Title: Psychic Distance and time: The concept and paradox re-examined

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Abstract

The globalization process has been dominant for over a decade and has been the source of benefits and costs for the business arenas of both the initiating and host countries. In particular the psychic distance costs of globalization have become increasingly prominent recently, whereas, initially at least, the globalization process appeared to reduce psychic distances between nations and countries significantly. The concept of psychic distance has a long history in international business and, in particular, in the explanation of foreign direct investment (FDI) decisions by multinational companies, The underlying idea of psychic distance is that companies operating in countries which through historical, cultural and institutional ties, are psychically close, are more likely to succeed in their international business operations than those which are more psychically distant. However, recent evidence has emerged that contradicts the psychic distance concept. Regarded as the *psychic distance paradox*, this evidence suggests that countries which are psychically proximate do not necessarily offer an investment advantage and for reasons of lack of nuanced understanding of cultural dissimilarities. However, a psychic distance paradox effect also has been found to be one of, the greater the psychic distance, the greater the pay-offs; perhaps explained by greater efficiencies that derive from the relative absence of 'social labor' required by 'cultural ties' and need for personal involvement.

The equivocal nature of the empirical findings regarding psychic distance and paradox suggest that the concept is theoretically fragile and needs to be considered with a more multi-faceted perspective. Against the backcloth of globalization, the current paper develops a theoretical model of psychic distance from secondary data analysis that incorporates both *time* and *distance* aspects that potentially increase its explanatory robustness, and discusses the independent importance of subjective management volition in FDI decision-making.

Introduction

The equivocal nature of the empirical findings regarding psychic distance and paradox suggest that the concept is theoretically fragile and needs to be considered with a more multi-faceted perspective. Against the backcloth of globalization, the current paper develops a theoretical model of psychic distance from secondary data analysis that incorporates both *time* and *distance* aspects that potentially increase its explanatory robustness. In the same vein, the importance of measuring subjective management volition in FDI decision-making is also briefly discussed (Joosub and Coldwell, 2016).

Literature review

The concept of Psychic distance

The original conception of psychic distance was made by Beckerman, 1956: 38 who observed, "… a special problem is posed by the existence of "psychic distance". It is probable that the manner in which the purchases of raw materials by a firm are distributed geographically will depend on the extent to which foreign sources have been personally contacted and cultivated. While the transport costs paid (directly or indirectly) by an Italian entrepreneur on a raw material supplied by Turkey may be no greater (as the material may come by sea) than the same material supplied by Switzerland, he is more likely to have contacts with Swiss suppliers, since Switzerland will be "nearer" to him in a psychic evaluation (fewer language difficulties, and so on), as well as in the economic sense that air travel will absorb less of his time".

Brewer (2007) argues the operationalization of key factors of the concept of 'psychic distance' can be achieved by constructing a comprehensive psychic distance index. This index comprises aspects of psychic distance derived from the extant literature and is combined together as an aggregated construct operationalized in a specifically designed measuring instrument. The psychic distance index construct devised by Brewer (2007) was obtained from factors derived from the experience of Australian exporters in their FDI decision-making. The psychic distance index incorporates factors based on "subjective judgment plus data availability" (Lockwood, 2004, p.507). The measures Brewer (2007) suggests as indexes of psychic distance are indicated in Table 1.

Table 1. Brewer's (2007) psychic distance index

Measure	Description of measure
Commercial ties	Existing commercial relationships between countries based on exchange of goods and services. Existing commercial exchanges are seen as adding overall knowledge about a country and its businesses operations.
Political ties	Political ties tend to enhance business relations in foreign countries and reduce information distortions.
Information availability-e.g. Trade agreements, defence treaties, diplomatic connections and aid programs.	Information availability generates enhanced international awareness
Historical ties	Countries that share historical ties (e.g. a colonial relationship),tend to be closer in terms of cultural

	commonality(particularly language), mutual familiarity and understanding of institutions.
Geographical proximity	Geographical distances between countries influence commercial exchanges; closer countries easier; more distant countries, difficult.
Country's level of development	Highly developed countries generally have better information availability, more amenable business environments and less corruption
Social ties	Differences in culture and language negatively affect information and knowledge inflows.

Brewer (2007) used the psychic distance index to measure exporting frequency between Australia and twenty five other countries and found that the concept of psychic distance generated significant predictive validity. Brewer (2007) found that countries having the closer psychic distance (lower psychic distance index scores) tended to have a larger number of Australian exporters selling in their markets. The UK and the US with psychic distance index scores of 4.80 and 5.27 respectively, were ranked first and second on psychic distance. In contrast, Kenya which was ranked bottom obtained a psychic distance index score of 11.51.
Brewer (2007, p.87), however, recognizes that: "Information exchange is at the heart of the original Johanson and Wiedersheim-Paul (1975) psychic distance definition based on ease of information flows. But there has been an important departure from this original definition in the most common forms of psychic distance interpretation in the literature, namely, country differences. The extrapolation of psychic distance from 'factors impeding the flow of information' to 'country differences' is unsupported by other than recognition that such differences should affect business relationships. The direct definitional relationship between psychic distance and ease of information flows has been corrupted to a direct one-to-one relationship between psychic distance and differences between countries".
Brewer (2007) suggests that the development of the psychic distance index goes some way in resolving this by offering a number of variables for measurement of the concept that may have particular relevance for specific countries. Brewer (2007, p.88) also indicates that, "In addition to national characteristics or conditions that are most likely to be important to psychic distance, the particular characteristics of the managers of a firm might also be important. This is because it is the managers not nations that perceive psychic distance". Brewer (2007) is fully aware that the psychic distance index is highly context dependent, and when applied to different countries, industries and entry methods requires careful interpretation. Brewer (2007) also recognizes the importance of subjectivity in managerial deliberations regarding FDI decision-making processes. This subjective dimension introduces an additional 'unstable' element that can undermine the predictive value of psychic distance.

The psychic distance paradox
A *paradox* can be defined as, "a statement or proposition which, despite sound (or apparently sound) reasoning from acceptable premises, leads to a conclusion that seems logically unacceptable or self-contradictory" (Oxford Dictionary, 2017). The psychic distance paradox is thus seen to exist when psychically close countries do not generate superior company performance. The 'psychic distance paradox' has arisen from studies that purport to show that business interests are not always served by investments made in countries considered to be psychically close, in the manner the psychic distance explanatory model proposes. For example, O'Grady and Lane (1966) maintain that perceived similarities between countries can make managers overlook and under prepare for possible differences and thereby fail to make

rational decisions. Expectations about psychic closeness may be overridden by unforeseen entry barriers which result in unsuccessful company performance.

In addition, Fenwick, Edwards and Buckley (2003) point out that although culturally close markets may result in reduced risk in entering and operating in a foreign market, there is no guarantee that this will result in successful company performance. Since cultural differences are seen as a core factor in the psychic distance concept, this finding is sometimes regarded as supportive of the paradox. In other words, Fenwick et al's. (2003) research suggests that company performance in psychically close markets can be negatively affected by unanticipated cultural differences largely because perceived cultural similarities resulted in overconfidence and poor management preparation.

Evans, Treadgold and Mavondo (2002) point out that psychic distance may generate positive organizational performance outcomes. Uncertainty and risks linked to psychically distant markets can make companies invest more time and money on planning and research activities which results in better preparedness which can positively influence organizational performance.

Dikova (2009) suggests that market uncertainties in *psychically distant* markets motivates company management to research such markets more thoroughly resulting in the better performance of foreign subsidiaries.

The above studies indicate that the psychic distance paradox is by no means unequivocal as regards its most fundamental independent variable namely, psychic distance emanating from 'distance' (geographical and cultural),. The concept psychic 'distance' has been found to be empirically equivocal and can have both positive and negative effects on company performance. This renders the 'paradox' itself to be logically self-contradictory. Nevertheless, the concept of psychic distance retains its empirical utility as a conceptual 'sounding board' and operational tool for understanding complex FDI behaviour. It is maintained in the current paper that the concept has become more equivocal through empirical studies partly because it does not incorporate a dynamic time perspective. Most empirical studies dealing with the psychic distance concept have been cross-sectional and do not study the phenomenon longitudinally. A longitudinal approach incorporating both *distance* and *time* as independent variables may go some way to showing that the psychic distance effect and the paradox relating to it are, conceptually useful but need to be considered as dynamic and transitory psychic phenomena.

New independent variables explaining the 'paradox' are distinct from the original one of information paucity as psychic distance. In the studies mentioned above independent variables are found to be: management unpreparedness (O'Grady and Lane ,1966), management overconfidence (Fenwick et al, 2003) and management research and planning (Evans et al, 2002; Divoka, 2009).

Gairola and Chong (2012) have, more recently, analyzed psychic distance in computer simulations of co-operation which aim to generate more realistic 'noise models' in empirically-validated spatial games. Gairola and Chong (2012) introduce a 'psychic noise model' based on a psychic distance effect that they suggest, reflects real-world interactions. Gairola and Chong (2012) purport that the extent to which psychic noise has an effect on interactions between individuals, depends on their psychic distance (e.g., cultural difference and spatial dispersion). Results from their extensive computer simulations which use a multi-agent system framework to assess the impact of various constructions of noisy interactions, show that noise has a negative impact on cooperation. However, Gairola and Chong (2012) also obtain results which they regard as "reminiscent of the psychic distance paradox" (op.cit., p.271), where increases in psychic 'noise levels' lead to decreases in inter-individual cooperation. Where 'noise' is defined as the faulty transmission of strategic choices and 'psychic noise' is regarded as arising from differential psychic distances between interacting people. This finding can be regarded as

computer simulated *equivocal* manifestation of the psychic distance model's paradox in that it suggests that psychic distance and resultant pay-offs (where average pay-off values indicate the degree of cooperation) follow the form of a U-shaped curve, whereby increasing psychic distance *reduces* average cooperation pay-offs. However, their model also shows that as psychic distance increases beyond a certain point, improvements in cooperative pay-offs occur. Gairola and Chong (2012) regard this as evidence of a psychic distance paradox. It is clear, however, that their study has fundamental differences in the variables analyzed in comparison with earlier empirical studies (e.g. those by O'Grady and Lane, 1966; Evans et al, 2002). In their analysis of the noise effects of spatial distances, Gairola and Chong (2012) found that neighbourhood *size* (with greater size being equivalent to greater distance) was associated, initially, with declining average pay-offs, but later with increasing average pay-offs as neighbourhood size increased (see Figure 1). Although not specifically time bound or longitudinal, Gairlola and Lane (2012) implicitly introduce a time dimension into their model since changes in the size of a neighbourhood are correlated with time. Generally, speaking, the longer a neighbourhood has been in existence the greater its size. Note that this finding, although logically consonant with the concept of psychic distance *paradox*, is quite distinct from the *paradox* found in some of the empirical studies on which the concept was built and, in particular, Brewer's (2007) original study. Here the *paradox* relates to *greater psychic distance being associated with greater pay-offs*, whereas in many empirical studies the *paradox* relates to *smaller pay-offs being associated with closer psychic distance.* Working from the general premise that lower psychic distance promotes greater benefits and as indicated earlier, it is not logically possible for the *paradox* to assert *simultaneously* that closer psychic distance promotes lesser benefits *and* further psychic distance promotes greater benefits as this would suggest that the paradox is constituted of *both* negative and positive aspects of psychic distance. Particularly as the concept itself in its original form is regarded as unidirectional.

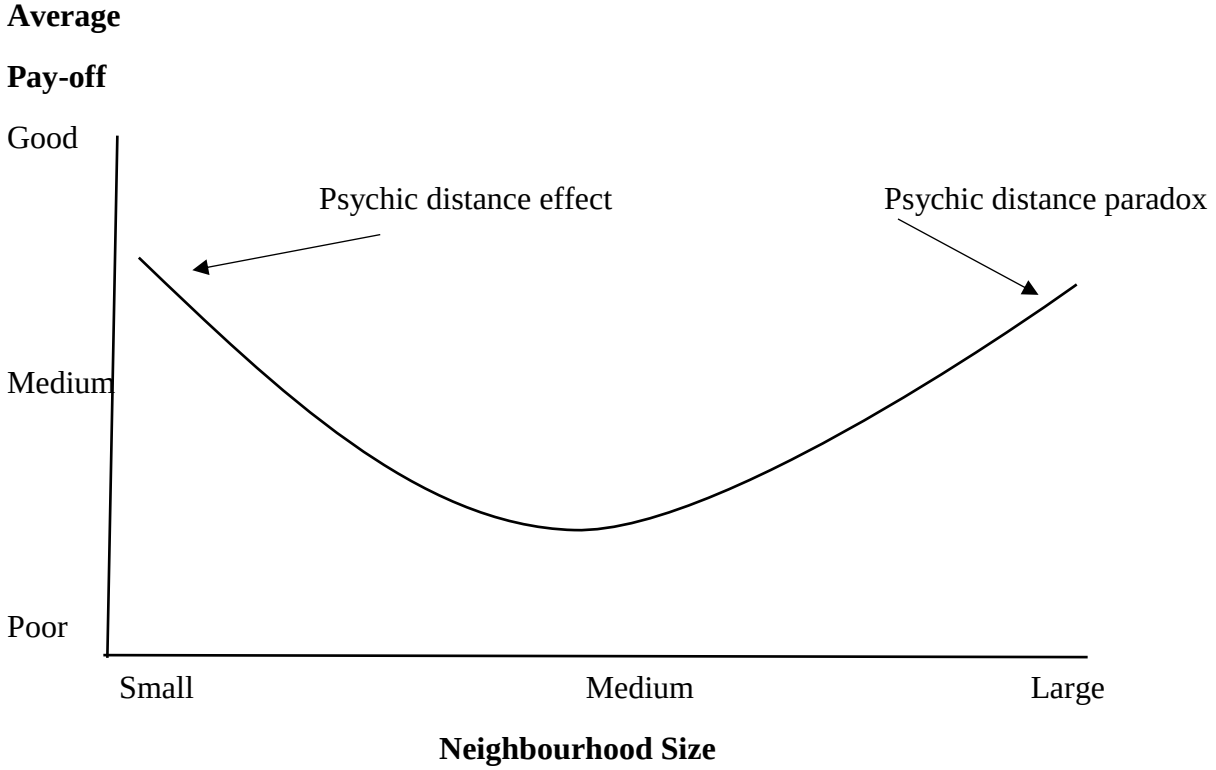

Figure 1. The psychic distance paradox (Gairola and Chong, 2012)

The paradox effect noted by Gairola and Chong (2012) and illustrated in Figure 1 cannot be explained by means of rationale of any of the empirical business studies mentioned earlier, here the effect seems to be one of, beyond a certain point, the greater the psychic distance the more effective cooperation and average pay-offs become. This finding might be explained by greater efficiencies derived from the relative lack of 'cultural ties' and need for personal involvement in more distant neighborhoods. As pointed out recently in a paper in the Economist (2017), cultural differences and lack of involvement can *diminish* the probability of cultural clashes which stem from "cultural incompatibilities" and thus reduce noise effects that diminish pay-offs. .

Globalization and the psychic distance paradox

Globalization has changed a small trade 'neighborhood' into a large 'neighborhood' over time with increasingly more distant members offering better payoffs than offered in the small neighborhood of the past, thus contributing to an apparent paradox whereby increasingly distant neighborhoods brought about through geographical spreading of globalization over time offer better payoffs than the smaller neighborhoods of the past.

This has become possible through the digital revolution and the globalization process. Geographically the business 'neighborhood' has expanded hugely, but the globalization process has diminished and sometimes reversed the importance of psychic distance (i.e. the knowledge and familiarity of a particular, and often historical business or trading bond) pay - offs have outweighed psychic distance as the driving force for foreign direct investment. Political allegiances have grown more prominent in some cases and have overridden psychic and historical connections. For example, under the ANC government in South Africa, recent allies in the struggle against apartheid, such as Russia and China, have gained ascendency over the more instated cultural and historical ties with Britain and the West, despite the ANC government having a strong psychic distance both in terms of mutual cultural understanding and historical connectivity, with its new business partners. The Economist (2017) notes in its article "South Africa's love affair with Russia-Say my name" that: "They remember support in decades past: during apartheid the Soviet Union provided military training and arms to the African National Congress (ANC) as well as to other liberation movements on the continent ……and for an anti-Western strain within the ANC, Russia and China offer ideological alternatives. Sanctions hit Russia sees South Africa as a source of political support and business opportunities" However, as Gerrit Oliver a former South African Ambassador to Russia observes the secret to the two countries "friendship" is that personal interactions between people from the two countries remain rare because of little language, cultural or historical understanding. Recent evidence suggest that this phenomenon may be time bound too and that once the pay-off benefits have settled and more knowledge and information surfaces regarding cultural incompatibilities and ways of doing business emerge, difficulties set in. This has been the experience of Zambia on the labor front and elsewhere in Africa. Chinese firms in Africa often have little time for Corporate Social Responsibility and have high expectations regarding working hours and general labor discipline which has proved difficult to digest among workers who have been accustomed to more tolerant western–type labor practices and labor law.

Xiaoyang (2016) points out that Chinese investment in Africa has grown substantially from 29.5 billion US dollars in 2004 to $221.6 billion in 2014.foreign Direct Investment FDI) reached $32.25 by 2014. Xiaoyang (2016) indicates that the three main criticisms today of Chinese investment in Africa are:

- That the Chinese are unwilling to hire local workers and large numbers of Chinese are brought in that does not benefit the generally high levels of unemployment experienced by the host African country.

- That wages Chinese companies pay African workers tend to be low, and
- That working conditions and safety and health issues tend to be ignored.

After the initial euphoria of acclaiming the left-leaning political credentials of countries like China which helped break down the colonial legacy of Europe in Africa and purportedly free African people from this yolk, problems have begun to emerge over time. As Xiaonyang (2016, p. 121-122): " Although China is a remarkable success story in the world history of development, the transplantation of Chinese model in another continent proves to be highly problematic. Workers in certain African countries enjoyed relatively high welfare and rigid labor protection until recently. They are not yet ready for an abrupt decline of the old standards. Africans also have their traditional life attitudes, value system and social habits, therefore many of them have trouble shifting to the Chinese enterprises' criteria of economic efficiency and disciplined work. The conflicting standards not only make it difficult to judge the impacts of employment practices, but also directly cause malfunction or even failure of Chinese business activities in Africa".

Methodology

The paper uses secondary data analysis of extant empirical and theoretical data to build and consider the utility of a time and distance model of psychic distance to explain the equivocal nature of the psychic distance paradox. Secondary data methodology is based on, "In the broadest sense, (an) analysis of data collected by someone else" (Vartanian, 2011). Secondary data analysis involves the use of information obtained from existing sources which "…can include any data that are examined to answer a research question other than the question(s) for which the data were initially collected" (Vartanian, 2011). The approach is distinct from primary data analysis which involves the same person/persons in designing the research, data collection and performing the analyses. New findings can usually only be generated from primary data sources.

The secondary data in the current paper was obtained from the collection of data from reliable and credible external academic empirical sources in which the author of the current paper did not participate, had no influence on specific research designs used and the research questions they sought to investigate (Boslaugh, 2007). These aspects of 'no direct involvement' that secondary analysis method uses constitutes its main disadvantage compared with primary data analysis. However, since the secondary data is collected from studies which have occurred at different points in time it offers a time integrated perspective of the psychic distance concept and the paradox. and helps explain the equivocal nature of the empirical finding relating to the concept.

Findings

The psychic distance concept and paradox re-examined

The secondary data obtained from the empirical studies discussed in the literature review suggest that there are two main factors that the concept of psychic distance and its variability are namely, distance itself, which most studies have considered and time i,e, the effect on psychic distance over time. The equivocal nature of the empirical findings can be regarded as being at least partly attributable to the fact that most empirical studies that have researched psychic distance do not incorporate a longitudinal dimension. The methodologies used in extant empirical studies have generally ignored the effect of *time* on the nature of psychic distance and the psychic distance paradox itself. Many have used the responses of managers to specially

designed questionnaires taken at a single point in time, although the duration of the data collection period itself may stretch over several years. (e.g. Brewer,2007, Hakanson and Ambos, 2010, Hakanson et al 2015). Hakanson et al (2015) note the asymmetry in psychic distance perceptions and how these change with different managerial experiences in the face of constant global change over time. Since change that affects psychic distance is time bound and largely unpredictable, symmetrically lower psychic distance perceptions of FDI (i.e. where both host and investing countries perceive investment as mutually beneficial from their perceived similarities of gain\pay-offs) are transitory and may become asymmetric again (as for example in the reassertion of psychic distance between Africa and China through negative managerial experiences that develop over time from perceptions of asymmetries in gain/payoffs that resurrect perceptions of psychic distance (discussed earlier in the paper).

The foregoing secondary data analysis suggests that time and its interrelationship with distance are crucial factors in explaining the dynamics of managerial perceptions that underline apparent predictive inadequacies of the concept of psychic distance and the paradox.

The psychic distance model that includes a time dimension is indicated schematically in Figure 2

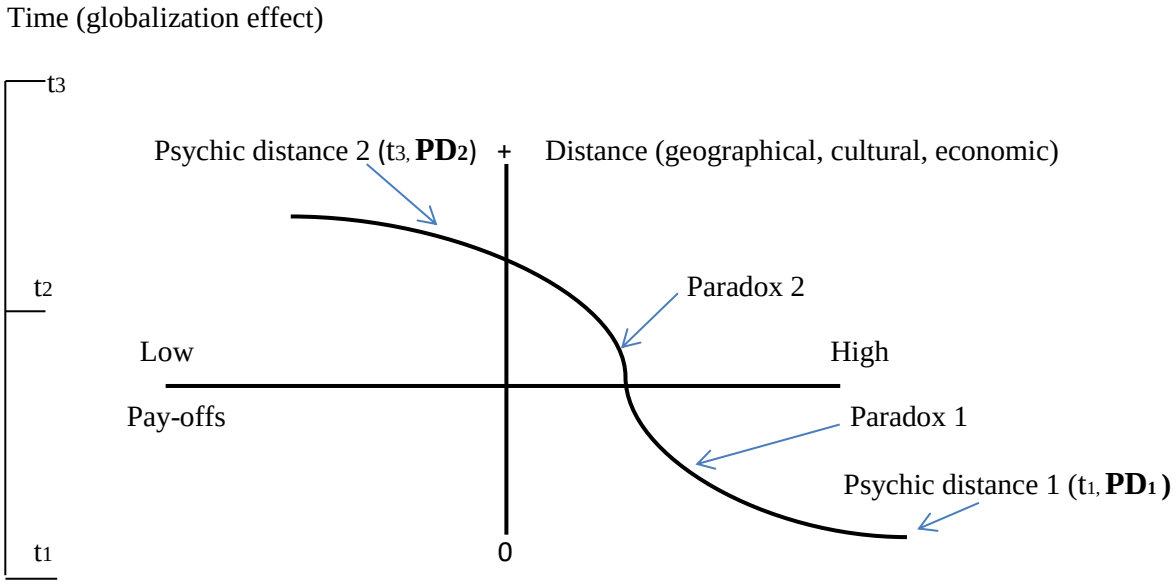

Figure 2. Distance/time psychic distance model

Key

t1, **PD1** and t3, **PD2** = The original psychic distance concept where smaller psychic distances increase pay-offs and greater psychic distances reduce pay-offs.

Paradox 1 =Smaller psychic distances reduce pay-offs. (Original paradox).

Paradox 2= Larger psychic distances increase pay-offs, (Paradox discovered through computer simulations (Gairola and Chong, 2012).

Gairola and Chong's (2012) model indicates that neighborhood size increases are associated with increases in pay-offs. They regard the psychic distance paradox as a situation that occurs when spatial/geographic distances increase in a neighborhood with increases in pay-offs. Since it can be reasonably expected that size of a neighborhood increases only over time, time itself becomes an important independent variable in the explanation of psychic distance

and pay-offs (benefits) expected from it, as suggested in the current paper in the earlier analysis of the effects of the globalizing process over time.

Discussion

The extant literature indicates that the psychic distance concept has not been subjected to detailed longitudinal empirical analysis yet, as the forgoing analysis and model has tried to show, recent circumstantial secondary data suggests that time is an important independent variable in the explanation of psychic distance and the paradox associated with the concept. Managerial perceptions of psychic distance and the benefits/pay-offs expected from specific investment opportunities from the perspectives of both the host and investment countries, change over time in ways that are difficult to predict. It is maintained in the current paper that equivocal findings relating to psychic distance and the paradox have emerged in studies dealing with concept because insufficient emphasis has been put on longitudinal study and analysis. Although, for example, Håkanson,. & Ambos' (2010) empirical study collected data over several years, it did not incorporate a formal longitudinal design in which respondents' perceptions were re-tested over a period of time. Joosub and Coldwell (2016) also recently have pointed out the importance of idiosyncratic managerial subjective perceptions and actual personal experiences in FDI decision making and have indicated this aspect adds a further element of unpredictability in applications of the psychic distance concept.

The secondary data analysis of the globalization process over time in Africa has indicated that perceptions of psychic distance and the nature of the paradox change over time in unpredictable ways that make findings of empirical studies equivocal. However, the model generated tracking this process, indicates that the concept of psychic distance itself can be a useful explanatory heuristic when time as well as distance are incorporated in the analysis.

Conclusion

The concept of psychic distance has been subjected to empirical and theoretical interrogation over an extended period of time. The concept itself also has been revised and extended from its original formulation. The utility of psychic distance as an explanatory variable in FDI decision-making has been questioned owing to the equivocal nature of the findings of empirical studies that have focused on its measurement. The current paper has suggested using globalization as an example, that the concept is best understood as dynamic, and best studied longitudinally with time as an independent variable.

Limitations of the study include the methodological approach using secondary data analysis. This approach has been able to show that over time the globalization process generated perceived pay-offs for African countries. It has also shown how Initial investments made by China were approved by African company managers by emphasizing the psychic closeness of African host countries through their assistance and involvement in various African liberation struggles and the homogeneity of political ideologies. And how, over time, perceptions of local African and Chinese managers became more strained as perceptions of psychic distance between the two countries in cultural, language, business methods and work expectations became increasingly evident. But the paper did not adopt a formal longitudinal design using primary data making the model which incorporates time as an independent variable tentative and in need of further investigation.

Although empirical studies of psychic distance have produced equivocal findings, the secondary data analysis in the current paper has shown that the concept still can have explanatory utility when viewed longitudinally with time as an independent variable. Managerial perceptions of psychic distance are indeed likely to be associated with mutual assessments of pay-offs in FDI in foreign and host companies, but the concept is dynamic and changes as the content of FDI pay-offs change in the face of managerial experience and perceptions of specific prevailing international business circumstances.

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