

LSF Research Working Paper Series

N°. 17-04

Date: June 2017

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Cross-Border Mergers and Acquisitions: Evidence from the Indochina Region

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Abstract

We study cross-border mergers and acquisitions (M&As) in ten countries in the Indochina region during the period 1993-2015. Countries with a French colonial history showed markedly lower levels of cross-border M&As (value as well as volume) than other countries, whether previously colonized or not. This difference persists even after accounting for the known drivers of cross-border M&A activity, including legal origin, trade openness, and labor cost levels. Together, these findings suggest that the colonial past of a country plays an important role in cross-border M&A activity.

Keywords: Foreign direct investment, colonial history, South-East Asia

JEL Classification: F54, G15, G34,

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1. Introduction

Cross-border mergers and acquisitions (M&As) have received considerable attention in the financial economics literature (e.g. Bris and Cabolis, 2008; Erel et al., 2012; Ferreira et al., 2009). Among several factors, the recent literature attributes the volume of M&A activity to the quality of investor protection (e.g., Rossi and Volpin, 2004). La Porta et al. (1998) argue that the legal origin of a country's jurisdiction underlies the quality of investor protection. In many studies, several emerging markets that are associated with poorer investor protection are ex-colonies of European empires. For such emerging markets, it is the colonial settlement that installed their legal origin and modern-day legal system (see also La Porta et al., 1998).

In this paper, we investigate whether a country's colonial past is relevant to the value and volume of cross-border transactions in its economy. To our knowledge, we are the first to study this fundamental, but as yet largely neglected, element that underlies the widely recognized role of legal origin in corporate activities. For our analysis, we exploit the setting of cross-border M&As involving targets from ten countries in the Indochina region: Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam.

2. Background

The Indochina region presents itself as a suitable ground to conduct our investigation as it comprises a set of countries with diverse colonial backgrounds and a sovereign country. Brunei, Malaysia, Myanmar and Singapore are former British colonies. Cambodia, Laos, and Vietnam are former French colonies. Indonesia was a Dutch colony. Spanish rule was established in the Philippines, which subsequently became a U.S. territory. Thailand remained sovereign throughout the colonial era. Different colonial rules had implications for not only languages, but also legal codes that are still present to a considerable extent today.

Voluminous literature documents a systematic influence of legal origin on several economic measures, such as capital market size and breadth (La Porta et al., 1997), private benefits of control (Dyck and Zingales, 2004), analyst following (Lang et al., 2004), and foreign ownership holdings (Leuz et al., 2009). Given that it is colonization that imposed a legal system in emerging markets, such documented influence appears linked to the literature on the economic effects of colonization, much of which focuses on the effects of French colonization in particular (see, e.g., Acemoglu et al., 2001; Crowder, 1968; Stuart-Fox, 1995; Terra and El

Kallab, 2014). The picture that emerges from these sources is that French colonization (compared with other European countries' colonization) focused more on extraction and exportation of natural resources. Also, the colonies were compelled to trade mainly with France, punitive taxation and forced labor were imposed, and relatively poor institutions were installed. One plausible interpretation is that French colonization left countries with a poorer infrastructure, in the most general sense of the word, than was the case for the other countries. In this view, former French colonies could be associated with reduced attractiveness for economic activities, such as cross-border acquisitions.

3. Methodology and data

For our investigation, we employ multiple regression models of the following general form:

$$ACQ_{i,t} = \beta_0 + \beta_1 French_{i,t} + \sum_{j=2}^k \beta_j X_{i,t,j} + \varepsilon_{i,t} , \quad (1)$$

where $ACQ_{i,t}$ represents the value of cross-border M&As per capita in country i in during year t . Our variable of interest is $French_{i,t}$, which takes the value of 1 for countries with a French colonial history and 0 otherwise. $X_{i,t,j}$ represents a $(k-1)$ -dimensional vector of control variables, some of which are binary, and $\varepsilon_{i,t}$ represents the regression error term. The empirical results reported are based on Tobit model estimation. The Tobit model is chosen because the dependent variable is (left-)censored.

The (quarterly) data on the value of M&A deals in U.S. Dollars were provided by Security Data Corporation's (SDC) Mergers and Corporate Transactions database. We restrict ourselves to completed deals, excluding self-tender offers, repurchases, and deals in which the acquirer is a government agency. We collected a number of additional data items from SDC, including the number of transactions, the country of domicile of both the target and the acquirer, and the fraction of the target firms owned by the acquirers before and after the acquisition. Deals in which the acquirer already owned more than 50% of the shares before the acquisition are also excluded, since owners' interest was not affected. All completed deals in which the acquirer's and target's nationalities are the same are also excluded in the light of our cross-border focus. After these exclusions, the final sample has a total U.S. Dollar value of 171,817 million and a total of 2,454 transactions for the period 1993Q1-2015Q4.

For the control variables, we largely took inspiration from Erel et al. (2012). These variables are constructed using data collected from different sources. The World Development Indicator (World Bank) provided us with GDP, labor cost, corruption index, and trade openness. WM/Reuters Datastream provided exchange rates. Dummy variables for communist regimes and legal origin (Common law, Civil law) are from the CIA World Factbook (La Porta et al., 1999). We complemented these variables with two additional potentially relevant control variables: a country’s road density (as measured by UNCTAD’s infrastructure index) and education level (as measured by the World Bank’s education index). The control variables and their expected signs are summarized and defined in Table 1. Expected signs were inferred from the references mentioned in the table with the exception of the sign of labor cost, which is obvious.

Insert Table 1 about here

4. Empirical results

In this section we report our empirical results. Preliminary inspection of the data reveals that countries with a French colonial history yield per capita M&A transaction values that are different from the values generated in other countries. This point is made quite clearly in Table 2.

Insert Table 2 about here

Table 2 shows mean and median quarterly transaction values, and compares the differences in order to verify whether these are statistically significant. The transaction values are indeed statistically significantly different, and moreover, they appear economically significant. The latter is especially true when comparing the results for former British and French colonies. It is possible, but not guaranteed, that these differences are fully accounted for by the control variables that we employ in our regression analysis. We address this issue by estimating equation (1). The empirical results for our main regression equation are presented in three panel regressions in Table 3.

Insert Table 3 about here

Model (1) incorporates the variable of interest (French dummy) and base-line control variables, and the year fixed effect is added in model (2). In both models, the French coefficient is significantly negative. The value of cross-border M&As is lower in countries that are former French colonies than other countries, whether or not colonized in the past. Studies on colonization suggest that colonial settlements not only installed institutions but also brought about infrastructure to colonies. Hence, it is plausible that the negative coefficient of the French dummy is the infrastructure effect in disguise. Model (3) includes road density and education as additional control variables. Despite the presence of infrastructure proxies, the French coefficient remains significantly negative with similar magnitude.

Except the exchange rate which has an insignificant coefficient, all other control variables have the expected coefficient sign. Legal origin, labor cost and trade openness have a significant coefficient across all three models. The coefficients of corruption and communist are significant in two out of three models. Together with these results, the persistently negative and significant coefficient of the French dummy suggests that this ‘French’ effect stands up to the known determinants of cross-border M&As. In particular, the effect of colonization exists above and beyond the known impacts of legal origin and infrastructure.

We find similar results (untabulated) when rerunning our analysis using the per capita transactions volume as a dependent variable, and when excluding Singapore (which is more highly developed than the other countries) from the sample.

5. Conclusion

Our empirical analysis shows that a colonial history matters to the cross-border M&A activity. For a sample of 10 countries in the Indochina region, specifically, there is a pronounced ‘French effect’: former French colonies show a much lower transactions value (as well as volume) than other countries in the region, after taking into account the known drivers of cross-border M&As. This finding is in line with the recent literature on colonization, which suggests factors that potentially produced adverse impacts on the former French colonies. In this interpretation, the

French dummy in our regressions captures the combined effects of such factors, to the extent that our control variables do not fully account for them.

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Table 1

Control variables employed in the estimation of equation (1) and their expected signs.

Variable	Measurement	Expected Sign
Legal origin	Dummy variable (1= Civil Law country; 0 = otherwise); see Treisman (2000).	Positive
Labor cost	Logarithm of quarterly Gross National Income per capita (in U.S. Dollars).	Negative
Trade openness	Logarithm of sum of import and export divided by sum of GDP per year in a group of countries; see Yanikkaya (2003).	Positive
Exchange rate	Exchange rate return, see Erel et al. (2012).	Negative
Corruption	Corruption index; see also Bekaert et al. (2007).	Positive
Communist	Dummy variable (1=communist country; 0= otherwise); see also Fabry and Zeghni (2002).	Negative
Road density	Total road network divided by the land area. Total road network includes motorways, highways, main or national roads, secondary or regional roads, and all other roads, measured in kilometers in a country. See also Baier and Bergstrand (2007).	Positive
Education	Total enrolment in secondary education, regardless of age, expressed as a percentage of the population of official primary education age. See Fedderke et al. (2010).	Positive

Table 2

Panel A and B report mean and median total values of cross border M&A transactions (per capita) for former French colonies and other countries. Significance tests for differences in means and medians between French colonies and non-French colonies are computed using, respectively, the independent-sample t-test allowing for unequal variances and the Wilcoxon Rank Sum Test. Sample size is 92 quarters.

Mean and median per capita M&A transaction values for former French colonies and other countries

		French		Non-French			
		All	British	Dutch	Spanish	Sovereign	
Mean	0.66	3.83***	12.95***	1.42***	2.23***	3.14***	
Median	0.05	2.64***	7.67***	0.71***	0.34***	0.59***	

***Denotes statistical significance at the 1% level.

Table 3

Tobit regression results from estimating equation (1) for three model specifications. In all three models, the dependent variable is $ACQ_{i,t}$, which is the per capita value of cross-border acquisitions that occur in country i in quarter t . The ‘French’ dummy variable is 1 for countries with a French colonial history and 0 otherwise. All other explanatory variables are defined as in Table 1. Sample size is 920 in all cases.

Explanatory variables	1	2	3
French	-5.78*** (0.50)	-6.58*** (0.47)	-6.29*** (0.49)
Legal origin	2.87*** (0.35)	2.73*** (0.32)	2.99*** (0.34)
Labor cost	-1.35*** (0.21)	-2.94*** (0.45)	-3.49*** (0.51)
Trade openness	3.26*** (0.21)	3.80*** (0.23)	4.14*** (0.40)
Exchange rate	0.60 (1.31)	0.91 (1.25)	0.85 (1.25)
Corruption	1.08 (0.68)	2.03** (1.00)	1.99* (1.01)
Communist	-1.02** (0.42)	-1.06*** (0.39)	-0.38 (0.50)
Road density			0.38* (0.20)
Education			2.59** (1.07)
Constant	5.03*** (0.63)	10.54*** (1.80)	10.63*** (1.81)
Year fixed effect	no	yes	yes
Pseudo R^2	0.16	0.20	0.20

*, ** and *** denote statistical significance at 10%, 5% and 1% levels, respectively. Standard errors robust to clustering at the country level are provided in parentheses.