Revisiting the Assessing Market Attractiveness for Mergers and Acquisitions Index Score: The effect of Geopolitics and ESG

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Abstract

This paper integrates geopolitical uncertainty and ESG factors into the scoring methodology of the M&A attractiveness index score (MAAIS). This methodology is designed to measure a country's capability to attract cross-border inflow and domestic mergers and acquisitions (M&A). In detail, 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 country- and year-specific index score. The inclusion of geopolitical risk and uncertainty and ESG considerations into this framework therefore becomes a natural but important step towards a comprehensive assessment of the attractiveness of a country, especially in light of recent developments in financial markets. We find that - in addition to the first five factors (regulatory and political, economic and financial, technological, socio economic, and infrastructure and assets) - ESG is also a key component to M&A activities. Further, our results show that in periods of uncertainty, there is a reduction in M&A activity while geopolitical risk is positively related to both volume and value of cross-border M&A activity.

Key words: MAAIS; Country scores; Market development, Mergers and acquisitions.

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

Assessing Market Attractiveness for Mergers and Acquisitions: The M&A Attractiveness Index Score (MAAIS)

"The year 2021 brought record-breaking M&A deal values. After a down year in 2020, value rebounded to an all-time high, with soaring valuations and accommodating deal financing. Total transaction values reached an unmatched $5.9 trillion. Some buyers were motivated by the plethora of available assets and low cost of capital; others jumped into the fray to stay competitive as their peers did deals. Companies raced to acquire both transformative capabilities and to scale up in a historic land grab."(https://www.bain.com/insights/state-of-the-market-m-and-a-report-2022/). Despite the ongoing negative influence of various sources of uncertainty ranging from financial crisis, economic crisis, political crisis and recently the pandemic, global foreign direct investment (FDI) flows grew by 64% in 2021 relative to the exceptionally low level in 2020 (World Investment Report). However, the global environment for international business and cross-border investment changed dramatically in 2022. The war in Ukraine – on top of the lingering effects of the pandemic – is causing a triple food, fuel and finance crisis in many countries around the world. The resulting investor uncertainty could put significant downward pressure on global FDI in 2023. The markets around the world that attract business are the ones making headlines with faster economic recovery and stronger consumer demand as well as large-scale investment, liberalization and promotion. For companies wishing to operate globally, the fact remains to invest in markets which are stable and where they can improve their portfolio performance as well as synergy rather than staying locked in their current investments. Therefore, they look for alternative markets to enhance their investment and future growth prospects.

It is well known that different themes in the finance, economics and legal literatures are albeit interrelated, but Appadu et al (2016) have shown that these themes can be classified according to a composite six factor group (33 sub-categories) that gives rise to an index allowing dealmakers to make informed decision prior to decide on announcing a deal.

Appadu et al (2016) research based their index on the multi factor index incorporating the five key factors. The regulatory and political factor, the economic and financial factor, the socio-economic factor, technological factors and the infrastructure and assets. They also categorise countries into three different development stages - namely mature, transitional and emerging - so to finalise the index score. However, this paper improves on and extends this methodology by providing a more exhaustive framework for the analysis of domestic and cross-border M&A attractiveness. To begin with, it augments the index by accounting for ESG factors at the country level. In fact, it is anticipated that the existence of ESG ratings at the country level will put pressure on governments to adopt and implement more sustainable economic policies, such as national schemes reducing carbon emissions or fighting labour exploitation, as advised by the relevant body of the United Nations. We find that country-level ESG scores are an important driver of M&A activity. By decomposing the composite factors of a country ESG score, our results then show in particular that the environment, social and governance factors

are positively related to measures of M&A. Therefore, this is a key factor that practitioner should take into consideration while performing due diligence at the macroeconomic level.

Further, in light of the recent current economic and political uncertainty that many countries are facing, this paper uncovers the impact of such risks affecting global M&A activity, with a focus on the world uncertainty index (WUI) and a measure of geopolitical risk . The paper shows that countries which are facing various threats as measured by the WUI are less likely to consider M&A activities, while the geopolitical risk is positively related to M&A activities. These results could send a signal that, despite heightened levels of uncertainty, firms with liquidity on their balance sheet and expertise in dealmaking still have the will power to conduct pursue deals. This paper also confirm that the north America regions are the leader in M&A transactions while all other regions have a lot to catch up in terms of number of both volume and value of M&A activities.

Review of the Literature
The paper of Appadu et al. (2016) develops a multi-factor index designed to measure a country's attractiveness for M&A purposes (the M&A Attractiveness Index Score [MAAIS]), based on country development factors categorised into the following five groups: 1) Regulatory and political factors (e.g., rule of law (DeLong et al., 2001 and Rossi and Volpin, 2004) and 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 capitalisation 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; Asiedu, 2002; Mateev, 2009; and Anyanwu, 2012). Based on a percentile classification methodology, each country receives an Index score given by average between these factors that ranges from 100% to 1%, with 100% being the highest achievable score in terms of M&A attractiveness. Based on the MAAIS, the index failed to capture another critical factor that has been discussed in any board room in the last few years, specifically ESG. Moreover, the fact that the world has been facing an unprecedent level of volatility since the financial crisis in 2008 due to geopolitical uncertainty, it is crucial to review the index as well as to propose a reorganisation of the other factors in order to avoid any duplication effects.

Theoretically, the effect of environment score on M&A and vice versa could arise through different channels. With respect to the impact of the environment score on M&A, lax environmental policies and the corresponding pollution in a particular country could discourage M&A dealmakers from conducting a cross-border deal in that country for fear that its production could be linked – directly or indirectly - to the country's "dirty" practices. By an opposite reasoning, however, it could encourage them to pursue such deals for the purpose of taking advantage of these lax policies. In terms of the effect of M&A on the environmental score, increases in inbound M&A activity could increase industrial production of a country and, as a consequence, environmental pollution, particularly in the case of foreign capital of

those industries associated to higher levels of pollution or environmentally unsafe practices. This link between environment and FDI was documented by Golub et al. (2011). In a similar manner, Cole et al.(2011) find that foreign-owned firms that indicate the presence of FDI contributed significantly to an increase in the emissions of petroleum pollutants, waste gas, and SO2 in China. For a group of Latin American countries, whereas, Sapkota and Bastola (2017) show evidence of this harmful impact of FDI on the environment. Beladi and Oladi (2005) confirm that capital mobility from the North to the South depletes the environmental resources in the South, thereby adversely affecting southern agricultural productivity. Finally, there is evidence that the increasing costs of pollution abatement in certain sectors in developed countries make pollution-intensive activities costly in developed countries (Eskeland and Harrison, 2003).

The relationship between business and society has been of monumental interest in both finance and management research, giving rise to several studies on corporate responsibility and sustainability. It should be noted that, interestingly, these two themes have mostly been addressed separately in research fields. From this very extensive literature, we would like to bring attention to different aspects of social spending and investment. To start with, social spending and investment have tended to rely on the level of FDI inflows rather than the liberalization of capital flows, economic openness and globalization (Hecock, 2006; Dreher et al., 2008; Hecock and Jepsen, 2013). Thus, it corroborates the idea that FDI inflows in this globalization process may have a positive effect on social spending, in that this kind of investment may support social partners in foreign countries. Further, Lehnert et al., (2013) claimed in this global context that FDI inflows are closely connected with increases in social welfare in the host country, which result from purchasing power and spillover effects onto education and health from the home country. Huber et al. (2008) sought to reveal the determinants of social expenditure in 18 Latin American economies for the 1970-2000 period, but they did not identify any statistically significant relationship between social expenditure and FDI. In contrast to these latter results, Leibrecht et al. (2011) showcased the impacts of globalization on social protection expenditures in Western Europe and in CEEC countries, and they provided evidence of the relationship between FDI and social protection expenditure. In their analysis, FDI proxied globalization as an indicator of the openness of an economy to international investment. The rational above is also true with the inflow of M&A activity and social factor whereby M&A can decrease unemployment and enhance economic and social well-being and human capital in their communities with expenditures into education, health and social security (Huber et al., 2008). Finally, in recent years, a global democratic backslide, as well as the actions of Russia in Ukraine, have shined a spotlight on national governance in Europe. The relationship between governance and foreign direct investment (FDI) is important to consider as a benchmark in recent years, given the rerouting of trade and investment trends in the global economy since the global pandemic broke out in 2020. During the recent period of global democratic backslide, the EU has maintained the distinction of remaining committed to democratic governance. The Freedom in the World report's democracy scale shows that the number of countries in decline has been greater than the number of countries moving toward democratization (Freedom House, 2022)

More recently, the ESG signals of counties help to reduce the risks that foreign investors face when investing in specific countries. Having a holistic view on a country level performance on ESG can help to better understand the risks and opportunities based on value based and economic perspectives. Therefore, ESG is a key driver which was overlooked when designing the methodology of Appadu et al (2016). Thus, by adding the ESG, it makes the index more robust as it covers the sustainability of the country to which an investor can me an informed decision in the country of attractiveness.

The review of literature on uncertainty and M&A activities has revealed various discrepancies. The form of uncertainty is diverse. It includes firm risk, macro-economic risk such as inflation risk, and other systematic risks as in the case of energy shocks. Confronted with Covid-19 and more recently the invasion of Russia in Ukraine – which eventually led to supply chain disruptions and a commodities shock – many countries around the world have experienced increases in inflation and interest rate globally, which in turn have affected the volumes of investment, FDI and M&A. It then becomes paramount for firms to evaluate the financial consequences of uncertainty on their business operations and future corporate strategy. Two important aspects of mergers and acquisitions that are central to this discussion are the riskiness of these projects but also the significant costs associated with their reversal once completed. With respect to the former, Bloom (2009) provides extensive evidence that, in times of heightened uncertainty, one common strategy is to exercise the real option to delay investment projects and instead recognize that there is value in waiting to invest, as theorized and shown by Abel (1983), McDonald and Siegel (1986), Ingersoll and Ross (1992) and Leahy and Whited (1996). With respect to the latter, whereas, it further encourages executive boards to put such irreversible projects on hold specifically in times of uncertainty (Bernanke 1983, Rodrik 1991, Dixit and Pindyck 1994). In practice, if the M&A negotiations are ongoing, a firm may thus opt to delay the completion of a (possibly cross-border) deal or abandon it all together following a negative assessment of the risks associated with adverse post-deal performance. To this point, it is known that uncertainty limits the firms' cash flow and increase the cost of capital of external financing (Greenwald and Stiglitz, 1990). Similarly, Bernanke (1983), Bloom, Bond, and Van Reenen (2007), Julio and Yook (2012) and Gulen and Ion (2013) suggest that firms prefer to delay the deal process due to such uncertainty. Therefore, geopolitical risk is expected to partially dampen M&A activity at country level. On the other hand, whereas, firms which are cash rich can take advantage of this uncertainty by pursuing distressed and/or undervalued targets, whether in their domestic market or abroad. For example, Garfinkel and Hankins (2011) show a positive relation between increases in cash flow uncertainty in targets and merger waves. Duchin and Schmidt (2013) also point out a positive association between uncertainty and merger activity.

Depending on the assumptions about the underlying economic mechanism at play, geopolitical risk could have a positive or negative impact on country–level M&A activity. More specifically, we hypothesize that, under geopolitical uncertainty, there will be retreaters but also movers in global M&: some companies may therefore opt to temporarily abandon the M&A strategies and wait for better times (Hao et al., 2023), while others may choose to size valuable opportunities brought about by the dampening effects of GPR on equity valuations (Rao et al., 2023).

Macroeconomic risks have a crucial role to play in shaping M&A activities. Aktas, de Bodt, and Roll (2010) find that changes in macroeconomic conditions can affect the level and timing of M&A activities. While a favorable environment will enhance investor confidence and hence more M&A activities, uncertainties and risk seem to depress the market for corporate control (Frankel and Lee, 1998). In unstable period, firms are in fact more cautious and will be less likely to pursue M&A deals, thus leading to a decrease in volume of such deals. Similar effects are observed when governments change their policies – such as tax laws, trade agreements, antitrust regulations, and so on – and indeed, as explained by DePamphilis (2019), regulatory uncertainty and changes in such policies can impact M&A activity. Further, Hitt, Hoskisson, and Kim (1997) argue that managers use macroeconomic forecasts to time acquisitions and indicate that favorable long-term macroeconomic prospects can increase M&A deal-making, while negative outlooks may dampen activity.

We show that geopolitical risks can also impact M&A activity similarly to macroeconomic risks. In fact, political instability, war, terrorism, and other risks can increase the uncertainty associated with cross-border deals, making investors hesitant to deploy capital in certain countries or regions. According to Shu et al. (2020), geopolitical tensions can affect the timing and pricing of M&A deals, and companies need to consider these factors when evaluating potential deals. In addition, countries such as the United States have increasingly introduced restrictions on foreign investment in certain sectors, such as technology industry, due to concerns about national security. These types of regulations can make M&A deals more complex and difficult to complete. More recently, the ongoing conflict between Ukraine and Russia has had a significant impact on M&A activity in the region. As noted by Dmytro Serebryakov, partner and head of M&A at CMS Ukraine, "the political situation in Ukraine is not conducive to M&A activity. Companies are hesitant to invest in an uncertain and potentially volatile environment." (CMS, 2019).

1   Data and Methodology

Table 1 provides the various factor group for the country development which are expanded in six factor groups. There is a total of 33 country development variables group. The groups are: regulatory and political, economic and financial, technology, infrastructure and assets, socio-economic and ESG. The first five groups were used in Appadu et al (2016) and but we propose a reorganisation of the factor group regulatory and political to avoid any duplicates of country development variables by including ESG. As demonstrated in Table 1, the regulatory and political group consist of six factors, the economic and financial group of five factors, the technological group of two factors, the socio-economic group of two factors, the infrastructure and assets group with four factors and finally the ESG with 14 variables. In total, our sample includes 148 countries out of the 202 countries due to the restrictions relating to the availability of data on both GDP size from the IMF's World Economic Outlook Database of April 2021 and total deal value activity in 2021 from SDC Platinum. The sample period ranges from 2006 until 2021 with the six-factor group.

Following Appadu et al (2016), the country level data are standardized. In order to be consistent with the original methodology, each variable has been converted into percentile scores such

that 100% is the best achievable score in terms of the level of attractiveness. Aside from the ESG factor which has its own weight, all other variables were equally weighted in order to determine the final overall score for each country.

For the purposes of analysing the drivers of M&A activity, we also break down the ESG score into its three sub-scores for the following reason. In recent years, ESG has become a priority in both advisors and advisees' minds prior to discussing any deal, following the increasing pressure from investors with sustainability investment objectives. In addition, cross-border acquirers face exposure not only to the particular ESG dimension(s) commonly associated with their target and/or industry, eg. environment for the mining sector for instance, but also to the ESG characteristics of the target country. Therefore, we will explore the environment, social and governance factor on its own to discuss the use of country attractiveness classifications.

Moreover, given that this study investigates the effect of global uncertainty, we include the world uncertainty index as well as follow the work of Caldara and Iacoviello (2019) by incorporating the geopolitical risk index. This index is constructed by counting the monthly number of articles related to geopolitical risk associated with wars, terrorism and tensions among state and countries that affect the normal course of international relations.

The restrictions on the M&A data, downloaded from SDC Platinum, follows Appadu et al (2016) and Rossi and Volpin (2004). In detail, M&A data in the form of LBOs, spin-offs, recapitalisation, self-tenders, exchange offers, repurchases and privatisation have been excluded from the analysis.. However, in contrast to the latter study, our sample also includes minority purchases and purchases of remaining interest. This is due to the heavy restrictions on foreign investments in many developing countries, making not-for-control transactions the only available option for cross-border inflow. The sample is also restricted to completed transactions. The final sample size of M&A activities is 194,234 for the period 2006-2021 including both domestic and cross-border data. Given the significant challenges of completing a deal at cross-border level relative to a domestic deal, this paper takes advantage of this extensive dataset to assess the differential impact of ESG scores of target countries, as well as global uncertainty and geopolitical risk, on deal characteristics between domestic and cross-border deals.[1] Finally, one should notice that while investors and companies may attempt to purchase companies and assets outside their country, although these deals are not included, they might still impact the overall M&A attractiveness of the domestic market.

Results

Table 2 provides the ranking of 148 countries worldwide which have been analysed using the MARC M&A Attractiveness Index for 2021. They are organised in descending order of attractiveness. The exhibits present the changes in the ranking's year-on-year and over a five-year period (comparing a period including Covid-19 and a period without any pandemic).

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[1] For example, a country's poor rule of law will have the same determining effect for domestic as for international buyers.

Therefore, the direct comparison shown is with 2020 and 2016, providing both a trend and a current snapshot of the drivers contributing to positive or negative movements from an in-bound and domestic M&A perspective. The 'Market Opportunities' and 'Market Challenges' columns give the factor group range for each country, with the highest-ranking factor group being presented as the country's most attractive feature or opportunity, whereas the lowest is the major challenge on a relative basis.

Looking at the top ten countries and the regions they represent Table 2, two North American countries form part of the top ten of the MAAIS 2021 with the US leading the index and Canada in fourth position. Six European countries are in the top ten together with two Asian countries. UK (notably despite Brexit), is leading the European region ranked third in the global country list followed by Germany, Netherlands, France, Spain and Switzerland in fifth, sixth, seventh, ninth and tenth positions respectively. For Asian countries, Singapore leads the region in second position of the global index followed by South Korea in eighth. The highest factor group ranking for the US, Singapore, UK, France and Spain, is 'Infrastructure and Assets'. They all have high levels of good infrastructure such as registered companies, ports, rails and roads. The leading market opportunity for Canada, Netherlands, Germany, and Switzerland is 'Environmental, Social and Governance', while 'Technology' is the key factor group which kept South Korea in the top ten. Notably, the leading market challenges for 70% of all of all the top ten countries are in the area of 'Socio-economic' due to principally to the pandemic'

[Insert Table 2 here]

Movers and Shakers

As noted above, the 2021 Index also shows year-on-year and five-year movements for each country in the ranking.

Interestingly, in the top ten of the MAAIS index, there are no movements over the past year for the US and, Singapore while Germany, the Netherlands, South Korea and Switzerland each lost two places, the UK, Canada, France and Spain gained four, one, three and four places respectively (Spain was not in the top 10 in the previous year). Dropping out of the top ten was Japan which now ranks twelfth.

Looking at the movements over the last five years, Switzerland, Germany and South Korea lost five, three and one rankings respectively, while Spain gained four rankings, both the UK and France gained three places each. Followed by the Netherlands, and Singapore gained two and one rankings respectively.

The largest one-year movements would be expected to be further down the tables. Within the top 50, the greatest improvement is Costa Rica (+10 places) followed by Panama (+7), Chile (+5), the UK (+4) and Spain (+4). 'Technological' is the greatest strength for Costa Rica, while 'Economic and Financial' is the main strength for both Panama. Latvia (-8) and Thailand (-5) suffered major drops in the top 50 of the global ranking. In the case of Latvia, the drop was due

to their 'Socio-economic' factor group while the 'ESG' factor was the main challenge for Thailand.

Improvements over the five-year period show Greece leading the pack with a gain of 16 places followed by China (15), and Costa Rica (12). The countries that have lost the most ground in the top 50 over the five-year period are Finland (-7), Croatia (-7) and Czech Republic (-6).

Table 3 provides the regional rankings for the Index for 2021. The 'Market Opportunities' and 'Market Challenges' columns give the factor group range for each region, with the highest-ranking factor group presented as the region's most attractive feature or opportunity, whereas the lowest ranked factor group is shown as the major challenge which each region faces.

North America (1st with an index score of 83%), Europe (2nd) and Asia Pacific (3nd) are the highest ranked regions in terms of M&A attractiveness. Table 3 also provides the logarithm of volume and value of the M&A activities per region.

[Insert Table 3 here]

Table 4 shows the descriptive statistics of the full sample. It includes the logarithm of the volume, value and cross-border volume and cross border value as well as the drivers of M&A. It includes, the six-factor group and the world uncertainty index and the geopolitical risk index as per Caldara and Iacoviello (2019). The average for the Index is 51%. Therefore, the Regulatory and Political, Economic and Financial, Technological, Socio-Economic, Infrastructure and Assets and ESG are fairly around the 50% while the volume and value are consistent to Appadu et al. (2016).

[Insert Table 4 here]

Multivariate regression analysis is performed on the country-year panel data set, covering sixteen years from 2006 to 2021, in order to determine which factor groups, explain the differences in M&A activity between all of the sample countries and assess the attractiveness index for M&A inflows at the country level. This paper follows Appadu et al. 2016 but with the updated index, by including the ESG variable at country level to the methodology. Table 5 shows the results of a regression analysis of the relationship between M&A activity as the dependent variable – measured in terms of the logarithm of Volume (Model 1), value (Model 2), Cross border Volume (Model 3) and Cross-border Value (Model 4) – and the six factor groups as the explanatory variables.

[Insert Table 5 here]

Table 5 confirms that the updated index is a key driver for M&A activities, which is in line with Appadu et al. 2016. The results are also robust for global M&A value (Model 2) and both cross-border volume (Model 3) and cross-border value (Model 4). The table shows that North America is the leader of deal activities.

In Table 6, we show the breakdown of the index with the decomposition of the factors. We confirm that all six factor groups individually explain some of the differences in country-level

M&A volumes and values. The analysis shows that, in line with other authors, regulatory and political factors (Rossi and Volpin, 2004; DeLong et al., 2001; and Yartey, 2008, Appadu et al.2016) , economic and financial factors (Berthelemy and Demurger, 2000; Liu et al., 2009; Yartey, 2008; Saborowski, 2009, and Appadu et al., 2016), as well as technological (Porter, 1993, Appadu et al. 2016), are positively and statistically significant determinants of M&A activity, in terms of both volume and value. Moreover, there is 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 railway lines and ports as well as the availability of sizeable assets to acquire. This paper adds to the existing literature by providing a positive relationship between both the volume and value of M&A activity and the country's ESG. In particular, it shows that similarly to firms, countries are reacting positively to the ESG when considering M&A activities in another country or in the domiciliary country.

Table 7 further provides insight into the relative degree to which the six factor groups are responsible for variations in M&A activity. Given that one of the key questions in this paper is about ESG, we decompose that ESG factors and regress each component individually to understand the various impact on the M&A activities. We then replicate the process for M&A value. Notably, we find that a country's Environment, Social and Governance are all positively related to M&A activities in Model 1, 2 and 3 respectively. The environmental dimension is of fundamental concern for many countries in light of the effects of climate change, and this is the reason why the UNFCC are meeting every year to try to change various rules to tackle this global challenge. This is a long-term problem and it will be remained to be seen how each country will adopt the rules to improve various issues relating to the environmental aspects. However, deals are already being negotiated after carrying out due diligence on the environmental factors[2].

Our results are also consistent with an unreported table when M&A value and cross border volume and value are considered. It shows that all the drivers are all significantly related to M&A activities. Therefore, environment, social and governance are a key factor in determining M&A activities, which confirms the current rationale of advisors being keen on doing deals that can improve the ESG score of their firms. We conclude that six factor groups, and by extension the MAAIS, are – as hypothesized – all important drivers of country-level M&A activity, both domestic and cross-border. More importantly, the ESG factor is a key variable in the current state of the world.

[Insert Table 7 here]

Table 8 presents the drivers of M&A activity. We find the index (the combination of all the six-factor group) to be positive and significantly related to the M&A activities (volume). That

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[2] We further explore the subfactors affecting the environmental factors in Table 11.

is, any firm considering buying any target should clearly focus their attention on the macro economic factors while performing their due diligence. The other key focus of this study is to concentrate on the effect of uncertainty and geopolitical issues and investigate whether the geopolitical risk affect M&A activities at country level and global level. To assess the relation between geopolitical risk and acquisition activity, we built up on the above results and include the world uncertainty risk and the geopolitical risk variable. We also control for regional fixed effects.

For this purpose, we use the world uncertainty risk (WUI) and the GPR index constructed by Caldara and Iacoviello (2019) to proxy for the geopolitical risk. The index focuses on articles related to geopolitical risks: it counts the monthly occurrence of articles related to political tension, war threats, and terrorist threats derived from a web scraping algorithm which conducts automated text searches in eleven leading national and international newspapers published in the countries of the target firms. Caldara and Iacoviello (2019) find that their GPR index successfully captures all the major geopolitical shocks. For instance, it covers global wars such as the Gulf War, the 9/11 terrorist attack, the 2003 Iraq invasion, the Russian invasion over Ukraine. While the geopolitical risk is positively related to M&A activities, we find that the WUI has the opposite effect.

[Insert Table 8 here]

We then further the analysis by presenting Table 9 which shows the breakdown of the Index together with the world uncertainty risks and the geopolitical risks. The results support the findings that the six factor groups are positively and consistent to the previous results. The breakdown of the ESG factor confirm that environmental, social and governance are still positive and statistically related to the M&A activities. Interestingly, the geopolitical risks are positively related to M&A activities. This interesting result suggests that geopolitical risk could be seen as an opportunity for firms that have cash in their bank account to tap into companies that trade at a discount in times of geopolitical uncertainty. It could also shift the deals from one country to another country, which has been the case when a sanction is applied to certain countries or when any other changes in policies due to protectionism occur. We are mindful that the regions may have a heterogeneous impact of M&A activities. We can confirm that North America leads the M&A activities as per the descriptive statistics in Table 4 and the analysis is in Table 6. Countries in developed regions have stable M&A activities. The rest of the regions have a lot to catch up compared to the North American region. In an unreported table, we find similar results when cross-border M&A volume and value are analysed.

[Insert Table 9 here]

Building on the previous results, Table 10 shows the results of the various factors but include other risk factors that could affect the M&A activities as a robustness test. Aside from the common factors used in previous tables, we also include the climate policy uncertainty index of Gavriilidis (2021), global policy uncertainty index as per Davis (2016) and the pandemic

risk sourced from the Economist Intelligence Unit country report. The results confirm that each of the risk factors in column 1, 2 and 3 are negatively related M&A activities. The same analysis was carried out for M&A value and both for cross-border volume and value in an unreported table. The coefficients of all the different types of risks are negatively and significantly related to respective M&A activities.

[Insert Table 10 here]

Finally, to have a better understanding of how the various compositions of the ESG factor groups affect M&A, we replace the target country aggregate ESG score with its corresponding sub-scores in the Environment, Social and Governance dimensions. We also include the various types of macro-economic risks that could affect the M&A activities as the previous tables. As per the previous tables, the Environment, Social and Governance factors are all positive and significantly related to M&A activities, but in Table 11, we find that not all sub-scores are statistically positive. Table 11 shows that Energy Resource Management is the key factor that drives the Environment score. Human capital performance and knowledge capital management are the two sub-variables that drive the Social score, while all the sub-variables for governance are positively related to M&A volume. Moreover, the sign and significance of geopolitical risk is consistent to previous results, thus confirming that firms look out for opportunities in times of geopolitical risk. In an unreported table, the above results are consistent with M&A value and cross border volume and value.

[Insert Table 11 here]

2 Conclusion

The paper revisits the proprietary methodology for measuring a country's attractiveness 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 and ESG, are measured in order to provide an overall country- and year-specific index score. 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 – are significantly related to M&A activity (volume, value, cross-border volume and value). However, we extend the findings of previous studies by suggesting that ESG is a fundamental variable in cross- border deal making.

This updated index can help acquiring companies in their investment decisions related to the acquisition of a stake in a target based in a foreign country relative to the acquirer's headquarters. Here, 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,

12

etc.). However, 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 attractiveness of each country is vital both at an aggregate level and within each group of factors, and the M&A attractiveness index devised by this study will hopefully equip acquiring companies with a tool that they can use to assess investment decisions. Finally, the decomposition of ESG are consistent with the fact that most dimensions of sustainability are key to M&A activities. Finally, geopolitical risk is a driving force for firms to seek other markets while cash rich firms may seek the opportunity to increase their spending spree for M&A targets.

References

Aktas, N., de Bodt, E., Bollaert, H, & Roll, R. (2016). Narcissism and the Takeover process:From private initiation to deal completion.. *The Journal of Financial and Quantitative Analysis* Vol. 51 No.1, pp. 113–137.

Anyanwu, J. (2012) 'Why Does Foreign Direct Investment Go Where It Goes?: New evidence from African countries'. *Annals of Economics and Finance* 13(2), 433-470.

Appadu, N., Faelten, A., Moeller, S., & Vitkova, V. (2016). Assessing market attractiveness for mergers and acquisitions: the M&A Attractiveness Index Score. *The European Journal of Finance* Vol. 22 No. 8–9, pp. 732–755.

Arif U, Arif A, Khan F N,(2022) 'Environmental impacts of FDI: evidence from heterogeneous panel methods.' *Environmental Science and Pollution Research*. 2022; 29:23639–23649.

Asiedu E. (2002) 'On the Determinants of Foreign Direct Investment to Developing Countries: Is Africa different?' *World Development* 30(1), 107-118.

Beladi, H., Oladi, R., (2005). 'Foreign investment policies and environment.' *Naturel. Resource Research*. 18 (2), 113–126.

Bernanke, B., 1983. Irreversibility, uncertainty, and cyclical investment. *Quarterly Journal of Economics* 98, 85-106.

Berthelemy, J.-C. and Demurger, S. (2000) 'Foreign Direct Investment and Economic Growth: Theory and application to China'. *Review of Development Economics* 4(2), 140-155.

Bloom, N., 2009. The impact of uncertainty shocks. *Econometrica* 77, 623-685.

Bloom, N., Bond, S., Van Reenen, J., 2007. Uncertainty and investment dynamics. *Review of Economic Studies* 74, 391-415.

Busse, M. and Hefeker, C. (2007) 'Political Risk, Institutions and Foreign Direct Investment'. *European Journal of Political Economy* 23(2), 397-415.

Caldara, D., Iacoviello, M., 2019. 'Measuring geopolitical risk.' *Working paper*, Board of Governors of the Federal Reserve Board.

Chow, G.C. (1960) 'Tests of Equality between Sets of Coefficients in Two Linear Regressions.' *Econometrica* 28(3), 591-605.

Chung, W. and Alcacer, J. (2002) 'Knowledge Seeking and Location Choice of Foreign Direct Investment in the United States'. *Management Science* 48(12), 1534-1554.

Cole, M.A., Elliott, R.J., Zhang, J., (2011). 'Growth, foreign direct investment, and the environment: evidence from Chinese cities., *J. Reg. Sci*. 51 (1), 121–138.

Cools, S. (2005) 'The Real Difference in Corporate Law between the United States and Continental Europe: Distribution of powers'. *Delaware Journal of Corporate Law* 30, 697-766.

Delios, A. and Henisz, W. (2003) 'Political Hazards, Experience, and Sequential Entry Stages: The international expansion of Japanese firms, 1980- 1998'. *Strategic Management Journal* 24, 1153-1164.

DeLong, G. and Buch, C. (2001) 'Cross-border Bank Mergers: What lures the rare animal?' *Journal of Banking and Finance* 28(9), 2077-2102.

DePamphilis, D. (2019). Mergers, Acquisitions, and Other Restructuring Activities: An Integrated Approach to Process, Tools, Cases, and Solutions. *Academic Press*.

Dittmar, A., Mahrt-Smith, J. and Servaes, H. (2003) 'International Corporate Governance and Corporate Cash Holdings'. *Journal of Financial and Quantitative Analysis* 38(1), 111-133.

Dixon, W.J. and Massey Jr., F.J. (1983) *Introduction to Statistical Analysis*, 4th ed., New York: McGraw-Hill, 121-130.

Djankov, S., La Porta, R., Lopez-de-Silanes, F. and Shleifer, A. (2008) 'The Law and Economics of Self-dealing'. *Journal of Financial Economics* 88(3), 430-465.

Djankov, S., McLiesh, C. and Shleifer, A. (2007) 'Private Credit in 129 Countries'. *Journal of Financial Economics* 84(2), 299-329.

Duarte, M. and Restuccia, D. (2007) 'The Structural Transformation and Aggregate Productivity in Portugal'. *International Journal of the Economics of Business* 8(2), 173-190.

Duchin, R., Schmidt, B., 2013. Riding the merger wave: Uncertainty, reduced monitoring, and bad acquisitions. '*Journal of Financial Economics*' 107, 69-88.

Eskeland, G.S., Harrison, A.E., 2003. 'Moving to greener pastures? Multinationals and the pollution haven hypothesis.' *Journal of. Development Economy*. 70 (1), 1–23

Fontagne, L. and Mayer, T. (2005) 'Determinants of Location Choices by Multinational Firms: A review of the current state of knowledge'. *Applied Economics Quarterly* 51, 9-34.

Frankel, R. and Lee, C.M. (1998) Accounting Valuation and Cross-Sectional Stock Market Expectations. Journal of Accounting and Economics, 25, 283-319.

Garfinkel, J., Hankins, K., 2011. The role of risk management in mergers and merger waves. *Journal of Financial Economics* 101, 515-532.

Golub, S.S., Kauffmann, C., Yeres, P., (2011). 'Defining and Measuring Green FDI.' Organization for Economic Development and Cooperation *Working paper* 2011/102.

Greenwald, B., Stiglitz, J., 1990. Macroeconomic models with equity and credit rationing. In Asymmetric Information, Corporate Finance, and Investment, R. G. Hubbard, ed. Chicago, IL: *University of Chicago Press*, 15-42.

Guerin, S.S. and Manzocchi, S. (2009) 'Political Regime and FDI from Advanced to Emerging Countries'. *Review of World Economics* 145(1), 75-91.

Haller, A. (2008) 'The Impact of Multinational Entry on Domestic Market Structure and Investment'. *International Review of Economics and Finance* 31, 372-390.

Hecock, R. D. (2006). Electoral competition, globalization, and subnational education spending in Mexico, 1999–2004. *American Journal of Political Science*, 50 (4), 950-961. [27]

Hecock, R. D., & Jepsen, E. M. (2013). Should countries engage in a race to the bottom? The effect of social spending on FDI. World Development, 44, 156–164.

Heshmati, A (2003) 'Productivity, Growth, Efficiency and Outsourcing in Manufacturing and Services Industries'. *Journal of Economic Surveys* 17(1), 35-66.

Hitt, A., Hoskisson, E., and Hicheon K. International Diversification: Effects on Innovation and Firm Performance in Product-Diversified Firms. *The Academy of Management Journal* 40, no. 4 (1997): 767–98.

Hoel, G. (1984) *Introduction to Mathematical Statistics*, 5th ed., New York: Wiley, 140-161.

Huber, E., Mustillo, T., & Stephens, J. D. (2008). Politics and social spending in Latin America. The Journal of Politics, 70(02), 420–436.

Julio, B., Yook, Y., 2012. Political uncertainty and corporate investment cycles. *Journal of Finance* 67, 45-83.

Kolstad, I. and Villanger, E. (2008) 'Determinants of Foreign Direct Investment in Services'. *European Journal of Political Economy* 24(2), 518-533.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A. and Vishny, R.W. (1997) 'Legal Determinants of External Finance'. *Journal of Finance* 52(3), 1131-1150.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A. and Vishny, R.W. (1998) 'Law and Finance'. *Journal of Political Economy* 106, 1113-1155.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A. and Vishny R. (2002) 'Investor Protection and Corporate Valuation'. *Journal of Finance* 57(3), 1147-1170.

Lehnert, K., Benmamoun, M., & Zhao, H. (2013). FDI Inflow and Human Development: Analysis of FDI's Impact on Host Countries' Social Welfare and Infrastructure. Thunderbird *International Business Review*, 55(3), 285–298.

Leibrecht, M., Klien, M., & Onaran, Ö. (2011). Globalization, welfare regimes and social protection expenditures in Western and Eastern European countries. *Public choice*, 148(3-4), 569-594.

Leuz, C., Nanda, D. and Wysocki, P. (2003) 'Earnings Management and Investor Protection: An international comparison'. *Journal of Financial Economics* 69, 505-527.

Liu, X., Shu, C. and Sinclair, P. (2009) 'Trade, Foreign Direct Investment and Economic Growth in Asian Economies'. *Applied Economics* 41(13), 1603-1612.

Loree, D.W. and Guisinger, S. (1995) 'Policy and Non-policy Determinants of US Equity Foreign Direct Investment'. *Journal of International Business Studies* 26(2), 281-299.

Nocke, V. and Yeaple, S. (2007) 'Cross-border Mergers and Acquisitions vs. Greenfield Foreign Direct Investment: The role of firm heterogeneity'. *Journal of International Economics* 72, 336-365.

Mateev, M. (2009) 'Determinants of Foreign Direct Investment in Central and Southeastern Europe: New empirical tests'. *Oxford Journal* 8(1), 133-149.

Pan, W., 2019. Geopolitical risk and R&D investment. Working paper, University of Reading.

Peng, W., Wang, L. and Jiang, Y. (2008) 'An Institution-based View of International Business Strategy: A focus on emerging economies'. *Journal of International Business Studies* 39(5), 920-936.

Porter, M. (1993) 'The Competitive Advantage of Nations'. *Journal of Development Economics* 40(2), 399-404.

Reese, W. and Weisbach, M. (2002) 'Protection of Minority Shareholder Interests, Cross-listing in the United States, and Subsequent Equity Offerings'. *Journal of Financial Economics* 66, 65-104.

Rugman, A. and Li, J. (2007) 'Will China's Multinationals Succeed Globally or Regionally?'*European Management Journal* 25(5), 333-343.

Rossi, S. and Volpin, P.F. (2004) 'Cross-country Determinants of Mergers and Acquisitions'. *Journal of Financial Economics* 74(2), 277-304.

Ryan, H., Raff, H. and Stähler, F. (2009) 'The Choice of Market Entry Mode: Greenfield Investment, M&A and Joint Venture'. *International Review of Economics and Finance* 18, 3-10.

Saborowski, C. (2009) 'Capital Inflows and the Real Exchange Rate: Can financial development cure the Dutch disease?' IMF Working Paper. Retrieved from http://www.imf.org/external/pubs/ft/wp/2009/wp0920.pdf.

Sapkota, P., Bastola, U., 2017. 'Foreign direct investment, income, and environmental pollution in developing countries: Panel data analysis of Latin America.' *Energy Econ.* 64, 206–212.

Spamann, H. (2010) 'The "Anti-director Rights Index" Revisited'. *Review of Financial Studies* 23(2), 467-486.

United Nations Conference on Trade and Development (2012) *Global Investment Report*.

Tsai, P.-L. (1994) 'Determinants of Foreign Direct Investment and its Impact on Economic Growth'. *Journal of Economic Development* 19, 137-163.

Wheeler, D. and Mody, A. (1992) 'International Investment Location Decisions: The case of U.S. firms'. *Journal of International Economics* 33, 57-76.

Wurgler, J. (2000) 'Financial Markets and the Allocation of Capital'. *Journal of Financial Economics* 58, 187-214.

Yartey, C.A. (2008) 'The Determinants of Stock Market Development in Emerging Economies: Is South Africa different?' IMF Working Paper. Retrieved from http://www.imf.org/external/pubs/ft/wp/2008/wp0832.pdf.

Appendix 1- Taken from Appadu et al. (2016)

1   The MAAIS variables

MAAIS is a scoring methodology designed to evaluate a country's capacity to attract and sustain M&A activity. The aim of this methodology is to provide an overview of how developed a country is for current and future M&A activity – arguably an important barometer of the health and sustainability of the national business environment, irrespective of the nationality of the acquirer firm. For the same reason, we include factors measuring the ease and attractiveness for any buyer – domestic or foreign – of acquiring and test their fit and predictive powers on the same set of data. 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 and ESG. Since we aim to provide an updatable scoring methodology and database, it is important that data sources and updates are available for all countries when changes occur as these countries develop. Hence, for each factor group, several widely recognised surveys, reports or databases (sourced from international institutional bodies, such as the International Monetary Fund (IMF)) were identified for inclusion. Finally, the Table 1 also show the geopolitical risk and the uncertainty risks that is included in the analytical section.

[Insert Table 1 here]

1.1   Regulatory and political factor group

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 the 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 (resp. positive) share price reaction around the time of deal announcement when the target is public (resp. private).

Whilst the aforementioned research has contributed greatly to the establishment of a link between certain aspects of a country's legal environment and their effect on M&A activity,

there are other regulatory and political factors that may influence a country's ability to attract and sustain M&A activity which deserve attention. We suggest that there are a number of other variables in this category which matter as they have practical implications which could hinder not only the transaction process but also continued business operations in the country. The complexity of a country's tax system as well as the time and costs related to registering new property are two such examples. In addition, DeLong et al. (2001) find that mergers tend to be less frequent if information costs are high, thus supporting the hypothesis that a more transparent business environment fosters M&A activity and suggesting that the Index should include other measures such as control of corruption.

We summarise the variables in the Regulatory and Political factor group in Table 1 (Panel A), which include: *Rule of Law*; *Completing Formalities*; *Registering Property*; *Paying Taxes*; *Trading Across Borders*; *Enforcing Contracts*; *Political Stability*; *Sovereign Debt Rating*; and *Control of Corruption*.

1.2   Economic and financial factor group

It is unsurprising that economic and financial factors of the host country are at the core of inbound M&A activity. Guerin and Manzocchi (2009) argue that democracy is conducive of the amount and probability of FDI flowing from developed to developing countries, while Berthelemy and Demurger (2000) stress the importance of the potential for future growth in foreign investment, with FDI playing 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. Indeed, it is evident that the presence of economic growth and business trade is a necessary condition for an M&A market to develop, which therefore supports the inclusion of economic factors in the Index.

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 stock market development in emerging market countries. His results also show that political risk, law and order, and bureaucratic efficiency are too important factors in the development of stock markets because they enhance the viability of external finance. They also suggest 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 destabilisation 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 sustain M&A activity, thus supporting the inclusion of financial factors in the dataset.

We summarise the variables in the Economic and Financial factor group in Table 1 (Panel B), which include: *GDP Size*; *GDP Growth*; *Inflation*; *Development of Equity Market*; and *Availability of Domestic Banking Credit*.

1.3 Technological and Socio-economic factor groups

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 in 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.

We summarise the variables in the Technological factor group in Table 1 (Panel C), which include: *High-Technology Exports*; *Innovation*; and *Internet Users*, and the variables in the Socio-economic factor group in Table 1 (Panel D), which include: *Population Size* and *Population Demographics*.

1.4 Infrastructure and assets factor group

Finally, studies have also demonstrated that the size of a country's market and, therefore, the availability of assets are an imperative driver of FDI flows (see, e.g., Mateev, 2009; and Anyanwu, 2012). This is particularly important for country-level M&A activity as many countries have concentrated ownership across industries for historical, cultural or political reasons, which hampers the process of reallocating inefficient capital. Further, assets, i.e. target firms in this context, need to be 'sizeable' in order to be attractive as the potential return on investment needs to exceed the costs associated with the acquisition. In addition, a number of studies demonstrate both theoretically and empirically that the quality of transportation infrastructure can affect FDI flow, i.e. higher quality of roads, ports, runways, etc. is positively and significantly related to FDI (see, e.g., Wheeler and Mody, 1992; Loree and Guisinger, 1995; and Asiedu, 2002).

We summarise the variables in the Infrastructure and Assets factor group in Table 1 (Panel E), which include: *Sizeable Assets*; *Ports*; *Railway Lines*; and *Paved Roads.*

Table 1: Sub-factor variables descriptions and sources

Panel A: Regulatory and Political [RegPol] factor group

Rule of Law	The rule of law concerns the consistency of the application of the law. The data for this comes from the World Bank's *Governance Matters* report. The sub-factor percentages were developed by percentile classification based on the full country dataset.
Completion Formalities	Completion formalities concerns the level of administration involved in setting up a business, measured in administrative time (days). The data for this comes from *Doing Business* by the World Bank. The sub-factor percentages were developed by percentile classification based on the full country dataset.
Registering Property	Registering property concerns the procedures necessary for a business to purchase a property from another business, measured in administrative time (days). The data for this comes from *Doing Business* by the World Bank. The sub-factor percentages were developed by percentile classification based on the full country dataset.
Paying Taxes	Paying taxes concerns the level of taxes and the related administration involved in paying taxes, measured in administrative time (days). The data for this comes from *Doing Business* by the World Bank. The sub-factor percentages were developed by percentile classification based on the full country dataset.
Trading Across Borders	Trading across borders concerns the procedural requirements for exporting and importing, measured in administrative time (days). The data for this comes from *Doing Business* by the World Bank. The sub-factor percentages were developed by percentile classification based on the full country dataset.
Enforcing Contracts	Enforcing contracts concerns the efficiency of the judicial system in resolving commercial disputes, measured in administrative time (days). The data for this comes from *Doing Business* by the World Bank. The sub-factor percentages were developed by percentile classification based on the full country dataset.
Political Stability	Political stability measures perceptions of the likelihood that the government will be destabilised. The data for this comes from the World Bank's *Governance Matters* report. The sub-factor percentage was developed by percentile classification based on the full country dataset.

Panel B: Economic and Financial [EconFin] factor group

GDP Size	GDP size measures the economic size of the market. GDP size is measured as the average estimated GDP size for the next five years, i.e. a rolling average. The data for this comes from the International Monetary Fund's World Economic Outlook Database. The sub-factor percentage was developed by percentile classification based on the full country dataset.
GDP Growth	GDP growth measures the economic growth of the market. GDP growth is measured as the estimated compounded average growth rate for the next five years, i.e. a rolling average. The data for this comes from the International Monetary Fund's World Economic Outlook Database. The sub-factor percentage was developed by percentile classification based on the full country dataset.
Inflation	Inflation concerns economic growth and monetary policy. Inflation is measured as the average from 2012 to 2016 (estimated). The data for this comes from the International Monetary Fund's World Economic Outlook Database. The sub-factor percentage was developed by percentile classification based on the full country dataset.

Table 1 continued

Development of Equity Market	Development of equity market concerns access to equity financing through capital markets. It is measured as the stock market capitalisation as a percentage of GDP. The data for this comes from the World Bank's *World Development Indicators*. The sub-factor percentage was developed by percentile classification based on the full country dataset.
Availability of Domestic Banking Credit	Availability of domestic banking credit concerns access to financing and credit from domestic banks. It is measured as the private credit provided as a percentage of GDP. The data for this comes from the World Bank's *World Development Indicators*. The sub-factor percentage was developed by percentile classification based on the full country dataset.

Panel C: Technological [Tech] factor group

High-Technology Exports	High-technology exports concerns the volume and quality of domestically produced high technology. It is measured as the level of high-technology exports as a percentage of all manufacturing exports. The data for this comes from the World Bank's *World Development Indicators*. The sub-factor percentage was developed by percentile classification based on the full country dataset.
Internet Users	Internet users measures the level of technological skills of the population. It is measured as the number of internet users per 100 people. The data for this comes from the World Bank's *World Development Indicators*. The sub-factor percentage was developed by percentile classification based on the full country dataset.

Panel D: Socio-economic [Socecon] factor group

Population Size	Population size concerns the total population of the country. The data for this comes from the World Bank's *World Development Indicators*. The sub-factor percentage was developed by percentile classification based on the full country dataset.
Population Demographics	Population demographics is the percentage of the population aged between 15 and 64 out of the total population. The data for this comes from the World Bank's *World Development Indicators*. The sub-factor percentage was developed by percentile classification based on the full country dataset.

Panel E: Infrastructure and Assets [InfrAsst] factor group

Sizeable Assets	Assets concern the number of registered firms (>$1m assets) in each country. The data for this comes from the 'Orbis' (Bureau van Dijk) database. The sub-factor percentage was developed by percentile classification based on the full country dataset.
Ports	Port capacity is measured by the amount of container port traffic (twenty foot equivalent unit). The data for this comes from the World Bank's *World Development Indicators*. The sub-factor percentage was developed by percentile classification based on the full country dataset.
Railway Lines	Railway infrastructure is measured as the total length of railway lines (km). The data for this comes from the World Bank's *World Development Indicators*. The sub-factor percentage was developed by percentile classification based on the full country dataset.
Paved Roads	Road infrastructure is measured as the percentage of paved roads in relation to the total number of roads. The data for this comes from the World Bank's *World Development Indicators*. The sub-factor percentage was developed by percentile classification based on the full country dataset.

Panel F: ESG factor group

Environment	Assesses a country's overall performance on environmental risk factors, derived from the simple average of the 'environmental risk exposure' score (rescaled by subtracting from 10) and the 'environmental risk management' score. countries with low risk exposure and strong management of environmental risk factors score high; countries with high risk exposure and weak management of environmental risk factors score low. (Score: 0-10)
Social	Assesses a Country's overall performance on social risk factors, derived from the simple average of the 'social risk exposure' score (rescaled by subtracting from 10) and the 'social risk management' score. Countries with low risk exposure and strong management of social risk factors score highest; Countries with high risk exposure and weak management of social risk factors score lowest. (Score: 0-10)
Governance	Assesses a Country's overall performance on governance risk factors, derived from the simple average of the 'governance risk exposure' score (rescaled by subtracting from 10) and the 'governance risk management' score. Countries with low risk exposure and strong management of governance risk factors score highest; Countries with high risk exposure and weak management of governance risk factors score lowest. (Score: 0-10)

Panel G: Uncertainty and Geopolitical risk.

World Uncertainty Index	This tab contains the time series of the total count of the word "uncertainty" (or its variant) in the EIU country reports for 143 countries and from the 1950s to 2020Q4. A higher number means higher uncertainty and vice versa.
Geopolitical Risk Index	Caldara and Iacoviello (2021) construct newspaper-based indexes of geopolitical risk (GPR), daily and monthly, global and country-specific, and examine their evolution since 1900. They define geopolitical risk as the threat, realization, and escalation of adverse events associated with wars, terrorism, and any tensions among states and political actors that affect the peaceful course of international relations. It is the natural logarithm of the monthly average of the Caldara and Iacoviello (2019) geopolitical risk (GPR) over a 12–month period calculated at the end of each calendar year.
Pandemic	This tab contains the aggregate index of discussion about pandemics as well as the index by country. The index is constructed by counting the number of times a word related to pandemics is mentioned in the Economist Intelligence Unit country reports. Specifically, the index is the percent of the words related to pandemic episodes in EIU country reports, multiplied by 1,000. A higher number means higher discussion about pandemics and vice versa.
Climate Policy Uncertainty Index	The dataset should be cited as: Gavriilidis, K. (2021). Measuring Climate Policy Uncertainty. Available at SSRN: https://ssrn.com/abstract=3847388
Global Uncertainty Index	Citation: Davis, Steven J., 2016. "An Index of Global Economic Policy Uncertainty," Macroeconomic Review, October.

Table 2 shows the Index 2021 ('Index Score' column) for the countries ranked between 1 and 50. The exhibit also provides the year-on-year and five-year changes in ranking for each country ('Rank 1YR' and 'Rank 5YR' columns). It also gives the range of factor group scores, with the highest ranked factor group and its corresponding score shown in the 'Market Opportunities' column and the lowest ranked factor group and its corresponding score shown in the 'Market Challenges' column

Rank	Country	Index Score	Rank 1YR Δ	Rank 5YR Δ	Market Opportunities		Market Challenges	
1	United States	76%	0	0	Infrastructure & Assets	91%	Regulatory & Political	74%
2	Singapore	74%	0	1	Infrastructure & Assets	95%	Socio-economic	70%
3	United Kingdom	69%	4	3	Infrastructure & Assets	92%	Socio-economic	64%
4	Canada	69%	1	0	ESG	95%	Socio-economic	74%
5	Germany	68%	-2	-3	ESG	94%	Socio-economic	70%
6	Netherlands	68%	-2	2	ESG	93%	Socio-economic	57%
7	France	67%	3	3	Infrastructure & Assets	93%	Socio-economic	60%
8	South Korea	67%	-2	-1	Technological	95%	Regulatory & Political	74%
9	Spain	66%	4	4	Infrastructure & Assets	90%	Regulatory & Political	70%
10	Switzerland	66%	-2	-5	ESG	97%	Socio-economic	59%
11	Norway	66%	0	6	ESG	100%	Socio-economic	50%
12	Japan	66%	-3	3	ESG	87%	Socio-economic	59%
13	Malaysia	64%	1	8	Technological	88%	Regulatory & Political	57%
14	Austria	64%	-2	-5	ESG	95%	Socio-economic	61%
15	Australia	64%	2	-4	ESG	93%	Socio-economic	63%
16	Denmark	63%	0	-4	ESG	98%	Socio-economic	41%
17	Ireland	63%	-2	1	ESG	91%	Socio-economic	44%
18	Luxembourg	63%	0	-2	ESG	94%	Socio-economic	53%
19	Belgium	63%	2	3	ESG	84%	Socio-economic	50%
20	Czech Republic	63%	2	-6	ESG	92%	Socio-economic	52%
21	New Zealand	62%	-1	-2	ESG	97%	Socio-economic	43%
22	Slovakia	62%	3	8	Infrastructure & Assets	81%	Socio-economic	61%
23	Sweden	62%	-4	1	ESG	99%	Socio-economic	45%
24	China	61%	4	15	Socio-economic	96%	Regulatory & Political	58%
25	Hong Kong	61%	-1	2	Technological	95%	Regulatory & Political	65%
26	Italy	60%	3	-3	Infrastructure & Assets	93%	Regulatory & Political	61%
27	Finland	60%	-4	-7	ESG	96%	Socio-economic	37%
28	Poland	60%	-2	-3	ESG	81%	Regulatory & Political	50%
29	Malta	59%	1	0	ESG	87%	Socio-economic	34%
30	Chile	59%	5	5	ESG	81%	Regulatory & Political	60%
31	United Arab Emirates	59%	-4	-5	Regulatory & Political	78%	Technological	62%
32	Iceland	58%	-1	-4	Technological	97%	Socio-economic	36%
33	Portugal	58%	0	1	ESG	79%	Socio-economic	51%
34	Israel	58%	2	-1	Technological	86%	Socio-economic	39%
35	Romania	57%	2	-4	Economic & Financial	72%	Regulatory & Political	63%
36	Slovenia	57%	-2	-4	ESG	90%	Socio-economic	40%
37	Thailand	57%	-5	6	Socio-economic	91%	ESG	50%
38	Costa Rica	57%	10	12	Technological	78%	Infrastructure & Assets	50%
39	Greece	56%	0	16	Economic & Financial	73%	Socio-economic	50%
40	Cyprus	56%	-2	-2	Technological	83%	Socio-economic	55%
41	Vietnam	55%	-1	-4	Socio-economic	89%	Regulatory & Political	37%
42	Lithuania	55%	3	11	ESG	90%	Socio-economic	42%
43	Croatia	55%	0	-7	ESG	78%	Socio-economic	42%
44	Hungary	55%	-2	-2	Technological	76%	Economic & Financial	58%
45	Russia	53%	-1	11	Infrastructure & Assets	83%	Regulatory & Political	25%
46	Panama	53%	7	11	Economic & Financial	77%	Socio-economic	46%
47	Brazil	52%	2	0	Socio-economic	93%	Regulatory & Political	34%
48	Bulgaria	52%	-1	-3	ESG	80%	Socio-economic	45%
49	Latvia	52%	-8	-5	ESG	89%	Socio-economic	31%
50	Mexico	52%	0	-4	Socio-economic	81%	Regulatory & Political	43%

.

Table 2 continued

Rank	Country	Index Score	Rank 1YR Δ	Rank 5YR Δ	Market Opportunities		Market Challenges	
51	Estonia	52%	3	-11	ESG	92%	Socio-economic	30%
52	Mauritius	51%	18	-1	Regulatory & Political	75%	Technological	39%
53	South Africa	51%	-1	5	Infrastructure & Assets	79%	Regulatory & Political	36%
54	Indonesia	50%	-3	10	Socio-economic	88%	Regulatory & Political	38%
55	Qatar	50%	1	-3	Regulatory & Political	70%	Economic & Financial	49%
56	Serbia	50%	9	7	Infrastructure & Assets	65%	Technological	55%
57	Oman	50%	0	-3	Regulatory & Political	78%	Economic & Financial	43%
58	India	50%	9	13	Socio-economic	86%	ESG	31%
59	Saudi Arabia	49%	-13	2	Socio-economic	86%	ESG	46%
60	Kuwait	49%	8	7	Socio-economic	67%	Economic & Financial	42%
61	Turkey	49%	-2	12	Infrastructure & Assets	82%	ESG	27%
62	Kazakhstan	48%	-2	-13	Technological	84%	Economic & Financial	41%
63	Philippines	48%	-1	11	Economic & Financial	73%	Regulatory & Political	30%
64	Morocco	48%	2	8	Economic & Financial	77%	ESG	28%
65	Belarus	48%	-10	-5	Socio-economic	66%	Economic & Financial	29%
66	Peru	48%	-5	-1	ESG	75%	Regulatory & Political	35%
67	Montenegro	47%	21	-8	ESG	72%	Infrastructure & Assets	34%
68	Uruguay	47%	-10	0	ESG	86%	Economic & Financial	33%
69	Argentina	47%	3	0	ESG	71%	Regulatory & Political	33%
70	Bahrain	47%	6	7	Socio-economic	62%	ESG	36%
71	Colombia	47%	-8	-23	Socio-economic	84%	Infrastructure & Assets	33%
72	Brunei	47%	-8	-31	ESG	83%	Economic & Financial	40%
73	Dominican Republic	46%	10	5	Technological	63%	ESG	36%
74	Bosnia and Herzegovina	45%	-5	-12	ESG	61%	Regulatory & Political	32%
75	Côte d'Ivoire	45%	7	17	Economic & Financial	73%	Infrastructure & Assets	25%
76	Macedonia	45%	5	-10	Socio-economic	58%	Infrastructure & Assets	46%
77	Tunisia	44%	0	7	Socio-economic	68%	ESG	34%
78	Ukraine	44%	-4	-3	Infrastructure & Assets	81%	Regulatory & Political	32%
79	Fiji	43%	0	24	ESG	69%	Infrastructure & Assets	33%
80	Georgia	43%	-7	-4	ESG	70%	Infrastructure & Assets	34%
81	Botswana	42%	14	1	ESG	67%	Technological	24%
82	Paraguay	42%	5	18	ESG	69%	Infrastructure & Assets	27%
83	Seychelles	41%	-5	-4	Regulatory & Political	57%	Economic & Financial	23%
84	Uzbekistan	41%	1	10	Socio-economic	75%	Technological	28%
85	Azerbaijan	41%	4	3	Socio-economic	73%	Economic & Financial	31%
86	Mongolia	40%	-6	-1	Technological	63%	Infrastructure & Assets	29%
87	Bahamas	40%	-3	-17	Regulatory & Political	66%	Economic & Financial	39%
88	Ecuador	40%	-13	-7	Socio-economic	61%	Regulatory & Political	21%
89	Trinidad and Tobago	39%	-18	-9	ESG	74%	Technological	36%
90	Jordan	39%	6	1	Infrastructure & Assets	61%	ESG	20%
91	Kenya	38%	7	18	Economic & Financial	62%	ESG	27%
92	El Salvador	38%	1	7	Economic & Financial	70%	ESG	34%
93	Armenia	37%	-2	-4	Technological	60%	Infrastructure & Assets	34%
94	Moldova	37%	-8	-11	Socio-economic	62%	Economic & Financial	35%
95	Algeria	37%	14	21	Infrastructure & Assets	66%	Regulatory & Political	20%
96	Albania	36%	1	1	Socio-economic	57%	Infrastructure & Assets	28%
97	Bolivia	36%	22	1	Economic & Financial	62%	Regulatory & Political	12%
98	Ghana	36%	14	15	Socio-economic	51%	Technological	25%
99	Iran	36%	-5	-13	Socio-economic	88%	Regulatory & Political	14%
100	Sri Lanka	35%	2	7	Socio-economic	65%	ESG	21%

Table 2 continued

Rank	Country	Index Score	Rank 1YR Δ	Rank 5YR Δ	Market Opportunities	Market Challenges

101	Egypt	35%	-11	13	Infrastructure & Assets	74%	ESG	9%
102	Iraq	35%	1	26	Technological	65%	ESG	7%
103	Bangladesh	35%	15	-8	Socio-economic	86%	Technological	9%
104	Senegal	35%	0	20	Economic & Financial	68%	Technological	21%
105	Jamaica	34%	-13	-12	Infrastructure & Assets	61%	Economic & Financial	21%
106	Cape Verde	34%	5	-1	Regulatory & Political	74%	Infrastructure & Assets	20%
107	Cambodia	34%	3	1	Socio-economic	54%	ESG	18%
108	Guatemala	34%	-1	13	Economic & Financial	48%	Regulatory & Political	31%
109	Papua New Guinea	33%	7	3	ESG	49%	Technological	24%
110	Laos	33%	3	-23	Technological	54%	Infrastructure & Assets	24%
111	Tanzania	32%	12	-15	Socio-economic	47%	ESG	24%
112	Namibia	32%	-13	-11	ESG	60%	Technological	20%
113	Lebanon	32%	-12	14	Socio-economic	60%	Economic & Financial	1%
114	Antigua and Barbuda	31%	-6	-8	Regulatory & Political	54%	Infrastructure & Assets	19%
115	Uganda	31%	0	19	Economic & Financial	45%	ESG	16%
116	Honduras	31%	-16	-14	Economic & Financial	49%	Regulatory & Political	26%
117	Kyrgyzstan	31%	15	-13	Economic & Financial	45%	Regulatory & Political	25%
118	Pakistan	30%	3	5	Infrastructure & Assets	70%	ESG	5%
119	Guyana	29%	-5	18	Economic & Financial	53%	Infrastructure & Assets	18%
120	Zambia	29%	0	-30	Regulatory & Political	46%	Technological	21%
121	Malawi	28%	1	-2	Socio-economic	39%	ESG	14%
122	Burkina Faso	28%	3	-11	Economic & Financial	51%	ESG	15%
123	Nigeria	28%	8	7	Socio-economic	52%	Technological	14%
124	Madagascar	28%	13	1	Socio-economic	45%	Technological	6%
125	Djibouti	28%	8	17	Economic & Financial	50%	ESG	6%
126	Mali	27%	3	5	Economic & Financial	55%	ESG	13%
127	Cameroon	27%	7	-12	Economic & Financial	51%	Regulatory & Political	16%
128	Belize	27%	-2	-6	ESG	41%	Infrastructure & Assets	20%
129	Zimbabwe	26%	-23	-11	Infrastructure & Assets	39%	ESG	7%
130	Nicaragua	25%	-3	-20	Socio-economic	49%	Technological	22%
131	Guinea	25%	-1	9	Economic & Financial	42%	Regulatory & Political	16%
132	Mozambique	24%	-15	-15	Socio-economic	40%	ESG	8%
133	Ethiopia	24%	-29	-4	Socio-economic	54%	ESG	12%
134	Angola	23%	-10	4	Infrastructure & Assets	42%	ESG	11%
135	Solomon Islands	23%	0	0	Regulatory & Political	60%	Technological	14%
136	Venezuela	23%	-8	-16	Socio-economic	65%	Economic & Financial	3%
137	Sudan	22%	-1	-11	Socio-economic	49%	ESG	0%
138	Tajikistan	21%	3	-2	Socio-economic	39%	Technological	19%
139	Haiti	20%	1	5	Socio-economic	46%	ESG	2%
140	Liberia	20%	-2	-1	Regulatory & Political	33%	Technological	4%
141	Syria	20%	-2	4	Socio-economic	55%	Regulatory & Political	0%
142	Mauritania	19%	0	4	Regulatory & Political	38%	Technological	9%
143	Congo, Rep.	19%	4	5	Socio-economic	28%	ESG	4%
144	Sierra Leone	18%	0	-3	Regulatory & Political	35%	Technological	11%
145	Yemen	18%	-2	-2	Socio-economic	48%	ESG	0%
146	Congo, Dem. Rep.	18%	0	-13	Socio-economic	47%	Technological	5%
147	Swaziland	16%	-2	-15	Regulatory & Political	32%	ESG	9%
148	Eritrea	8%	0	-1	Economic & Financial	31%	Technological	0%

Table 3: Average Index score and factor group scores at different levels of regions. This table shows the average index score and factor group score for the market opportunities and market challenges for each region together with their respective factors. by their yearly (logged) M&A volume or (logged) M&A value activity for 2021.

Rank		Index score	Volume	Value	Market Opportunities		Market Challenges	
1	North America	83%	7.01	7.01	ESG	93%	Economic & Financial	69%
2	Europe	62%	2.76	2.76	Infrastructure & Assets	71%	Economic & Financial	54%
3	Asia Pacific	59%	3.94	3.94	ESG	64%	Infrastructure & Assets	56%
4	Middle East	50%	1.39	1.39	Infrastructure & Assets	60%	ESG	38%
5	Latin America	46%	1.76	1.76	ESG	55%	Regulatory & Political	41%
6	South Asia	44%	2.11	2.11	Socio-economic	69%	Regulatory & Political	35%
7	Africa	33%	0.78	0.78	Socio-economic	43%	Technology	22%

Table 4: Average Index score and factor group scores at different levels of regions. This table shows the average M&A attractiveness score and factor group score for the market opportunities and market challenges for each region together with their respective factors. by their yearly (logged) M&A volume or (logged) M&A value activity for 2021.

	Number of Observations	Mean	Min	Max	Std Dev
Index	2,368	0.51	0.1	0.89	0.18
Regulatory and Political	2,336	0.49	0	1	0.29
Economic and Financial	2,352	0.5	0.05	0.9	0.16
Technological	2,277	0.49	0	1	0.28
Socio-Economic	2,336	0.55	0.14	0.99	0.17
Infrastructure and Assets	2,368	0.51	0	0.99	0.23
ESG	2,070	0.52	0	1	0.29
Volume (ln)	1,755	2.36	0	8.04	1.95
Value (ln)	1,755	6.39	-6.91	14.37	3.24
CB Volume (ln)	1,666	1.82	0	6.48	1.54
CB Value (ln)	1,666	5.85	-6.91	12.95	3.03
Geopolitical Risk	656	2.24	0.05	31.53	4.2
Global Uncertainty Index	1905	2.01	0	4.29	0.89
CPU	2,368	4.77	4.21	5.38	0.22
Global Political	2,368	4.97	4.13	5.77	0.42
Pandemic	506	4.96	1.41	7.49	0.82
Environmental	2,070	5.54	2.19	9.08	1.26
Social	2,070	5.79	0.57	9.62	2.08
Governance	2,070	4.94	0.21	9.79	1.83

Table 5: Multivariate regression analysis − Drivers of M&A activity. This table presents the results from the panel data regression analysis of the Index which explain M&A activity for the 148 countries included in this study for the period 2006 to 2021. Model 1 presents the analysis of drivers of M&A activity (Volume) on the basis of a sample of all the countries included in this study and Models 2, 3 and 4 present the analysis of the drivers of M&A activity on the basis of countries at the Value, Cross-Border Volume and Cross Border Value. Table 5 presents the results when M&A activity is measured by logged M&A volume (MA_Vol), logged M&A value (MA_Val), logged cross-border M&A volume (CB_MA_Vol) logged cross-border M&A value (CB_MA_Val). Z-scores are reported below each independent variable. To correct for the possibility that our coefficients are not estimated on the basis of a random sample or that the distributions of our independent variables and regression residual are not independent and identically distributed (i.i.d.), all of the models have a robust estimate of variance following Huber (1967) and White (1980, 1982). ***, **, and * indicate statistical significance at a 1%, 5% and 10% level, respectively.

VARIABLES	(1) MA_Vol	(2) MA_Val	(3) CB_MA_Vol	(4) CB_MA_Val
Index	8.382***	13.76***	6.511***	11.90***
	(0.202)	(0.404)	(0.168)	(0.406)
North America	1.519***	2.135***	1.604***	2.261***
	(0.159)	(0.278)	(0.128)	(0.238)
Europe	-0.826***	0.162	-0.309***	0.585***
	(0.118)	(0.224)	(0.0955)	(0.210)
Asia	-0.800***	-0.246	-0.343***	0.0871
	(0.125)	(0.263)	(0.0983)	(0.253)
Africa	-1.747***	-0.945***	-1.102***	-0.448*
	(0.115)	(0.223)	(0.0960)	(0.231)
Oceania	-1.119***	-0.541***	-0.533***	0.142
	(0.0949)	(0.173)	(0.0749)	(0.163)
Asia	-0.0855	0.542	0.0207	0.617
	(0.204)	(0.348)	(0.170)	(0.422)
Constant	-1.471***	-1.040***	-1.457***	-1.025***
	(0.159)	(0.331)	(0.129)	(0.321)
Observations	1,755	1,755	1,666	1,666
R-squared	0.663	0.537	0.634	0.477

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 6: Multivariate regression analysis − Drivers of M&A activity. This table presents the results from the panel data regression analysis of the factor groups (Regulatory and Political, Economic and Financial, Technological, Socio-Economic, Infrastructure and Assets and ESG) which explain M&A activity for the 148 countries included in this study for the period 2006 to 2021. Model 1 presents the analysis of drivers of M&A activity (Volume) on the basis of a sample of all the countries included in this study and Models 2, 3 and 4 present the analysis of the drivers of M&A activity on the basis of countries at the Value, Cross-Border Volume and Cross Border Value. Table 6 presents the results when M&A activity is measured by logged M&A volume (MA_Vol) ,logged M&A value (MA_Val). , logged cross-border M&A volume (CB_MA_Vol) logged cross-border M&A value (CB_MA_Val). Z-scores are reported below each independent variable. To correct for the possibility that our coefficients are not estimated on the basis of a random sample or that the distributions of our independent variables and regression residual are not independent and identically distributed (i.i.d.), all of the models have a robust estimate of variance following Huber (1967) and White (1980, 1982). ***, **, and * indicate statistical significance at a 1%, 5% and 10% level, respectively.

VARIABLES	(1) MA_Vol	(2) MA_Val	(3) CB_MA_Vol	(4) CB_MA_Val
Regulatory and Political	0.582***	1.151***	0.642***	1.380***
	(0.202)	(0.391)	(0.170)	(0.411)
Economic and Financial	2.189***	3.938***	1.814***	4.205***
	(0.212)	(0.435)	(0.180)	(0.449)
Technological	0.873***	1.083**	0.279	0.137
	(0.217)	(0.445)	(0.182)	(0.421)
Socio-Economic	2.604***	3.193***	1.473***	1.926***
	(0.239)	(0.457)	(0.194)	(0.462)
Infrastructure and Assets	2.502***	4.821***	2.225***	4.678***
	(0.193)	(0.379)	(0.169)	(0.394)
ESG	1.376***	2.183***	1.146***	1.853***
	(0.221)	(0.440)	(0.188)	(0.451)
North America	2.618***	2.342***	2.185***	1.974***
	(0.155)	(0.276)	(0.128)	(0.249)
Europe	0.214***	-0.0753	0.161**	0.0768
	(0.0765)	(0.149)	(0.0688)	(0.158)
Asia	0.694***	0.0231	0.206	-0.621
	(0.215)	(0.352)	(0.172)	(0.434)
Oceania	1.124***	0.294	0.600***	-0.143
	(0.106)	(0.204)	(0.0874)	(0.197)
Africa	0.676***	0.474**	0.379***	0.129
	(0.103)	(0.220)	(0.0837)	(0.221)
Constant	-3.794***	-3.011***	-2.756***	-2.225***
	(0.164)	(0.318)	(0.132)	(0.323)
Observations	1,504	1,504	1,423	1,423
R-squared	0.705	0.593	0.668	0.533

Table 7: Multivariate regression analysis − Drivers of M&A activity. This table presents the results from the panel data regression analysis of the factor groups (Regulatory and Political, Economic and Financial, Technological, Socio-Economic, Infrastructure and Assets and the breakdown of the ESG) which explain M&A activity for the 148 countries included in this study for the period 2006 to 2021. Model 1 presents the analysis of drivers of M&A activity (Volume) on the basis of a sample of all the countries included in this study with the Environmental factor as a key component for ESG.and Models 2 and 3present the analysis of the drivers of M&A activity on the basis of countries at the Volume for Social and Governance component for ESG. Table 7 presents the results when M&A activity is measured by logged M&A volume (MA_Vol). Z-scores are reported below each independent variable. To correct for the possibility that our coefficients are not estimated on the basis of a random sample or that the distributions of our independent variables and regression residual are not independent and identically distributed (i.i.d.), all of the models have a robust estimate of variance following Huber (1967) and White (1980, 1982). ***, **, and * indicate statistical significance at a 1%, 5% and 10% level, respectively.

VARIABLES	(1) MA_Vol	(2) MA_Vol	(3) MA_Vol
Regulatory and Political	1.296***	1.416***	0.735***
	(0.157)	(0.189)	(0.217)
Economic and Financial	2.156***	2.105***	2.143***
	(0.212)	(0.211)	(0.213)
Technological	1.109***	1.277***	1.175***
	(0.205)	(0.218)	(0.208)
Socio-Economic	2.853***	2.686***	2.674***
	(0.240)	(0.242)	(0.243)
Infrastructure and Assets	2.614***	2.342***	2.376***
	(0.190)	(0.191)	(0.188)
Environment	0.139***		
	(0.0240)		
Social		-0.0124	
		(0.0407)	
Governance			0.129***
			(0.0282)
North America	2.667***	2.725***	2.752***
	(0.161)	(0.155)	(0.167)
Europe	0.237***	0.289***	0.271***
	(0.0759)	(0.0832)	(0.0775)
Asia	0.472**	0.448**	0.489**
	(0.205)	(0.205)	(0.210)
Oceania	1.152***	1.163***	1.138***
	(0.106)	(0.108)	(0.107)
Africa	0.557***	0.508***	0.564***
	(0.0986)	(0.128)	(0.0972)
Constant	-4.458***	-3.505***	-3.866***
	(0.226)	(0.209)	(0.170)
Observations	1,505	1,505	1,505
R-squared	0.704	0.697	0.701

Table 8: Multivariate regression analysis − Drivers of M&A activity. This table presents the results from the panel data regression analysis of the Index which explain M&A activity for the 148 countries included in this study for the period 2006 to 2021 and the uncertainty around the world. Model 1 presents the analysis of drivers of M&A activity (Volume) on the basis of a sample of all the countries included in this study with the Geopolitical risk as a key component. And Models 2 presents the analysis of the drivers of M&A activity on the basis of countries at the Volume for Uncertainty as the key component for macro-economic risk. Table 8 presents the results when M&A activity is measured by logged M&A volume (MA_Vol). Z-scores are reported below each independent variable. To correct for the possibility that our coefficients are not estimated on the basis of a random sample or that the distributions of our independent variables and regression residual are not independent and identically distributed (i.i.d.), all of the models have a robust estimate of variance following Huber (1967) and White (1980, 1982). ***, **, and * indicate statistical significance at a 1%, 5% and 10% level, respectively.

VARIABLES	*(1)* lvol	*(2)* lvol
Index	5.980***	8.649***
	(0.350)	(0.207)
Geopolitical Risk	0.0762***	
	(0.00654)	
Global Uncertainty Index		-2.155***
		(0.383)
North America	1.325***	2.517***
	(0.170)	(0.150)
Europe	0.218**	0.118
	(0.107)	(0.0799)
Asia	1.973***	1.058***
	(0.0865)	(0.184)
Oceania	1.337***	1.288***
	(0.111)	(0.0976)
Africa	1.053***	0.544***
	(0.152)	(0.0843)
Constant	-0.537**	-14.51***
	(0.219)	(2.025)
Observations	648	1,551
R-squared	0.682	0.710

Table 9: Multivariate regression analysis − Drivers of M&A activity. This table presents the results from the panel data regression analysis of the factor groups (Regulatory and Political, Economic and Financial, Technological, Socio-Economic, Infrastructure and Assets and ESG) which explain M&A activity for the 148 countries included in this study for the period 2006 to 2021. It shows the drivers volume of various models on the basis of a sample of all the countries. It shows the breakdown of the Environment, Social and Governance together with the uncertainties and geopolitical risks. Note that it shows the logged of M&A volume (MA_Vol).

	(5)	(1)	(2)	(3)
VARIABLES	MA_Vol	MA_Vol	MA_Vol	MA_Vol
Regulatory and Political	1.565***	1.937***	1.592***	1.812***
	(0.239)	(0.160)	(0.178)	(0.223)
Economic and Financial	1.628***	1.618***	1.718***	1.629***
	(0.214)	(0.215)	(0.216)	(0.215)
Technological	0.814***	0.920***	0.640***	0.924***
	(0.214)	(0.213)	(0.231)	(0.213)
Socio Economic	2.210***	2.270***	2.260***	2.258***
	(0.240)	(0.248)	(0.241)	(0.245)
Infrastructure Assets	3.396***	3.387***	3.229***	3.364***
	(0.213)	(0.216)	(0.217)	(0.215)
ESG	0.615**			
	(0.271)			
Environment		0.0146***		
		(0.274)		
Social			0.152***	
			(0.392)	
Governance				0.0263***
				(0.294)
Geopolitical Risk	1.823***	1.705***	1.792***	1.732***
	(0.406)	(0.407)	(0.402)	(0.405)
Global Uncertainty Index	-0.0692**	-0.0644*	-0.0629*	-0.0665*
	(0.0353)	(0.0353)	(0.0353)	(0.0353)
North America	1.163***	1.181***	1.105***	1.198***
	(0.130)	(0.132)	(0.134)	(0.135)
Latin America	-0.603***	-0.562***	-0.548***	-0.552***
	(0.105)	(0.103)	(0.102)	(0.104)
Africa	-0.441***	-0.527***	-0.211	-0.514***
	(0.127)	(0.118)	(0.138)	(0.119)
Middle East	-1.966***	-2.042***	-2.056***	-2.039***
	(0.127)	(0.123)	(0.112)	(0.117)
Europe	-1.145***	-1.131***	-1.233***	-1.122***
	(0.0887)	(0.0899)	(0.0919)	(0.0918)
South Asia	-0.703***	-0.840***	-0.743***	-0.826***
	(0.222)	(0.207)	(0.208)	(0.209)
Constant	-13.11***	-13.11***	-13.67***	-12.53***
	(2.429)	(2.429)	(2.428)	(2.434)
Observations	1,283	1,283	1,284	1,284
R-squared	0.772	0.772	0.774	0.772

Table 10: Multivariate regression analysis – Drivers of M&A activity. This table presents the results from the panel data regression analysis of the Index which explain M&A activity for the 148 countries included in this study for the period 2006 to 2021 and the uncertainty around the world. Model 1 presents the analysis of drivers of M&A activity (Volume) on the basis of a sample of all the countries included in this study with the CPU factor as a key component for uncertainty and Models 2 and 3present the analysis of the drivers of M&A activity on the basis of countries at the Volume for global pollution uncertainty and the pandemic risk. Table 10 presents the results when M&A activity is measured by logged M&A volume (MA_Vol). Z-scores are reported below each independent variable. To correct for the possibility that our coefficients are not estimated on the basis of a random sample or that the distributions of our independent variables and regression residual are not independent and identically distributed (i.i.d.), all of the models have a robust estimate of variance following Huber (1967) and White (1980, 1982). ***, **, and * indicate statistical significance at a 1%, 5% and 10% level, respectively.

	(1) *lvol*	*(2)* *lvol*	*(3)* *lvol*
Index	8.152***	8.192***	8.355***
	(0.205)	(0.205)	(0.477)
North America	2.836***	2.824***	2.609***
	(0.158)	(0.157)	(0.348)
Europe	0.154**	0.150*	0.409**
	(0.0775)	(0.0774)	(0.190)
Asia	1.143***	1.150***	0.829**
	(0.187)	(0.188)	(0.351)
Oceania	1.274***	1.269***	1.319***
	(0.107)	(0.107)	(0.205)
Africa	0.408***	0.418***	0.364**
	(0.0863)	(0.0862)	(0.167)
CPU1	-0.178**		
	(0.0792)		
Global Political Uncertainty		-0.264***	
		(0.0663)	
Pandemic			-0.124***
			(0.0307)
Constant	-1.747***	-1.307***	-1.957***
	(0.387)	(0.337)	(0.293)
Observations	1,755	1,755	378
R-squared	0.648	0.650	0.700

Table 11: Multivariate regression analysis – Drivers of M&A activity. This table presents the results from the panel data regression analysis of the factor groups (Regulatory and Political, Economic and Financial, Technological, Socio-Economic, Infrastructure and Assets and the breakdown of the ESG) which explain M&A activity for the 148 countries included in this study for the period 2006 to 2021. It shows the drivers volume of various models on the basis of a sample of all the countries. It shows the breakdown of the Environment, Social and Governance together with the uncertainties and geopolitical risks. Note that it shows the logged of M&A volume (MA_Vol) .

VARIABLES	(1) lvol	(2) lvol	(3) lvol	(4) lvol	(5) lvol
Regulatory and Political	2.357***	1.888***	1.867***	1.873***	1.954***
	(0.211)	(0.160)	(0.160)	(0.321)	(0.166)
Economic and Financial	0.876***	1.895***	1.900***	0.797*	1.494***
	(0.241)	(0.196)	(0.196)	(0.414)	(0.210)
Technological	0.0565	1.025***	1.062***	1.195**	1.019***
	(0.243)	(0.201)	(0.202)	(0.509)	(0.222)
Socio Economic	1.162***	2.327***	2.314***	2.604***	2.076***
	(0.240)	(0.233)	(0.232)	(0.516)	(0.247)
Infrastructure Assets	4.147***	3.305***	3.294***	4.038***	3.700***
	(0.321)	(0.193)	(0.193)	(0.421)	(0.215)
Energy Resource Management	0.126***	0.0969***	0.0987***	0.0901**	0.0950***
	(0.0191)	(0.0181)	(0.0180)	(0.0369)	(0.0177)
Resource Conservation	-0.0540***	-0.0332**	-0.0338***	-0.0426	-0.0354***
	(0.0141)	(0.0131)	(0.0129)	(0.0323)	(0.0137)
Water Resource Management	0.0746***	-0.0418***	-0.0435***	0.00797	-0.0241*
	(0.0125)	(0.0121)	(0.0121)	(0.0289)	(0.0123)
Environmental Performance	-0.0977***	-0.0245	-0.0243	-0.0366	-0.0107
	(0.0225)	(0.0164)	(0.0164)	(0.0355)	(0.0184)
Management of Environmental External	0.0236	-0.0434***	-0.0428***	-0.0321	-0.0142
	(0.0171)	(0.0128)	(0.0127)	(0.0304)	(0.0138)
Geopolitical risk	0.396***				
	(0.0349)				
CPU		-0.135**			
		(0.0647)			
Global Political Uncertainty			-0.226***		
			(0.0783)		
Pandemic Risk				-0.0953***	
				(0.0280)	
Global Uncertainty Index					-0.0660*
					(0.0350)
North America	1.0159	1.386***	1.383***	1.307***	1.090***
	(0.109)	(0.141)	(0.140)	(0.362)	(0.134)
Europe	-0.472***	-0.464***	-0.467***	-0.829***	-0.691***
	(0.104)	(0.114)	(0.114)	(0.239)	(0.106)
Asia	-0.179	-0.608***	-0.601***	-0.486*	-0.580***
	(0.225)	(0.125)	(0.125)	(0.267)	(0.119)
Oceania	-1.751***	-2.022***	-2.027***	-1.741***	-2.136***
	(0.131)	(0.130)	(0.129)	(0.322)	(0.133)
Africa	-1.206***	-0.915***	-0.919***	-0.743***	-1.206***
	(0.0879)	(0.101)	(0.101)	(0.249)	(0.0967)
Constant	-1.158***	-1.751***	-1.266**	-2.183***	-12.20***
	(0.396)	(0.478)	(0.530)	(0.648)	(2.384)
Observations	545	1,488	1,488	319	1,271
R-squared	0.843	0.750	0.750	0.783	0.779

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Table11: Multivariate regression analysis – Drivers of M&A activity. This table presents the results from the panel data regression analysis of the factor groups (Regulatory and Political, Economic and Financial, Technological, Socio-Economic, Infrastructure and Assets and the breakdown of the ESG) which explain M&A activity for the 148 countries included in this study for the period 2006 to 2021. It shows the drivers volume of various models on the basis of a sample of all the countries. It shows the breakdown of the Environment, Social and Governance together with the uncertainties and geopolitical risks. Note that it shows the logged of M&A volume (MA_Vol) .

VARIABLES	(1) lvol	(2) lvol	(3) lvol	(4) lvol	(5) lvol
Regulatory and Political	2.126***	1.554***	1.548***	1.554***	1.441***
	(0.240)	(0.182)	(0.182)	(0.182)	(0.174)
Economic and Financial	0.870***	1.911***	1.917***	1.914***	1.487***
	(0.263)	(0.206)	(0.207)	(0.206)	(0.213)
Technological	0.390	0.999***	1.002***	0.998***	0.800***
	(0.315)	(0.219)	(0.219)	(0.219)	(0.227)
Socio Economic	0.856***	3.034***	3.029***	3.033***	2.616***
	(0.258)	(0.231)	(0.231)	(0.231)	(0.238)
Infrastructure Assets	3.497***	3.021***	3.017***	3.020***	3.073***
	(0.337)	(0.207)	(0.207)	(0.207)	(0.215)
Basic Needs	-0.123*	-0.0991***	-0.0982***	-0.0989***	0.00894
	(0.0695)	(0.0326)	(0.0326)	(0.0326)	(0.0323)
Human Capital Performance	-0.0118	0.0260**	0.0275***	0.0263***	0.0227**
	(0.0122)	(0.0101)	(0.0103)	(0.0101)	(0.00955)
Human Capital Infrastructure	-0.0498	-0.0201	-0.0200	-0.0200	0.00956
	(0.0357)	(0.0244)	(0.0244)	(0.0244)	(0.0243)
Knowledge Capital Management	0.0522***	0.0783***	0.0779***	0.0783***	0.102***
	(0.0176)	(0.0131)	(0.0131)	(0.0131)	(0.0127)
Wellness	-0.0165	-0.0118	-0.0121	-0.0120	-0.00205
	(0.0293)	(0.0215)	(0.0215)	(0.0215)	(0.0214)
Geopolitical risk	0.371***				
	(0.0381)				
CPU		-0.0758*			
		(0.0880)			
Global Political Uncertainty			-0.0170*		
			(0.000444)		
Pandemic Risk				-0.149*	
				(0.000636)	
Global Uncertainty Index					-0.0222**
					(0.00912)
North America	1.207*	1.373***	1.374***	1.373***	0.957***
	(0.115)	(0.149)	(0.149)	(0.149)	(0.151)
Latin America	-0.210**	-0.326***	-0.328***	-0.326***	-0.573***
	(0.104)	(0.112)	(0.112)	(0.112)	(0.0996)
Africa	-0.677***	-0.697***	-0.691***	-0.697***	-0.315**
	(0.225)	(0.152)	(0.152)	(0.152)	(0.146)
Middle East	-2.108***	-1.736***	-1.738***	-1.737***	-1.924***
	(0.134)	(0.114)	(0.114)	(0.114)	(0.109)
Europe	-1.202***	-0.800***	-0.801***	-0.800***	-1.240***
	(0.0943)	(0.105)	(0.105)	(0.105)	(0.0926)
South Asia	-0.853***	-0.968***	-0.963***	-0.968***	-0.832***
	(0.180)	(0.221)	(0.221)	(0.221)	(0.209)
Constant	1.049**	-2.747***	-2.416***	-2.448***	-2.709***
	(0.435)	(0.483)	(0.251)	(0.255)	(0.245)
Observations	552	1,505	1,505	322	1,338
R-squared	0.818	0.748	0.748	0.748	0.782

Table11: Multivariate regression analysis – Drivers of M&A activity. This table presents the results from the panel data regression analysis of the factor groups (Regulatory and Political, Economic and Financial, Technological, Socio-Economic, Infrastructure and Assets and the breakdown of the ESG) which explain M&A activity for the 148 countries included in this study for the period 2006 to 2021. It shows the drivers volume of various models on the basis of a sample of all the countries. It shows the breakdown of the Environment, Social and Governance together with the uncertainties and geopolitical risks. Note that it shows the logged of M&A volume (MA_Vol) .

VARIABLES	(1) lvol	(2) lvol	(3) lvol	(4) lvol	(5) lvol
Regulatory and Political	2.162***	0.518	1.181***	0.492	0.901
	(0.520)	(0.356)	(0.372)	(0.356)	(0.804)
Economic and Financial	1.180***	1.910***	1.490***	1.924***	0.964**
	(0.247)	(0.180)	(0.193)	(0.179)	(0.394)
Technological	-0.285	0.589***	0.627***	0.608***	0.369
	(0.250)	(0.181)	(0.179)	(0.182)	(0.464)
Socio Economic	0.608**	2.918***	2.652***	2.920***	3.158***
	(0.290)	(0.218)	(0.229)	(0.218)	(0.499)
Infrastructure Assets	3.820***	2.782***	3.016***	2.775***	3.065***
l	(0.375)	(0.181)	(0.199)	(0.181)	(0.423)
Financial Management	0.0490***	0.0322**	0.0356**	0.0311**	0.0156
	(0.0162)	(0.0139)	(0.0140)	(0.0140)	(0.0489)
Political Rights and Civil Liberties	-0.0549*	0.179***	0.149***	0.179***	0.104**
	(0.0294)	(0.0209)	(0.0220)	(0.0208)	(0.0458)
Stability and Peace	-0.0353	-0.250***	-0.215***	-0.250***	-0.227***
	(0.0281)	(0.0185)	(0.0189)	(0.0185)	(0.0451)
Corruption Control	0.0560	0.151***	0.111***	0.153***	0.197**
	(0.0400)	(0.0298)	(0.0313)	(0.0298)	(0.0770)
Geopolitical risk	0.321***				
	(0.0435)				
CPU		-0.000575*			
		(0.000333)			
Global Political Uncertainty			-0.0168**		
			(0.00814)		
Pandemic Risk				-0.147**	
				(0.0695)	
Global Uncertainty Index					-0.0912***
					(0.0281)
North America	0.383***	0.885***	0.745***	0.882***	0.834***
	(0.134)	(0.119)	(0.128)	(0.119)	(0.273)
Latin America	-0.155	-0.896***	-0.927***	-0.896***	-1.095***
	(0.110)	(0.0961)	(0.0960)	(0.0961)	(0.217)
Africa	-0.346	-0.866***	-0.788***	-0.862***	-0.792***
	(0.227)	(0.108)	(0.108)	(0.108)	(0.267)
Middle East	-2.364***	-2.018***	-2.061***	-2.015***	-2.067***
	(0.142)	(0.114)	(0.120)	(0.114)	(0.303)
Europe	-1.240***	-1.117***	-1.232***	-1.117***	-0.880***
	(0.0882)	(0.0792)	(0.0821)	(0.0791)	(0.206)
South Asia	-0.432***	-1.618***	-1.556***	-1.610***	-1.711***
	(0.137)	(0.212)	(0.212)	(0.219)	(0.478)
Constant	-0.0285	-1.822***	-1.832***	-1.170***	-1.087*
	(0.407)	(0.222)	(0.220)	(0.422)	(0.605)
Observations	552	1,505	1,338	321	1,505
R-squared	0.812	0.783	0.803	0.784	0.800