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# Assessing market attractiveness for mergers and acquisitions: The M&A maturity index

## **Abstract**

This paper presents a new scoring methodology designed to measure a country's capability of attracting and sustaining business investment activity in the form of cross-border inflow and domestic mergers and acquisitions (M&A). We compute a theoretically grounded maturity index for M&A purposes based on groups of country development factors which have been identified as key drivers of corporate investment activity in economics, finance and management literature. By using the index, which has been successfully tested against M&A activity in a time series analysis, we show that the drivers of M&A activity differ significantly at different stages of country maturity. Specifically, for mature countries, the quality of their regulatory systems, political stability, economic and financial health, socio-economic environment and technological developments all determine differences country-level M&A activity. For countries in the transitional stage, it is instead economic and financial health, socio-economic environment, technological developments, quality of infrastructure, and availability of sizeable assets which drive M&A activity. Finally, only the quality of infrastructure and availability of assets are significant factors in explaining the differences in M&A activity in emerging economies.

Key words: Country scores; Market development; Transitional economies; Emerging markets; Mergers and acquisitions.

JEL classification: F21, G34, G38, K20, O11, O57.

# Assessing market attractiveness for mergers and acquisitions: The M&A maturity index

# 1 Introduction

Despite the ongoing negative influence of the global economic and financial crisis of 2008-2009, as well as the continuing sovereign debt crises, global foreign direct investment (FDI) inflows grew by 16% in 2011 (Global Investment Report, 2012), exceeding their 2005-2007 pre-crisis level for the first time. The so-called developing markets around the world are making headlines with faster economic recovery and stronger consumer demand, at least as compared to the more developed markets, as well as large-scale investment liberalization and promotion. For companies wishing to operate globally, it is no longer a question of whether to invest in the developing markets, but rather a matter of in which of these alternative markets they should focus their investments and future growth.

Of the two main components of FDI in terms of both volume and value, namely greenfield investment and cross-border M&A, it appears to be the latter which has become the key driver of international business activity over the last three years. In 2011, cross-border M&A increased by 53% in terms of deal value while greenfield investment remained relatively flat (Global Investment Report, 2012). Along with this major shift in the form of global investment activity, the proportion of developing markets participating in M&A activity has risen substantially from approximately 10% of total global activity in 1998 to almost 40% in 2011, according to the SDC Platinum database. In light of this increasing importance of developing markets to the global economic and financial environment in general and to the M&A environment in particular, this paper develops a universal, updatable and replicable

scoring methodology for determining a country's maturity, and therefore attractiveness, for M&A investment.

There are four distinct, albeit inter-related, themes in economics and finance literature that are identified in the literature that make a country attractive for M&A activity. First is the voluminous area of research which explores the drivers of FDI in general (see, e.g., Delios and Henisz, 2003; Peng, Wang and Jiang, 2008; Busse and Hefeker, 2007; and Kolstad and Villanger, 2008 for analyses of the regulatory and political group of FDI drivers, and Buch and De Long, 2001; Fontagne and Mayer, 2005; as well as Rugman and Li, 2007 for analyses of the economic and financial group of FDI drivers). Second is the emerging literature which focuses on the drivers of FDI in developing as opposed to developed economies and the need to distinguish explicitly between different stages of country development when analyzing the drivers of FDI (see, e.g., Heshmati, 2003; and Duarte and Restuccia, 2007). Third are the studies which call for the need to analyze M&A as a separate process instead of considering it as under the more general FDI umbrella (see, e.g., Ryan and Stahler, 2005; Nocke and Yeape, 2007; as well as Haller, 2008). Finally, the extensive research on the impact on finance of the rule of law, triggered by the seminal work of La Porta et al. (1998), which proposes theoretical arguments and empirical regularities on how differences in legal investor protection between countries determine investor confidence and, ultimately, market development. One of the outputs of the analysis of La Porta et al. (1998) was the development of a now well-know index which measures the quality of shareholder protection

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<sup>&</sup>lt;sup>1</sup> Specifically, Pan (2003) argues that FDI patterns in developed countries should not be generalized to incorporate developing and transitional economies. Furthermore, according to Blonigen and Wang (2005), the factors which affect FDI location differ systematically between developed and developing countries. Phylatkis and Xia (2006) demonstrate that country-level factors are more important compared to industry factors when analyzing the differences in performance of firms involved in FDI.

at the country level, namely the anti-director rights index. Despite the fact that the anti-director rights index has been widely criticized and also revised a number of times, its development highlighted the academic interest as well as the usefulness of such country-level indices. The wealth of research on cross-country variation in governance structures has linked shareholder legal protection, on one hand, to the development of stock markets around the world (La Porta et al., 1997), types of law (common/civil; La Porta et al., 1998), efficiency of capital allocation (Wurgler, 2000), firm valuation (La Porta et al., 2002), listing in the US (Reese and Weisbach, 2002), earnings management (Leuz et al., 2003), cash-holdings (Dittmar et al., 2003), and expropriation by corporate insiders (Djankov et al., 2008), on the other. La Porta et al.'s (1998) index has since been criticized (Cools, 2005, and Vagts, 2002), revisited (Djankov et al., 2008), and given suggested alterations in subsequent literature (Spamann, 2010). Djankov et al. (2007) construct a legal index which focuses on creditor rights as opposed to shareholder rights.

The extensive research on the effects of the rule of law is both interesting and relevant when considering the area of corporate finance that is M&A. Rossi and Volpin (2004) test the relationship between shareholder/creditor rights and cross-country M&A. Their findings show that M&A activity is more prevalent in countries with better accounting standards and stronger shareholder protection, with cross-border transactions playing a critical governance role by improving the degree of investor protection. In addition, their study shows that in cross-border deals, targets are typically from countries with poorer investor protection relative to those of acquirers, suggesting that cross-border transactions can play a disciplinary role by improving the degree of investor protection within target firms. Kose et al. (2010) further extend the research in this area by examining announcement returns in cross-border

M&A by US acquirers and finding that returns decrease with the level of creditor protection and increase with the quality of accounting standards. However, for target countries with strong shareholder protection, acquirers experience negative share price reaction around the time of deal announcement when the target is public and positive share price reaction when the target is private.

Whilst the abovementioned research has contributed greatly by establishing a link between a country's legal environment and its effect on M&A activity, there are other factors that may influence a country's ability to attract and sustain M&A activity as well that should be considered. DeLong et al. (2001) find that mergers tend to be less frequent if information costs are high, which supports the hypothesis that a more transparent business environment fosters M&A activity and therefore suggests that the index should include measures of political stability.

Guerin and Manzocchi (2009) argue that democracy has a positive effect on the amount and probability of FDI which flows from developed to developing countries. Berthelemy and Demurger (2000) stress the importance of the potential for future growth in foreign investment in China. They find that FDI plays a fundamental role in China's economic growth. Liu et al. (2009) find similar results while observing a two-way causal relationship between trade, inward FDI and inward M&A, and economic growth for most economies. It is evident that the presence of economic growth and business trade is a necessary condition for an M&A market to develop, which supports the inclusion of economic factors in the M&A maturity index database.

The development of domestic capital markets is another key driver of M&A activity since investment requires capital and because it is more cost-effective to source capital from the local market. Yartey (2008) argues that macroeconomic factors, such as income level, gross domestic investment, banking sector development, private capital flows, and stock market liquidity, are important determinants of the stock market development in emerging market countries. His results also show that political risk, law and order, and bureaucratic efficiency are all important factors in the development of stock markets because they enhance the viability of external finance. It also suggests that the reduction of political risk can be an important factor in the development of stock markets in emerging economies. Saborowski (2009) shows evidence that the exchange rate appreciation effect of FDI inflows is indeed attenuated when financial and capital markets are larger and more active. The main implication of these results is that one of the main dangers associated with large capital inflows in emerging markets – the destabilization of macroeconomic management (due to a sizeable appreciation of the real exchange rate) – can be partly mitigated by developing a deep local financial sector. This is a key idea in this study since it highlights the importance of developed capital markets and a stable financial system to the ability to sustain M&A activity, thus supporting the inclusion of financial factors in the dataset. The factors related to the financial systems of emerging economies is further discussed by Smith and Valderrama (2008), who argue that net foreign asset positions can be explained by these systems' inefficiencies in underdeveloped financial markets. The inefficiencies raise the cost of debt financing for domestic firms and impose limitations on the purchase of foreign firms.

Following Porter (1993), Tsai (1994) and Chung and Alcacer (2002), the issue of a country's social development as well as its level of technical innovation and entrepreneurship are

shown to be of high importance to the formation of a sustainable M&A market, arguing that if unemployment is high and the workforce unskilled, there will be little scope for the development of businesses and low interest in growth in the country. Similarly, if no appetite or support for R&D or technological development exists, the country will stagnate internally and be unable to sustain M&A activity. All of these factors provide a rationale for the inclusion of technological and socio-cultural factors in the database, although our analysis has led to the expansion of these two categories beyond the level suggested by existing literature.

Finally, studies have also demonstrated that the size of a country's market and therefore the availability of assets, typically measured by the size of GDP, are an imperative driver of FDI flows (see, e.g., Mateev, 2009; and Anyanwu, 2012). In addition, a number of studies demonstrate both theoretically and empirically that the quality of the transportation infrastructure can affect the flows of FDI, i.e. higher quality of roads, ports, runways, etc is positive and significantly related to FDI (see, e.g., Wheeler and Mody, 1992; Loree and Guisinger, 1995; Richard et al., 1999; Asiedu, 2002; Sekkat and Veganzones-Varoudakis, 2004; and Quazi, 2005).

Following on from this research into the identification of the factors which influence M&A activity at the country level, this paper thus develops a multi-factor index incorporating these factors and designed to measure a country's maturity for M&A purposes [the M&A maturity index], based on publically available country development factors categorized into the following five groups: 1) Regulatory and political factors (e.g., rule of law (DeLong et al., 2001 and Rossi and Volpin, 2004); corruption of officials (Yartey, 2008)); 2) Economic and financial factors (e.g., GDP growth (Berthelemy and Demurger, 2000 and Liu et al., 2009),

stock market capitalization and access to financing (Yartey, 2008 and Saborowski, 2009)); 3) Technological factors (e.g., innovation (Porter, 1993; Tsai, 1994; and Chung and Alcacer, 2002)); 4) Socio-economic factors, such as people and demographics; and 5) Infrastructure and availability of asset factors, such as the level of physical infrastructure development, e.g. roads and railways, and the number of sizeable corporate assets (see, e.g., Wheeler and Mody, 1992; Loree and Guisinger, 1995; Richard et al., 1999; Asiedu, 2002; Sekkat and Veganzones-Varoudakis, 2004; Quazi, 2005; Mateev, 2009; and Anyanwu, 2012). Based on a percentile classification methodology, each country receives an index score as an average from these factors which ranges between 100% and 1%, with 100% being the best achievable score in terms of M&A maturity.

The results from the 2012 annual update of the M&A maturity index demonstrate the emergence of Asia as an important future hub for corporate finance activity, with the region claiming five of the top ten country positions. Despite the US (85%) and UK (82%) claiming the top and third spots respectively, Singapore (84%) and Hong Kong (81%) are second and fourth respectively, with South Korea (5<sup>th</sup>), China (9<sup>th</sup>) and Japan (10<sup>th</sup>) following.

In terms of contribution, we argue that the ability to determine a country's M&A maturity can contribute to a better understanding of the factors which affect the performance of companies involved in cross-border acquisitions. According to Tong, Alessandri, Reur, and Chintakananda (2008), it is also country- as opposed to industry-effects which will influence the performance of companies involved in cross-country investment activities. In addition, knowledge of a country's M&A maturity can also provide a deeper insight not only into the firm-level drivers of financial performance but also into the country-level drivers of economic and financial progress. As noted in the UK Parliament in July 2012, based on his

reading of Faelten and Clare (2012), the Secretary of State for the influential cabinet-level Department of Business, Innovation and Skills proclaimed that M&A activity is indeed a net contributor to the UK economy, stating that the 'benefits [of M&A] to the UK economy are substantial' (statement by the Right Honourable Dr Vince Cable before the Parliamentary Business, Innovation and Skills Committee on 17 July 2012). Furthermore, an accurate measure of the country-level drivers of M&A activity can shed light on the capacity of a given country to develop and sustain M&A activity levels, and hence make it possible to forecast future medium- and long-term M&A activity in that country.

We adopt the country development classifications used by the United Nations Statistical Office [UNSO] that describes a mature stage (reached by all developed countries), a transitional stage (reached by all developing countries), and an emerging stage (reached by less developed countries). The average M&A maturity index score for mature markets is found to be 70%, whereas the transitional average score is 50%, and the emerging average score 32%. Interestingly, the results reveal that the although the quality of a country's regulatory system and its political stability are found to be a prerequisites for reaching full market maturity, they are not significant drivers of M&A activity for countries classified as transitional and emerging. At the transitional stage of development, a country's technological, economic and financial, and socio-economic factors, as well as the quality of its infrastructure and assets, all show a significant relationship with M&A activity. The results also show that only the quality of a country's infrastructure and the availability of sizeable assets provide viable explanations for M&A activity in emerging economies.

This paper thus adds to the existing literature not only by providing a robust and continuously updatable research tool using readily available public data sources but also by showing the

relationship between M&A activity and market development factors at different stages of market maturity. Section 2 describes the sample as well as the methodology used in the study. Section 3 discusses the empirical results and Section 4 concludes.

# 2 Data and Methodology

The M&A maturity index is a scoring methodology designed to evaluate a country's capacity to attract and sustain M&A activity. The index is based on the following country development factor groups, all of which have been identified as important for these purposes in the relevant literature or by market practitioners: regulatory and political, financial and economic, technological factors, socio-economic, and factors relating to the development of physical infrastructure and the availability of assets. Since we aim to provide an updatable scoring methodology and database, it is important that data sources and updates are available for all countries as changes occur as these countries develop. Hence, for each factor group, several widely recognized surveys, reports, or databases (sourced from international institutional bodies, such as the International Monetary Fund (IMF)) were identified for inclusion. Note that the data download for the 2012 annual update of the M&A maturity index was performed in the first months of 2012, hence referring to 2011 annual data or latest year available.

# [Insert Table 1 here]

As demonstrated in Table 1, a total of 23 country development variables populate the five factor groups,<sup>2</sup> with the regulatory and political group consisting of eight factors, the

<sup>&</sup>lt;sup>2</sup> It should be noted that at a preliminary stage of the analysis, a larger number of variables constituted each of the five factor groups, as per Appendix 1. The number of factors for inclusion was reduced on the basis of

economic and financial group including six factors, the technological group including three factors, the socio-economic group including two factors, and the infrastructure and assets group including four factors. In total, our sample include 148 countries, restricted by the availability of data for GDP size from the IMF's 'World Economic Outlook Database' of April 2011 and of data for total deal value activity in 2011 from SDC Platinum. Due to historical data availability issues for some of the variables included in the five factor groups, we also restrict the time series to five years, thus the panel data set covers the period from 2006 to 2011. However, the idea is to use the methodology in this paper (with an option for tailored alteration) and apply it to any country in question at a specific point in time. As the sources are referenced and the thresholds stated, further analysis can easily be performed for other markets.

In order to standardize the country data, each variable has been converted into percentile scores, where 100% is the best achievable score in terms of the level of maturity/development. As we could find no support in the literature or in discussions with market practitioners to overweight any of the factors or groupings consistently, the 23 variables were equally weighted within each factor group to determine the factor group score. Finally, each factor group's score was equally weighted in order to determine the overall score for each country.

For the purposes of analyzing the drivers of M&A activity at the different stages of a country's development, the classifications provided by UNSO were followed. The use of country maturity classifications external to the analysis of those presented in this study leads

correlation analysis and following the principle of parsimony. In addition, some of the factors presented in Appendix 1 were excluded as the data is only available for a small selection of the country sample of 148.

to subjectivity in the analysis of the relative importance of the different factors at the different stages of a country's development. UNSO distinguishes between developed, developing and less developed countries, which are termed mature, transitional and emerging respectively for the purposes of this paper.

This study uses the above described UNSO country classifications to measure the ability of the M&A maturity index to classify countries into their pre-defined stages of maturity. To achieve this, the study performs linear discriminant analysis. The discriminant analysis makes it possible to identify the ability of the M&A maturity index to describe the differences between the mature, transitional and emerging economies and exploit these differences in order to classify the sample countries to their correct membership group, i.e. stage of development.

The restrictions for the M&A data, downloaded from SDC Platinum, follows Rossi and Volpin (2004), thus M&A in the form of LBOs, spin-offs, recapitalization, self-tenders, exchange offers, repurchases, and privatization have been excluded. However, in contrast to the abovementioned study, our sample also includes minority purchases and purchases of remaining interest. This is due to the heavy restriction to foreign investments in many developing countries, making not-for-control transactions the only available option for cross-border inflows. The sample is also restricted to completed transactions. Since the focus of the study is to determine the environment for M&A where the target is located, we include both inward and domestic M&A activity. Investors and companies within these countries also purchase companies and assets outside their country, but these deals are not included. However, it should be noted that such deals might impact the overall M&A maturity of the domestic market. Note that throughout the following section, we present our results using

both country-level M&A volume and value data. In the emerging stage of country development, the total country-level volume of transactions is the most reliable indicator of activity as these transactions tend to be very small in size, hence the data on the value of the transactions will often not be disclosed. As a country matures it should start attracting larger transactions in terms of value - for which the details around the consideration are more likely to be disclosed - which in itself will spur further industry growth and larger transaction, hence the total country-level value of transactions becomes a more appropriate measure of activity.

# 3 Results

Table 2 shows the overall M&A maturity score as well as the score for each of the five major factor groups for the top 100 ranked countries for the 2012 annual update of the index.

## [Insert Table 2 here]

The US remains on the top spot, mirroring its position in terms of global M&A activity (currently 21% of global volume (SDC Platinum)), with the UK in third position. However, we note that five Asian countries now occupy top ten positions, with Singapore and Hong Kong being in second and fourth place respectively. Further analysis of the database leads us to conclude that Singapore's and Hong Kong's high rankings are driven mainly by their highly developed infrastructure, the availability of sizable assets to purchase (measured as the number of companies with assets valued at \$1m or higher) and business-friendly regulatory environments. This is in contrast to most of the remaining top ten countries, their competitive advantage mainly being their highly developed technological environments, including high levels of high-tech exports and innovation in terms of patents filed, indicating an extremely skilled business community which should attract investment interest.

In Table 2, we are also able to see trends in M&A maturity over the last five years, which should help in determining the future markets for M&A activity. Malaysia and the UAE stand out from the rest of the top 25 ranked countries, climbing seven and six places respectively in the ranking over the last five years. Further analysis of the database reveals that Malaysia's improved ranking is driven by a significant improvement in its regulatory and political environment. The UAE's ranking has seen improvement due to developments in its financial infrastructure and economic growth. Further down the top 50 table, we find Poland, Romania, Turkey, India, Kazakhstan, and Morocco as the front-runners in terms of improvement in their scores over the last five years as they have all risen by at least five places over that period. Not surprisingly, the rise in the rankings of developing countries has often come at the expense of developed countries in Europe. Most notably, Greece has lost significantly in terms of relative maturity or attractiveness for M&A, falling 23 places over the last five years.

Table 3 provides the descriptive statistics of the average M&A maturity score and the five major factor groups at different levels of M&A volume and value activity. Both levels of M&A activity appear to increase in line with the overall M&A maturity score as well as the scores corresponding to the five factor groups, providing evidence that the M&A maturity index closely corresponds to country-level M&A activity.

## [Insert Table 3 here]

To test the strength of our index, Table 4 shows the correlation between M&A volume (Panel A) and value (Panel B) activity and various indices which aim to measure a country development and attractiveness. The table demonstrates that the M&A maturity index has the

highest correlation with both types of M&A activity. In addition, the results from the correlation analysis show that there is a need to analyze M&A as a separate process rather than consider it as part of the more general FDI umbrella. This is evidenced by the negative correlation between the FDI attractiveness index and both M&A volume and value activity. It should also be noted that the second best index in terms of the size of its correlation with M&A activity is the so-called investment climate index which is provided in the World Economic Forum's Global Competitiveness Report.

# [Insert Table 4 here]

To determine the drivers of M&A at different stages of development, we use the development classifications devised by UNSO. According to these classifications, countries are divided into three stages of development for the purposes of M&A investment: mature (consisting of countries which are classified as developed by UNSO), transitional (consisting of countries which are classified as developing by UNSO), and emerging (consisting of countries which are classified as less developed by UNSO).

We first test the fit of UNSO's classifications of market development with the M&A maturity index using a discriminant analysis technique. Tables 5 shows the results of the analysis using both the overall M&A maturity index score (Panels A and B), as well as its constituent groups (Panels C and D), to distinguish between the different stages of a country's development.

## [Insert Table 5 here]

The discriminant analysis confirms that the initial classification process classifies 77% of countries at the correct level of maturity based on the overall M&A maturity score and 82%

at the correct level of maturity based on the five major factor groups which constitute the index.<sup>3</sup> Two conclusions can be drawn from the discriminant analysis. Firstly, in both cases (i.e. based on the overall score and the five major factor groups), the results are stronger when using proportional prior probabilities as opposed to using equal prior probabilities. This finding is not surprising given the fact that the number of sample countries which belong to each stage of M&A maturity development differ substantially, with transitional economies accounting for the highest proportion (59% of the sample), followed by mature economies (24%), and emerging economies (17%). Secondly, the results are stronger when using the five major factor groups as opposed to using the overall score. This finding demonstrates that there are information advantages to using the overall M&A maturity index in combination with the five major factor groups which constitute it. This is due to the fact that the overall index gives equal weight to each of the five constituent factor groups and, as argued in this study, each factor group can be relatively more or less important depending on the stage of maturity a given country is at.

Table 6 shows the results of the univariate analysis of the average<sup>4</sup> M&A maturity scores depending on market maturity. As demonstrated by the analysis, the difference between mature stage of the development and the more developing stages –transitional and emerging – is the greatest in terms of regulatory and political development as well as technological advancement. These results show that the quality of a country's regulatory system, its political stability and a developing technological environment are all prerequisites for a

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<sup>&</sup>lt;sup>3</sup> These percentages are based on the use of proportional prior probabilities.

<sup>&</sup>lt;sup>4</sup> Note that in an unreported table we tested the differences in medians between the three stages of market maturity and conclude that the results are not materially different from the analysis of averages.

market to reach the stages of mature development, supporting the work of Rossi and Volpin, 2004), Guerin and Manzocchi (2009), Yartey (2008), and Porter (1993).

# [Insert Table 6 here]

Multivariate regression analysis is performed on the panel data set, covering five years from 2006 to 2011, in order to determine which factor groups explain the differences in M&A activity between all of the sample countries as well as between countries at different stages of maturity. Table 7 shows the results of a regression analysis of the relationship between M&A activity as the dependent variable - measured both in terms of volume (Panel A) and value (Panel B) - and the five factor groups as the explanatory variables. As discussed earlier, for countries defined as emerging we use country-level M&A volume as the dependent variable whereas for those defined as mature we use country-level M&A value as the dependent variable. Finally, we test the countries defined as in a transitional stage against both measures of activity.

## [Insert Table 7 here]

The analysis shows that, in line with other authors, economic and financial (Berthelemy and Demurger, 2000; Liu et al., 2009; Yartey, 2008; and Saborowski, 2009), as well as technological (Porter, 1993), factors are positively and statistically significant determinants of M&A activity. This paper adds to the existing literature by proving the existence of a positive relationship between M&A activity and a country's socio-economic development, i.e., population size as well as the percentage of working age people. We also demonstrate that there is a positive relationship between M&A activity and the quality of a country's infrastructure and assets, i.e., the availability of adequate roads, railway lines and ports as

well as the availability of sizable assets to acquire. Notably, the findings add to the existing body of research by showing that the development of the regulatory and political environment is not a significant determinant of both M&A volume and value activity when the analysis does not distinguish between the different stages of a country's maturity and once we have accounted for other (more important) factors, such as a country's economic and financial, technological, and socio-economic development, as well as the quality of its infrastructure and assets. However, as discussed above, a country's regulatory quality and political stability appears to be a prerequisite for the highest level of country development. These results should therefore not be viewed as a direct contradiction of the findings of previous studies which show a significant relationship between a) a country's regulatory environment and M&A activity (see, e.g., Rossi and Volpin, 2004) and b) a country's political environment and M&A activity (see, e.g., DeLong et al., 2001; and Yartey, 2008), but rather as an extension of their analyses.

Table 7 also provides insight into the relative degree to which the five factor groups are responsible for variations in M&A activity at the three stages of a country's development. In emerging markets, only the quality of infrastructure and assets factor group seems to determine M&A volume activity. This result shows that at the lowest stage of development for M&A purposes, it is the availability of sizable targets as well as the availability of an adequate transport system that can make a difference. However, this result is also a reflection of little variation within the other factor scores as all countries which belong to this stage of maturity have to play catch up in all of the areas which drive M&A activity. By contrast, in the transitional stage of development, all factor groups except the regulatory and political factor group appears to drive both M&A volume and value activity. Finally, as countries

move to the mature stage, the infrastructure and assets factor group become insignificant, whereas all other factor groups, including regulatory and political factor group, are found to be significant determinants of country-level M&A activity.

# 4 Conclusion

The paper provides a proprietary methodology for measuring a country's maturity for M&A purposes. Each country's regulatory and political, economic and financial, technological, and socio-economic environments, as well as the quality of its infrastructure and assets, are measured in order to provide an overall index score. This updatable index can help acquiring companies in their investment decisions related to the acquisition of a controlling interest in a company based in a country outside the location of the acquirer's headquarters. It should be stressed that this type of investment decision may ultimately be determined principally by factors unique to the specific company being acquired (such as the target company's financial situation, management, market position, intellectual property, etc.), although, as shown in this paper, factors unique to each country within which a company operates are also critical. Therefore, knowledge of the level of M&A maturity of each country is vital both at an aggregate level and within each group of factors, and the M&A maturity index devised by this study will hopefully provide acquiring companies with a tool which they can use to assess investment decisions.

From an academic viewpoint, by studying the factor scores at different stages of a country's development, it is clear that technological advancement as well as the quality of the country's regulatory system and its political stability are prerequisites to becoming a mature – and therefore attractive – market for M&A purposes. The findings of the paper also provide support for previous studies examining macro- and micro-economic determinants of M&A

activity, proving that all of the factor groups in the index - regulatory and political, economic and financial, technological, socio-economic and infrastructure and assets factors - are significantly related to M&A activity. This paper goes one step further and analyzes the drivers of M&A activity at different stages of a country's development. The results show that it in the infant stage of market development, a country's physical infrastructure and the availability of sizeable assets drive country-level M&A activity. As a country moves from an emerging to a transitional stage, its economic and financial, technological, and socio-economic factors, as well as the quality of its infrastructure and assets, become determinants of M&A activity. Finally, as a country moves towards a fully mature stage of development, all of the factor groups, except infrastructure and assets, are found to be significant drivers of M&A activity, hence at this stage of maturity the country's regulatory quality and political stability is also of importance.

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