differences in Work-related Values. Sage, Newbury Park, CA.

Hofstede, G. (1991) Cultures and Organizations: Software of the Mind. McGraw-Hill, London.

Hofstede, G. (1994) Values Survey Module 1994 Manual. Available from: http://www.geerthofstede.nl/research--vsm/vsm-94.aspx

Holton, R. (2000) Globalization's cultural consequences, The Annals of the American Academy of Political and Social Science, Vol.570, 140-152.

Jensen, J. B. and Kletzer, L. G. (2007) Measuring Tradable Services and the Task Content of Offshorable Services Jobs. Paper presented at NBER-CRIW conference on Labor in the New Economy, November 16-17, Washington DC.

Kedia, B. L. and Mukerjee, D. (2009) Understanding offshoring: A research framework based on disintegration, location and externalization advantages, Journal of World Business, Vol.44, 250–261.

Kelleher, B. R. (1996) Competitive advantage: A synthesis of existing literature, Journal of Applied Management and Entrepreneurship, Vol.3(1), 79-90.

Kenney, M., Massini, S. and Murtha, T. P. (2009) Introduction to Special Issue - Offshoring administrative and technical work: New fields for understanding the global enterprise, Journal of International Business Studies, Vol.40, 887-900.

Kirkman, B. L., Lowe, K. B. and Gibson, C. B. (2006) A quarter century of *Culture's* Consequences: A review of empirical research incorporating Hofstede's cultural values framework, Journal of International Business Studies, Vol.37, 285–320.

Krishna, S., Sahay, S. and Walsham, G. (2004) Managing cross-cultural issues in global software outsourcing, Communications of the ACM, Vol. 47(4), 62-66.

Leung, K., Bhagat, R.S., Buchan, N.R., Erez, M., Gibson, C.B. (2005) Culture and international business: recent advances and their implications for future research. Journal of International Business Studies, Vol.36(4), 357–378.

Lewin, A. Y. and Peeters, C. (2006) Offshoring work: Business hype or the onset of fundamental transformation? Long Range Planning, Vol.39, 221-239.

Metters, R. (2008) A case study of national culture and offshoring services, International Journal of Operations & Production Management, Vol.28(8), 727-747.

Parker, A., Metcalfe, D. and Takahashi, S. (2004) Two-Speed Europe: Why 1 Million Jobs Will Move Offshore. Forrester Research, Inc., Cambridge, MA.

Pieterse, J. N. (2009) Globalization and Culture: Global Mélange, 2nd edition. Rowman & Littlefield Publishers, Plymouth, UK.

Ricks, D. A. (1999) Blunders in International Business, Blackwell, Malden, MA

Robinson, R. (1983) Book Reviews: Geert Hofstede's Culture's Consequences, International Differences in Work-Related Values, Work and Occupations, 10, 110-115.

Rotondo Fernandez, D., Carlson, D. S., Stepina, L. P. and Nicholson, J. D. (1997) Hofstede's country classification 25 years later, The Journal of Social Psychology, Vol.137(1), 43-54.

Sajeev, A. S. M. and Ramingwong, S. (2010) Mum Effect as an Offshore Outsourcing Risk: A Study of Differences in Perceptions, The Computer Journal, Vol.53, No.1, 120-126.

Sako, M. (2006) Outsourcing and offshoring: implications for productivity of business services, Oxford Review of Economic Policy, Vol.22(4), 499-512.

Schomer, K. (no date) Culture Matters: 5 Challenges India Offshore Teams Face in Working with Americans. Available at: http://www.sourcingmag.com/content/c060814a.asp (last accessed 29/01/2011).

Sondergaard, M. (1994) Hofstede's consequences: A study of reviews, citations and replications, Organizational Studies, Vol.15, 447-456.

Stringfellow, A., Teagarden, M. B., Nie, W. (2008) Invisible costs in offshoring services work, Journal of Operations Management, Vol.26, 164-179.

Taras, V., Rowney, J. and Steel, P. (2009) Half a century of measuring culture: Review of approaches, challenges, and limitations based on the analysis of 121 instruments for quantifying culture, Journal of International Management, Vol.15, 357-373.

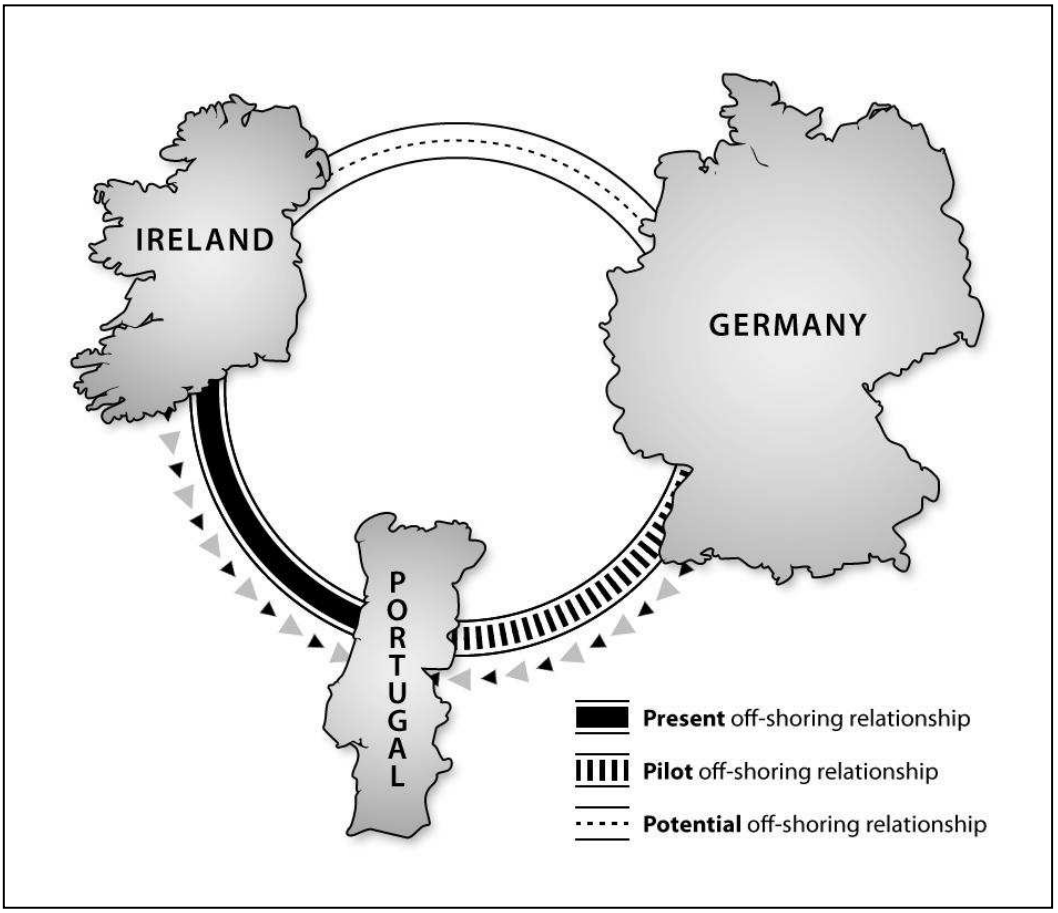
UNCTAD (2004) Chapter IV 'The Offshoring of Corporate Service Functions: The Next Global Shift?' in World Investment Report: The Shift to Services, pp.147-182. New York and Geneva: United Nations Conference on Trade and Development.

Winkler, J. K., Dibbern, J., Heinzl, A. (2008) The impact of cultural differences in offshore outsourcing: Case study results from German-Indian application development projects, Information Systems Frontiers, Vol.10(2), 243-258.

Youngdahl, W. and Ramaswamy, K. (2008) Offshoring knowledge and service work: A conceptual model and research agenda, Journal of Operations Management, Vol.26, 212–221.

Youngdahl, W. E., Ramaswamy, K. and Dash, K. C. (2010) Service offshoring: the evolution of offshore operations, International Journal of Operations & Production Management, Vol.30(8), 798-820.

Figure 1: Service Offshoring Relationships within Fincorp's European Operations



Source: authors

Table 1: Key aspects of some recent empirical studies on service offshoring and culture

Author (date)	Aims/research questions	Context and unit of analysis	Methodology	Measures of culture	Key findings
Bunyaratavej et al (2007)	To investigate the factors that contribute to the location choices for services offshoring activity, including wage differentials between the home and host countries	A complete dataset for analysis of offshoring projects by US companies in 38 countries; dependent variable is the number of greenfield and expansion FDI projects related to services in a particular country during the period 2002–2003	Multiple regression modelling using quantitative secondary data	Cultural distance index using Hofstede's (2001) country scores on four cultural dimensions; CDI is the mean of the absolute difference between each of the Hofstede scores of country i and the corresponding score of the US	A country is more likely to be a destination of services offshoring as the average wage of a country increases; education level and cultural similarity are also significant drivers of offshoring location choices; Decreased overall cultural distance is a facilitating determinant of location decisions in offshoring of services
Hahn and Bunyaratavej (2010)	To investigate the impact of cultural dimensions on the location of service offshoring projects.	FT global database of FDI projects covering three types of services (682 projects from 2002-05). Data limited to captive offshoring cases (no offshore outsourcing).	Negative binomial regression modelling using quantitative secondary data	Hofstede's country level scores for the original 4 dimensions (PDI, UAI, MAS, IDV) but not LTO as data not available for all countries in model	Countries with lower levels of Hofstede's UAI as well as higher levels of IDV and PDI are able to attract greater numbers of service offshoring projects, even after controlling for macroeconomic, linguistic, and risk-related factors
Metters (2008)	To explore how and through what specific decisions national culture affects operational implementation in offshore service facilities	A major US airline's captive offshoring centres in two Carribbean nations: Barbados and Dominican Republic (the former deemed a success and the latter a failure)	Comparative case study analysis based on ethnographic worker interviews, archival sources and executive interviews	Discusses Hofstede and Trompenaars pre-amble; no specific concepts used to structure analysis and discussion, which coveres specific aspects of Bajan and Dominican culture, including worker attitudes, aspirations, language and cultural reference points, etc.	Cultural clashes between home US and offshore Carribbean locations resulted in operational problems in service processes, and these were greater for the more culturally distant Dominican Republic site than for Barbados
Sanjeev & Ramingwong (2010)	Focuses on the 'mum effect' as a risk to offshore outsourcing. Primary aim is to investigate relationships between cultural dimensions and mum effect factors	Two samples: professionals from IT industry in Thailand and third year UG computer engineering students from a major Thai university (as a control group representing wider Thai culture)	Questionnaire survey (77 respondents: 30 professionals and 47 students); results analysed in SPSS with independent samples t-test and Pearson's correlation	Three of Hofstede's cultural characteristics (PDI, LTO, IDV) and three mum effect factors (fear of consequences, communication gap and team solidarity).	Professionals correlate PDI with team solidarity ($p<0.001$) indicating that PDI with superiors is likely to influence team members to be protective of each other; For both students and professionals, PDI turns out to be more relevant than LTO and IDV in influencing mum effect factors.
Winkler et al (2008)	To explore the nature of cultural differences in IS offshore outsourcing arrangements between German clients and Indian vendors; and impacts on offshore outsourcing success	The context and unit of analysis was IS offshore outsourcing projects between German clients and Indian vendors (of which there were six across five different firms)	Multiple qualitative case studies (six cases); semi-structured face-to-face interviews with managers in German client companies	Interview participants asked to describe issues and situations in which they had to handle cultural differences; no a priori theoretical propositions were used to structure the interviews; themes induced from data via coding	Cultural differences in terms of PDI distance, IS designer values, and an active versus passive working attitude influence offshore outsourcing success in the case between German clients and Indian vendors

Table 2: Calculation of country dimensions scores from VSM-94 responses

The formulae for the various dimensions used in this study appear in the Values Survey Module 1994 Manual (Hofstede, 1994).

Power Distance (PDI) was measured by questions 3, 6, 14 and 17 in the VSM-94. These questions dealt respectively with: superior-subordinate relationships in the workplace, the level of fear with disagreeing with superiors, management behaviour and decision making style, and organisational structure. The formula for calculating the score for PDI is as follows (m(03) represents the mean score for question 3):

$$PDI = -35m(03) + 35m(06) + 25m(14) - 20m(17) - 20$$

Uncertainty Avoidance (UAI) was measured by questions 13, 16, 18 and 19. These addressed respectively:rule orientation, stress and anxiety, attitudes towards competition, and demands for precision and punctuality. The formula for calculating the score for UAI is as follows:

$$UAI = 25m(13) + 20m(16) - 50m(18) - 15m(19) + 120$$

Individualism-collectivism (IDV) was measured by questions 1, 2, 4 and 8. These questions dealt respectively with: personal time, physical conditions, security of employment, and challenges in the workplace.

The formula for calculating the score for IDV is as follows:

$$IDV= -50m(01) + 30m(02) + 20m(04) - 25m(08) + 130$$

Masculinity versus femininity (MAS) was addressed by questions 5, 7, 15 and 20. These questions looked respectively at: advancement, aggressiveness, cooperation and trust. The formula for calculating masculinity is as follows:

$$MAS = 60m(05) - 20m(07) + 20m(15) - 70m(20) + 100$$

Long term orientation (LTO) was addressed by questions 9, 10, 11 and 12. These questions respectively addressed the importance of: personal stability, thrift, persistence and respect for tradition. The original formula for long term orientation was:

$$LTO = 45m(09) - 30m(10) - 35m(11) + 15m(12) + 67$$

However, this was amended in 1999 after results from a large scale application of the LTO questions showed that only questions 10 and 12 produced country scores correlated with other LTO measures (Hofstede, 2009). The formula for calculating long-term orientation is now as follows:

$$LTO = -20m(10) + 20m(12) + 49$$

Table 3: Hypotheses to be examined in VSM-94 survey of Fincorp's employees in Ireland, Portugal and Germany

1. The existence, nature and extent of comparative culturally-determined differences in work-related values between the employees of Fincorp at three separate locations in Ireland (Belfast, Dublin and Cork)

H_10: There are no significant cultural differences, as defined by Hofstede's five dimensions, between Fincorp's three offices in Ireland (when examined using an ANOVA test).

H_1A: There is at least one statistically significant cultural difference, as defined by Hofstede's five dimensions, between Fincorp's three offices in Ireland (when examined using an ANOVA test).

2. The existence, nature and extent of comparative culturally-determined differences in work-related values between the employees of Fincorp in Ireland, Portugal and Germany

H_20: There are no significant cultural differences, as defined by Hofstede's five dimensions, between Fincorp's offices in Ireland, Portugal and Germany (when examined using an ANOVA test).

H_2A: There is at least one statistically significant cultural difference, as defined by Hofstede's five dimensions, between Fincorp's offices in Ireland, Portugal and Germany (when examined using an ANOVA test).

3. The existence, nature and extent of comparative comparative culturally-determined differences in work-related values between the employees of Fincorp in Ireland and Portugal (where there was an established bilateral offshoring relationship)

H_30: There are no significant cultural differences, as defined by Hofstede's five dimensions, between Fincorp's offices in Ireland and the office in Portugal (when examined using a t-test).

H_3A: There is at least one statistically significant cultural difference, as defined by Hofstede's dimensions, between Fincorp's offices in Ireland and the office in Portugal (when examined using a t-test).

4. The existence, nature and extent of comparative culturally-determined differences in work-related values between the employees of Fincorp in Germany and Portugal (where there was a pilot bilateral offshoring relationship)

H_40: There are no significant cultural differences, as defined by Hofstede's five dimensions, between Fincorp's office in Germany and the office in Portugal (when examined using a t-test).

H_4A: There is at least one statistically significant cultural difference, as defined by Hofstede's dimensions, between Fincorp's office in Germany and the office in Portugal (when examined using a t-test).

5. The existence, nature and extent of comparative culturally-determined differences in work-related values between the employees of Fincorp in Germany and Ireland (where there was a potential future bilateral offshoring relationship)

H_50: There are no significant cultural differences, as defined by Hofstede's five dimensions, between Fincorp's offices in Ireland and the office in Germany (when examined using a t-test).

H_5A: There is at least one statistically significant cultural difference, as defined by Hofstede's dimensions, between Fincorp's offices in Ireland and the office in Germany (when examined using a t-test).

Table 4: Sample characteristics and response rate analysis from employee survey of Fincorp

	Belfast	Dublin	Cork	**Ireland**		**Portugal**		**Germany**		**Total**
Sent	72	323	127	522		56		72		650
Failed	2	2	1	5		0		0		5
Responded	50	190	66	306		52		49		407
Response Rate	69%	59%	52%	59%		93%		68%		63%
Excluded (foreign nationals)	4	31	4	39		4		3		46
Total valid responses	**46**	**159**	**62**	**267**		**48**		**46**		**361**
Gender										
Male	22	77	24	123	46%	12	25%	27	59%	162
Female	24	82	38	144	54%	36	75%	19	41%	199
Age (years)										
<20	0	1	0	1	0%	0	0%	0	0%	1
20-24	10	5	3	18	7%	7	15%	0	0%	25
25-29	17	41	12	70	26%	20	42%	8	17%	98
30-34	9	48	22	79	30%	14	29%	7	15%	100
35-39	2	27	12	41	15%	5	10%	6	13%	52
40-49	6	27	11	44	16%	2	4%	16	35%	62
50-59	2	10	2	14	5%	0	0%	9	20%	23
>60	0	0	0	0	0%	0	0%	0	0%	0
Job description										
Manager of one or more managers	2	12	4	18	7%	1	2%	4	9%	23
Manager of one or more subordinates (non-managers)	6	29	10	45	17%	11	23%	8	17%	64
Academically trained professional or equiv. (but not a manager)	34	97	34	165	62%	33	69%	27	59%	225
Vocationally trained craftsperson, technician, informatician, etc.	0	3	0	3	1%	2	4%	2	4%	7
Generally trained office worker or secretary	4	18	14	36	13%	0	0%	5	11%	41
Unskilled or semi-skilled manual worker	0	0	0	0	0%	0	0%	0	0%	0
No paid job (includes full-time students)	0	0	0	0	0%	1	2%	0	0%	1

Table 5a: Hofstede dimension scores at three Irish offices of Fincorp

Dimension	Belfast	Dublin	Cork
Power Distance	22	23	19
Uncertainty Avoidance	49	51	43
Individualism	87	83	91
Masculinity	27	5	-10
Long-term Orientation	41	43	40

Table 5b: ANOVA test results for difference in mean dimension scores at three Irish offices

Dimension		Sum of Squares	Df	Mean Squares	F	P-Value	F Crit ($\alpha = 0.05$)	Significance (Y/N)
Power Distance	Between Groups	730.63	2.00	365.32	0.18	0.84	3.03	N
	Within Groups	549,667.31	264.00	2,082.07				
	Total	550,397.94	266.00					
Uncertainty Avoidance	Between Groups	2,629.62	2.00	1,314.81	0.31	0.73	3.03	N
	Within Groups	1,120,419.45	264.00	4,244.01				
	Total	1,123,049.06	266.00					
Individualism	Between Groups	2,935.60	2.00	1,467.80	0.86	0.43	3.03	N
	Within Groups	452,348.11	264.00	1,713.44				
	Total	455,283.71	266.00					
Masculinity	Between Groups	36,965	2.00	18,482.46	2.32	0.10	3.03	N
	Within Groups	2,106,661	264.00	7,979.77				
	Total	2,143,625	266.00					
Long-Term Orientation	Between Groups	608.82	2.00	304.41	0.74	0.48	3.03	N
	Within Groups	108,131.26	264.00	409.59				
	Total	108,740.07	266.00					

Table 6a: Hofstede dimension scores at Ireland, Portugal and Germany offices of Fincorp

Dimension	Ireland	Portugal	Germany
Power Distance	22	11	40
Uncertainty Avoidance	49	94	78
Individualism	85	81	73
Masculinity	5	34	-20
Long-term Orientation	42	21	53

Table 6b: ANOVA test results for difference in mean dimension scores at Ireland, Portugal and Germany offices

Dimension		Sum of Squares	df	Mean Squares	F	P- Value	F Crit ($\alpha = 0.05$)	F Crit ($\alpha = 0.01$)	Significance
Power Distance	Between Groups	20,369.03	2.00	10,184.51	5.17	0.01	3.02	4.66	Y**
	Within Groups	705,805.21	358.00	1,971.52					
	Total	726,174.24	360.00						
Uncertainty Avoidance	Between Groups	102,678.44	2.00	51,339.22	12.77	0.00	3.02	4.66	Y**
	Within Groups	1,439,551.06	358.00	4,021.09					
	Total	1,542,229.50	360.00						
Individuality	Between Groups	5,997.46	2.00	2,998.73	1.75	0.18	3.02	4.66	N
	Within Groups	613,253.09	358.00	1,713.00					
	Total	619,250.55	360.00						
Masculinity	Between Groups	69,828.74	2.00	34,914.37	4.48	0.01	3.02	4.66	Y*
	Within Groups	2,791,806.72	358.00	7,798.34					
	Total	2,861,635.46	360.00						
Long-term Orientation	Between Groups	16,482.20	2.00	8,241.10	18.42	0.00	3.02	4.66	Y**
	Within Groups	160,193.70	358.00	447.47					
	Total	176,675.90	360.00						

Note: Y* = Significant at 5% level; Y** = significant at 1% level.

Table 7a: Comparison of dimension scores for Ireland and Portugal

	Hofstede (Ire-Por)	Fincorp (Ire-Por)	Comments	t-test result
PDI	28 < 63	22 > 11	Opposite to predicted direction	N
IDV	70 > 27	85 ~ 81	Predicted difference not observed	N
MAS	68 > 35	5 < 34	Opposite to predicted direction	N
UAI	35 < 104	49 < 94	As predicted by Hofstede	Y**
LTO	24 ~ 28	42 > 21	Difference where none predicted	Y**

~ indicates a gap in dimension scores of less than 10; N = not significantly different; Y* significantly different at 5% level; Y** significantly different at 1% level.

Table 7b: Comparison of dimension scores for Germany and Portugal

	Hofstede (Ger-Por)	Fincorp (Ger-Por)	Comments	t-test result
PDI	35 < 63	40 > 11	Opposite to predicted direction	Y**
IDV	67 > 27	73 ~ 82	Predicted difference not observed	N
MAS	66 > 31	-20 < 34	Opposite to predicted direction	Y**
UAI	65 < 104	78 < 94	In direction predicted by Hofstede	N
LTO	83 > 28	53 > 21	In direction predicted by Hofstede	N

~ indicates a gap in dimension scores of less than 10; N = not significantly different; Y* significantly different at 5% level; Y** significantly different at 1% level.

Table 7c: Comparison of dimension scores for Ireland and Germany

	Hofstede (Ire-Ger)	Fincorp (Ire-Ger)	Comments	t-test results
PDI	28 ~ 35	22 < 40	In direction predicted by Hofstede	Y*
IDV	70 ~ 67	85 ~ 73	As predicted by Hofstede	N
MAS	68 ~ 66	5 > -20	Difference where none predicted	Y*
UAI	35 < 65	49 < 78	In direction predicted by Hofstede	Y**
LTO	24 < 83	42 < 53	In direction predicted by Hofstede	Y**

~ indicates a gap in dimension scores of less than 10; N = not significantly different; Y* significantly different at 5% level; Y** significantly different at 1% level.

Note: Hofstede dimension scores obtained from:
http://www.geerthofstede.nl/culture/dimensions-of-national-cultures.aspx