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Country Selection and Impact IT Sourcing: Relationships Between Business Factors and Social Inequality

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Abstract

How, if at all, does offshore outsourcing impact social development in supplier countries? We explored the relationship between international offshore outsourcing rankings produced by consulting firms against country level social data obtained from international non-governmental agencies. A multivariate analysis was carried out between commercial outsourcing attractiveness data and country level socio-economic data. Two components from the main country attractiveness index are shown to be correlated with data from three international data sets: child mortality rate, life expectancy and unemployment. This suggests that higher commercial attractiveness scores are associated with lower national performance in socio-economic data, the corollary being that poverty and its consequences make some destinations more financially attractive for investment. Conversely, the top-ranked most successful sourcing destinations tend to have exemplary socio-economic data suggesting that sourcing activity does contribute to humanitarian values.

Keywords Outsourcing, Impact Sourcing, Country Selection, Offshore, Humanitarian Indices.
1 Introduction

This paper is inspired by a simple question: is offshore outsourcing activity positively transforming the human condition in those economies servicing the industry? Put another way: does activity supporting offshore outsourcing in technology and digitally mediated services moderate humanitarian conditions in developing economies? Responses to this question will be of interest anyone motivated by the aspiration to improve the condition and prospects for poor and marginalised communities (Madon and Sharanappa 2013). The ethics of digital sourcing is ultimately a matter for leadership. It must be driven by the leader’s personal motivation and preparedness to be responsible for sourcing sustainable, humane, technology services and business processes (Babin and Nicholson 2012).

Globalisation and technological innovation has led to the growth of international outsourcing and off-shoring activity. Researchers estimate that the international market for IT (information technology) outsourcing grew from US $9-12 billion in the late 1980’s, to exceed US $290 billion in 2012 (Kotlarsky and Willcocks 2012). Likewise, the global market for outsourced services is thought to have grown from US $45.6 billion in 2000 to US $104.6 billion to 2014 (TPI Information Services Group 2015).

Although this sector has sustained remarkable growth there are indications that the rationale underpinning outsourcing strategies is now changing. The most significant change being that, rather than being driven by cost savings, sourcing is being seen as a way to gain access to excellence (Willcocks et al. 2009). While the profit motive is often considered to be the prime driver for outsourcing decisions other factors such as access to people, skills, scarce resources, ability to scale, competitive pressure etc. are also significant drivers for offshore outsourcing strategies. Nonetheless the “costs logic” of outsourcing continues to dominate industry and academic interest in IT and business process outsourcing (ITO and BPO).

International rankings of country status and performance are an obvious input to the decision making processes surrounding country selection for outsourcing initiatives (Oshri et al. 2011). Country, regional and city level reports produced by consultancy firms and national agencies distil statistics and metrics justifying one offering or another or to promote particular destinations (e.g. A.T. Kearney 2015; Tholons 2015). They highlight opportunities emerging in developing economies and are aides for making balanced judgements when selecting offshore locations for outsourcing activity.

2 Responsible sourcing and social impact

Impact sourcing is a term for sourcing initiatives that are founded at least partially on social ethical intentions to enable people to work, with dignity and respect, to improve and possibly overcome challenging circumstances. It involves sending work to remote locations with the goal of improving if not transforming the lives of those supplying the goods and labour (Carmel et al. 2013; Heeks and Arun 2010). Yet how actual or aspirational the trend is, is uncertain. Corporate strategy operates within a complex competitive environment. Strategy must attain an awkward balance between shareholder demands, commercial reality, employee aspirations and public perception. But it may be that impact sourcing offers a counterbalance the simplistic financial measures of cost or return on investment. Even so, sourcing strategies are historically embedded processes encapsulating knowledge and learning acquired over time; they are the accumulation of actions and decisions responding to commercial realities, contexts, and exigencies. In addition, the country selection decision may also draw upon personal factors: individual cultural heritage, emotions, beliefs, and attitudes of those involved (Abbott and Jones, 2012).

Against this backdrop there is increasingly critical discourse in the media and in government challenging offshore outsourcing. Consumer behaviour is shifting towards wanting to know the source and provenance of the products and services they buy. Such concerns are often contra those of commercial entities and are prompting wider debate about the ethics of outsourcing, of offshore sourcing, of social impact and sustainability. The corporate social responsibility (CSR) perspective implies that firms and industry sectors have an onus to justify offshore sourcing in terms of fairness, social responsibility, corporate behaviour, and tax compliance. Consequently, many organisations have started the process of engaging with local communities, raising awareness of the social value they contribute to, and committing to ethical goals like minimum wages, working hours, and halting the use of child labour. These commitments have impacts on employees, suppliers, contractors, subcontractors, local communities and even customers.

The socially responsible buying/sourcing (SRB) model from the international textile and clothing industry offers an example of how one industry sector is attempting to deal with the negative
consequences of ‘social dumping’ - when manufacturing shifts to the lowest labour cost supplier, usually in developing countries (Park and Lennon 2006; Park and Stoel 2005). The SRB requires that firms take responsibility for ethical, socially responsible purchasing and sourcing (figure 1).

Figure 1: Criteria for SRB model (Park and Lennon 2006)

Similarly, new guidance published by the International Standards Organisation (ISO) sets out a framework for establishing and maintaining policies for corporate social responsibility (ISO 2010). Under this model organisations complying with the standard commit to fair trading, sustainability, socially responsibility and ethical behaviour. Independent reporting and auditing bolsters claims that products and services are produced safely, sustainably, fairly and ethically (Pretious and Love 2006).

Likewise, the move to socially responsible investment (SRI) has raised interest in the social impact of IT outsourcing activity in developing countries (Pagell and Wu 2009; Walsh and Poznanski 2014; Zorzini et al. 2015). Evidently more equitable distributions of wealth benefit society as a whole. Regional population health has long been associated with income inequality. Even in developed economies, research shows that poverty, limited social access and opportunity are linked with political neglect and underinvestment by the state in social infrastructure such as education, public health, public services and infrastructure.

“Concepts like income inequality and social capital are inherently ‘ecological’ - that is, they are characteristics of places, not individuals.” (Kawachi and Kennedy 1997)

Pickett and Wilkinson (2009) argue that equitable societies offer supernumerary benefits even to those earning salaries greater than the average. Social solidarity through the provision of public services, paid for by moderate inclusive taxation should result in better educated, healthier, workers (and consumers). Accordingly, a well-developed welfare and social infrastructure should in theory spread and amplify the benefits of foreign direct investment (FDI). In theory, in addition to the more obvious economic benefits, FDI should translate over time into positive societal impact.

2.1 Hypothesis

This research investigates the relationship (if any) between measures of national sourcing attractiveness and national social index data such as life expectancy, literacy, unemployment etc. By linking offshore outsourcing country indicators with social impact data we hope to integrate social impact and ethical considerations with offshore outsourcing decisions in an unbiased and evidence based manner.

We hypothesise that socio-economic performance of a society should correlate positively with excellence of workforce characteristics, business and financial environment, skills, lifestyle etc. For research purposes the hypothesis is formulated as:

H1: There should be a correlation between country attractiveness values for sourcing activity and social index data.

We anticipate that there will be a correlation between country level sourcing activity and social performance over time. An optimistic reading of these conjectures is that greater country sourcing attractiveness should lead to greater economic activity, and translate over time into improving social conditions.

The Gapminder and other social performance models illustrate this idea that multiplier effects from capital flows from FDI and sourcing activity may moderated by the presence (or absence) of welfare and social infrastructure, i.e. mechanisms for wealth distribution (Hansen and Flyverbom 2014). So, for example, lower societal impact may result in regions with acute structural inequalities, where poorly funded government services and inadequate social supports amplify rather than ameliorate social inequality.

1 Using international demographic data from the World Bank, World Health Organisation, the OECD (Organisation for Economic Co-operation and Development) and the UNICEF.
3 Research design

Having argued that a country’s attractiveness as a destination for supplying outsourced services may be linked with its humanitarian data we sought international data sources to test the hypothesis. Two broad data categories were identified and compared to address the question:

- International human development data
- Country sourcing attractiveness reports

Country level primary socio-economic data was derived from public data sources (table 1, below) and country level sourcing attractiveness data from consulting firms (table 2, page 5).

3.1 International human development data

The following international social-index data sources identified (table 1). Child mortality data was sourced from the United Nations Children’s Fund. We obtained life expectancy data from the World Health Organisation (WHO). Country level migration data are sourced from the World Bank. Adult literacy rates are reported by the United Nations Educational, Scientific and Cultural Organisation (UNESCO). International employment data is provided by the International Labour Organisation.

![Table 1. International social data sources and definitions](image)

The Human Development Index (HDI) is an aggregate combining life expectancy, education and income metrics. It provides an annual measure of the development state of a country and classifies countries into four tiers of: very high, high, medium, and low human development.

3.2 Country sourcing attractiveness reports

Consulting agencies such as Accenture, A.T. Kearney, KPMG, PwC, Tholons and others have produced surveys and research for comparing and promoting countries as destinations for outsourced IT and business services (table 2, page 5). A number of factors work against comparability of these surveys for various reasons: lack of access, limited country coverage, inconsistent methodology, unclear or non-disclosed primary and secondary sources. For example, different approaches may be taken when defining and categorising sourcing activity. Units of analysis also differ; international versus regional perspectives, focus on single sectors like banking, finance, or insurance industries rather than IT and IT mediated business process outsourcing in general.

Note that the HDI was expanded in 2010 to incorporate measures of development inequality. The Inequality-adjusted Human Development Index (IHDI) attempts to quantify human cost and loss due to inequality (United Nations Development Programme 2015). Conversely the IHDI may offer an indirect measure of untapped human potential.
Table 2. Commercial global sourcing surveys and research

We identified two publications providing multi-year country sourcing attractiveness reports: The A.T. Kearney Global Services Location Index™ (GSLI) and the Tholons Outsourcing Destinations Report. The Tholons reports cover years in the period 2006-2014 and focus on cities or regional clusters. They monitor six categories: scale and quality of workforce, business catalyst, cost, infrastructure, quality of life, and risk profile. The A.T. Kearney Global Services Location Index spans 2004-2014 and provides an overall country index compiled from three categories: financial attractiveness, people skills and availability, and business environment. A subset of 23 countries appear in all of the A.T. Kearney reports of which 18 are reported both in the Tholons Top 50 and A.T. Kearney (table 3).

Table 3. Countries with comparable data (A.T. Kearney country subset 2004 - 2014).

As the A.T. Kearney GSLI is a country level rather than city index it enables direct comparison with the international human development data identified earlier. Subsequent analysis was therefore limited to the A.T. Kearney GSLI as is the most complete data set and the country level unit matches that of humanitarian data.

4 Research findings

The approach taken was to compare values for country attractiveness versus country human development data. Our research assumptions do not posit causal mechanisms between various indices and commercial activity.

Exploratory analysis included a broad range of socio-economic data including: Child Mortality Rate, Life Expectancy, Migration, Literacy Rate, Unemployment Rate and the Human Development Index.
Only those that exhibit correlations with the A.T. Kearney Global Services Location Index (GSLI) are presented below. The years for which data is available were: 2004, 2005, 2007, 2009, 2011, and 2014.

Multivariate analysis was conducted in order to identify if correlations exist between the two data sets. Country attractiveness values was tested against the social data for each corresponding year. We excluded correlation tests with Literacy Rate, Migration and Human Development Index due to data gaps or mismatches over the period 2004 to 2014. We expanded the data analysis to include the GSLI sub-indices as indicated in table 4. We noted four strong patterns of correlation that needed further explanation. The country correlations between GSLI values and selected social index data summarised in table 4 below³.

![Table 4. Country correlations between GSLI values and selected social index data. Key: CMR=Child mortality rate, LE=Life Expectancy, UR=Unemployment rate](image)

Analysing these correlations, we note a strong positive pattern between the GSLI Financial Attractiveness index and child mortality rate for nearly all countries in the survey (figure 2, page 7). This implies that the financial attractiveness indicator is positively correlated with greater child mortality rates between birth and 5 years of age. We also noted a strong negative correlation between GSLI Financial Attractiveness and life expectancy for new births (figure 3, page 7). This suggests that as the average number of years a new born child would be expected to live increases so the financial attractiveness of that country or region declines. Controversially this correlation could be interpreted as; the longer the workforce lives, the less financially attractive the destination.

In trying to interpret these findings we note that higher rates of infant mortality and low life expectancy are also strong indicators of poverty. Regional poverty in turn is associated with low local labour costs, and low costs in turn increase the financial attractiveness of a region. This finding leads us to question the seemingly obvious beneficial meanings generally attributed to the term “financial attractiveness”. Correlations are also observed between the GSLI People Skills index and the same two social indices, child mortality rate and life expectancy, and again, for all nearly all the selected countries. Interestingly child mortality rates and the people/skills index show a negative correlation (figure 4, page 7). This suggests that as child mortality rates decrease, the people/skills indicators improve. A positive correlation was also detected between life expectancy and the people/skills index

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³ The Pearson correlation formula produces values in the range −1 and +1. A value of +1 represents a perfect positive correlation between values of the variables X and Y. A value of −1 represents a perfect negative correlation between values of the variables X and Y. A value of 0 indicates no correlation between the variables X and Y. Values between 1 and 0 indicate fractional correlation between the variables.
This may mean that as people live longer so too the skills profile of the region improves. In effect, higher GSLI people skills and availability scores are associated with lower child mortality rates and increased population life expectancy.

Analysis

Having analysed the data for 23 countries we did not find a significant correlation between the overall GSLI score and social indexes. However, two sub-categories from country attractiveness data, 'financial attractiveness', and 'people skills', appear to be associated with child mortality rate, national life expectancy (figure 6, page 8).
We note that our main hypothesis is only partially supported, i.e. H1: That there should be a correlation between country attractiveness values for sourcing activity and social index data. Interestingly the observed correlations are evident across nearly all countries regardless of state of development.

It seems that more experienced and higher cost locations for IT and services outsourcing remain popular despite large relative cost disadvantages with developing locations. We posit, after Hansen and Flyverbom (2014), that modes of knowledge production: big data analysis; international rankings; and organisational strategy; may be 'worked together' by key actors involved in strategic sourcing decision making processes. While emerging and developing countries have a reasonable expectation that economic growth will occur as they bring trade barriers down, expand international connectivity and invest in improved digital infrastructure; even so, strategic sourcing decisions may not prove to be so strategic as countries with long established outsourcing reputations appear able to retain competitive advantage in the market for offshore outsourcing in defined specialisms and services.

Unless sourcing activity and global trade continues to expand we may expect new entrants in developing or emerging economies to struggle to establish and sustain their attractiveness as sourcing locations. We theorise that countries that are already more experienced as sourcing destinations – hosting captive centres, servicing nearshoring and offshore outsourcing – will remain successful in part due to a maturing societal infrastructure and commercial environment and human development along all dimensions: financial, people skills and business.

6 Discussion: Country selection; implications for outsourcing IT and services

While the commercial benefits of outsourcing have been widely researched and promoted extensively in recent decades, the various claims of consultancy reports and surveys are difficult to verify, test, validate or reproduce. Perhaps unremarkably, much of the commercial outsourcing research and reportage is based on one-off studies, press releases, and advisory statements. Non-disclosure of interests and self-interest may also skew the intent of specific reports. For example, once-off surveys of trends, attitudes or uptake of different initiatives may be offered as objective research, all the while being intended to market and drive business. However, management and consultancies promoting the IT outsourcing sector do no favours if ranking metrics for financial attractiveness of countries are associated with increasing child mortality or lower life expectancy in target countries. Perhaps the use of more neutral terminology would help overcome the perception that low cost is the key driver of the IT outsourcing strategy. Industry also runs the risk that useful international outsourcing country league tables may lose credibility if they are branded ‘death and ignorance’ indexes. We propose addressing this risk by underscoring the close link between socio-economic conditions and financial factors. We recommend that financial attractiveness be retitled financial basis. Such a shift would achieve two goals:

1) Create an opening for debate about the value of impact and ethical concern as drivers for offshore outsourcing.

2) Highlight the question of who benefits from offshore outsourcing.

Impact sourcing encompasses the human desire to help and benefit others, motivated perhaps by ethical, moral or humanistic objectives. Such enterprises may still be commercially oriented but models and tools such as the GSLI can be adapted to explicitly include social impact factors, thereby supporting ethically oriented goals within a decision making process.
6.1 Limitations and future work

These findings may be interpreted in various ways but in this case we have opened a dialogue about how the data may be employed by business users seeking to incorporate altruistic and social-ethical considerations with investment decisions. We have also highlighted gaps in our understanding of the links between national/international sourcing investment and activity and country level social impact. The analysis creates an opportunity to question, critique, develop, refine, revise or expand country-industry models, for example, to better incorporate human development data, corporate responsibility, transparency and sustainability. We propose that ethically informed strategic outsourcing decisions should also encompass factors assessing ‘quality of life’, societal infrastructure, social supports and good national governance (education, health, rule of law, public services, etc.). Improved data sources, better metrics and transparent ranking can be used to close the loop between the aspirations behind ethical sourcing decisions and their impact over the long term.

In addition, decision models and ranking systems such as the GSLI have been available and promoted for some years yet little is known of their application. We had assumed that sourcing indexes and rankings are one of the main reference points for client organisations intending to make the outsourcing decision, as tools for selecting ITO (Information Technology Outsourcing) or BPO (Business Process Outsourcing) destinations. However, anecdotally there is little evidence that they are in fact used for this purpose, or if used, how they are used and their efficacy. Follow-up investigation would seek to address this through interviews and surveys with client, supplier and intermediary organisations.

We feel that better benchmarks of international sourcing activity are possible and desirable. For example, focusing on national reporting of ITO and BPO activity in quarterly and annual returns at a country level and to identify these activities in external trade for international goods and services. Objective international measures of ITO and BPO activity may be derived from national statistical reports on exported or traded services utilising NACE codes⁴, HS codes⁵ or other categories of business activity captured in government statistical reporting.

We might also question the rhetoric surrounding investment in national and international infrastructure. Policy makers raise the expectation that economic growth follows as trade barriers come down and investment is made into national infrastructure. However, sourcing destinations like India are still relatively poor in all kinds of infrastructure, including digital infrastructure yet they remain the outstanding success story for ITO and BPO industry. Does social solidarity and societal infrastructure play a part in this success?

7 Conclusions

The question remains, does sourcing activity contribute to making these places better places work and live? What are the impacts over time of offshore outsourcing investments in the destination country? Do societal conditions and human infrastructure improve as a consequence? Are investment multiplier effects trickling through to wider society? Is their impact moderated by the presence (or absence) of welfare and social infrastructure, i.e. mechanisms for wealth distribution as suggested by data transparency movements like the Gapminder and the Spirit Level (Hansen and Flyverbom 2014)? Conversely, in cases where lower societal impact results in regions with acute structural inequalities is this due in part to poorly funded and poorly run government infrastructure?

This paper makes a novel contribution by linking international social index data with country ranking indices for global sourcing activity. We also identified problems with the concept of ‘financial attractiveness’ as used in the GSLI and recommend using more neutral language, for example, retitling the category ‘financial basis’ and introducing a new category, ‘social impact’. Furthermore, the inclusion of social impact factors within country ranking and country attractiveness metrics expands their use as an assessment tool for enterprise leaders desiring to generate both corporate value and produce sustainable social benefits in the countries in which they operate.

Open questions remain.

- What (if any) are the second order effects of the IT sourcing sector and its impact over time?

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⁴ NACE code: European classification system for goods and services sector activities such as software and communications, computer services, business services etc.

⁵ HS code: World Customs Organization system of standard codes and nomenclature for traded goods.
- Can we detect transmission of activity from the sourcing sector to wider national economic activity or in social shifts such as changes in skills and education?
- What (if any) is the connection between these variables?

The social impact of ITO and BPO activities is a growing concern for both client and supplier countries in which media and public discourse has at times become emotive and partisan. These concerns reflect the fact that sourcing decisions are not value neutral, they impact individuals, regions and national economies. Nor it seems are sourcing decisions based only upon commercial arguments, many other factors come into play, including personal, emotional and cultural.

In terms of sourcing, the results of this study may also contribute to the debate surrounding the ethics of global sourcing and be of interest to social scientists, policy makers and politicians. As mentioned in the introduction, the ethical issues of global sourcing are becoming more visible. Clients looking to develop long term relationships with their offshore partners are paying increasing attention to corporate social responsibility.

One of the most significant positive impacts of an offshore outsourcing decision may be the strength of the investment ‘halo’ in the supplier country. However, the outsourcing halo effect if it exists is not evident in current offshoring indexes or rankings, nor is it evident in international humanitarian data. Changes are needed if country selection models for sourcing are to reflect the societal potential and impact of offshore outsourcing activity. We conclude with an appeal that management decision tools like the GSLI should be upgraded; to both identify good locations for ITO and BPO whilst also highlighting the extent to which investment value is multiplied through civil society. The end result is to expand the scope of IT offshore outsourcing decision making to include social impact and ethical considerations in an unbiased and evidence based manner.

We conclude by positing that societal provision of a minimum level of technological infrastructure is necessary and sufficient to equip destination countries to a base level, beyond which further investment may be unnecessary. Indeed, greater benefits may accrue to the outsourcing industry through investment in social infrastructure such as moderate inclusive taxation and national healthcare and education programmes. If so, then these points will have major implications for the goals and objectives of national policy makers and the agendas of industry groups.

8 References


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