



UNIVERSITY OF THE WITWATERSRAND
JOHANNESBURG



The Strategic Location of Regional Headquarters for Multinationals in Africa

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Working paper 276

March 2012

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March 28, 2012

Abstract

The study investigates the criteria used by multinational companies to identify the locations of their African regional headquarters (RHQs) and the importance that multinational companies assign to the respective regional offices. We find that multinationals do assign value to their RHQs but are always aiming to strike a balance between local responsiveness and global integration. The power of standardization and the introduction of relevant controls have allowed multinational companies to operate as a coherent unit in the different markets where they operate. The dominant criteria used by MNEs to choose their locations for RHQs in Africa are linked to the advantages of agglomeration and the accompanying economies of scale, and a sound institutional framework which provides a predictable business climate. Distance has become less important.

JEL codes: F23, O55

Keywords: FDI and the MNE; Africa; Regional Headquarters; MNE-Host Country Relations, Strategic decision making in MNEs

1 INTRODUCTION

No company can operate at a global scale by centralizing all decisions and then farming them out to the entire world for implementation (Ohmae 1989). The conditions in each market are too different and in some cases changes in market conditions are too rapid to accommodate long distance management. It is for this reason that many multinational companies have opted to establish regional headquarters (RHQs) in the different markets where they operate. The establishment of these regional offices allows multinational companies to have a local insight of the market, competition landscape and customer preferences. With such detailed insight, multinational companies are then able to formulate effective and responsive regional strategies. In addition, multinationals can

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improve competitiveness and differentiation against local companies by drawing from global resources such as finance, technology, bulk procurement, human capital and research to address regional customer requirements.

Given the importance of RHQs, it is rather surprising that they have not received more attention in the academic literature. When it has been addressed it has generally focused on RHQs in industrialized countries (Frost, 2001; Hedlund, 1980; Hewett, Roth and Roth, 2003; O'Donnell, 2000) although there has been an increasing focus on the Asian markets too (Holt, Gray, Purcell and Pedersen, 2000; Lasserre, 1996). The result is that we do not yet fully possess an overall framework for understanding how value and decisions are devolved, how location decisions are made (certainly less so than with FDI flows), and how their structures and strategies are evolving to accommodate the growth in emerging markets. For example, are MNEs devolving the same amount of value and decision-making powers to RHQs in emerging markets as they would if they were located in industrialized host countries? In terms of location of RHQs in emerging markets, how do MNEs deal with institutional voids? This issue becomes all the more pressing in Africa which arguably has amongst the most uncertain institutional environments. In this paper we show that the dominant criteria used by MNEs to choose their locations for RHQs in Africa are linked to the advantages of agglomeration and the accompanying economies of scale, and a sound institutional environment.

This study investigates the criteria used by multinational companies to identify the locations of their RHQs in Africa and the importance or value that multinational companies assign to the respective regional offices. The hegemony of South Africa on the African continent lends itself as a natural entry point for multinationals seeking to do business in Africa. The topic is important because thus far there is no literature focused on location criteria for RHQs in Africa and the continent increasingly represents the last frontier to international business.

2 LITERATURE REVIEW

RHQs are intermediaries between corporate headquarters and country branches or subsidiaries themselves located in a number of countries. Dicken (2003: 239) explains it as follows:

Regional headquarter constitutes an intermediate level in the corporate organizational structure, having a geographical sphere of influence encompassing several countries. . . Their primary responsibility is to integrate the parent company's activities within a region, that is, to coordinate and control the activities of the firm's affiliates (manufacturing units, sales offices, etc.) and to act as the intermediary between the corporate headquarters and its affiliates within its particular region.

As organizations pursue foreign markets as part of their growth strategy, they are always faced with the trade-off of local responsiveness and global integration. In response to this challenge, multinational organizations have embraced

the concept of RHQs. The regionalization of the different regions such as the European Union, Association of South-East Asian Nations, and North American Free Trade Area has highlighted the relevance of RHQs (Lasserre 1996). By establishing RHQs aligned to these economic regional groups, multinationals are able to simplify the segmentation of their global markets and formulate effective regional strategies. Through a regional presence, multinationals can also benefit from trade agreements that normally exist within the regional communities.

2.1 Criteria for identifying RHQs location

The number of RHQs has been increasing as more multinational organizations realize the benefits of improved responsiveness associated with regional strategies. Whilst the literature examining the importance of location factors for FDI is rich, much less is understood about how the location decisions for RHQs are made or integrated this into a theoretical framework. At a fundamental level, Holt *et al.* (2000) find nine dimensions used by multinational organizations in selecting the location of RHQs: favorable government incentives; low operating costs; low living costs; favorable financial environment; effective regional links; compatibility with home base; supportive business environment; economic IT infrastructure; and favorable employment relations. But making sense of these factors within a broader theoretical context of foreign locational decision making is still a challenge for International Business. We contribute to this understanding by integrating these factors into three key themes within the International Management literature: the role of spatial agglomeration, institutions and distance.

2.1.1 *Spatial agglomeration*

Looking at the spread of RHQs globally reveals a concentration around key cities or what Friedmann (1986) has termed ‘world cities’. These cities are increasingly used as basing points by global capital often housing corporate headquarters of MNEs or their regional offspring, and progressively bringing ‘control functions’ together. They are usually important centers of global transport and centers of communication and information. Part of the explanation for these spatial agglomeration effects has been captured by the work of Krugman (1991) and the ‘new economic geographers’ based upon the economic analysis of agglomeration production on the assumptions of increasing returns and imperfect competition. Porter (1998) has applied this to his work on clusters (geographically concentrated groupings of interlinked firms) that enhance firm competitiveness through better access to suppliers, employees, and information, economies of scale, innovation facilitation, and reduced transaction costs. Applying this concept to RHQs, Tan (2007: 74) maintains that for effectively managing their global empire, MNEs prefer to locate their RHQ in large nodal cities and service hubs where global reach, the flow of instruction, ideas and data to regional offices, branch plants, affiliates and subsidiaries can be more efficiently coordinated and controlled. Therefore MNEs like to move to and stay in locations with the

characteristics of (1) strategic positioning with sufficient transport and communication infrastructure; (2) high quality external services with a particular type of labor market, especially people skilled in information processing; (3) rich in social and cultural amenities; and (4) good institutional social factors including people's working attitude, loyalty, productivity, skill, etc. Tan raises another interesting point around the need for face-to-face contact that MNEs still require even with the phenomenal ICT developments. The problems of asymmetric information loom large in a competitive market economy and a healthy relationship between contracting parties may grow through regular contact and relational proximity which enhances trust and reduces transaction costs. Whilst standardized financial information may be cheap and quick to transmit with current communication technology, the quality of non-standardized information may decline sharply as a result of distance between parties. Tan uses the example of a business rumor which spreads rapidly through global networks but traders further from the source find it harder to verify the information to act on it. All this reinforces the importance of agglomeration for RHQs in key cities with the best access points and which act as epicenters of global financial transactions.

Hypothesis 1: The need for organizational control and coordination by MNEs will result in them choosing locations which capture the benefits of spatial agglomeration to establish their RHQs.

2.1.2 Institutional voids

In developing countries, institutional voids often raise the cost of doing business because the rules of the game are not clearly spelt out and are subject to manipulation. It is clear that organizations are merely a component of the broader institutional framework which affects our economic interactions. So for example, the transaction costs of doing business in a country could be raised by either underdeveloped formal institutions or by destructive informal rules and norms – weak property rights, discretionary power on the part of the state, the unpredictability of the investment environment, the lack of informal social capital structures, the impact of distributional conflict mobilized along ethnic lines, and the direct disruptive impacts of political instability. These institutional voids often provide severe challenges for MNEs from the developed world because of their lack of experience of doing business in this sort of milieu. In general they come from countries where governments have a long tradition of courting business by lowering costs associated with doing business through the easing of tax burdens, the provision of various incentives, strict laws prohibiting corruption, and of course high levels of political stability. These conditions very seldom apply in the developing world where governments often have a very ambivalent relationship with business and where populist anti-business sentiments is often just below the surface.

In general, business in developing countries face much larger regulatory burdens than those in developed countries. They face three times the administrative costs, and nearly twice as many bureaucratic procedures and delays associated

with them. And they have fewer than half the protections of property rights of rich countries (World Bank, 2005: 3). This is most certainly the case in Africa and the World Bank's Doing Business datasets illustrate the comparatively higher costs of doing business in Africa versus more developed countries. African economies are slowly starting to liberalize and the environment is therefore gradually becoming more familiar. A number of African countries already have business environments which approximate that in the industrialized world – South Africa being a case in point and the latter is therefore often used as a platform for investment into the rest of the continent. We have also seen large improvements in the regulatory environments in countries like Ghana, Uganda, Mauritius, Rwanda, Botswana, Namibia, and Senegal. Nonetheless doing business in Africa is exceptionally 'foreign' to most MNEs as it is a continent they have little experience of and where weak institutions are the norm. This raises the risk of doing business in these countries and the associated transaction costs. MNEs are therefore likely to search for the most familiar business environment where the rules of the game approximate that of their home countries.

Hypothesis 2: RHQs are more likely to locate in countries with a more attractive business and institutional climate.

2.1.3 The role of distance

Ghemawat (2001) argues that companies routinely exaggerate the attractiveness of foreign markets because they lose sight of the vast difficulties of pioneering new, often difficult territories. He goes on to say that most of the costs and risks of doing business in a new market result from barriers created by distance. Whilst some have argued that geography no longer matters because of developments in ICT which are shrinking the world, he maintains that distance still matters and that companies must explicitly account for it when making decisions about global expansion. This can be applied to locational decisions for RHQs as well. Ghemawat ... (2001) maintains that distance between two countries can manifest itself along four basic dimensions, namely cultural, administrative/political, geographic and economic. We highlight two of these below.

Cultural distance – The country's cultural attributes such as religion, social norms, race and language can influence how people interact with other people or institutions and influence the choices consumers make. In choosing a location for RHQs, multinational companies prefer destinations with a much smaller cultural distance from the home country so as to minimize the risks of 'mistakes' that arise from cultural distance.

Economic distance – The wealth or income of consumers is the most important economic attribute that creates distance between countries. Rich countries engage in relatively more cross-border economic activity relative to their economic size than do their poorer counterparts. Most of this activity is with other rich countries. However, this is rapidly changing with the growth of South-South trade and the emergence of greater co-operation amongst emerging markets. In establishing regional headquarters, it would therefore make sense for multina-

tional companies to look at the most economically successful countries in the targeted region.

Hypothesis 3: The selection criterion for locating RHQs depends on minimization of the distance between the multinational's home country and the potential host country.

2.2 Value assigned to RHQs

During the early stages of expansion abroad, many multinationals establish an International Division (ID) at the global headquarters. To ensure coordination and strategic alignment, all the subsidiaries or RHQs in the different countries report directly to the ID. As the global reach of the organization extends to more countries, management at headquarters grapple with the issue of integration and coordination (Baliga and Jaeger 1984). Centralizing all decision making and control at the ID is likely to deny the foreign subsidiaries the responsiveness required to compete in their regional markets. It is for this reason that multinationals tend to relinquish some but not all powers and decision making authority to the regional offices (Baliga and Jaeger 1984). Factors that are indicative of the value or importance assigned to the RHQs are discussed below.

Imposed control: In measuring the value assigned to the RHQs, Baliga and Jaeger (1984) focus on the level of control imposed on the RHQ by global headquarters. Control is concerned with regulating the activities within an organization so that they are in accordance with the expectations established in policies, plans and targets (Baliga and Jaeger 1984). Organizations can either impose personal and/or bureaucratic control on the respective RHQs or subsidiaries. Personal control involves placing a number of trustworthy personnel from headquarters in key management positions in the subsidiary to supervise subsidiary functioning (Baliga and Jaeger 1984). The deployment of these expatriates will therefore ensure that the RHQs are completely aligned to global headquarters and make no decisions that might be in conflict with global headquarters. Harzing (2001) argues that some multinationals deploy expatriates as a form of a surveillance strategy on the subsidiaries or regional offices. The expatriates in senior positions are viewed as an extended form of headquarter supervision (O'Donnell 2000). However, Lasserre (1996) warns against viewing the deployment of resources from global headquarters in a negative light. He argues that the RHQ importance can be entrenched by appointing very senior and highly influential people within the organization to run the RHQs. Given their influence and power, these expatriates would be able to strongly represent the views and interests of the RHQ. For multinationals that want to improve responsiveness in the regional subsidiaries, they allow for some level of local discretion yet maintain overall coordination and control (Edström and Galbraith 1977). To achieve this, organizations rely on bureaucratic control. In bureaucratic control, global headquarters introduces explicit and codified rules and regulations that must be adopted by the RHQs. Using these rules and procedures, multinationals are able to limit local discretion of the regional offices

(Edström and Galbraith 1977).

Strategic decision-making: Hedlund (1980) argues that the level of strategic decision-making powers assigned to the subsidiaries or RHQs is another indication of the value assigned to the RHQs. He points out that the biggest concern raised by the subsidiaries or RHQs, was the one directional nature of strategy formulation. Instead of engaging RHQs, global headquarters defined the organizational strategy and RHQs were simply expected to implement the strategy. The preferred approach would be to engage the RHQs in the formulation of the global strategy and also assign the RHQs the authority to formulate their own strategy that is still aligned to the global strategy.

Innovation and research & development (R&D): Conventionally, innovation in multinational firms has been understood as the domain of the parent organization located in the home base of the firm (Frost 2001). However, changes in the structure of the global economy and apparent trend towards internationalization of the R&D function within major multinational firms motivated researchers to treat more seriously the possibility that foreign subsidiaries could play an important role as sources of new ideas and capabilities (Hakanson and Nobel 1993). Gassmann and Von Zedtwitz (1999) talk about the shortcomings of the ethnocentric centralized R&D. In this model, the home country is assumed to be technologically superior to its foreign subsidiaries. Even though the model has its own benefits, they warn against its lack of sensitivity for signals from foreign markets and its insufficient consideration of local market demands.

Marketing decisions: Hewett et al. (2003) argue that the role of RHQs in marketing activities is another indication of the value that is decentralized. Organizations can become more efficient and save money through standardization of marketing and advertising campaigns. In such a scenario, RHQs will have limited or no input at all in the organization's marketing strategy. RHQs will simply be relegated to implementing sites of decisions taken at global headquarters. Even though the reasons for standardization are compelling, few markets are exactly the same hence a need for local customization to address diverse conditions in different markets.

Hypothesis 4: The value or importance assigned to RHQs can be measured by looking at the deployment of expatriates to run the RHQs and bureaucratic control imposed on the RHQs, apportioning strategy responsibilities, innovation and R&D responsibility, and allowing the RHQ to formulate regional marketing strategies.

3 RESEARCH METHODOLOGY

A semi-structured interview survey process consisting of written questionnaires and one-on-one interviews that incorporated both closed as well as open-ended questions was used. The population of the research covered foreign multinational organizations that have a presence in South Africa and the sample, in turn, focused on local market leaders in their respective sectors. A mixed methodology was employed which had a significant qualitative dimension to it to allow us to

probe the responses for depth and further explanation. Face-to-face interviews were conducted and this allowed for follow-up questions based on the responses. All respondents were either country managing directors or part of the senior management team. Five companies participated in the study on condition that the name of the company not be mentioned in the report. Table 1 below summarizes a list of companies that participated in the study, their home country, industry and global revenue.

Unfortunately, none of the multinational companies reported their revenues at country level, which would have allowed us to indicate the market share of these companies in Africa. However, our sample represents leading companies within the global markets. For example, Accenture and IBM are the top two technology consulting firms in the world. BMW, Mercedes and Nissan are major players in the motor vehicle sector. Microsoft, SAP and SAS are market leaders in the global software industry. The sample is thus relatively large given the finite number of multinationals operating in South Africa and the focus on market leaders. To further ensure consistency, a mixed method approach was followed to consolidate qualitative feedback with the quantitative survey data. The research instrument was standardized and consistent for each respondent. Issues around reliability and validity were addressed by conducting face-to-face interviews which ensured that none of the questions asked had any form of ambiguity. Also the questions asked in this questionnaire touched on long term strategic positions of the different multinationals and thus none of the discussion issues could be influenced by the foremost events that are currently taking place. Therefore, there was no major concern that the reliability of this research could be compromised.

Part of the questionnaire examined the criteria influencing the location of RHQs and this used a Likert scale as a basis to determine the relative importance of each of the factors and it required a more involved statistical analysis before the data could be used and correctly interpreted. This is because the survey data captured is of an ordinal nature and cannot necessarily be assumed to be linearly correlated with the underlying attitudes of the Likert scale of the survey i.e. one cannot directly, accurately interpret responses from the point scale without some mathematical means of normalizing or rescaling it first. Stacey (2005) has developed a distribution-fitting approach which allows for the conversion of such data into a more representative form which yields results of greater accuracy and validity. This allowed for each factor to be interpreted

and ranked.¹

When analyzing the results of the distribution-fitting analysis performed on the survey data, Stacey’s (2005) statistical methodology imply that the following interpretations needed to be made to identify factors as *very important*, *important* and *less important*. If the mean for an investment factor response was appreciably greater than zero ($\mu \gg 0$ as determined by the hypothesis test) then that factor is statistically significantly more important than the overall average importance of all the factors and can hence be interpreted as being *very important* relative to other factors. If the mean for an investment factor response was very close to zero then it can be interpreted as being *important* (the average) relative to other factors. If the mean for an investment factor response was appreciably less than zero then it can be interpreted as being *less important* relative to other factors.

4 RESULTS AND DISCUSSION

Respondents were asked to indicate how their companies split the global market into different regions. As reflected in Figure 1 below, most multinational companies are broken down into three main regions, namely, Europe, Middle East and Africa (EMEA), Americas and Asia Pacific (APAC).

A slight deviation from the above regionalization is where the multinationals have split the countries into Europe, Africa and Latin America (EALA), North America (NA) and Asia-Pacific (APAC). Another deviation is where a number of multinationals have split the region of Americas into two regions, namely, North America and South America. In addition to the three main regions, a number of multinationals have also grouped countries into a category called “*Emerging/Growth Markets*”. These are countries identified as future drivers of the multinational’s growth. To further simplify management, some multinationals take the regionalization of countries to a lower level by introducing sub-regions. It is worth mentioning that a few multinationals still used the global headquarters to host the leads of the different regions as opposed to having RHQs in one of the countries within the respective region.

¹The approach calculates item means and standard deviations of the sample, rather than respondent level data. Respondent level data can however be generated from estimated threshold values and the estimated means and standard deviations. In the case of normal underlying distributions, the rescaled values can be calculated as the mean or expected value of the truncated normal distribution between the two threshold values. This is given in the formula:

$$Y_{k,j} = \frac{\int_{\tau_{k-1}}^{\tau_k} x \cdot e^{-\frac{(x-\mu)^2}{2\sigma^2}} dx}{\int_{\tau_{k-1}}^{\tau_k} e^{-\frac{(x-\mu)^2}{2\sigma^2}} dx}$$

Where $Y_{k,j}$ is equal to the rescaled value for the k^{th} ordinal response to the j survey item, and μ and σ are the estimated mean and standard deviation of the normal distribution fitted to the responses to the j^{th} survey item (Stacey, 2005: 21).

The respondents were also asked to indicate the region to which South Africa belongs and the host country of that region's RHQs – see Table 2. Where multinationals had Africa as a sub-region, South Africa always served as the RHQs. When probed about the reason for hosting the RHQs in the respective countries, 30% of the respondents indicated that it was based on the revenue contributions of the countries in a specific region. With the exception of emerging markets, the country with the highest revenue contribution normally served as the host. The geographic location of a country was also mentioned as a reason on two occasions. The country that is central to the countries within the region got the preference. Two respondents touched on Dubai's incentives as a reason for hosting the RHQ for Emerging Markets.

4.1 Importance of location factors

Based on the available literature, 18 factors were identified as major drivers of the RHQs location decision. Senior executives from multinationals operating in South Africa were asked to indicate the importance of each factor as if they were making a location decision. In addition to this, the respondents were asked to rate South Africa as positive or negative in the respective factor. The results are presented in Table 3 and for each factor the ratings given by the respondents and the mean determined from the distribution-fitting analysis are shown (Stacey, 2005).

Holt *et al.* (2000) finding of 18 factors that are important in influencing the location decision has proved to be incorrect. The importance of the respective factors is reflected in Figure 2 below. The graph was plotted using the standardized mean of each factor calculated using Stacey's (2005) analysis method. As we move away from the center of the radar graph, the interpreted level of importance increases from less important to very important. In summary, six factors were interpreted as very important, seven factors were interpreted as average in importance and the remaining five factors were interpreted as less important – see Table 4.

From Table 3 the factor that was interpreted as being most important overall (a positive standardized mean of 1.31 and a t-value of 4.29) was the *availability of a skilled workforce*. Running RHQs requires highly skilled professionals. Even for companies that believe in the deployment of expatriates, there will always be a demand for locals that have the correct set of skills. However, only 20% of the respondents felt that South Africa featured positively in this dimension. The concern raised regarding South Africa is the small pool of professionals that have the necessary skills to occupy positions at the RHQs. As a result of this shortage, companies have to pay a premium to attract and retain talent and this can contribute to higher operating costs. Some executives pointed out that this shortage of skills also contributes to a high attrition rate as professionals change jobs in search for the highest paying organization. Another negative consequence of this phenomenon is the small number of professionals that have gone through the ranks of the organization and therefore have a deep understanding of the business and its challenges.

The next factor identified in order of importance was the *economic IT infrastructure* with a mean of 0.69 and a t-value of 3.62. A RHQ must coordinate and control the activities of the MNE's affiliates within a particular region, acting as an effective channel of transmitting instructions and information. As a result MNEs have invested in expensive IT systems that ensure real time integration with systems throughout the world. For example, most manufacturing companies have sophisticated Supply Chain Management systems that must always be online to manage inventory and the ordering of components for assembly plants in the region. All these systems rely on the fact that the RHQs will always be online. In addition to being the communication touch point with global headquarters, many RHQs are also used to host the shared services centers used by the individual countries within the region. Even though most executives agree that South Africa's IT infrastructure is reliable, there is a concern about the price. One executive from a multinational bank indicated that they pay seven times more for bandwidth in South Africa as compared to Europe. Another executive from a global consulting firm indicated that telecommunication costs account for about 30% of their operating costs. Some respondents argued that some of the benefits derived from tax incentives in the Contact Centre and BPO businesses are eroded by the high telecommunications costs. Respondents argued that the country is still paying a significant price for the legislation that allowed Telkom to operate as a state-run monopoly.

A *supportive business environment* was interpreted as being *very important* and ranked third. This factor focuses on the availability of reliable suppliers, presence of key technology suppliers, and consistent physical infrastructure. Next was the *size of the local market*. During the interviews, most of the respondents confirmed that countries that host regional headquarters often have the biggest economies in that region. Despite South Africa's relatively low economic growth, many respondents concur on the country's significance as the biggest economy on the African continent. One of the executives indicated that South Africa is amongst the Top 10% revenue contributors out of a total of 51 countries where his company has a presence. Many referred to the country's sound fiscal policies and the gradual emergence and growth of the black middle class as signs for potential future growth.

A *favorable financial environment* was interpreted as being very important overall and 65% of the respondents felt that South Africa featured positively. All the respondents highlighted the importance of stability and predictability of financial indicators. As part of the multinational's strategic management, RHQs are expected to compile business plans and revenue forecasts that are compiled in the currency of the multinational's home country. Currency fluctuations make long term planning very difficult. Respondents mentioned that RHQs often fund their working capital from loans received from global headquarters. Sudden changes in the currency can have a significant impact on the RHQs' ability to service the loan. In countries characterized by unstable and high inflation, forecasting and planning becomes even more difficult. Most respondents commended the inflation targeting policy adopted by the South African Reserve Bank. Such a framework makes it easy for companies to com-

pile long term plans as they have a comfortable view of the threshold values that can be assigned to the inflation rate in their financial models.

The final factor that was rated as being very important was *government cleanliness*. Corruption in government has the potential to inhibit economic growth and scare off potential investors. Given that government is often one of the biggest spenders in an economy, respondents whose companies do business with government felt that corruption would make it impossible for them to win any government tenders as it is against their governance frameworks and value systems. They indicated that lack of corruption is especially important during the period of economic recession as spending by governments through stimulus packages helps to keep business afloat. The view on South Africa is that corruption has not reached crisis stage although it is becoming more problematic. Nonetheless compared to the rest of the continent it is still rated highly but respondents warn that if corruption is allowed to grow, it will impact service delivery and this can result in social unrest and political instability.

Of the six factors that were rated very important, four are related to the benefits of agglomeration, and three to a sound institutional framework. Distance did not feature. This pattern continues as we move into the category of seven factors that were rated of average importance with the first four emphasizing the institutional environment. The *rule of law* emerged seventh overall. Business cannot operate efficiently in an environment of lawlessness. Within the South African context, high levels of crime are a concern to a number of executives. Despite these challenges, executives from multinationals are comfortable with other aspects of the rule of law in South Africa. These include the enforcement of contracts and resolution of disputes. All believe that the judicial system in South Africa is independent and are comfortable with its impartiality and fairness when dealing with contractual matters and dispute resolution. The next factor was *government attitude towards business* where 90% of the respondents felt that South Africa featured positively. The expectation of the business community is that government must create an environment that is conducive for business to flourish. Many respondents viewed the South African government as being friendly towards business. They commended the existence of formal structures such as the National Economic Development and Labor Council (NEDLAC). Through this vehicle, government, labor, business and community organizations collaborate in finding solutions and negotiate on economic, labor and development issues facing the country. In addition to NEDLAC, the country's leadership also created multiple forums that allow government to engage the business community on matters affecting the country. However, some executives have warned about the negative impact of policy uncertainty. They pointed out the discussions around nationalization of mines and banks as examples of policy uncertainty that has a negative impact on South Africa hosting future RHQs.

In ninth place were favorable employment relations. There is a general view amongst the respondents that the employment relations in South Africa are on par with those implemented in developed countries such as Germany and France. However local rules are seen as stringent when compared to rules in

other developing markets. Some executives have questioned the wisdom of having rules that are on par with the developed economies when South Africa is still trying to attract foreign investment. This is a very sensitive issue in South Africa and the debate is often clouded by emotions related to the apartheid legacy. There are those executives who strongly believe that the stringent rules are necessary to protect workers from the exploitation that was prevalent during the apartheid years. On the other side, there are those who feel that workers have too many rights that scare off foreign investors. One executive indicated that the current labor laws make it very difficult for employers to deal with non-performance. Many executives however commended the predictability of the South African labor framework. This is especially important for industries that must meet service level agreements with overseas markets as they can make contingency plans where necessary.

A *favorable political climate* emerged next in importance. One executive touched on the risk premium that a multinational company can suffer by doing business in a politically unstable country. This risk emanates from the fact that most multinationals have insurance policies covering their employees and assets. By doing business in an unstable country, the organization's risk profile can be negatively impacted and the company can be expected to pay higher insurance premiums to compensate for the risk exposure. He indicated that the matter is taken so seriously that high risk countries require special approval before his organization can send any of its employees to work in the respective country. There is an acknowledgement that not all stable countries have a strong democracy and free political activity. There are a number of well-known authoritarian governments that are running very stable countries and have created an environment favorable to business. Multinationals seem to be satisfied to invest where there is political stability even if that stability is associated with limited political activity and freedom of expression.

Low operating costs was interpreted as being of average importance overall. A number of respondents indicated that multinationals have responded to this issue by introducing operating models that allow them to tap the cheapest labor irrespective of location. For example, many multinationals have established global delivery centers that service their RHQs throughout the world. The global delivery centers create an opportunity for a RHQ's finance function, for example, to be performed in India where the cost for accountants is cheaper. There is however an acknowledgement that these global delivery centers come with their own challenges such as time zone differences and language barriers. Therefore countries that have a pool of skilled and affordable local workers still have an advantage. Closely linked to the concept of global delivery networks is the emergence of new technologies that deal with the problem of high labor costs. An example of these technologies is the concept of cloud computing which allows companies to host the entire IT infrastructure in a central data center where the required skills are available in abundance. Local RHQs are then charged based on the use of the central infrastructure but do not have to worry about the skills required for ongoing maintenance or enhancements.

The last two factors that emerge as being of average importance although

at the bottom of this list are related to distance namely *access to regional markets* and *effective regional links*. With many of the developed economies still emerging out of recessions or dealing with a major debt crisis, respondents felt that untapped markets within the continent provide great opportunities for growth. Regional integration and the formation of regional economic blocks such as the Southern African Development Community (SADC) are viewed as strong building blocks towards regional integration and effective trade across the member countries. South Africa's leading role within the SADC region is viewed as a position of strength and further entrenches the country's status as the gateway to Africa. Even though the regionalization of the continent has been in existence for a number of years, many respondents felt that a lot of work still needs to be done. The movements of goods and labor within the SADC region for example still has a long way to go before it can reach the levels experienced in integrated regional communities such as the EU. The road and rail infrastructure within the continent still requires serious investment as it impedes the simple and cost effective movement of goods. Even though African countries have worked towards regional integration, some of the respondents referred to a peculiar alignment to historical colonial divisions. Former British, French or Portuguese colonies were much more open to doing business with their former colonial masters. One of the executives from a technology consulting firm referred to an example where their client in Angola prefers getting services from their office in Portugal rather than from South Africa.

Five factors come out as being less important starting with *favorable government incentives*. Only 30% of the respondents viewed South Africa as featuring positively on this factor. Despite its overall rating of less important, this factor featured highly with multinationals in the manufacturing sector. In line with the government's drive to boost this sector, a number of incentives were critical in driving the location decision in South Africa. The most prevalent of these incentives is the Motor Industry Development Program (MIDP) applicable in the motor vehicle manufacturing sector. The program was designed to help the industry adjust and increase its global competitiveness in the post-apartheid trade policy environment. The savings derived from the program also help offset the costs associated with South Africa's geographic location which is often far from the export markets. In addition to the MIDP, South Africa is also made attractive by the fact that it is a beneficiary of the Africa Growth and Opportunity Act (AGOA) introduced by the USA government in 2000. AGOA makes provision for trade preferences and duty free entry to the USA of certain goods from Sub-Saharan Africa. A number of manufacturers are taking advantage of this incentive and use South Africa as an export base to the US. For example, BMW South Africa only sells 30% of their vehicles to the local market and the rest are exported with the US being the biggest export destination.

Even though the above incentives can be important, many of the senior executives expressed doubts about their sustained value. They argued that many countries have introduced incentives to a point that it is difficult for any country to use incentives as a differentiator. They also raised questions about the sustainability of government incentives. To highlight doubts on the

sustainability of tax incentives, one executive referred to tax incentives used by Ireland to attract multinational companies to its shores. Many commentators argue that it is a matter of time before Ireland is forced to revise its generous tax incentives as a measure to address their current debt crisis. The question in everyone's mind is whether all the multinationals that relocated to Ireland will vote with their feet and seek a new location that provides better incentives.

The next three factors are related to distance. *Political relations between home and host country* and *compatibility with multinational's home country* rank only 15th and 16th. Hostility between countries is not good for business but there was a general view amongst the respondents that good relations do not necessarily translate into good business. Also by their very nature, multinationals expect to operate in very diverse countries that do not resemble their home country and are glued together by the organizational culture which transcends country differences.

Geographic position appears in second last position. Most executives felt that globalization and the emergence of new technologies have made this factor less significant to the RHQs location discussion. The emergence of technologies such as video conferencing and telepresence make it possible for people to simulate a virtual boardroom discussion. In addition multinational companies have also invested substantially in closely integrated IT systems. These systems allow executives at the global headquarters to have real time access to the business activities in each RHQ. In addition to cost savings, the implementation of these technologies is in line with environmental and green initiatives. Corporate companies are able to reduce their carbon footprint by discouraging unnecessary flights to the RHQs. Even though the implementation of telecommunication technologies has made this factor less important, some executives indicated that bandwidth costs and network penetration makes it difficult for Africa to exploit these technologies to a maximum. Also executives whose companies focus on exporting goods to places such as Europe, the USA and Asia, touched on the negative impact of high shipping costs from their South African bases because of distance.

The least important factor was *low living costs*. The living costs in a RHQs host country seemed relevant only to countries that have a large expatriate contingent deployed to run the office. Given that most multinationals operating in South Africa have a limited dependence on expatriates, it is not surprising that this factor has the lowest mean of all 18 factors.

In general therefore we find support for hypotheses 1 and 2 but not for 3. Distance did not feature strongly as a factor important to the location of RHQs to service the African market. But factors related to agglomeration and institutional certainty featured powerfully. We discuss this further in the conclusion.

4.2 Value or importance assigned to RHQs

The value assigned to the RHQs was evaluated based on the control imposed on the RHQ, strategic decision-making authority apportioned to the RHQ, as

well as the innovation and marketing responsibility of the RHQ.

4.2.1 Imposed control

Control is concerned with regulating the activities within an organization so that they are in accordance with the expectations established in policies, plans and targets (Baliga and Jaeger 1984). In the survey the respondents were asked a number of questions to determine if there was any form of control imposed by the global headquarters. The questions tried to determine the dominance of expatriates in senior management positions, mainly focusing on the Executive Committee (Exco). 80% of the companies studied had no expatriates or have a very low expatriate presence of less than 5% as part of their Exco. It is worth noting that out of the 20 companies that formed part of the study, only four had a Country Managing Director (CMD) that was not South African. Interestingly, three of these companies come from the motor vehicle manufacturing sector and all German companies had a CMD who was from Germany. Some respondents indicated that such a high number of local CMDs are a vote of confidence in the local leadership talent.

A total of 80% of the respondents disputed the theory that expatriates are deployed with the intention of imposing control on the regional offices. The common view was that flooding regional offices with expatriates is a very expensive exercise. Companies would have to pay relocation costs and out-of-country allowances. Figure 3 illustrates that the main reason for deploying expatriates is to address the lack of skills in the respective regional office.

Closely linked to the lack of skills is the introduction of new products or technologies in the industry. This point was common in the motor manufacturing industry where expatriates were often deployed during the introduction of new models. The next common reason for deploying expatriates was "Resource Rotation/Knowledge Sharing". Since the emerging markets are seen as the major drivers of future global economic growth, there is a view amongst multinationals that their senior executives at global headquarters must have a deep understanding of these markets. Many respondents indicated that South Africa is viewed as one of the best countries to expose executives to diversity and inclusion.

One executive from a technology multinational indicated that he voluntarily invited executives from the global headquarters to join his Exco when he took over as CMD. The reason for requesting the deployment was two-fold. Firstly, his view was that it helps to have well respected people from global headquarters being part of the regional team. They bring a global view of the organization and it is easy to sell new strategies and initiatives to the global headquarters: "These executives can help you maneuver through the organizational politics and approval processes...their views are well respected and often get limited resistance." Secondly, he felt that these executives help the regional office step up its game: "They are able to bring their experience from different types of markets and bring ideas that ensure differentiation in the regional office. They are able to contribute to an environment where the local workforce always feels

challenged and excited about their work”.

To monitor activities at the regional offices, all the multinationals have invested in closely integrated IT systems. These systems allow management from global headquarters to have a real time view of the activities in each of their regional offices. Respondents were also asked to comment on the level of flexibility that is allowed in customizing global policies to fit local needs. The requirement for consistency and standardization was highly emphasized by the respondents. However, respondents also indicated that where local laws dictate, customization at a local level is allowed. A number of multinationals actually have a formal framework to deal with any deviations from standard global policy. Local offices can always apply for deviations or concessions by compiling a business case that will require global approval. As an example, one of the multinationals took a global decision not to increase salaries in 2008 due to the global financial crisis. The legislation in some countries required a minimum salary adjustment equivalent to the inflation rate. These countries were allowed to deviate from global policy and implemented salary increases as required by the country laws. Some countries like South Africa were able to compile a strong business case reflecting the growth that was achieved in the country despite the financial crisis. The risk of losing highly skilled employees in an environment characterized by a shortage of skilled labor also contributed to the approval of the deviation. Another example unique to South Africa relates to laws around the Black Economic Empowerment (BEE) Act. A number of multinationals have had to customize their policies including procurement and ownership to address the requirements of BEE.

4.2.2 Strategic decision-making

More than 90% of the executives emphasized the importance and power of local responsiveness. They argue that regional offices will always have a better understanding of local markets and customer needs hence the importance of having the decision authority on matters of strategy. However, they also emphasized that local strategies must always be aligned to the global strategy. One executive touched on the psychological impact of allowing local strategic decision making. He indicated that stronger commitment by the local and regional executives can be achieved if they helped formulate the strategy that they are expected to execute. There is always a sense of ownership of the strategy and hence the high level of commitment.

Respondents were asked to comment on the contribution of the local and regional offices to the formulation of the global strategy. The most common approach was the bottom-up strategy formulation approach. In this approach local offices compile their strategy and submit it to the RHQs, which then submit the consolidated regional strategy to the global headquarters. At global headquarters, common themes from the different regions are identified and incorporated into the global strategy. One executive from a global telecommunications multinational indicated that local/regional input is so valuable that his organization actually has a formal framework for regions to challenge the

overall global strategy if their contributions are not reflected.

4.2.3 Innovation responsibility

Out of the 20 respondents, eight indicated that the local offices have invested in R&D capabilities. The common argument for these investments is the need for local responsiveness and differentiation from local competitors. One executive from a telecommunications multinational indicated that different markets with different demands can generate solutions or products that can be applicable in other markets. He referred to the mobile payment solution that was developed for the African market that had a high level of unbanked consumers. A variation of the same solution is now used in developed countries to address the need for mobile payments. The majority of the eight companies that have local R&D functions come from the technology and professional services sectors. Most of these organizations have a culture that encourages innovation at an individual level. Contribution to the knowledge base is actually a performance indicator for all employees. At the end of each project, the respective project leadership is expected to make a contribution to the Knowledge Exchange database. These contributions are then accessible to all employees throughout the world and reduce the cost of implementation which can be a differentiator from competitors.

However, most multinationals still do not believe in a decentralized R&D approach. Figure 4 below confirms that the preference for a centralized R&D unit was the main reason why local offices did not have a local R&D unit. Many executives indicated that a centralized R&D deals with the threat of compromised Intellectual Property amongst other things. Having R&D units in each region makes it easier for the company's trade secrets to be leaked to the competitors. They also indicated that their products have very limited variations that depend on the region. It therefore makes business sense to centralize everything and derive the benefits of economies of scale and reuse of technologies.

4.2.4 Marketing responsibility

Almost all respondents indicated that a level of centralization and global consistency are important for the strength of the brand. For a number of multinationals, global headquarters assumes responsibility for the brand and for defining guidelines for regional offices in driving their marketing initiatives. To ensure adherence to the set guidelines, some multinationals indicated that the marketing budget is controlled by the Marketing Unit at global headquarters. Local and regional offices access this budget by presenting their marketing proposals to global headquarters that will approve it based on compliance with the set guidelines. One unique arrangement is where the local office of a technology multinational has full control of its marketing budget, but 30% of the budget is ring-fenced for global marketing initiatives. Even though there is an emphasis on consistency that is achieved through a level of centralization, the respondents

also emphasized the need for local responsiveness. Local offices and regional offices are still viewed as having the best understanding of their market and the competitor landscape and hence the need for flexibility.

5 CONCLUSION

There is a level of agreement with the fourth hypothesis that multinationals do assign value to their RHQs. However, multinationals are always aiming to strike a balance between local responsiveness and global integration. The power of standardization and the introduction of relevant controls have allowed multinational companies to operate as a coherent unit in the different markets where they operate. Hypothesis 1 and 2 find strong support amongst MNEs doing business in Africa. The dominant criteria used by MNEs to choose their locations for RHQs in Africa are linked to the advantages of agglomeration and the accompanying economies of scale, and a sound institutional framework which provides a predictable business climate. In emerging markets which often suffer from institutional voids and thus higher country risk profiles where the rules of the game are uncertain, MNEs choose to locate in the environment which is most familiar to its home rules and use it as a springboard to do business in more 'hostile' milieus. The new growth opportunities are almost invariably located in countries with less attractive institutional setups and MNEs attempt to mitigate that risk by choosing the most favorable rules within that region. Hypothesis 3 finds little support and distance is shown to be less important in an era of globalization and technological innovation which allows distance to be navigated. This is not to say that geography does not matter as agglomeration effects demonstrate that whilst distance is less important, location still matters because of the benefits of increasing returns as a result of agglomeration.

South Africa emerges very favorably as a suitable host for RHQs for multinationals wishing to do business in Africa. However, we need to note some limitations of this paper which present themselves as fruitful areas for further research. First, the study is conducted at a point in time on a continent which is seeing dramatic changes and extraordinary economic growth rates. South Africa's economic dominance in Africa is declining and that may open up new host possibilities. Over the last decade the rapid growth in Dubai saw it become a potential competitor to host RHQs for the Africa and Middle East region. However this has been short lived and a number of multinationals have recently shifted back to South Africa. But it is worth noting the dynamics of the broad region make the final outcome uncertain. Second, our relatively small sample makes it impossible to statistically identify industry specific differences. Additional areas for research include an analysis further unpacking our fourth hypothesis. To what extent is the same amount of value and decision-making autonomy decentralized to RHQs in different regions. Do São Paulo, Johannesburg and Singapore elicit the same amount of value decentralization for multinationals hosting their Latin American, African and Asian operations there? Lastly, we have indicated that a number of multinational companies have

introduced what they call “Emerging Markets” as an additional region. It would be useful to conduct a study to determine the criteria used by multinationals to locate RHQs for the “Emerging Markets” group of countries or whether these are going to remain subservient to geographic boundaries.

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Table 1: List of multinationals that formed part of study

No.	Multinational Company	Home Country	Industry	Revenue Currency	Global Revenue for 2010
1	Accenture	US	Technology	Dollar	\$21 billion
2	BMW	Germany	Motor Vehicle	Euro	€60.5 billion
3	Dell	US	Technology	Dollar	\$52.9 billion
4	Deloitte	UK	Audit and Consulting	Dollar	\$26.6 billion*
5	GEA	Germany	Manufacturing	Euro	€4.4 billion
6	IBM	US	Technology	Dollar	\$99.9 billion
7	Mercedes Benz	Germany	Motor Vehicle	Euro	€97.8 billion
8	Microsoft	US	Technology	Dollar	\$62.5 billion
9	MSA	US	Manufacturing	Dollar	\$977 million
10	Nissan	Japan	Motor Vehicle	Yen	¥9.4 trillion
11	Quadrem	US	Supply Chain	Dollar	\$500 million
12	SAP	Germany	Technology	Euro	€12.5 billion
13	SAS	US	Technology	Dollar	\$2.43 billion
14	Vodafone	UK	Telecommunications	Pound	£44.5 billion
15	Cargill	US	Financial Services	Dollar	\$107.9 billion
16	US Multinational Bank	US	Financial Services	Dollar	\$86.6 billion
17	US Audit and Advisory Multinational	US	Audit and Advisory	Dollar	\$26.6 billion
18	French Manufacturing Multinational	France	Manufacturing	Euro	€20.9 billion
19	US Software Multinational	US	Technology	Dollar	\$26.8 billion
20	US Technology Multinational	US	Technology	Dollar	\$40 billion

* Company's home country is UK but published financials in US Dollars

Table 2: Regional allocation of South Africa and RHQ host country

No.	Multinational Company	Home Country	Region or Sub-region where SA is allocated	RHQ host country
1	Accenture	US	SPAI	Spain
2	BMW	Germany	EMEA	Germany
3	Dell	US	Emerging markets	Dubai
4	Deloitte	UK	EMEA	UK
5	GEA	Germany	Africa	South Africa
6	IBM	US	CEEMEA – Emerging markets	Dubai
7	Mercedes	Germany	EMEA	Germany
8	Microsoft	US	MEA	Turkey
9	MSA	US	Africa, Middle East and Latin America	South Africa
10	Nissan	Japan	Emerging markets	France
11	Quadrem	US	Africa	South Africa
12	SAP	Germany	Emerging markets	Spain
13	SAS	US	Africa	South Africa
14	Vodafone	UK	EMEA	UK
15	Cargill	US	EMEA	Switzerland
16	US Multinational Bank	US	EMEA	UK
17	US Audit and Advisory Multinational	US	EMEA	UK
18	French Manufacturing Multinational	France	MEA	Egypt (<i>Plans to relocate in SA</i>)
19	US Software Multinational	US	EMEA	UK
20	US Technology Multinational	US	EMEA	UK

Table 3: Results of Stacey’s Distribution-Fitting Analysis

	Government Incentives	Low Operating Costs	Low Living Costs	Favorable Financial Environment	Effective Regional Links	Home Country Compatibility	Supportive Business Environment	Economic IT Infrastructure	Favorable Employment Relations	Home and Host Country Political Relations	Government Attitude Towards Business	Rule of Law	Favorable Political Climate	Availability of Skilled Workforce	Size of Local Market	Access to Regional Markets	Government Cleanliness	Geographic Position	
Observed																			
Not Important	2	0	2	0	1	1	0	0	0	3	0	0	0	0	0	1	0	1	
Less Important	4	5	7	0	4	8	0	1	4	4	1	2	3	1	1	1	0	8	
Important	7	6	6	3	4	4	1	0	4	5	3	4	8	1	4	6	4	5	
Very Important	4	4	5	8	8	7	7	7	7	7	10	6	4	4	5	10	7	4	
Extremely Important	3	5	0	9	3	0	12	12	5	1	6	8	5	14	10	2	9	2	
	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	
Solver parameters																			
μ	-	0,3281	-0,1101	-0,5602	0,4431	0,1381	0,4511	0,6459	0,6592	0,0151	0,4317	0,2655	0,3091	0,0389	1,0185	0,4803	0,1196	0,4110	-0,4628
σ	0,7733	0,7758	0,6006	0,5383	0,7057	0,5799	0,4703	0,7045	0,7274	0,7707	0,5182	0,7630	0,6587	0,9671	0,7774	0,6151	0,6060	0,6865	
Expected																			
Not Important	1,7667	1,0358	1,7601	0,0074	0,8016	1,1194	0,0002	0,0392	0,5637	2,2201	0,0157	0,2749	0,4287	0,1341	0,1713	0,4162	0,0324	1,8498	
Less Important	5,0914	3,9024	7,1709	0,4328	3,9596	6,3149	0,0619	0,6104	3,1075	5,6401	0,7871	1,8558	3,1793	0,7277	1,3208	3,5513	0,7933	6,1031	
Important	5,1499	4,8430	6,3171	2,4184	5,3146	6,7521	0,9214	1,9681	4,7329	5,1720	3,6353	3,5063	5,2760	1,4826	2,8216	5,8801	2,8818	5,7543	
Very Important	5,3157	6,1195	4,0549	8,4114	6,4801	4,9042	7,0555	5,9177	6,7984	4,8428	9,4535	6,6320	7,2311	3,7843	6,1873	7,2366	7,8383	4,8077	
Extremely Important	2,6762	4,0994	0,6969	8,7300	3,4441	0,9094	11,9610	11,4645	4,7975	2,1250	6,1085	7,7309	3,8848	13,8713	9,4990	2,9158	8,4541	1,4851	

χ ² contributions																		
Not Important	0,0308	1,0358	0,0327	0,0074	0,0491	0,0127	0,0002	0,0392	0,5637	0,2740	0,0157	0,2749	0,4287	0,1341	0,1713	0,8189	0,0324	0,3904
Less Important	0,2339	0,3087	0,0041	0,4328	0,0004	0,4497	0,0619	0,2486	0,2564	0,4769	0,0576	0,0112	0,0101	0,1018	0,0779	1,8329	0,7933	0,5896
Important	0,6646	0,2764	0,0159	0,1399	0,3252	1,1217	0,0067	1,9681	0,1135	0,0057	0,1110	0,0695	1,4064	0,1571	0,4922	0,0024	0,4339	0,0989
Very Important	0,3257	0,7341	0,2203	0,0201	0,3565	0,8956	0,0004	0,1979	0,0060	0,9609	0,0316	0,0602	1,4438	0,0123	0,2278	1,0552	0,0897	0,1357
Extremely Important	0,0392	0,1979	0,6969	0,0084	0,0573	0,9094	0,0001	0,0250	0,0085	0,5956	0,0019	0,0094	0,3201	0,0012	0,0264	0,2876	0,0352	0,1786
27,84175998	1,2942	2,5528	0,9699	0,6086	0,7884	3,3891	0,0694	2,4789	0,9481	2,3131	0,2178	0,4252	3,6091	0,4065	0,9956	3,9971	1,3845	1,3932
Solver thresholds		Standardised thresholds																
τ ₁	-1,3728	τ ₁		-	1,7799													
τ ₂	-0,6409	τ ₂		-	0,8889													
τ ₃	-0,1314	τ ₃		-	0,2686													
τ ₄	0,5292	τ ₄		0,5355														
Standardised parameters																		
μ	-0,5081	-0,2427	0,7907	0,4307	0,2768	-0,6578	0,6776	0,6938	0,0903	-0,6342	0,2145	0,2676	0,1561	1,1311	0,4760	-0,2543	0,3916	-0,6721
σ	0,9414	0,9444	0,7311	0,6553	0,8591	0,7059	0,5725	0,8576	0,8855	0,9382	0,6308	0,9288	0,8019	1,1773	0,9463	0,7488	0,7377	0,8358
t-value	-2,4137	-1,1493	4,8365	2,9396	1,4408	-4,1676	5,2936	3,6179	0,4561	-3,0230	1,5204	1,2887	0,8704	4,2969	2,2495	-1,5187	2,3743	-3,5962

Table 4: Summary of interpreted importance of location factors

Factor #	Factor Description	Interpreted Importance	Ranking	Relevant hypothesis
Factor 14	Availability of skilled workforce	Very Important	1	1
Factor 8	Economic IT infrastructure	Very Important	2	1
Factor 7	Supportive business environment	Very Important	3	2
Factor 15	Size of local market	Very Important	4	1
Factor 4	Favorable financial environment	Very Important	5	1, 2
Factor 17	Government cleanliness	Very Important	6	2
Factor 12	Rule of law	Important	7	2
Factor 11	Government attitude towards business	Important	8	2
Factor 9	Favorable employment relations	Important	9	2
Factor 13	Favorable political climate	Important	10	2
Factor 2	Low operating costs	Important	11	1
Factor 16	Access to regional markets	Important	12	3
Factor 5	Effective regional links	Important	13	3
Factor 1	Favorable Government incentives	Less important	14	3
Factor 10	Political relations between home and host country	Less important	15	3
Factor 6	Compatibility with multinational's home country	Less important	16	3
Factor 18	Geographic position	Less important	17	3
Factor 3	Low living costs	Less important	18	3

Figure 1: Common regional breakdown of multinationals

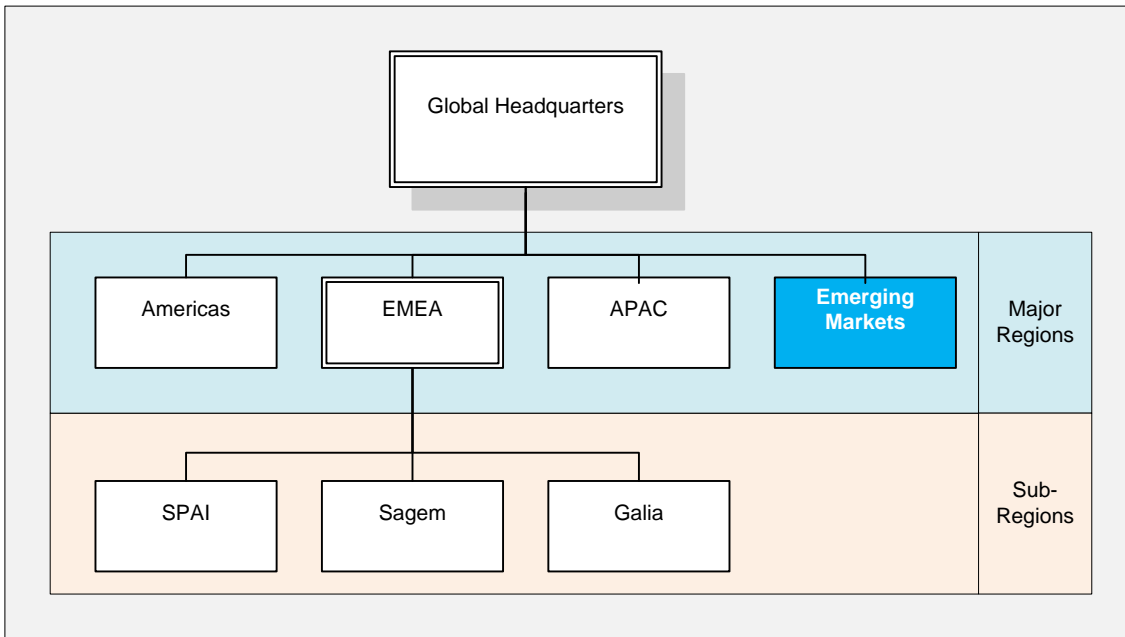


Figure 2: Radar graph reflecting importance of location factors



Figure 3: Frequency count of expatriate deployment reasons

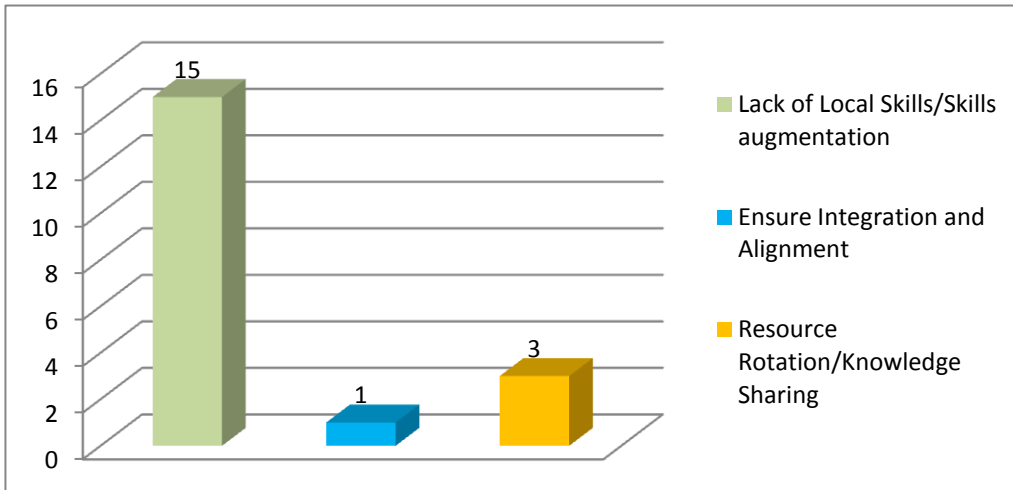
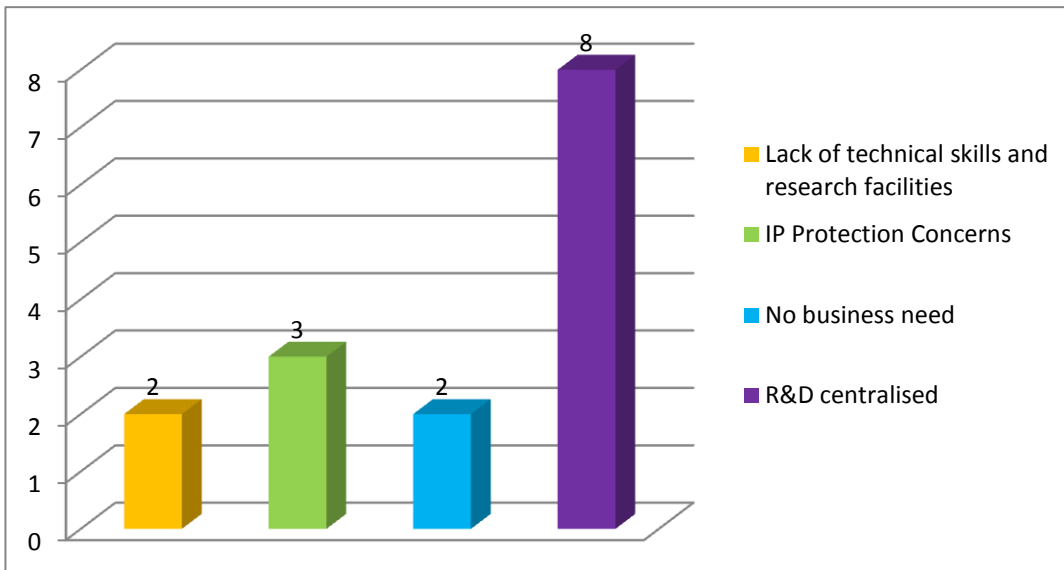


Figure 4: Frequency count of reasons for not having local R&D



¹ The approach calculates item means and standard deviations of the sample, rather than respondent level data. Respondent level data can however be generated from estimated threshold values and the estimated means and standard deviations. In the case of normal underlying distributions, the rescaled values can be calculated as the mean or expected value of the truncated normal distribution between the two threshold values. This is given in the formula:

$$Y_{k,j} = \frac{\int_{\tau_{k-1}}^{\tau_k} x \cdot e^{-\frac{(x-\mu)^2}{2\sigma^2}} dx}{\int_{\tau_{k-1}}^{\tau_k} e^{-\frac{(x-\mu)^2}{2\sigma^2}} dx}$$

Where $Y_{k,j}$ is equal to the rescaled value for the k^{th} ordinal response to the j survey item, and are the estimated mean and standard deviation of the normal distribution fitted to the responses to the j^{th} survey item (Stacey, 2005: 21).