M&As in Africa – effects of law and governance

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Abstract

Purpose – The cultural and legal differences between foreign acquirers and African target firms can be substantial. There is also a large variation in cultures and legal systems within Africa. However, there is limited research on merger and acquisition (M&A) performance by foreign firms in Africa. The purpose of this paper is to fill this gap by exploring the "spillover by law" hypothesis (Martynova and Renneboog, 2008) that focuses on the influence of the external environment on the governance and performance of foreign M&As in Africa.

Design/methodology/approach – The data set covers 415 M&A transactions by foreign firms in Africa during the period of 1999–2016. Dynamic data covering the country's legal, cultural and political environment are collected from the World Bank, the Heritage Foundation and Transparency International.

Findings – The authors find that the legal environment significantly affects the returns of bidders on African firms. For complete acquisitions, bidder returns are significantly higher when the bidder's country has higher shareholder protection and higher creditor protection compared with the target firm's country. The results show that the effects are significant when there is a full control change (including a change in the target firm's nationality) but not in the case of partial control transfers. The results are consistent with the "spillover by law" hypothesis.

Originality/value – The authors contribute to the literature on cross-border M&As by separately studying the valuation effects of full, majority and minority changes in control; by being the first study of the legal spillover effects in Africa; and by being the most extensive study of the legal determinants of the valuations of non-African acquirers of African firms.

Keywords Africa, Mergers and acquisitions, Investor protection, Legal environment, Creditor protection

Paper type Research paper

1. Introduction

Underperforming firms are more likely to be subject to a merger and acquisition (M&A) because of the profit opportunities acquirers with reorganization capabilities can realize. One restructuring dimension following an M&A is improving the quality of the target firm's corporate governance by providing operational efficiency gains, lower agency costs, reduced risks or funding at a lower cost. Improved governance should therefore improve firm valuations (Djankov *et al.*, 2008), and M&As could act as a catalyst for corporate governance changes.

JEL Classification — G3, G34

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Since an acquisition frequently exports governance from the acquiring firm (Bris and Cabolis, 2008), an interesting question is to what extent the valuation effects of an M&A transaction relate to changes in corporate governance within the transacting firms. Prevailing external corporate governance mechanisms, such as country-level regulation and legislation regarding investor protection, also play an important role (La Porta *et al.*, 2000). There is limited research on this subject since a vast majority of M&A studies have been conducted on mature markets with typically small differences between the governance systems of the targets and acquirers.

We contribute to the prior literature by studying the valuation effects connected to changes in external corporate governance in cross-border M&As in Africa. Due to large between-country variations in legal systems, culture and governance regimes, cross-border M&As in Africa offer a fruitful area for such a study. We conduct, to our knowledge, the most extensive study of the external corporate governance determinants of valuations of non-African (Australian, British, Canadian, Chinese, French, Indian and American) acquisitions into Africa (35 African countries).

Prior studies have suggested that cross-border mergers into emerging markets provide significant economic rents (see e.g. Chari *et al.*, 2010; Bhagat *et al.*, 2011). Africa is an interesting target for research both due to its fast economic growth and its large heterogeneity, combined with a typically large governance gap compared to developed markets. M&As into Africa are also a rather new phenomenon, mainly occurring after the liberalizations and deregulations of markets in the 1990s. The study is based on recent annual data provided by the World Bank, the Heritage Foundation and Transparency International, facilitating a more comprehensive analysis than what has previously been possible. We also contribute by including variables derived from Hofstede's cultural dimension model. We separately analyze the effects from various types of acquisitions, i.e., majority/minority, as well as complete takeovers, during the time period from 1999 to 2016.

We find that the legal environment significantly affects the returns of bidders on African firms. In particular, the results show that bidder returns in complete acquisitions are significantly higher when the bidder's country has stronger shareholder as well as creditor protection compared to those of the target's country, in line with Martynova and Renneboog (2008) and Xie and Wang (2009). However, regarding partial acquisitions, the bidder returns are smaller and typically not statistically significant from zero. Our results concerning complete acquisitions are especially supportive of the role of investor protection as a driver of value in line with the "spillover by law" hypothesis.

The rest of the paper is structured as follows: in Section 2 we survey the prior literature and develop hypotheses. In Section 3, the African M&A market is discussed. Our data are presented in Section 4, and method and results are presented in Section 5. Section 6 provides a discussion of the results, and it also concludes and summarizes the study.

2. Theory and hypothesis development

In an acquisition, either the whole target company or parts of it or its assets are bought by the acquirer. Conversely, in a merger, two companies merge together into one enterprise. We study all these forms of M&As. As motives for M&As, both value creation through synergies (such as economies of scale in some operations, or increased market power)[1] and other advantages (e.g. tax advantages, or access to new markets for products or labor) as well as managerial motives, such as empire building, hubris (overconfidence) (Roll, 1986), or even the undertaking of an M&A as a poison pill against takeovers, have been suggested in the literature. Managerial motives arise because of some agency problem(s) between the management of the acquiring firm and its owners. The focus of our study is to investigate the degree to which corporate governance improvements add value in M&A transactions[2].

Corporate governance can broadly be defined as "the system by which companies are directed and controlled" (Cadbury, 1992)[3]. Corporate governance mechanisms, such as legal shareholder and creditor protection and ownership concentration, reduce the controlling shareholder–minority shareholder and shareholder–manager conflicts, respectively (Shleifer and Vishny, 1997). Corporate governance mechanisms lower total agency costs, which, in turn, increase firm value (Jensen and Meckling, 1976). We classify legal investor protection as an external corporate governance mechanism and concentrated ownership (such as majority ownership) as a typically internal corporate governance mechanism due to board/managerial positions and/or access to insider information (see also Shleifer and Vishny, 1997; Demsetz, 1986).

A typical result of acquisition gains in M&As is that the target company obtains most of the gain (e.g. Andrade *et al.*, 2001). The announcement price reaction for the acquirer is often insignificantly different from zero. However, most prior studies are conducted on M&A transactions within developed markets with already high standards of corporate governance, which limits benefits from further improvements.

Corporate governance effects in M&As have been studied, for example, by Bris and Cabolis (2008), Martynova and Renneboog (2008) and Chari *et al.* (2010). Using a sample of firms mostly from the USA and Western Europe, Bris and Cabolis (2008) found no significant announcement returns for the acquiring firms. For the target firms, a significant difference between the abnormal returns connected to the level of investor protection in the acquirer's country was found. Acquirers from countries with varying levels of investor protection are also included in the study of cross-border M&As in Europe by Martynova and Renneboog (2008). They found significant price reactions for acquiring firms also and a significant difference in returns depending on the level and type of rule-of-law in the acquirer's country compared to the target's laws. While acquirers from German or Nordic rule-of-law countries exhibited significant positive abnormal returns, significantly lower returns were found for acquirers from English or French rule-of-law countries. Chari *et al.* (2010) found that the acquirers' returns are higher when they gain majority control of target companies in countries with weak rules of law and high risks for expropriation of minority owners.

Other studies of corporate governance effects in M&As include Xie and Wang (2009) and John *et al.* (2010). Xie and Wang (2009) found that the efficiency gains for US firms were significantly positively related to the difference between the acquirer's and the target's level of investor protection. John *et al.* (2010) studied cross-border acquisitions by US firms and found that the acquirer's gains were significantly higher when the level of minority protection in the target firm's country was lower. Significant acquirer return differences linked to differences in the level of corporate governance have also been found by Bhagat *et al.* (2011) for M&As by acquirers from emerging markets. Of interest for our study is also the study of the post-acquisition performance of American acquisitions into Africa by Boubakri *et al.* (2013), who reported that M&As generate more value when made in countries offering a more stable economic environment.

The "spillover by law" hypothesis by Martynova and Renneboog (2008) proposes an explanation for corporate governance effects in M&As. We know that, on the one hand, companies seldom deviate from the national minimum restrictions concerning corporate governance (Doidge *et al.*, 2007). On the other hand, a complete takeover typically leads to the acquirer's standards being imprinted on the target firm (Bris and Cabolis, 2008). According to Martynova and Renneboog (2008), cross-border acquisitions can thus, in cases where the acquirer is bound by stronger corporate governance standards, partly be motivated by an improvement in the investor protection in the target firm. The "spillover by law" effect may also be present on a voluntary basis in partial acquisitions. If new improved corporate governance standards generate added value in the target firm, we should be able

to observe positive announcement returns for the target and/or the acquirer (the division of which being ultimately driven by the acquisition terms). The governance improvement effect may often be present, since Rossi and Volpin (2004) show that the target companies in cross-border mergers actually mostly come from countries with a lower level of investor protection, compared to the acquirer's country[4].

Based on the "spillover by law" hypothesis by Martynova and Renneboog (2008) and other studies reviewed, we expect that the returns, measured by cumulative abnormal returns (CARs) around the announcement are a positive function of the difference in the investor protection between the acquirer and target country. Previous research supports the theory of value creation through the dissemination of higher corporate governance standards. Hence, the first hypothesis is as follows:

H1. Announcement returns for the acquirer firms are positively related to the difference in the levels of investor protection (both shareholder and creditor protection) between the bidder firm and target firm.

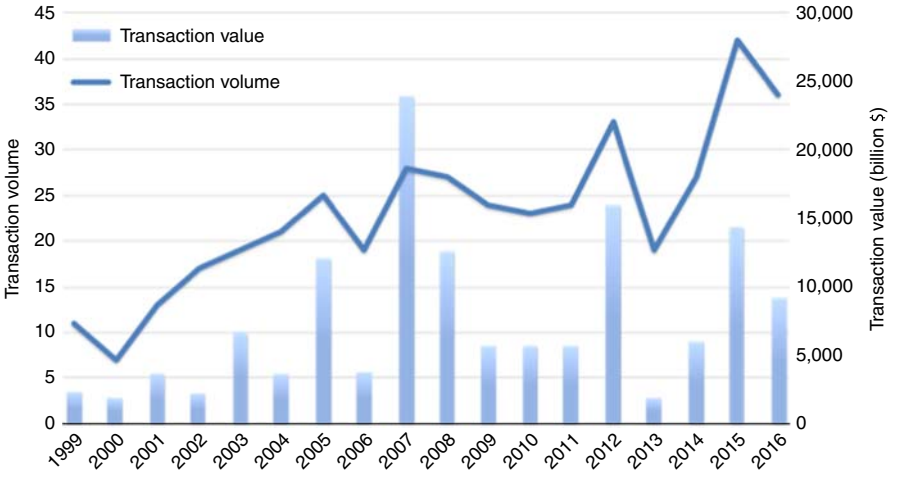
According to Chari *et al.* (2010), announcement returns are significantly higher upon the change of majority control when the target company is from a country with less developed capital markets, a weak rule-of-law and a high risk of expropriation of minority owners. A majority ownership makes it more likely that the acquirer country's standards are implemented in the target firm compared to a partial ownership change, while an acquisition above 50 percent may also (depending on the country's accounting standards), for example, trigger consolidation of accounting statements (Bris and Cabolis, 2008)[5]. Thus, the relevant levels to study more in detail seem to be above 50 and 100 percent. We expect that the link between announcement returns and the level of investor protection is stronger in such cases, especially in the 100 percent case. Thus, we focus on the following three ownership categories: minority, majority and full (100 percent) acquisitions. We state the second hypothesis as follows:

H2. The relationship between the announcement returns for the acquirer firm and the difference in the levels of investor protection between the bidder and target becomes stronger as the ownership stake (minority, majority and 100 percent) acquired in the target firm increases.

3. M&As and governance in Africa

Africa has been among the fastest growing regions in the world during the last 10 years, with an average GDP growth rate of approximately 5 percent (African Development Bank Group, 2016; World Bank, 2016). The increasing economic stability, growing significant consumer markets and an abundance of natural resources have fused an increasing M&A activity into Africa. The population is young, the middle class is growing and there is a large demand for goods, services and resources in a continent that still largely lacks a well-functioning infrastructure. According to the UN's forecast, Africa's relative share of the world population is expected to grow from approximately 16 percent in 2015 to approximately 25 percent in 2050 and 39 percent (approximately 4.4bn) in 2100. Africa, thus, has a chance to become a large supplier of labor for the global industry and a huge consumer market (UN's World Population Prospect, 2015).

Between the years 2003 and 2008, the cumulative value of M&As in Africa grew sevenfold (Figure 1). The cumulative value ($27.3bn) was, however, small in a global comparison (less than 1 percent of all transactions). Of these transactions, non-African acquirers represented approximately $19.2bn (Zephyr, 2016). Between the years 2008 and 2013, up to 59 percent of the total M&A transaction value in Africa came from acquisitions within the energy, mining, telecom/technology and public sectors. During the years



Source: Zephyr and Mergermarket

Figure 1.
Transaction activity by year

2015–2017, there has been a growing interest in the consumer and health sectors. Almost half of all African acquisitions have taken place in South Africa (Zephyr, 2016), which has recently also been a platform for further acquisitions into other African countries (Popli and Kumar, 2015)[6].

There are many non-African countries that show high activity on the African M&A market. Chinese investments into Africa have grown rapidly since the 1990s. Additionally, India has increased its interaction with Africa; the bilateral trade between India and Africa grew from $1bn in 1995 to $75bn in 2015 (African Development Bank Group, 2016). According to Mergermarket (2016), India has in recent years been the largest Asian operator in African M&As. However, UK firms have initiated by far the largest amount of M&A transactions in Africa. While Indian acquisitions mainly occur in the energy and telecom sectors, investments from the UK have been more diversified. Between the years 2003 and 2012, British companies made 437 M&As with a cumulative value of $30.5bn into Africa. When ranking the acquirer countries based on the number of M&A transactions into Africa, UK firms executed more transactions than the next three countries together on the Zephyr's (2016) list. Beyond the above Top 3 countries, firms from the USA, Canada, France and Australia have been the most active acquirers in Africa, altogether producing almost a quarter of all cross-border acquisitions into Africa in 2016.

Foreign acquirers of African firms face many challenges. First, the cultural differences between foreign acquirers and African target firms can often be substantial, which influence communication, knowledge transfer and the M&A integration in general (see e.g. Sanda and Adjei-Benin, 2011; Gomes *et al.*, 2012). There are also large variations in the cultures and legal systems within Africa. Many countries in North and West Africa base their legal framework on the French legal system, whereas Eastern Africa and many countries south of the Sahara follow a UK tradition.

Second, many African countries face political instability, corruption, opaque regulatory systems, underdeveloped infrastructure and unstable currencies[7]. A growing population has also led to a falling GDP per capital development. According to Mergermarket's (2016) survey, operational and safety risks, regulatory uncertainty and fear for unreliable and incomplete information constitute the largest transaction obstacles in Africa. More recently, increased IT-risks have created additional challenges.

Several studies of African M&As point at poor governance and financial performance in target firms as motives for M&As in Africa (see e.g. Oghojafor and Adebisi, 2012; Akinbuli and Kelilume, 2013), although improvements have gradually been observed. In the severe stagnation of the 1980s, several African countries sought help from the IMF and the World Bank. This paved the way for structural reforms, such as deregulation of interest rates, liberalization of trade, and the elimination of state subsidies (African Development Bank Group, 2016; World Bank, 2016). An overview of recent corporate governance developments in Africa can be found in ACGN (2016).

4. Data

4.1 Sample

We use M&A data on cross-border acquisitions from seven countries (Australia, Canada, China, France, India, the UK and the USA) into Africa during the time period of 1999–2016. The data have been collected from the databases of Zephyr (Bureau van Dijk) and Mergermarket. The firm financials as well as stock prices have been collected from FactSet and are complemented by data from Orbis. All financials are calculated in US dollars using year-end exchange rates when transferring from national currencies. The data for macroeconomic variables as well as for governance-related variables have been obtained from databases, including World Bank and Transparency International. The following M&A inclusion criteria have been used:

(1) The acquirer must be a listed firm in one of the seven countries included in our study, and the target company must have a corporate domicile in an African country; the databases mentioned above include 1,580 of these acquisitions during our study period.

(2) The transaction value must exceed $5m, and exceed more than 1 percent of the acquirer's market value. A relative size criterion was used in earlier research, for example, by Xie and Wang (2009), which motivated us to also include such relative criteria since we are interested in potentially significant acquirer returns. This selection criterion retains 476 M&A transactions in our sample.

(3) Financial and stock price data for both an estimation and for a study period around the acquisition must be available for the acquiring firm. There must be at least 250 days in between the acquisition and another acquisition by the same acquirer to accommodate for an estimation period of alphas and betas for the computation of CARs[8]. When also enforcing these criteria, we are left with 415 acquisition events in 35 African countries.

The final sample of 415 acquisition events includes 254 majority acquisitions, and 186 acquisitions giving full (100 percent) control[9]. We define a majority acquisition as one where the acquirer controlled less than 50 percent of the target firm prior to the acquisition, and over 50 percent after it. Figure 1 shows the year by year variation in the number of transactions and transaction value.

4.2 Variables

Our dependent variable is the announcement return for the acquiring firm at the announcement of the acquisition event. First, we estimate a market model using daily logarithmic returns and country-specific logarithmic market index returns from MSCI for the seven countries representing the acquirers (see e.g. MacKinlay, 1997). We use a three-day return (from day −1 to day +1 around the event at time 0) defined as the CAR[10]. Our explanatory variables can broadly be divided into the following four categories: corporate

governance variables, political and economic variables, cultural variables and other control variables[11]. Definitions are summarized in Table AI.

Since our focus is on corporate governance variables, variables in Group 1 are the most important explanatory variables in our study. Investor protection is used here as a term covering both shareholder protection and creditor protection. We use an index for shareholder protection, and one for creditor protection, both from World Bank's annual "Doing Business" reports. These updated indexes are based on survey data and the methodology is based on Djankov *et al.* (2008). The shareholder protection index consists of several components, including shareholder rights in larger corporate matters (e.g. stock issues, appointments of external auditors, minority shareholder rights in related party transactions), and regulations concerning boards of directors and limitations to their powers. The shareholder protection index is based on questionnaires about country regulations reviewed by experts around the world following the methodology in Djankov *et al.* (2008).

The creditor protection variable describes to what extent the legislation facilitates lending by ensuring the seniority and rights of creditors in connection with restructuring and bankruptcy. Furthermore, the index measures whether lenders have access to sufficient credit information about the companies seeking funding. This variable is also based on the World Bank's annual Doing Business reports and the methodology follows Djankov *et al.* (2007). It should be noted that creditors' rights are more limited compared to shareholder protection because assets (collateral) generally remain under the jurisdiction of the country in which they are located.

The variables shareholder protection difference and creditor protection difference are defined as the difference between bidder and target country shareholder and creditor protection indexes in that year, respectively. Before calculating the differences, both individual index values have first been multiplied by the rule-of-law index constructed by the World Bank (specific for the respective combination of country and year)[12]. The index has been rewritten so that it takes values in the range of zero to one. It is important to note that strong legal enforcement can replace a weaker formal regulation (e.g. La Porta *et al.*, 1998). Furthermore, laws that aim to enforce the rights for, e.g., minority shareholders, can lose their credibility if the judiciary system does not work efficiently.

Based on the corporate governance indexes, we also create some additional indicator variables. Dispersion is a dummy variable that takes the value one if the acquirer's index value for investor protection (shareholder or creditor protection) is above the global average, and the target firm's index is below it. We label the variables shareholder protection dispersion and creditor protection dispersion.

We also control for other corporate governance-related variables used in the literature, measured for the target country. We include transparency to measure the level of openness and data availability in a country, also measured through an index from World Bank's Doing Business reports. We also include a dummy variable for English rule-of-law (common law). According to La Porta *et al.* (1998), common law countries have a higher degree of investor protection. This variable has been used in many previous studies, such as Martynova and Renneboog (2008) and Bhagat *et al.* (2011). The data for the variable have been obtained from La Porta *et al.* (1999).

To capture the effects from political conditions, we include political stability, economic freedom and corruption. Political stability is from the World Bank's Worldwide Governance Indicators and should reflect the probability of destabilization or fall of the current government. Economic freedom is based on an index constructed by the Heritage Foundation and *The Wall Street Journal* and reflects factors related to freedom of trade, business, investments and ownership rights. In earlier studies, trade openness has been found to be significantly related to increases in foreign direct investment (FDI) inflows to

countries (see e.g. Kumari and Sharma, 2017). Additionally, Boubakri *et al.* (2013) took into account the effect of economic stability; hence, our variables also facilitate comparisons with prior results. We also include corruption, a variable based on data from Transparency International. Earlier studies have presented mixed results concerning the effect of corruption (Bris and Cabolis, 2008; Boubakri *et al.*, 2013).

To control for the effects of economic conditions, we include the variable urbanization as well as several GDP-based indicators. Urbanization is defined as the percentage growth rate of the urban population and is based on data from both the World Bank (population growth) and UN's World Urbanization Prospects (proportion of urban population). While the variable may capture potential takeover gains (and risks), as it is related to consumer markets, it is also likely to be related to the quality of the infrastructure, which (e.g. Sharma and Sharma, 2015) found to be a major factor influencing FDI inflows. Our urbanization variable is correlated with GDP growth (a correlation of 0.432). Our GDP-based variables are GDP growth, GDP/capita and market value/GDP. GDP growth is defined as the percentage annual GDP growth, and GDP/capita as the logarithm of the GDP (in US dollars) per capital. Both are calculated for the target country, and both are based on the World Development Indicators (WDI) data of the World Bank. GDP/capita has been used in many prior studies, such as Bris and Cabolis (2008) and Chari *et al.* (2010). GDP growth was included, for example, in the studies by Martynova and Renneboog (2008) and Bhagat *et al.* (2011), and was found to be related to FDI inflows in India in Sahni (2012) and Kumari and Sharma (2018). Finally, market value/GDP is included as a valuation indicator. It is defined as the cumulative market value of all listed firms divided by the GDP of the target country. This variable is based on data from the World Bank (WDI).

Since acquirers may struggle with balancing potentially very different cultures and languages between themselves and the target firm, we include a number of variables to capture such effects. We base our cultural difference measure on Hofstede's cultural dimension theory (Hofstede *et al.*, 2010; see also Hofstede, 2011), which identifies six dimensions that explain national cultural values. The cultural difference is measured by the formula of Kogut and Singh (1988), which has been adjusted to include the effects of six (instead of the original four) dimensions. The data have been obtained from Hofstede's personal webpage[13]. We also include a dummy variable, called same language, which takes the value one if the acquirer and the target are from countries with the same official language (or a language with a similar status). The relevant languages here are English and French. We base our language variable on data from the CIAWorldbook (2017) following, for example, Martynova and Renneboog (2008), who analyzed a similar variable. Prior presence is included as a dummy variable to capture whether the acquirer has made prior acquisitions of African firms during the study period. It is based on data from Zephyr and Mergermarket. We expect that acquisition problems may be smaller for acquiring firms with prior experience from African acquisitions. This variable was also used by Boubakri *et al.* (2013).

Our other controls include acquirer size, measured as the logarithmic market value of the acquiring firm (data from FactSet), which controls for the effect of the acquirer; market-to-book, defined as the market value of the acquirer's equity over their book value (data from FactSet), is included as a typical measure of valuation (or growth opportunities) and has been used in many prior studies. We also include, as a profitability measure, ROA, defined as the return on assets for the acquiring firm (data from FactSet). According to La Porta *et al.* (1998), good shareholder rights are positively correlated with good operational performance. This has also been used in many prior studies, such as Xie and Wang (2009). Free CF is defined as the free cash flow of the acquiring firm divided by total assets (data from FactSet), and it is included as a potential proxy for agency problems and the Roll's (1986) hubris motive for M&As. It has been used by Bris and Cabolis (2008) and

Martynova and Renneboog (2008). Cash payment is a dummy for cases where the method of payment in the acquisition has been cash (data from Zephyr and Mergermarket). In earlier studies of M&As, cash payment has typically been significantly related to higher takeover gains. Boubakri *et al.* (2013) report that approximately 77 percent of US acquisitions into Africa have been conducted using cash payment. Target listed is a dummy for a listed takeover target. Several studies report results indicating that acquisitions of private firms are associated with better transaction terms for the acquiring firm (see e.g. Fuller *et al.*, 2002; Faccio *et al.*, 2006). This effect may be caused by an increased transaction risk due to asymmetric information. Finally, diversification is a dummy that takes the value of 1 if the acquirer and the target are in different sectors, defined on the basis of the two first North American Industry Classification System sector codes. Synergies could be expected to be higher when both firms come from the same sector. Such a variable has also been used in most prior studies. The data are from Zephyr and Mergermarket.

M&As have been observed to cluster in merger waves. Martynova and Renneboog (2011) conclude that hubris and investor herding behavior are higher at the tops of merger waves. We, therefore, include time dummies in the models.

4.3 Descriptive statistics

The descriptive statistics are reported in Figure 1 and in Tables I–V. Figure 1 shows the transaction value and number of deals for the acquirers by year. The peak in transaction value in 2007 is due to the largest acquisition in the sample, i.e., the French company Lafarge bought the Egyptian company Orascom Cement for $15bn. Table I reports the allocation of transactions over the 35 African countries in which target firms have their corporate domicile in. More than a third of the transactions target South African firms. Table II shows that UK firms have been the most active acquirers on the African continent, with 125 of the 415 transactions. South Africa tops the list of target countries for acquisitions from all of our seven countries, with the exception of France. French acquirers seem to favor targets in Northern Africa.

Table III details our key variables per acquisition type. Table III shows that 44 percent of all transactions were paid entirely with cash and that either minority or 100 percent acquisitions dominate the sample. Table IV reports summary statistics for our main explanatory variables, while Table V displays detailed descriptive statistics for abnormal returns for event day windows of −1…+1, −3…+3 and −5…+5 days around the announcement day. The average CARs for acquirers are typically statistically significantly positive and qualitatively very similar, regardless of the event window size employed.

5. Empirical analysis

5.1 Methods

We employ the following cross-sectional OLS regression model with year, industry and country dummies (using robust standard errors):

$$\begin{aligned} \mathrm{CAR}_i[-1,+1] = {} & \alpha + \beta_1(\text{Corporate Governance}) \\ & + \beta_2(\text{Political and Economic Variables}) \\ & + \beta_3(\text{Cultural Variables}) \\ & + \beta_4(\text{Control Variables}) + \varepsilon_i. \end{aligned} \tag{1}$$

The variables included for each category in (1) are displayed in Tables VI–VIII and are defined in detail in Section 4.2. Our tests mainly focus on the following six

	Number of acquisitions	Transaction volume share of sample (%)	Total transaction value (million $)	Transaction value share of sample (%)
South Africa	156	37.6	74,312.1	54.6
Egypt	54	13.0	27,512.0	20.2
Morocco	39	9.4	8,106.0	6.0
Mauritius	24	5.8	3,776.9	2.8
Nigeria	18	4.3	7,120.6	5.2
Dem. rep. Congo	12	2.9	1,337.5	1.0
Kenya	12	2.9	1,556.2	1.1
Ghana	11	2.7	3,236.0	2.4
Tanzania	10	2.4	354.8	0.3
Namibia	8	1.9	145.0	0.1
Algeria	7	1.7	554.9	0.4
Zambia	7	1.7	983.0	0.7
Ethiopia	5	1.2	379.0	0.3
Gabon	5	1.2	1,016.3	0.7
Guinea	5	1.2	1,150.1	0.8
Mozambique	4	1.0	1,083.8	0.8
Angola	4	1.0	296.4	0.2
Mali	4	1.0	53.9	0.0
Zimbabwe	3	0.7	51.9	0.0
Sierra Leone	3	0.7	71.4	0.1
Tunisia	3	0.7	171.3	0.1
Botswana	2	0.5	60.5	0.0
Burkina Faso	2	0.5	107.1	0.1
Kamerun	2	0.5	135.2	0.1
Ivory Coast	2	0.5	21.2	0.0
Lesotho	2	0.5	33.0	0.0
Mauritanie	2	0.5	23.0	0.0
Senegal	2	0.5	290.1	0.2
Centr. Afr. rep.	1	0.2	13.5	0.0
Liberia	1	0.2	813.2	0.6
Libya	1	0.2	205.6	0.2
Madagascar	1	0.2	5.6	0.0
Rep. Congo	1	0.2	80.0	0.1
Seychelles	1	0.2	62.0	0.0
Sudan	1	0.2	996.4	0.7
	415	100.0	136,115.3	100.0

Table I.
Transaction activity by target country

corporate governance explanatory variables within Variable Group (1): shareholder protection difference, creditor protection difference, shareholder protection dispersion, creditor protection dispersion, transparency and common law. As described earlier, the first two variables are first differences between the acquirer and target country indexes for investor protection (either shareholder or creditor protection), the next two are dummy variables for a certain type of difference between the indexes, whereas the last two are target country-specific variables. We interact the main governance variables (first four) with the scope of the acquisition to distinguish between effects of corporate governance between minority and majority acquisitions. Other Variable Groups (2)–(4) of the Model (1) provide a rich set of control variables covering target country-specific characteristics and acquiring company characteristics (and target listing status). Although some expectations might be possible to form for some of these country-level controls, the evidence and theory behind them are mixed and, therefore, we do not explicitly sign these variables.

	Number of acquisitions	Transaction volume share of sample (%)	Total transaction value (million $)	Transaction volume share of sample (%)	Top 5 target countries	Top 5 sectors
UK	125	30.1	51,122.0	37.6	South Africa	Mining, oil and gas
					Egypt	Finance and insurance
					Mauritius	Consumer goods
					Nigeria	Producer goods
					Kenya	Telecom, IT
France	78	18.8	38,461.2	28.3	Morocco	Finance and insurance
					Egypt	Telecom, IT
					Africa	Consumer goods
					Algeria	Construction
					Nigeria	Producer goods
USA	64	15.4	24,500.0	18.0	South Africa	Telecom, IT
					Egypt	Consumer goods
					Nigeria	Public services
					Mauritius	Producer goods
					Morocco	Mining, oil and gas
Australia	63	15.2	5,934.2	4.4	South Africa	Mining, oil and gas
					Dem. rep. Congo	Telecom, IT
					Tanzania	Producer goods
					Namibia	Consumer goods
					Guinea	Health care and drugs
Canada	42	10.1	5,316.2	3.9	South Africa	Mining, oil and gas
					Ghana	Finance and insurance
					Namibia	Public services
					Mauritius	Producer goods
					Egypt	Construction
India	27	6.5	3,416.8	2.5	South Africa	Producer goods
					Egypt	Telecom, IT
					Mauritius	Mining, oil and gas
					Kenya	Consumer goods
					Mozambique	Health care and drugs
China	16	3.9	7,364.8	5.4	South Africa	Mining, oil and gas
					Egypt	Producer goods
					Ethiopia	Finance and insurance
					Dem. Rep. Congo	Construction
					Mauritius	Health care and drugs
Total	415	100.0	136,115.3	100.0		

Table II.
Transaction activity by acquirer country

5.2 Results

Table VI shows the results on the relation between bidder return and the level of shareholder protection difference between the bidder and target country. As there are several correlated explanatory variables capturing similar economic effects, only one variable among a variable group is included at a time in the regressions to avoid multicollinearity[14]. The coefficient for shareholder protection in complete acquisitions (Columns 3 and 6) varies between 4.56 and 4.46 and is statistically significant at the 5 percent level. Thus, support for *H1* is obtained. Table VI also shows that the bidder returns are lower and statistically insignificant for minority acquisitions and majority acquisitions without a complete change in control. This supports *H2*. The results indicate that abnormal acquirer returns are significantly higher in full acquisitions of firms when the target firms operate in weaker legal environments compared to that of the acquirer. While Martynova and Renneboog (2008) and Xie and Wang (2009) find positive and significant bidder returns for majority acquisitions more generally,

	All acquisitions	Minority acquisitions	Majority acquisitions	100% acquisitions
Shareholder protection dispersion	200	80	120	79
	48.2%	49.7%	47.2%	42.5%
Creditor protection dispersion	146	56	90	63
	35.2%	34.8%	35.4%	33.9%
Bootstrapping (investor protection)	5	2	3	3
	1.2%	1.2%	1.2%	1.6%
Bootstrapping (creditor protection)	10	4	6	5
	2.4%	2.5%	2.4%	2.7%
Common law	234	87	147	114
	56.4%	54.0%	57.9%	61.3%
Same language	280	110	170	127
	67.5%	68.3%	66.9%	68.3%
Prior presence	163	88	75	57
	39.3%	54.7%	29.5%	30.6%
Diversification	85	35	50	42
	20.5%	21.7%	19.7%	22.6%
Target listed	98	51	47	36
	23.6%	31.7%	18.5%	19.4%
Cash payment	184	75	109	71
	44.3%	46.6%	42.9%	38.2%
Total	415	161	254	186

Table III.
Variables by type of acquisition

Notes: Bootstrapping equals 1 if the target company's index value for investor protection is above the global median and the acquirer's index is below it. The other variables are defined in Table AI

our results show that the effects are significant only when there is a change in the firms' nationality (i.e. a 100 percent acquisition) as indicated by the statistically significant coefficient (5 percent level) of the shareholder protection × 100 percent acquisition variable in Model Specifications (3) and (6)).

In Table VII, the relation between bidder returns and the creditor protection difference between the bidder and target country is displayed. For complete acquisitions, the coefficient for the level of creditor protection difference is statistically significant at the 10 percent level and varies between 2.45 and 2.26, depending on the specification. Thus, the results provide some support for the argument that bidder returns are higher when the target company's creditors are brought under the more protective umbrella of the bidder's legal environment. As was the case for shareholder protection (Table VI), the coefficient for creditor protection difference is statistically significant only for complete acquisitions, not for partial ones. One should also note that creditor protection has a smaller effect on bidder returns than shareholder protection. Overall, the results for creditor protection are in line with those of John *et al.* (2010), who find that higher creditor protection can increase firm value due to improved monitoring.

Our results in Tables VI–VII show that the acquisition outcomes are dependent on the ownership level in the acquisition. It is logical that larger acquisitions should affect the legal spillover more, and we see a strictly increasing trend in coefficients and significance in the ownership trichotomy going from minority to majority and to 100 percent acquisitions. The required level of ownership and control needed appear higher than those for more developed markets, such as the European markets (e.g. Martynova and Renneboog, 2011).

5.3 Further analysis: robustness discussion and tests

To further test the relation between bidder returns and shareholder/creditor protection, we run estimations introducing the dummies used in Martynova and Renneboog (2008) instead

	Mean	Median	Min.	Max.	SD	Skewness	Kurtosis
Abnormal return (dependent variable)							
CAR[−1, +1] (%)	1.98	0.68	–	–	7.64	–	–
Corporate governance variables							
Shareholder protection (acquirer)	0.69	0.77	0.43	0.87	0.12	−0.20	−1.65
Shareholder protection (target)	0.57	0.57	0.17	0.80	0.20	−0.15	−1.52
Shareholder protection (difference)	0.12	0.08	−0.30	0.63	0.21	0.15	−0.30
Creditor protection (target)	0.52	0.50	0.08	1.00	0.21	0.07	−0.94
Creditor protection (difference)	0.24	0.20	−0.60	0.83	0.26	0.12	0.06
Transparency (target)	0.46	0.44	0.11	0.89	0.15	10.00	0.85
Corruption (target)	0.38	0.41	0.10	0.61	0.11	−0.33	−0.87
Rule-of-law (acquirer)	0.79	0.83	0.40	0.89	0.11	−2.38	4.45
Rule-of-law (target)	0.46	0.51	0.13	0.70	0.11	−0.70	0.76
Political and economic variables							
Political stability	0.42	0.46	0.02	0.70	0.15	−0.79	0.41
Economic freedom (target)	0.46	0.44	0.11	0.89	0.15	0.10	0.85
Market value/GDP (target)	1.117	0.742	0.037	2.766	0.912	0.51	−1.25
GDP growth (target)	0.041	0.040	−0.089	0.226	0.026	0.57	8.34
GDP/capita (target)	3,788.12	3,203.24	189.59	11,219.43	2,664.45	0.50	−0.69
Urbanization (target)	0.025	0.020	−0.003	0.062	0.012	0.750	0.230
Cultural variables							
Cultural difference	1.49	1.23	0.17	4.46	1.10	0.76	0.01
Control variables							
Acquirer size (million $)	9,356.57	1,699.67	8.43	340,730.6	26,387.08	3.75	19.30
Market-to-book (acquirer)	1.90	1.41	0.23	11.64	1.63	3.48	15.12
ROA (acquirer)	0.15	2.82	−171.07	70.72	21.13	−4.53	35.57
Free CF (acquirer) (%)	−17.91	3.37	−718.58	57.22	114.51	−5.22	28.02
Transaction value (million $)	327.99	40.20	5.00	15,025.00	1,161.00	8.02	81.10

Notes: Rule-of-law is from the World Bank's "Worldwide Governance Indicators" (WGI project). Shareholder (creditor) protection is the level of shareholder (creditor protection) multiplied by the rule-of-law. Corruption is the level of corruption in the target country by Transparency International. CAR is the cumulative abnormal return. The other variables are defined in Table AI

Table IV.
Descriptive statistics of explanatory variables

	CAR[−1, +1] mean (median)	CAR[−l, +3] mean (median)	CAR[−3, +3] mean (median)	CAR[−5, +5] mean (median)
All acquisitions	1.98%*** (0.68) %	1.91%*** (0.70) %	1.81%*** (0.92) %	1.65%*** (0.86) %
Minority acquisitions	1.66%*** (0.59) %	1.31%*** (0.56) %	0.97%* (0.64) %	1.15% (0.82) %
Majority acquisitions	2.18%*** (0.70) %	2.29%*** (0.77) %	2.34%*** (0.94) %	1.97%** (0.89) %
100 % acquisitions	2.59%*** (0.92) %	2.63%** (1.12)%	2.61%*** (1.18)%	3.23%*** (0.97) %

Notes: *,**,***Significant at the 10, 5 and 1 percent of levels (italic faced), respectively

Table V.
Cumulative abnormal returns around acquisition announcements

of the continuous variable[15]. For complete acquisitions, the coefficients for shareholder/creditor dispersions are positive and statistically significant. Table VIII reports the results using only the investor protection dispersions (for shareholders and creditors). The results using shareholder and creditor protection dispersion are in line with those

Table VI.
Regression with CAR [−1, +1] and shareholder protection

	(1)	(2)	(3)	(4)	(5)	(6)
Corporate governance						
Shareholder protection difference × minority acquisition	1.71 (0.78)			1.636 (0.74)		
Shareholder protection difference × majority acquisition		2.385 (1.19)			2.546 (1.26)	
Shareholder protection difference × 100% acquisition			*4.564*** (2.05)			*4.466*** (1.99)
Transparency	1.007 (0.36)	1.293 (0.46)	1.108 (0.4)	2.391 (0.72)	2.422 (0.73)	2.259 (0.68)
Common law	*2.066** (1.7)	*2.132** (1.77)	*2.167** (1.79)	0.921 (0.58)	1.115 (0.69)	1.212 (0.75)
Politics and economics						
Political Stability	1.033 (0.34)	0.625 (0.21)	0.263 (0.09)			
Economic freedom				5.72 (0.72)	7.005 (0.94)	6.627 (0.89)
Market value/GDP				−0.007 (−0.62)	−0.008 (−0.72)	−0.005 (−0.48)
GDP growth	0.086 (0.46)	0.089 (0.48)	0.086 (0.47)	0.03 (0.15)	0.037 (0.18)	0.035 (0.18)
Urbanization				0.786 (1.43)	*0.943** (1.68)	*0.998** (1.77)
Cultural variables						
Cultural difference	−0.122 (−0.3)	−0.129 (−0.32)	−0.188 (−0.44)			
Same language				0.017 (0.02)	0.136 (0.17)	0.092 (0.12)
Prior presence	−0.349 (−0.46)	−0.187 (−0.25)	−0.323 (−0.42)	−0.323 (−0.43)	−0.156 (−0.21)	−0.278 (−0.37)
Control variables						
Acquirer size	*−0.844**** (−4.81)	*−0.855**** (−4.7)	*−0.858**** (−4.71)	*−0.873**** (−4.83)	*−0.847**** (−4.74)	*−0.848**** (−4.73)
Market-to-book	−0.478 (−1.32)	−0.46 (−1.27)	−0.461 (−1.31)	−0.502 (−1.37)	−0.486 (−1.34)	−0.485 (−1.37)
ROA	0.023 (1.48)	0.023 (1.47)	0.022 (1.38)	0.024 (1.57)	0.024 (1.56)	0.023 (1.46)
Free CF	*−0.033*** (−2.1)	*−0.033*** (−2.09)	*−0.032*** (−2.05)	*−0.033*** (−2.07)	*−0.320*** (−2.04)	*−0.031*** (−2.01)
Cash payment	−0.151 (−0.21)	−0.204 (−0.29)	−0.018 (−0.03)	−0.117 (−0.17)	−0.189 (−0.27)	−0.027 (−0.04)
Target listed	−0.156 (−0.22)	−0.301 (−0.44)	−0.149 (−0.21)	−0.298 (−0.43)	−0.447 (−0.66)	−0.27 (−0.39)
Diversification	*−1.381** (−1.66)	−1.234 (−1.48)	−1.315 (−1.59)	*−1.403** (−1.68)	−1.255 (−1.5)	−1.334 (−1.6)
Intercept	12.219 (3.64)	11.561 (3.43)	10.855 (3.41)	6.632 (1.04)	5.744 (0.95)	5.124 (0.87)
Fixed effects (year, country, industry)	Yes	Yes	Yes	Yes	Yes	Yes
Number of observations	415	415	415	415	415	415
F-value	1.51**	1.52**	1.50**	1.45**	1.45**	1.46**
R^2	0.174	0.175	0.182	0.178	0.18	0.186

Notes: *t*-values are in parentheses. The dependent variable is CAR[−1, +1]. Shareholder protection difference is the difference between bidder and acquirer country shareholder protection. The control variables, Tobin's *Q*, ROA and free cash flow margin, are winsorized at the 1st and 99th percentiles. The variables are defined in Table AI. All models contain year, country and industry dummies. *,**,***Significant at the 10, 5 and 1 percent of levels (italic faced), respectively

Table VII.
Regression with CAR [−1, +1] and creditor protection

	(1)	(2)	(3)	(4)	(5)	(6)
Corporate governance						
Creditor protection difference × minority acquisition	0.194 (0.16)			0.327 (0.27)		
Creditor protection difference × majority acquisition		1.071 (0.88)			1.009 (0.9)	
Creditor protection difference × 100% acquisition			*2.451** (1.66)			*2.265** (1.66)
Transparency	1.037 (0.7)	1.156 (0.41)	1.076 (0.39)	2.474 (0.74)	2.384 (0.72)	2.259 (0.68)
Common law	*2.154** (1.74)	*2.413*** (1.99)	*2.546*** (2.15)	0.972 (0.61)	1.226 (0.78)	1.333 (0.86)
Politics and economics						
Political stability	1.206 (0.4)	0.861 (0.29)	0.666 (0.23)			
Economic freedom				5.535 (0.7)	6.018 (0.76)	5.839 (0.74)
Market value/GDP				−0.007 (−0.66)	−0.008 (−0.7)	−0.007 (−0.62)
GDP growth	0.086 (0.46)	0.084 (0.45)	0.077 (0.42)	0.028 (0.14)	0.027 (0.14)	0.02 (0.1)
Urbanization				0.764 (1.35)	0.824 (1.51)	*0.927** (1.65)
Cultural variables						
Cultural difference	−0.117 (−0.28)	−0.234 (−0.54)	−0.345 (−0.78)			
Same language				0.018 (0.02)	0.133 (0.16)	0.298 (0.37)
Prior presence	−0.261 (−0.34)	−0.178 (−0.24)	−0.317 (−0.42)	−0.251 (−0.33)	−0.15 (−0.2)	−0.269 (−0.36)
Control variables						
Acquirer size	*−0.877**** (−4.79)	*−0.869**** (−4.79)	*−0.886**** (−4.78)	*−0.864**** (−4.82)	*−0.859**** (−4.83)	*−0.873**** (−4.8)
Market-to-book	−0.476 (−1.32)	−0.472 (−1.31)	−0.46 (−1.29)	−0.5 (−1.37)	−0.501 (−1.37)	−0.492 (−1.37)
ROA	0.023 (1.42)	0.022 (1.4)	0.022 (1.43)	0.024 (1.51)	0.024 (1.48)	0.023 (1.5)
Free CF	*−0.033*** (−2.07)	*−0.033*** (−2.09)	*−0.033*** (−2.08)	*−0.033*** (−2.04)	*−0.033*** (−2.06)	*−0.033*** (−2.04)
Cash payment	−0.175 (−0.03)	−0.203 (−0.03)	−0.106 (−0.02)	−0.133 (−0.02)	−0.183 (−0.03)	−0.099 (−0.01)
Target listed	−0.214 (−0.03)	−0.291(−0.04)	−0.184 (−0.03)	−0.035 (−0.05)	−0.437 (−0.06)	−0.333 (−0.05)
Diversification	−1.33 (−1.61)	−1.265 (−1.53)	−1.278 (−1.54)	*−1.373** (−1.65)	−1.286 (−1.55)	−1.297 (−1.55)
Intercept	12.407 (3.7)	12.191 (3.66)	12.136 (3.66)	6.806 (1.06)	6.426 (1.01)	6.227 (0.98)
Fixed effects (year, country, industry)	Yes	Yes	Yes	Yes	Yes	Yes
Number of observations	415	415	415	415	415	415
F-value	1.50**	1.50**	1.54**	1.45**	1.45**	1.46**
R^2	0.173	0.174	0.18	0.178	0.179	0.184

Notes: *t*-values are in parentheses. The dependent variable is CAR[−1, +1]. Creditor protection difference is the difference between bidder and acquirer country creditor protection. The control variables, Tobin's *Q*, ROA and free cash flow margin, are winsorized at the 1st and 99th percentiles. The variables are defined in Table AI. All models contain year, country and industry dummies.*,**,***Significant at the 10, 5 and 1 percent levels (italic faced), respectively

Table VIII.
Regression with CAR [−1, +1] and shareholder/creditor protection dispersion

	(1)	(2)	(3)	(4)	(5)	(6)
Corporate governance						
Shareholder prot. dispersion × minority acquisition	−0.799 (−1.00)					
Shareholder prot. dispersion × majority acquisition		*1.973** (1.82)				
Shareholder prot. dispersion × 100% acquisition			*2.755*** (2.07)			
Creditor prot. dispersion × minority acquisition				−0.523 (−0.63)		
Creditor prot. dispersion × majority acquisition					1.265 (1.29)	
Creditor prot. dispersion × 100% acquisition						*2.14** (1.77)
Transparency	0.37 (1.07)	4.113 (1.32)	4.12 (1.35)	3.538 (1.14)	4.196 (1.32)	3.794 (1.23)
Controls for politics, economics, culture and firm characteristics (as in Tables VI and VII)	Yes	Yes	Yes	Yes	Yes	Yes
Fixed effects (year, country, industry)	Yes	Yes	Yes	Yes	Yes	Yes
Number of observations	415	415	415	415	415	415
F-value	1.46**	1.53**	1.51**	1.47**	1.49**	1.49**
R^2	0.176	0.179	0.182	0.177	0.183	0.188

Notes: *t*-values are in parentheses. The dependent variable is CAR[−1, +1]. Shareholder or creditor protection dispersion equals 1 if the acquirer's index value for investor protection (shareholder or creditor protection, respectively) is above the global average and the target firm's index is below it. The control variables, Tobin's *Q*, ROA and free cash flow margin, are winsorized at the 1st and 99th percentiles, respectively. Variables are defined in Table AI. All models contain year, country and industry dummies. *,**,***Significant at the 10, 5 and 1 percent levels (italic faced), respectively

reported in Tables VI and VII, respectively, with the only exception being that the coefficient for shareholder protection dispersion for majority acquisitions generally becomes statistically significant. The results in Table VIII are broadly supportive of the "spillover by law" hypothesis in Martynova and Renneboog (2008).

Our estimations are subject to certain caveats. First, it may be argued that there is a selectivity bias since the returns are endogenous to the decision to make a cross-border acquisition rather than a domestic one (or none at all)[16]. Those who go abroad might, for example, be more professional and, hence, conduct better acquisitions. While we acknowledge that this may be the case (in which case, our average level of bidder returns would not be representative for any firm), we argue that it should not bias our results concerning the relationship we find, unless there is a positive correlation between the "professionalism" and our explanatory variable, the difference in shareholder/creditor protection (bidder vs target). We note that the shareholder/creditor protection variables are country, not firm, specific. To further test for this type of endogeneity (i.e. to test if more professional investors would come from countries with higher levels of investor protection and, thus, both generate higher bidder returns as well as larger differences in investor protection), we estimated our models with both bidder and target levels included (similar to the test by Martynova and Renneboog, 2008) and the bidder level and the legal difference, i.e., our basic test variable called investor protection difference is included, and find no significance for the level variables (i.e. in line with Martynova and Renneboog, 2008, no significance for a regulatory effect). In line with them, we conclude that apart from the decision to acquire a firm from abroad (i.e. our set of acquiring firms may be more professional and, hence, our results may not hold for the average firm), corporate governance regulation as such (i.e. in levels) has no significant effect on the takeover returns to the bidding firm. In addition, our tests could suffer from hidden/omitted variables that could affect the acquirer's returns. However, our models control for both country and industry fixed effects in addition to employing several explanatory variables for acquiring firm-specific characteristics and allowing for time-variation in CARs over the sample years. As a benefit, our data set also updates legal shareholder data annually, which reduces concerns about inaccurate data compared to studies using static legal variables.

The main regressions are performed with the dependent variable defined as CAR −1…+1. The results are similar in terms of coefficients and statistical significance if we use −1…+3 day CARs as an alternative dependent variable (not reported). In addition, we prefer to report the results using winsorization at the 1st and 99th percentiles, respectively, for certain control variables (such as Tobin's *Q*, ROA and cash flow margin), which then satisfy the normality assumption better. However, re-estimating the regressions with unadjusted variables provides qualitatively very similar results.

6. Summary and conclusions

Improvements in corporate governance practices should create value for shareholders in connection with cross-border acquisitions. While most previous studies have focused on developed markets, we study whether value is created when firms from a legal environment with better investor and creditor protection acquire firms incorporated in countries with poorer protection. Less developed capital markets and relative size asymmetry indicate a strong negotiating position for the acquiring company in emerging economies (Chari *et al.*, 2010). Our data set covers 415 M&A transactions by foreign firms in Africa during the period of 1999–2016. Dynamic annual data covering the country's legal, cultural and political environment are collected from the World Bank, the Heritage Foundation and Transparency International, and we also incorporate Hofstede's index on cultural differences (Hofstede *et al.*, 2010).

We find that the differences in legal environments significantly affect the returns of bidders on African firms. For complete acquisitions, bidder returns are significantly higher when the difference (bidder vs target) in shareholder protection is higher. For partial acquisitions, the bidder returns are smaller and, generally, not statistically significant. The results are robust with respect to several political, economic, cultural and firm-level control variables. Our results are consistent with the "spillover by law" hypothesis by Martynova and Renneboog (2008) for full control transfers, which involves a change in the target company's nationality, but for partial control transfers, we do not find significant valuation effects due to changes in governance. Our results are different from those reported in previous research because we distinguish between full, majority and minority acquisitions, which is critical for the valuation effects.

Our findings also indicate that the value creation through spreading higher creditor protection is more limited. One explanation for this finding is that assets generally remain under the jurisdiction of the country in which they are located (La Porta *et al.*, 2000). With the exception that the coefficients are only significant for full acquisitions, the results are generally in line with John *et al.* (2010).

According to La Porta *et al.* (1998), countries within the English legal tradition are associated with higher investor protection and better opportunities for economic growth and prosperity[17]. Our regression results support their theory, as we find that acquirers of African companies coming from the English legal tradition are associated with higher abnormal stock returns. The results support those in Martynova and Renneboog (2008) and Bhagat *et al.* (2011).

In summary, our results support the idea that the legal environment and the corporate governance standards applied bring significant shareholder value. Our results suggest that foreign companies acquiring firms in other markets may function as standard setters through the application of higher requirements on corporate governance compared to the national standards, either because they are legally forced to do so due to their national legislation or because their investors expect that of them. An implication would then be that, for emerging countries struggling to improve their legal environment, such acquisitions may be helpful in the process toward higher national standards. Additionally, for employees in the target companies, higher standards may improve employment terms or conditions. In terms of national policies, our results indicate that the capital market regulation and M&A legislation should not aim at preventing foreign firms.

To the extent that the acquired assets stay in Africa, value is created for the economy, especially in 100 percent acquisitions through the legal spillover effect. While majority acquisitions have had similar effects, for example, in European firms, in emerging markets such as Africa, the acquisition effects are most pronounced for complete takeovers. Furthermore, there are also likely to be important operational changes in the target firms following the acquisitions when the acquirers, motivated by the ownership incentives, impose changes in internal corporate governance structures and practices. In terms of legal reform, we note that the improvements in investor protection enabled by foreign acquirers complement but do not replace countries' regulatory changes and improvements in the enforcement of legal rules (see also La porta *et al.*, 2000).

To better understand the full scale of underlying motives, future research could investigate the characteristics of companies that make acquisitions in Africa. Furthermore, considering how rapidly the political and socioeconomic situation has changed over the past decades in several African countries, it would be interesting to study the performance of mergers and acquisitions over a longer period. Acquisitions conducted by South African companies could serve as a benchmark for cultural adaptation. In addition, direct investment can be of great importance for developing countries by promoting both economic development and well-being. Additionally, the significant reforms done in Africa (see World Bank's Doing Business Report, 2016) could be analyzed in more detail.

Notes

1. The synergies from an M&A may, however, be drastically reduced by additional direct or indirect costs caused by, for example, culture collisions (Duso *et al.*, 2007).
2. A vast literature exists on how other factors, such as target firm characteristics, may affect an acquirer's announcement returns (see e.g. Betton *et al.*, 2008 for a survey of M&As). Since our typical target is unlisted, which restricts access to detailed target data, we are focusing on acquirer and country-level variables.
3. An alternative definition states that "Corporate governance deals with the ways in which suppliers of finance to corporations assure themselves of getting a return on their investment" (Shleifer and Vishny, 1997, p. 737).
4. If the acquirer comes from a regime with a lower level of investor protection, one would expect that the level of investor protection is also reduced in the target firm. This should be associated with a negative valuation effect. However, Martynova and Renneboog (2008) also present an alternative "bootstrapping" hypothesis, according to which the acquirer may have incentives to improve its investor protection on a voluntary basis by acquiring target companies in strong investor protection regimes. Since we have a limited number of such observations (see Table 3), we do not consider the bootstrapping hypothesis in the regressions.
5. See Bris and Cabolis (2008) for an in-depth discussion around the transfer of governance and accounting standards in acquisitions (of e.g. 50 or 100 percent) and the role of national and international law. In the absence of contractual arrangements between the parties, international law states that the acquisition of a 100 percent interest in a company by a foreign firm results in a change of the law applicable to the target firm. However, e.g., creditor protection rules can be invariant to changes in control, as long as assets or creditors remain in the host country.
6. Recently, South Africa has also met increasing problems with its country credit rating, which has been downgraded by several rating agencies.
7. Recently, democratic reforms have been demanded by political protest movements in a manner resembling the Arab Spring events in 2010 and onwards. The military's influence in politics is still a dominant feature in many African countries.
8. The window is chosen because we need a clean estimation period (free from contaminated events). In total, 250 days also provide sufficient statistical precision for estimating market model parameters.
9. Although even less than 50 percent control may in many cases yield effective control, we want to separately analyze corporate governance spillover effects when complete control is taken, as these transactions are likely to be most strategically oriented for the acquirers.
10. We also consider the return windows of −3…+3 and −5…+5 days as our main dependent variable, but the results remain qualitatively very similar. See also Table V.
11. Occasionally, we lack data starting from year 1999, in which case, the value that is available for a year closest to the missing one has been used. There may also be some occasional gaps in our data, in which case, an average of the surrounding values has been used.
12. Martynova and Renneboog (2008), Chari *et al.* (2010) and Starks and Wei (2013) also take into account legal certainty in addition to the formal investor protection rules.
13. The formula first computes for each dimension the squared difference between the point scores of two countries for that cultural dimension, divides it with the global variance for that dimension, and finally takes an average of such measures over all dimensions.
14. A correlation matrix is provided in Table AI. A VIF-analysis indicates VIF factors ranging from 1.15 to 6.38 (Corruption). The next highest explanatory variable GDP/Capita has VIF = 4.68 < 5. This mild level of multicollinearity is attenuated by avoiding using these more highly correlated variables simultaneously.
15. Target firms being frequently unlisted limits the available data for target firm-level characteristics.

16. Another selectivity bias could stem from our focus on the Top 7 acquirer firm countries. To the extent that acquirers in some countries are, for example, more skilled than others should at least partly be captured by country and industry fixed effects and acquiring firm-specific variables.

17. In our sample, the common law and shareholder protection difference variables are, in fact, weakly negatively correlated, and hence, there is no concern for multicollinearity.

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Appendix 1

Variable	Definitions
Corporate governance variables	
Shareholder protection difference	The difference in the acquirer's and target's World Bank "Doing Business" shareholder protection index scores. Prior to taking the difference, the indexes were multiplied by the rule-of-law index constructed by the World Bank
Shareholder protection dispersion	A dummy variable that takes the value one if the acquirer's index value for shareholder protection is above the global average and the target firm's index is below it
Creditor protection difference	The difference in the acquirer's and target's World Bank "Doing Business" creditor protection index scores. Prior to taking the difference, the indexes were multiplied by the rule-of-law constructed by the World Bank
Creditor protection dispersion	A dummy variable that takes the value one if the acquirer's index value for creditor protection is above the global average and the target firm's index is below it
Transparency (target)	The transparency index score for the target country from the World Bank's Doing Business reports
Common law (target)	A dummy variable for English rule-of-law
Political and economic variables	
Political stability	The target country's World Bank's Worldwide Governance Indicator index score
Economic freedom (target)	An index on freedom of trade constructed by the Heritage Foundation and *The Wall Street Journal*
Market value/GDP (target)	Cumulative market value of all listed firms divided by the GDP of the target country
GDP growth (target)	Percentage of annual GDP growth
GDP/capita (target)	Logarithm of the target country's GDP (in US dollars) per capita
Urbanization (target)	Percentage growth rate of the target country's urban population
Cultural variables	
Cultural difference	Hofstede's six dimensional cultural distance score between the acquirer and target country
Same language	Dummy variable equal to one if the acquirer and the target are from countries with the same official language
Prior presence	A dummy variable to capture whether the acquirer has made prior acquisitions of African firms during the study period
Control variables	
ln of acquirer size (million $)	The logarithmic market value of the acquiring firm
Market-to-book (acquirer)	The market value of the acquirer's equity over their book value
ROA (acquirer)	Return on assets for the acquiring firm
Free CF (acquirer)	The free cash flow of the acquiring firm divided by total assets
Cash payment	A dummy for cases where the method of payment in the acquisition was cash
Target listed	Target listed is a dummy for a listed takeover target
Diversification	A dummy that takes the value of one if the acquirer and the target are in different sectors defined on the basis of the two first NAICS sector codes

Table AI.
Definitions of main variables

Appendix 2

Table AII.
Correlation matrix

	CAR[−1, +1]	CAR [−1, +3]	CAR[−3, +3]	CAR[−5, +5]	Shareholder protection difference	Dispersion (shareholder protection)	Creditor protection	Dispersion (creditor protection)
CAR[−1, +1]	1							
CAR[−1, +3]	0.809*	1						
CAR[−3, +3]	0.659*	0.851*	1					
CAR[−5, +5]	0.517*	0.674*	0.845*	1				
Shareholder protection difference	0.069	0.059	0.015	0.023	1			
Dispersion (shareholder protection)	−0.010	0.040	0.010	−0.025	0.577*	1		
Creditor protection	0.064	0.017	−0.018	0.001	0.626*	0.505*	1	
Dispersion (creditor protection)	0.033	0.042	0.018	0.014	0.552*	0.618*	0.618*	1
Transparency	−0.010	0.013	0.028	0.009	−0.038	−0.117*	−0.103*	−0.028
Political stability	0.030	0.005	0.004	0.024	−0.46*	−0.408*	−0.228*	−0.404*
Economic freedom	0.010	0.021	0.032	0.027	−0.497*	−0.429*	−0.247*	−0.478*
Corruption	0.011	0.012	0.034	0.019	−0.526*	−0.534*	−0.254*	−0.651*
Common law	0.075	0.038	0.028	0.038	−0.232*	−0.695*	−0.009	−0.532*
Cultural difference	−0.015	−0.001	−0.024	−0.027	0.463*	0.498*	0.266*	0.453*
Same language	0.043	0.001	−0.005	0.023	−0.161*	−0.408*	−0.012	−0.419*
Market value/GDP	−0.030	−0.015	0.003	0.007	−0.440*	−0.414*	−0.059	−0.414*
GDP/capita	−0.057	−0.027	0.034	0.059	−0.489*	−0.524*	−0.150*	−0.424*
GDP growth	−0.025	0.003	0.039	0.003	0.230*	0.213*	0.098*	0.272*
Urbanization	0.121*	0.084	0.014	0.018	0.423*	0.168*	0.219*	0.244*
Transaction value	−0.134*	−0.068	−0.039	−0.038	0.016	−0.020	−0.072	−0.023
Acquirer size	−0.282*	−0.216*	−0.184*	−0.155*	0.032	0.101*	−0.130*	0.013
Tobin's *Q*	−0.028	−0.068	−0.052	−0.021	−0.130*	−0.190*	−0.008	−0.112*
ROA	0.020	−0.027	0.007	0.069	−0.106*	−0.024	−0.068	−0.056
Free CF	−0.102*	−0.079	−0.002	0.034	−0.010	−0.046	−0.086	−0.006
Cash payment	−0.030	−0.014	−0.038	−0.083	0.032	−0.041	0.000	−0.068
Target listed	−0.067	−0.016	−0.035	−0.037	0.036	−0.011	−0.030	−0.077

(*continued*)

Table AII.

Minority acquisition	−0.033	−0.054	−0.071	−0.034	−0.001	−0.030	−0.027	−0.007
Majority acquisition	0.033	0.054	0.071	0.034	0.001	0.030	0.027	0.007
100% acquisition	0.072	0.074	0.077	0.122*	−0.008	−0.079	0.074	−0.025
Prior presence	−0.102*	−0.059	−0.091	−0.103*	0.141*	0.093	0.066	0.017
Diversification	−0.034	−0.020	−0.027	−0.034	−0.129*	−0.162*	−0.082	−0.047
	Transparency	Political stability	Economic freedom	Corruption	Common law	Cultural difference	Same language	Market value/GDP
Transparency	1							
Political stability	0.030	1						
Economic freedom	0.210*	0.649*	1					
Corruption	0.168*	0.674*	0.785*	1				
Common Law	0.015	0.158*	0.264*	0.329*	1			
Cultural difference	0.055	−0.319*	−0.429*	−0.548*	−0.446*	1		
Same language	0.116*	0.356*	0.446*	0.442*	0.461*	−0.598*	1	
Market value/GDP	−0.092	0.377*	0.405*	0.564*	0.421*	−0.638*	0.329*	1
GDP/capita	0.319*	0.516*	0.653*	0.712*	0.287*	−0.494*	0.305*	0.673*
GDP growth	−0.046	−0.151*	−0.296*	−0.393*	−0.230*	0.353*	−0.199*	−0.434*
Urbanization	−0.345*	−0.516*	−0.432*	−0.629*	0.138*	0.283*	−0.116*	−0.440*
Transaction value	0.041	−0.054	0.013	0.022	0.020	−0.016	−0.034	0.041
Acquirer size	0.108*	−0.091	0.007	0.015	−0.102*	0.045	−0.080	−0.039
Tobin's *Q*	−0.039	0.133*	0.142*	0.137*	0.121*	−0.096	0.103*	0.111*
ROA	−0.049	0.035	0.045	0.075	−0.002	−0.045	0.009	0.123*
Free CF	0.051	−0.034	−0.006	0.027	0.019	−0.014	0.010	0.015
Cash payment	0.026	−0.025	0.032	0.061	0.002	0.085	−0.043	−0.002
Target listed	0.118*	−0.029	0.023	0.058	0.077	−0.028	−0.001	0.100*
Minority acquisition	0.079	−0.043	0.024	0.029	−0.038	0.014	0.014	−0.098*
Majority acquisition	−0.079	0.043	−0.024	−0.029	0.038	−0.014	−0.014	0.098*
100% acquisition	−0.050	0.044	0.064	0.077	0.089	−0.058	0.016	0.187*
Prior presence	0.029	−0.072	−0.011	0.047	−0.029	−0.048	0.042	−0.013
Diversification	0.036	0.033	0.106*	0.081	0.095	−0.064	0.045	0.033

(*continued*)

Table AII.

	GDP/capita	GDP growth	Urbanization	Transaction value	Acquirer size	Tobin's *Q*	ROA	Free CF
GDP/capita	1							
GDP growth	−0.401*	1						
Urbanization	−0.654*	0.432*	1					
Transaction value	0.075	−0.032	−0.090	1				
Acquirer size	0.068	−0.037	−0.143*	0.594*	1			
Tobin's *Q*	0.132*	0.036	−0.037	−0.085	−0.154*	1		
ROA	0.067	−0.111*	−0.132*	0.125*	0.215*	−0.126*	1	
Free CF	0.063	0.021	−0.068	0.090	0.162*	−0.021	0.119*	1
Cash payment	−0.003	0.015	−0.071	0.094	0.096	−0.110*	0.054	−0.001
Target listed	0.003	−0.017	−0.100*	0.487*	0.272*	−0.066	0.078	0.071
Minority acquisition	−0.014	0.012	−0.033	0.093	0.260*	−0.089	0.040	0.002
Majority acquisition	0.014	−0.012	0.033	−0.093	−0.260*	0.089	−0.040	−0.002
100% acquisition	0.144*	−0.127*	−0.031	−0.084	−0.249*	0.149*	0.001	0.075
Prior presence	0.033	−0.081	−0.045	0.252*	0.370*	−0.136*	0.061	−0.004
Diversification	0.113*	−0.070	−0.037	−0.128*	−0.043	−0.045	0.009	0.011

	Cash payment	Target listed	Minority acquisition	Majority acquisition	100% acquisition	Prior presence	Diversification
Cash payment	1						
Target listed	0.143*	1					
Minority acquisition	0.036	0.151*	1				
Majority acquisition	−0.036	−0.151*	−1.000	1			
100% acquisition	−0.112*	−0.090	−0.479*	0.479*	1		
Prior presence	0.107*	0.134*	0.251*	−0.251*	−0.159*	1	
Diversification	0.023	−0.096	0.034	−0.034	0.006	−0.134*	1

Note: *Indicates significance at the 5 percent level