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The concurrent impact of cultural, political and spatial distances on international Mergers and Acquisitions

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1. OBJECTIVE

The objective of this study is to explore the concurrent effect exerted by cultural, political and spatial distances on the flows of Merger and Acquisitions (M&A) deals occurred between any two countries belonging to the whole European Union (27 States) or to the European Neighbors group (16 States) over the period 2000-2011. The existing literature on international M&As shows that distances have an important effect on the development of firms strategy because the extent of similarity between countries, based on their legal, economic, administrative, political, and cultural institutions are important factors that affect M&A strategy. Firms have a greater opportunity to benefit from international exchanges when the cross-national institutional distance between the home and host countries is small because information asymmetries and overall transaction costs are lower.

More specifically, we investigate the role that distances play in determining the M&A activity by analyzing the drivers of both the probability of observing a cross-country economic and business interaction and the intensity of such interactions.

This is accomplished by adopting the class of econometric models that allows to estimate simultaneously the two processes while exploiting the informative potential of a highly differentiated set of countries, comprising advanced economies, new EU member states, Eastern Europe, and Mediterranean Africa.

In the case of EU and ENC countries the analysis of M&A activity, being one of the most important forms of international exchanges, is expected not only to enhance the understanding of its main determinants, but also to provide useful insights on the ongoing process of political and economic integration between the two groups of countries.

2. SCIENTIFIC METHOD

The data analyzed in this paper were retrieved from the SDC Platinum database, which contains information on M&A deals and is updated daily using over 200 English and foreign language sources. To obtain a representative sample for the full set of 43 countries, we consider a period of 12 years and thus select transactions between January 1, 2000 and December 31, 2011. In order to assess the role of cultural, political and spatial distances, the empirical analysis is conducted on the cross-border sample, which comprises 1,806 possible country pairs with a total of 23,391 completed deals.

The existence of remarkable dissimilarities across countries is considered the main cause of the large number of observed zero values, which amount to 55.3% of all potential cross-border interactions. Given this feature of the data it is reasonable to assume that there are two mechanisms simultaneously at work, one governing the probability that any two countries engage in an M&A deal, and the other determining the rate of recurrence of the deals once the pair of countries have engaged in the economic interaction process.

The empirical analysis is based on the hypothesis that the set of distances has a predominant role in shaping the first mechanism, whereas the economic factors and the geographical distance are crucial determinants of the intensity of M&A activity.

The two mechanisms are simultaneously estimated by adopting a two-part model - the zero inflated negative binomial model – specified within a traditional gravity framework for count data.

For any two countries we compute distances in relative terms with respect to the following indicators:

- Geographical distance: kilometres between the country capital cities;
- Cultural distance: combined indicator of six cultural indices (Hofstede, 1980, 2001);
- Governance distance: World Bank Worldwide Governance Indicator (Kaufmann et al. 2010);
- Risk distance: synthetic Euromoney country risk index;
- Democracy distance: Unified Democracy Scores (Pemstein et al., 2010);
- Corruption distance: Corruption Perception Index in the public sector (Transparency International).

Among the socio-economic factors determining the M&A activity we consider population and GDP per capita for both the acquirer and target countries (referred to the year 2000), while the growth rate of GDP per capita (annual average over the entire period) and the technological level (patents per capita, year 2000) are specific to the target countries.

Population is intended to capture the relative notion of mass, while GDP per capita is expected to represent the country's economic development level; the growth rate of GDP per capita is meant to capture the general economic conditions outlook of the country where the target firm is located; the technological indicator accounts for technological motivated deals that are expected to facilitate the transmission of knowledge and technological competencies. All economic factors are expected to exert a positive effect on cross-border M&A activity.

3. MAIN RESULTS

The empirical analysis is based on the estimation of zero-inflated negative binomial (ZINB) models, which enable us to simultaneously model the probability that an M&A deal occurs between any two countries and the rate of recurrence of the deals. The high flexibility of the zero-inflated negative binomial (ZINB) models allows us to distinguish, on substantive grounds mainly related to firms' behavior, the set of variables that enter the probability part of the model from the set of regressors that should more reasonably included in the rate of recurrence part of the model.

We hypothesize that cultural, institutional, and political differences are crucial in determining whether firms are willing to initiate economic interactions. If countries share common and recognized characteristics along those 'intangible' dimensions, the necessary conditions to consider engaging in a business deal are satisfied; otherwise, the 'dissimilarity' costs are excessively high and exceed any potential benefit arising from the deals. In our sample, a striking example is presented by country pairs including Israel and one of the southern EU neighboring countries (Algeria, Egypt, Jordan, Lebanon, Libya, Morocco, Syria, or Tunisia). In these cases, the observed zero values are more likely to be the result of the well-known historical and political distances that have prevented, or significantly limited, the occurrence of stable and trustful economic and political relationships between Israel and most of the other southern Mediterranean countries.

Therefore, the probability process is modeled as a function of the complete set of distances - geographical, cultural, institutional (based on the WB governance indicator) and the 'Israel dummy' - as well as of pure socioeconomic indicators (population and GDP per capita) and the two EU dummies for both acquirer and target countries. The count process for the rate of recurrence if specified as a function of the population and GDP per capita of both the acquirer and the target country, the target country's per capita GDP growth rate and technological level; among the distance measures only the geographical one is included to account for transport costs.

The main results indicate that the probability of observing an M&A deal is positively related to the relative masses (population) and the economic development level (GDP per capita) of the acquirer and target countries, while it is negatively related all distance measures. In essence, if two countries are very distant in terms of spatial, cultural, and institutional dimensions, the probability that they will not conclude a bilateral deal is high.

We find that the acquirer county's level of economic development is a very important determinant of the intensity of M&A deals for the acquirer, while population is relatively more influential in the target country. Its technological level act as relevant and attractive features for potential acquirers, whereas the target's economic outlook (GDP per capita) rate of growth does not seem to provide any additional contribution.

These main results are confirmed by an extensive robustness analysis.

4. POLICY VALUE-ADDED

The relationships between the EU and ENC countries has received great attention since 2007 when the EU has attempted to develop an integrated policy towards the non-candidate countries on the EU's eastern and southern borders as an alternative to further enlargements. Among the different ways in which valuable interactions between the EU and ENC are generated, capital transactions represent a key channel and M&A activity is one of the most effective ways for directing capital towards productive sites. Therefore, from a policy perspective our results, by enhancing our

understanding of the determinants of M&A activities among EU and ENC countries, provide useful insights to assess whether the European neighbouring policy (ENP) is becoming effective in offsetting tangible and intangible barriers between the two country groups.
More specifically, the relative political-institutional distance measures employed in the empirical analysis indicate that countries like Belarus, Libya, Syria, Azerbaijan, Russia, Ukraine, Moldova, Egypt, Jordan rank very low in terms of democracy, human right, rule of law, good governance and market economy principles, whereas top positions are taken by the most advanced EU countries, namely Sweden, Denmark, Finland, The Netherlands, Austria.
Notwithstanding the merits of the ENP and the goals achieved so far, the reported “distances” indicate that there is plenty of unfulfilled potential in the relationships between the EU and the ENC countries.
This calls for more efforts from both sides in order to accelerate the process of ENC democratic reform and thus reduce the existing gap in democracy and human rights values. Increased financial assistance and technical support from the EU side and stronger actions towards democratic control, political and civil liberties, competitive elections, freedom of organization and freedom of expression, fight against corruption and violence from the ENC side are expected to improve the level of cooperation, to increase economic integration and people movements, to make ties closer and to strengthen peaceful relationships. Ultimately, this enduring process should guarantee widespread democratic shared values, indispensable for civil and political stability, sustainable long run development and economic prosperity.