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CROSS-BORDER MERGERS AND ACQUISITIONS

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ABSTRACT

One of the most consequential events in any firm's lifetime is a major acquisition. Because of their importance, mergers and acquisitions (M&As) have been an enormous area of research. However, the vast majority of this research and survey papers summarizing this research have focused on domestic deals. Cross-border ones, however, constitute about 30% of the total number and 37% of the total volume of M&As around the world since the early 1990s. We survey the literature on cross-border M&As, focusing on international factors that can lead firms to acquire a firm in another country. Such factors include differences in economic development, laws, institutions, culture, labor rights, protection of intellectual property, taxes, and corporate governance.

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1. Introduction

One of the most consequential events in any firm's lifetime is a major acquisition. For the target, being acquired means the end of its existence as a separate entity, and for the acquirer, combining with a different firm usually requires a substantial change in the way that firm operates. Acquisitions redraw the boundaries of firms, change the merging firms' cultures, create (or destroy) synergies, and affect the ability of both the former acquirer and target to access capital markets. They affect every aspect of the management of a business.

Because of their importance, acquisitions have been an enormous area of research. However, the vast majority of this research has focused on domestic deals. Cross-border acquisitions, however, constitute about 30 percent of the total number and 37 percent of the total volume of acquisitions around the world in recent years (See Figure 1). This percentage has increased as the world's economy has become increasingly integrated. While many cross-border deals occur for the same reasons as domestic ones, there are some factors that motivate cross-border acquisitions but not domestic ones. A new strand of research has been developed to understand the role of these factors leading to cross-border acquisitions.

This paper surveys the literature on cross-border mergers and acquisitions. There are a number of excellent surveys of the literature focusing on domestic mergers and acquisitions (see, for example, Jensen and Ruback (1983), Jarrell, Brickley, and Netter (1988), Betton, Eckbo, and Thorburn, 2008, and Mulherin, Netter, and Poulsen (2017)). Here, in contrast, we discuss the literature studying international factors that affect cross-border deals but not domestic ones. As cross-border mergers and acquisitions become more common, these factors are likely to be increasingly important in the future.

We begin by presenting a set of facts about cross-border mergers and acquisitions. The number of cross-border deals has increased from about 1,500 per year in the early 1990s to around 4,000 in recent years. These deals represent between 26 and 33 percent of the total; the fraction increases to between 24 and 52 percent value-weighted since cross-border deals are, on average, larger than domestic ones. Similar to most studies of cross-border acquisitions, there appears to be a small positive stock price reaction for acquirers, and a larger positive one for targets.

Section 3 of the paper presents and discusses the literature on international factors that can affect cross-border acquisitions. One such factor is differences in the way a country's laws and institutions protect the interests of a firm's shareholders. If legal rules protecting shareholders' rights can increase a firm's ability to access capital markets, and also the market's estimate of the firm's future cash flows, then the improvements in legal protection could provide a motive for a cross-border acquisition. We discuss a number of papers that have addressed the extent to which legal or regulatory reasons lead to cross-border acquisitions in Subsection 3.1.

Cross-country differences in corporate governance are not the only international factors that can lead to acquisitions. Differences in regulation also lead firms to merge with other firms in different countries and transfer their regulatory environment to the more favorable one. Papers studying the regulatory arbitrage motive with regard to banking, labor and climate regulations are discussed in Subsection 3.2.

A potential impediment to combining firms in different countries is the protection of intellectual property. If a firm uses proprietary technology in its products, it can be risky to share that technology in countries that allow other companies to appropriate it without sufficient compensation. Consequently, the potential infringement of intellectual property rights could be

one factor that decrease the incidence of cross-border mergers. We discuss several papers that provide empirical support for this idea in Subsection 3.3.

Cultural factors can also affect the successful merger of two firms, especially if the firms are from different countries. If the employees at two firms come from very different cultures, then combining the two firms into one can be difficult. Subsection 3.4 summarizes several papers that estimate the extent to which cultural factors affect the likelihood and profitability of acquisitions.

Another important factor that can affect the likelihood and value of cross-border acquisitions is political differences. If there is tension between two countries, it would be more difficult to consummate a merger between firms from those countries than if the countries get along well. And politics within a country can affect firms' abilities to complete deals: nationalistic pressures can potentially make it harder for a firm to be acquired by a foreign bidder if the domestic firm is considered important to the national interest. Subsection 3.5 discusses a number of papers that explore these ideas.

An opportunity to reduce corporate taxes can also lead to cross-border acquisitions. One way in which firms avoid taxes is by using transfer pricing and other strategies to move their income to subsidiaries in "tax havens," in which tax rates are particularly low. But to adopt such a strategy, a firm must have such a subsidiary in a country with favorable tax rates. Subsection 3.6 examines work studying the way in which cross-border acquisitions are motivated by the desire to acquire subsidiaries in tax haven countries.

Finally, the desire to expand a firm's specialized product internationally can lead to cross-border acquisitions. To expand internationally, a firm could, in principle, set up new operations outside its home country and grow organically. However, for a number of reasons, it can be more efficient to acquire a local firm in a foreign country than to establish its own subsidiary overseas.

Subsection 3.7 discusses research suggesting that cross-border acquisitions can be used for such expansion of specialized product lines.

While Section 3 considers factors that could either lead to or deter cross-border acquisitions, Section 4 focuses on the process of structuring the deals. It surveys literature discussing the way in which investors can help minimize the difficulties in identifying cross-border targets and completing such acquisitions. Institutional investors are considered in Subsection 4.1. Institutional investors can have both information advantages and connections in foreign countries. This section discusses work that evaluates the extent to which institutional investors help to minimize information asymmetries and regulatory difficulties firms have in completing cross-border acquisitions.

Particularly important institutional investors are private equity investors, which include both buyout funds and venture capital funds. These investors play an active role in the management of their portfolio companies and are specialists in adding value to them, in part by knowing about potential overseas acquisition targets and the process of buying them. Several papers discuss this idea and the way in which venture capitalists can affect overseas innovations through acquisitions. Subsection 4.2 discusses these papers.

Much work on cross-border acquisitions concerns the valuation of the merging firms, which is discussed in Section 5. Pricing, both of acquirers and targets, can affect the choice of deals. If a firm is more highly valued, then it will face a lower cost of capital and be more likely to make acquisitions. In addition, if a firm is undervalued, it can be an attractive target. Since a large fraction of stock price movements is country-specific, it seems likely that many price-driven acquisitions are cross-border ones. Subsection 5.1 evaluates work studying the impact of stock prices on the choice of cross-border mergers and acquisitions.

An important stylized fact about diversified firms across industries is that they trade at a discount compared to single-segment ones, holding other things constant. This finding is commonly interpreted as diversifying acquisitions being inefficient. Similar logic applies internationally: If internationally diversified firms trade at a discount, cross-border acquisitions are likely wealth-decreasing. Subsection 5.2 considers work studying this issue.

After a deal is identified and the firm is acquired, the ultimate consequence of the deal is to affect the value of the acquired firms. The most common way to study cross-border (and other) acquisitions is to perform “event studies” designed to measure the abnormal change in value around the announcement of cross-border acquisitions. These studies generally find that the deals do increase the value of acquirers. Subsection 5.3 surveys these papers.

2. Facts about Cross-Border Acquisitions

A large fraction of worldwide acquisitions are of firms based in countries other than that of the acquirer. In Figure 1, we plot the number (Panel A) and transaction value (Panel B) of the cross-border deals by deal completion year over the past three decades (1991-2020). Our sample includes M&A deals across 48 countries that are announced between 1991 and 2020 and completed by the end of 2020, obtained from the Security Data Corporation’s (SDC’s) Mergers and Corporate Transactions database.¹ We exclude partial equity stake acquisitions, acquisitions of the remaining interest, and deals where either the target or the acquirer is a financial firm (SIC codes 6000-6999) or a utility firm (SIC codes 4900-4999). We define a deal as a cross-border deal if the target’s nation is different from that of the acquirer’s ultimate parents. The bars in Figure 1 represent the numbers or values in a given year, and the solid lines represent the fraction of cross-

¹ In addition, we exclude LBOs, spin-offs, recapitalizations, self-tender offers, exchange offers, and repurchases. In Panel B, the statistics are based on deals with transaction values available from SDC.

border acquisitions relative to the total number or aggregated deal value of all domestic and cross-border acquisitions.

Panel A documents that the total number of cross-border deals has increased from about 1,500 to about 4,000 annually in recent years. These deals typically represent between 26 percent and 33 percent of the total deal volume. Panel B shows that cross-border deal volume has increased from below \$48 billion to almost \$1,165 billion of the total deal value in the 2000s. The ratio of cross-border to total deal value has fluctuated between 24 percent and 52 percent in the past three decades. The fact that the fraction of cross-border deals is higher when deals are value-weighted than when equally weighted implies that cross-border deals tend to be larger than domestic ones.

2.1. Who Buys Whom?

Which countries' firms tend to merge with which other countries' firms? To provide a detailed answer to this question, Table 1 presents statistics on 361,630 mergers and acquisitions across 48 countries between 1991 and 2020. The columns represent the countries of the acquirers, while the rows represent those of the targets. The diagonal entries of the matrix are the number of domestic deals in a particular country and the off-diagonal entries are the number of cross-border deals between two countries. As expected, the largest numbers are on the diagonals since the number of domestic deals generally exceeds the number of cross-border ones. For example, only about 19 percent of U.S. acquirers have non-U.S. targets. However, this ratio varies by country: for example, it drops to about 7 percent for Russian acquirers but increases to above 75 percent for Ireland and Luxembourg.

Table 2 presents statistics on some characteristics of cross-border acquisitions. Public firms are the most common acquirers with 46 percent. However, the majority of targets are private at the

time they are acquired: 60 percent of the targets are private firms, and another 35 percent are subsidiaries of other firms. Consequently, many studies relying on samples of public firms' acquisitions of other public firms are not likely to be reflective of acquisitions more broadly, since they rely on a small (3 percent) fraction of deals.²

Panel B of Table 2 presents the number and percentage of deals by acquirer and target countries. We classify countries as emerging or developed based on the MSCI definition. Firms from developed countries are more active acquirers in the cross-border acquisition market, making up 91 percent of all acquisitions. These acquirers most often acquire firms from developed countries, with developed-to-developed country acquisitions constituting 75 percent of the universe of cross-border acquisitions. Firms in developed countries do acquire firms in emerging markets as well, with this type of deal amounting to about 15 percent of cross-border acquisitions.

Panel C summarizes important deal characteristics of cross-border acquisitions. In the sample of announced cross-border deals, 97.1 percent are completed. The majority of cross-border acquisitions (75 percent) are cash deals, where an acquisition is defined as a cash deal if more than 50 percent of the price is paid in cash. The sample is evenly split between diversifying and related deals – 48 percent of cross-border transactions are diversifying, meaning that the acquirer and the target in these deals are not in the same 2-digit SIC. Hostile deals are rare (less than one percent) in the cross-border M&A market. Acquirers are substantially larger than targets, with the average transaction value being only 14 percent of the acquirer's market value, and the median is just 5.2 percent.

Next, we present statistics on the industry composition of acquirers. The ratio of diversifying acquisitions appears to vary with the industry. In Figure 2, we present the industry

² See Netter, Stegemoller, and Wintoki (2011) and Erel, Liao, and Weisbach (2012) for more on this point.

composition of the cross-border deals in our sample of 48 countries. The top industries in terms of the total number of cross-border deals are business equipment (with over 20,000 acquisitions) and manufacturing (with over 15,000 acquisitions). While only 38 percent of acquirers in the business-equipment industry engage in diversifying acquisitions, this number increases to 59 percent for acquirers in manufacturing.

2.2. Valuation

In this section, we calculate the changes in acquirers' and targets' stock market valuations on the announcement of cross-border acquisitions. Table 3 presents the cumulative announcement returns (CARs) of merging firms over the three and five days around the announcement. The CARs are calculated based on a market-adjusted model in which abnormal returns are defined as stock returns in excess of the overall stock market return, which implicitly assumes a beta of one. As discussed above, there are fewer targets than acquirers that are publicly traded.

In panel A, where we present the statistics for the three-day or five-day acquirer CARs around the acquisition announcement, we observe a small positive effect. This finding is similar to many found in the literature, in which abnormal returns for the cross-border acquirers are typically positive but small (see section 5.3 below). In addition, as is usual in the M&A literature, targets have positive reactions. The mean target CAR is 4.3 percent (4.7 percent) over three (five) days around the announcement of the acquisition.

3. Reasons for Cross-Border Acquisitions

The underlying reason for any merger is that the participants believe that the two firms will be more valuable as a combined entity than as separate firms. However, the principle of

conservation of value means that merging two firms does not in itself create value. To make a merger profitable after paying the legal, investment banking, and other costs, there must be something that causes the cash flows of the combined firms to be strictly greater than the sum of what the cash flows of the two separate firms would be if they had not merged. In other words, every merger should have an identifiable source of value; otherwise, the firms would be better off not having merged.

The source of value in many cross-border acquisitions is the same as the sources of value in domestic ones. These include operational or financing synergies, acquiring innovation or labor, wealth transfers from workers and governments, and creation of monopoly rents, among other factors. These motives for mergers and acquisitions has been extensively studied in the literature and has been the subject of a number of excellent surveys, the most recent of which is Mulherin, Netter, and Poulsen (2017).

In this chapter, we focus on potential sources of value that are unique to cross-border acquisitions. There are several papers that propose such reasons that are relevant for cross-border deals but not for domestic deals. In this section, we discuss the way in which each motivation can lead to merger gains, as well as the literature that has evaluated it empirically.

3.1. Legal Protections of Shareholders' Rights

Much work on cross-border acquisitions has focused on a firm's legal system and how it protects shareholders' rights. Legal protection can have a substantial impact on a firm's corporate financial decisions. Shleifer and Vishny (1997) and La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1998) started a literature that argues that there are substantial differences across countries in the way in which legal systems protect shareholders' rights. These differences in shareholder

protection, as well as other country-specific regulations, can materially affect not only firms' abilities to raise capital but also firms' financial policies and valuations. This literature mostly focuses on differences between common law and civil law as determinants of legal protection, but, even for countries with the same legal system, there can be noticeable differences in shareholders' rights.

This idea has implications for cross-border acquisitions. If, as the literature supposes, better protection increases firm value, then being acquired by a firm from a country that has better shareholder protection could lead to an improvement in the value of the target firm. For this reason, the potential improvement in shareholder protection coming from being owned by a firm from a country with a different legal system could be a source of value in a cross-border acquisition.

The first paper to explore this idea is Rossi and Volpin (2004). Rossi and Volpin gather a large, international sample of acquisitions and evaluate the extent to which corporate governance considerations are a motivation for them. They find that both within countries and across countries, corporate governance appears to be an important reason for acquisitions. Their main finding about cross-border acquisitions is that, holding other factors constant, such deals are more likely when the acquirer is from a country with better shareholder protection than the target country. This finding suggests that better protection is one potential source of value in cross-border deals.³

Bris and Cabolis (2008) extend this work and evaluate the extent to which improved governance appears to be a source of value in cross-border acquisitions. These authors rely on merger premiums as a measure of the value creation in any particular deal. Their main finding is that premiums are higher when corporate governance differences are higher. This pattern holds

³ The finding is also consistent with the very interesting idea proposed by Coffee (1998) that market forces will lead to convergence across countries in corporate governance standards. For more discussion and evidence on this point, see Stulz (1999), Reese and Weisbach (2002), Doidge, Karolyi, and Stulz (2004), and Benos and Weisbach (2004).

not only for country-level governance measures, mostly due to legal differences, and also for firm-specific measures of governance, focusing on the accounting standards of the firms. Subject to caveats about the selection of deals into their sample and the lack of data availability on changes in governance around the time of the acquisition, Bris and Cabolis interpret their findings as supportive of the view that governance is an important motive for cross-border mergers.

Consistent with these findings, Ellis, Moeller, Schlingemann, and Stulz (2017) study stock price reactions to over 37,000 cross-border acquisitions between 1990 and 2007. This paper documents that acquirers' gains are higher when target firms are from countries with worse governance. The authors also find that no other acquirer country characteristics explain this effect. Starks and Wei (2013) also study the stock price reactions to cross-border mergers and differentiate deals paid with stock as the method of payment. They find that the value gains to acquirer stockholders are increasing in the quality of corporate governance for stock offers and that acquirers from countries with better corporate governance are more likely to make stock offers. In addition, Starks and Wei find that premiums offered to the targets are decreasing in the quality of the acquirer's country-level governance. This result implies that acquirers compensate target shareholders when the merger creates exposure to weaker country-level corporate governance.

One way to identify the impact of country-specific corporate governance on cross-border acquisitions is to measure how changes in corporate governance regulations affect acquisition patterns. Kim and Lu (2013) use this approach and evaluate the extent to which corporate governance reforms in the acquirer's country affect the incidence of cross-border acquisitions. These authors find that following reforms that improve the corporate governance in a country, firms from that country make more and higher quality cross-border acquisitions. This finding supports the view that improvements in governance are a source of value in cross-border deals.

An important implication of the idea that better corporate governance from the acquirer country creates value in cross-border acquisitions is that corporate governance of the target improves following cross-border deals. Albuquerque, Brandão-Marques, Ferreira, and Matos (2019) provide an empirical test of this hypothesis. This paper considers a firm-level sample of cross-border acquisitions from 64 countries between 2005 and 2014 and evaluates whether the governance in non-target firms in targets' countries improves after acquisitions. They focus on non-target instead of target firms because the latter are typically delisted. The authors measure governance quality using an index based on 16 governance attributes drawn from Bloomberg's Environmental, Social, and Governance (ESG) database. They find that this index of governance does, in fact, increase following cross-border acquisitions. In addition, Albuquerque, Brandão-Marques, Ferreira, and Matos (2019) also find that cross-border deals also improve the investment and valuation of nontarget firms in the same country of firms that are acquired.

While differences across countries in corporate governance-related regulations can lead to acquisitions that improve the governance in target firms, these differences can also deter potential value-improving combinations. Investors from one country are likely to avoid deals in which their legal rights are reduced, and potentially not recognized by a foreign court. For this reason, countries can agree to "Bilateral Investment Treaties," in which countries treat foreign investors the same as home-country investors, not to expropriate foreign-owned assets without appropriate compensation, and to litigate disputes through an independent arbitration body. A recent paper by Bhagwat, Brogaard, and Julio (2021) examines these treaties and finds that these bilateral investment treaties appear to facilitate cross-border acquisitions.

3.2. Other Regulatory Motives for Cross-Border Acquisitions

The idea that acquisitions allow firms to take advantage of other countries' regulations is known as 'regulatory arbitrage' and it can be applied to other types of regulations than those affecting corporate governance. One industry where regulatory arbitrage is particularly important is banking. Banks, in most countries, are supervised and subject to a number of regulations (e.g., regulatory capital requirements, reserve and liquidity requirements as well as restrictions on their non-bank activities such as securities trading and underwriting). Importantly, the extent and stringency of these regulatory requirements for banks vary across countries, creating incentives for them to explore ways to move their funds to countries with weaker regulatory regimes (see Houston, Lin, and Ma (2012)).

Karolyi and Taboada (2015) evaluate the extent to which regulatory arbitrage can explain cross-border banking mergers. Using a sample of over 7,000 domestic and 900 cross-border deals between 1995 and 2012, the authors examine whether banks from countries with strict regulations acquire from countries with weaker regulations. Karolyi and Taboada find that acquiring banks are more likely to be from countries with stronger supervision, more stringent capital requirements, and more restrictions on banking activities. In addition, the authors also show that these bank acquisitions are not value-destroying. In contrast, target and aggregate abnormal returns around deal announcements are positive and are larger in magnitude when acquiring banks are subject to more stringent regulation. Karolyi and Taboada interpret these findings as evidence of a benign regulatory capital arbitrage with banks escaping from a costly regulatory environment.

Another potential set of regulations that could lead to cross-border mergers is those concerning labor practices. If a firm acquires a target in a country with lower labor regulations, it can potentially move some of its operations to the target firm and lower its labor costs. In this situation, reductions in labor costs could provide a motive for acquisition, especially if the same

cost-savings cannot be achieved through a contractual relationship between the firms. The advantage of an acquisition over a contractual relationship normally comes from relationship-specific investments, for which hold-up problems can prevent efficient contracting.⁴

Levine, Lin, and Shen (2019) provide empirical evidence suggesting that a country's lax labor regulations make firms in that country more attractive to potential acquirers. Levine, Lin, and Shen find that when firms make acquisitions in countries with lower labor protection, they earn higher abnormal returns and have better post-deal performance gains. In addition, this relation is more pronounced among firms in labor-dependent industries, suggesting that weak labor regulation is an important factor in the post-merger labor restructuring and the realization of cost synergies. In contrast, Alimov (2015) argues that tighter labor market regulation could affect the likelihood of inbound cross-border acquisitions as it typically would lead to substantial labor force restructuring. Tighter labor protection could decrease firms' valuations, making firms more attractive to acquirers. Consistent with this idea, Alimov finds that following increases in labor protection, firms become *more* likely to be cross-border targets.

A type of regulation that has become increasingly common concerns climate change. Some countries have adopted rules that limit CO₂ emissions by firms in that country. While these regulations may be socially desirable, they potentially make the country less attractive to foreign investors. Li, Tang, and Xie (2022) test this idea and find that stronger climate regulations in a country indeed decrease the incidence of cross-border acquisitions of that country's firms.

3.3. Intellectual Property

⁴ This idea was originated by Klein, Crawford, and Alchian (1978) and was further developed by the "Grossman/Hart/Moore" literature, which is summarized in Hart (1995). A recent empirical test of this idea is provided by Bena, Erel, Wang, and Weisbach (2022).

While regulatory arbitrage motivates cross-border acquisitions, there are several country-specific differences that deter deals. One potential impediment is that whenever a firm does operations outside its home country, its private information and intellectual property can be compromised. The protection of the intellectual property is particularly important in industries where technology is important. The potential loss of intellectual property is a cost of making cross-border acquisitions, especially if it is necessary for the combined company to use technologies based on this intellectual property outside the home country.

Two papers evaluate whether a potential loss of intellectual property deters cross-border acquisitions. Hasan, Khalil, and Sun (2017) examine whether better intellectual property protection facilitates cross-border technology mergers. They find that better intellectual property protection in a country does, in fact, lead to more cross-border technology mergers. In addition, they find that the premiums are higher when the target comes from countries with better intellectual property protection, suggesting that such protection makes companies more valuable to potential acquirers.

This finding is complemented by Alimov and Officer (2017), who do essentially the same test in first differences by considering how changes in intellectual property protection in a country lead to changes in the number of cross-border acquisitions of firms in that country. This increase is only in industries that the authors classify as “intellectual-capital intensive.” The findings in these two papers strongly suggest that the protection of intellectual property rights is an important concern of potential acquirers in industries reliant on intellectual property.

3.4. Cultural Reasons

Cultural differences can be a hurdle that must be overcome when combining two firms from different countries. If the employees of one firm approach things in a very different fashion culturally from those of another, merging the two firms can be fraught with difficulties. A famous example of a merger that failed for cultural (and other) reasons is Daimler-Chrysler.⁵ The notion that mergers can have difficulties because of cultural issues is consistent with the economics literature that emphasizes the role of culture and trust in business relationships (see, e.g., Guiso, Sapienza, and Zingales (2006)).

Consequently, it is possible that when countries have very different cultures, firms from those countries are less likely to merge. This hypothesis is tested by Ahern, Daminelli, and Fracassi (2015) and Lawrence, Raithatha, and Rodriguez (2021). These authors find that firms from culturally different countries are less likely to merge, measuring culture using a variety of different measures. For example, Ahern, Daminelli, and Fracassi (2015) use measures of the distance in “cultural” space along three dimensions commonly identified in sociology and economics: trust vs. distrust; hierarchy vs. egalitarianism; individualism vs. collectivism. They find that the greater the cultural distance along each of these dimensions, the smaller the volume of mergers.

However, unlike the Daimler-Chrysler case, when culturally distant firms do merge, Chakrabarti, Gupta-Mukherjee, and Jayaraman (2009) find that those deals have better performance than other deals. The likely explanation is that firms from countries with very different cultures are so reluctant to combine with one another that they do so only when the synergies are expected to be particularly large. In the relatively rare circumstances in which the synergies are large enough to overcome substantial cultural differences, they end up leading to unusually good performance for the combined firm.

⁵ See “Why Daimler Chrysler Never Got Into Gear,” Michael Watkins, *Harvard Business Review*, May 18, 2007.

3.5. Trade and Politics

In addition to cultural differences, a number of other factors can affect the desirability of combining two firms. Erel, Liao, and Weisbach (2012) find that the geographic distance and the amount of trade between two countries affect the likelihood that firms from those countries merge. Presumably, a greater distance impedes an efficient combination of two organizations. The trade between two countries probably reflects several factors that all affect cross-border mergers, including the quality of the relationship between the countries, the costs of doing the actual trade, as well as cultural and geographic differences.

One component of trade costs, tariffs, can actually be a reason *for* making a cross-border acquisition. The international trade literature has emphasized that Foreign Direct Investment, either through greenfield investments or acquisitions, can allow firms to bypass tariffs that countries impose on imports.⁶ This “tariff-jumping” argument suggests that when tariffs are sufficiently high, firms will make cross-border acquisitions or greenfield investments to avoid paying them. For example, a major reason why Jushi, the Chinese fiberglass company, built a plant in South Carolina in 2019 was to avoid the tariffs being imposed at the time by President Trump.⁷ Hijzen, Görg, and Manchin (2008) evaluate whether such tariff jumping motivates cross-border acquisitions by comparing horizontal and non-horizontal deals. These authors find that the impact of trade costs on deal volume is lower for horizontal deals, which they interpret as consistent with the tariff-jumping argument.

An important factor affecting the ease of doing business across countries is the extent to which the countries have good relations with one another. There are a variety of reasons why a

⁶ See the discussion in Hijzen, Görg, and Manchin (2008) for references to this literature.

⁷ See Lerner, Bernstein, and Leamon (2019).

company spanning two countries that do not get along can be difficult to manage, from personnel reasons to financial ones. To evaluate whether the quality of the relations between two countries affects cross-border merger activity, Aleksanyan, Hao, Vagenas-Nanos, and Verwijmeren (2021) consider whether state visits between countries affect the likelihood of deals between firms from those countries. Presumably, the existence of a state visit indicates that the two countries are on relatively good terms. Aleksanyan, Hao, Vagenas-Nanos, and Verwijmeren (2021) find that state visits between countries predict a higher number of cross-border acquisitions between firms from those countries, consistent with the idea that firms are more likely to merge if their countries have a good relationship with one another.

In addition to relations between countries, politics inside a country can influence whether firms from that country are targets in cross-border acquisitions. Often, the public does not like it when their country's firms are acquired by foreign companies. This idea is known as "Economic Nationalism." It is especially prevalent when the firms targeted by foreign acquirers are important to the country's economy or are thought to be symbolic of a country's wealth or power.⁸

Dinc and Erel (2013) evaluate the importance of economic nationalism in explaining cross-border acquisitions. The authors focus on acquisitions within the European Union (EU) between 1997 and 2006. The reason for focusing on European Union countries is that the EU treaty grants the European Commission, not domestic governments, as the anti-trust regulator for large international mergers in all industries but defense and media. Despite this treaty, Dinc and Erel find that holding other factors constant, governments are more likely to support deals when the acquirer is from their own country and are significantly more likely to oppose foreign bids. Moreover, this effect is larger when preferences for natives against foreigners in social, political,

⁸ Economic nationalism has a long history in economics, dating at least to Feiler (1935).

and economic domains are stronger. For example, the effect increases with the vote share of extreme right-wing parties that advocate protectionist, anti-globalization economic policies, and it is larger against acquisition bids from countries to which the target country has little affinity. These findings support the Economic Nationalism interpretation of the findings.

Another way that politics can affect acquisition decisions is by creating uncertainty about government policies and how foreign companies will be treated. While, in general, firms do not like uncertainty about future government policies, such uncertainty is particularly problematic if it is from a foreign government under which the firm cannot influence. If concerns about future government policy in a particular country are sufficiently large, they can deter a firm from acquiring a target in that country.

Cao, Li, and Liu (2019) evaluate this idea, using national elections as an exogenous event that affects policy uncertainty. The main finding is that when a country is about to hold national elections, there are fewer acquisitions of firms from that country by foreign acquirers. This effect is particularly large when the host country has high expropriation risk. The paper provides support for the view that uncertainty about government actions is an important factor affecting cross-border acquisitions.

Bonaime, Gulen, and Ion (2018) also study regulatory and policy uncertainty. They find that acquiring firms are more likely to seek targets abroad when this uncertainty increases. The authors interpret this pattern through risk management channel. When the risk of a policy-related shock in domestic markets is high, firms partially hedge against such shocks by acquiring firms from other countries that are less exposed to the policy in question.

3.6. Tax Havens

A number of countries have become known as “tax havens”. Tax havens are countries that attract capital with low tax rates, leading companies to use a variety of methods to move income to subsidiaries in these countries.⁹ To take advantage of these tax havens, however, a firm must have a subsidiary in a tax haven country. The desire to acquire such subsidiaries is a potential motivating factor for cross-border acquisitions.

Meier and Smith (2021) measure the incidence of cross-border acquisitions that appear to be motivated by the creation of tax haven subsidiaries. They compare the number of cross-border acquisitions of firms in tax haven countries with the amount that is predicted by a “gravity” model that is commonly used in the international economics literature. Using a sample of about 13,300 cross-border, tax-haven acquisitions (with \$4.1 trillion in total deal value) from 1990 to 2017, Meier and Smith’s estimates suggest that the value of cross-border acquisitions of tax-haven companies is \$2.4 trillion more than it would have been absent tax considerations. In addition, much of this activity, about \$1 trillion, is of companies based in small tax haven countries such as Bermuda or the Cayman Islands.

3.7. International Expansion of Specialized Firms

When a firm produces a unique, specialized product, there can be demand for it internationally, since there will be no foreign competitors producing the same product. To expand internationally, the firm will have to transfer specialized, often proprietary assets, overseas. Such assets tend to be intangible, such as trade secrets or the “know-how” to make a particular product. In addition, the firm will often have to contract with a foreign firm to market and distribute the

⁹ For detail on tax havens and the way they operate, see Desai, Foley, and Hines (2006) and Dharmapala and Hines (2009).

product in a foreign country. However, because of hold-up problems, contracting specialized assets can be problematic (see Klein, Crawford, and Alchian (1978)). Under such circumstances, it can be more efficient to merge the two firms than to rely on arm-length contracting to consummate the relationship.

Frésard, Hege, and Phillips (2017) examine this idea and suggest that one reason for cross-border acquisitions is the extension of the markets of specialized products. They consider a large sample of cross-border deals and find that more specialized acquirers tend to purchase targets that are less specialized but in the same industry. Moreover, this effect appears to be larger when contracting inefficiencies and export costs limit potential arm-length contractual relationships. Overall, the findings are consistent with the view that specialized firms use cross-border acquisitions as a way of expanding internationally.

4. The Process of Acquiring Companies Internationally

To this point, we have focused our discussion on the reasons for cross-border acquisitions. While many of the sources of value in cross-border deals are the same as those for domestic ones, there are a variety of potential motives for cross-border deals that are not relevant to domestic ones. Section 3 discusses a number of possible sources of value for cross-border acquisitions, as well as the academic literature that documents the extent to which it explains real-world transactions.

Regardless of the reason, however, once a firm identifies a target in another country that it would like to acquire, international considerations can complicate the process of consummating the deal. Identifying the expected synergies associated with a potential target is more difficult when the firms being considered are in another country. Cross-border deals can face unfamiliar

regulations as well as political opposition that can make government approval more difficult than in domestic deals. Consequently, institutions that facilitate acquisitions by reducing information asymmetries and finessing regulatory hurdles can help facilitate cross-border deals. Particularly important are institutional investors and venture capitalists.

4.1. Institutional Investors

Ferreira, Massa, and Matos (2010) evaluate the role of institutional investors in facilitating cross-border acquisitions. There are several ways in which institutional investors can affect the process of acquiring firms in other countries. First, the presence of institutional investors tends to be associated with more concentrated ownership, which tends to make deals easier to complete by lowering free rider problems between shareholders when responding to bids.¹⁰ Second, institutional owners, especially those from the country of a potential bidder, can help to minimize information asymmetries that could make it more difficult for a foreign acquirer. Third, Ferreira, Massa, and Matos (2010) suggest that foreign institutional investors will be more likely than domestic investors to accept value-increasing bids from foreign companies rather than favor domestic acquirers who offer lower premiums to shareholders.

Ferreira, Massa, and Matos (2010) estimate the impact of foreign institutional ownership on cross-border acquisitions. These authors find that higher foreign institutional ownership increase the probability that the firm is acquired by a foreign company. Moreover, they directly link the acquisitions to ownership by institutions from the particular country where the bidder is located. The paper argues that this finding provides direct evidence of the facilitation role played

¹⁰ Shleifer and Vishny (1986) provide a classic analysis of the way in which the presence of concentrated ownership can lead to takeovers.

by institutions when the nationality of the target shareholders coincides with the nationality of the bidders.

Ferreira, Massa, and Matos (2010) and Aggarwal, Erel, Ferreira, and Matos (2011) suggest that in addition to facilitating cross-border acquisitions, foreign institutional owners can help improve corporate governance. These papers provide evidence that foreign institutional investors bring better governance practices from their home country to the countries in which they are investors.

Institutional investors also affect cross-border acquisitions in other ways. Chen, Hobdari, and Zhang (2019) evaluate the way in which different kinds of large blockholders affect cross-border deals. These authors argue that banks, because they are continually soliciting business, are sensitive to pressure from management and unlikely to monitor. Mutual funds, in contrast, are not subject to such pressure, and are more likely to monitor management. Chen, Hobdari, and Zhang (2019) perform several tests, the results of which are largely consistent with these hypotheses.

Governments or sovereign wealth funds also drive acquisitions around the world. To understand the role of governments and sovereign wealth funds in acquisitions, Karolyi and Liao (2017) consider a sample of acquisitions by government-controlled acquirers between 1990 and 2008, with a total value of \$619 billion. They compare these deals with deals by corporate acquirers and find that government-led acquisitions involve larger targets with greater growth opportunities. However, the targets of government-controlled acquirers tend to have more financial constraints. In addition, these deals are less sensitive to economic development and institutional differences between countries.

4.2. The Role of Private Equity

Private equity investors, who either make venture investments in new companies or private placements in existing ones, are likely to be particularly valuable in easing frictions associated with international borders. Private equity investors are almost always actively involved in management decisions, usually holding board seats and other control rights for which they negotiate at the time they make their investments. In addition, private equity investors are likely to be knowledgeable about potential cross-border acquisition targets, as well as any regulatory or political hurdles facing such deals.

Humphery-Jenner, Sautner, and Suchard (2017) provide evidence on the role of private equity investors in facilitating cross-border acquisitions. These authors find that when private equity-backed companies make cross-border acquisitions, the stock price reaction to the announcements is larger than for similar cross-border deals by firms that are not backed by a private equity company. This pattern is stronger when the target is in a “poor information environment” and when the private equity fund has more experience doing deals in the target firm’s country. In addition, they find that private equity-backed acquirers improve the operating performance of cross-border targets when the target is classified to be in a poor information environment. These results are all consistent with the view that when a private equity fund invests in a company, one of the ways in which they add value is by helping the company identify potential profitable cross-border acquisitions.

The results of Humphery-Jenner, Sautner, and Suchard (2017) suggest that private equity investors can help to facilitate cross-border acquisitions. Another way in which private equity investors, especially venture capitalists, add value to their portfolio firms is to help them innovate (see, for example, Kortum and Lerner (2000), Bernstein, Giroud, and Townsend (2016), and Lerner and Nanda (2022)). Consequently, it seems likely that one source of value in cross-border

acquisitions by venture-backed companies is the returns from the subsequent innovation by their targets.

An issue of concern with cross-border acquisitions and other foreign investments in innovative industries, however, is that innovations can sometimes be sufficiently important to the national interest that governments want them to be kept secret. Policymakers can be reluctant to allow foreign investors to own part of these companies. Foreign investment in innovative sectors, especially in those areas related to national security, has been somewhat controversial because of this possibility.

Akcigit, Ates, Lerner, Townsend, and Zhestkova (2020) model this idea formally. In their model, foreign investments allow U.S. companies to pursue technologies that they could not otherwise, but this investment comes at the cost of knowledge spillovers to the foreign investor's home country. Cross-border investments are more likely to happen if the industries in the investor's home country lag behind the same industries in the U.S. Akcigit, Ates, Lerner, Townsend, and Zhestkova (2020) document that there are, in fact, such knowledge spillovers associated with investments in innovative industries. Consequently, there appears to be a role for government restrictions on foreign ownership of innovative firms, either through regulatory barriers or taxes. Such restrictions can be a factor affecting the process of acquiring a company in another country.

5. Valuation

Much research about cross-border mergers and acquisitions concern valuation in one way or another. Share prices of acquirers or potential targets could affect acquisition decisions. A higher price, reducing its effective cost of capital, could make a firm more likely to be an acquirer

(Shleifer and Vishny (2003)). Alternatively, a decrease in the share price of a potential target would make the firm “cheaper” if the price decrease is not justified by the firm’s fundamentals (Edmans, Goldstein and Jiang (2012)). While valuation affects the desirability of cross-border deals, the deals also have consequences for firms’ valuations. There is a large literature documenting a “diversification discount” for firms that have divisions in different industries. Whether there is such a diversification discount across countries is an interesting question that has implications for the overall efficiency of cross-border mergers and acquisitions. Finally, the largest collection of papers in the field of cross-border mergers and acquisitions has examined the stock price reactions to the announcement of deals. The average abnormal stock price reaction to deals’ announcements indicates whether cross-border deals tend to increase or decrease the value of acquirers.

5.1. Do Price Levels Affect the Choice of Acquisition Targets?

One reason for acquiring a firm (or any other asset) is that its market price is lower than its true value. Alternatively, a potential acquirer’s valuation could affect its choice of acquisitions: holding cash flows constant, a higher share price means that the discount rate is lower, which would encourage firms to make acquisitions. Consequently, the aggregate level of equity prices in a country is a potential factor that could affect cross-border acquisitions both to and from that country.

In a cross-border context, there are country-level factors that affect the country’s stock market price, its exchange rates, as well as other factors that could potentially affect the pricing of potential acquisition targets. Baker, Foley, and Wurgler (2009) evaluate this argument using Foreign Direct Investment (FDI), the majority of which occurs through cross-border acquisitions. The authors find that FDI flows are positively related to the market-to-book ratio in the source

country (i.e., where the money comes from) but not the host country (i.e., where the money goes to). Baker, Foley, and Wurgler conclude that the higher prices in source countries are associated with a lower cost of capital, which drives the increase in FDI.

Erel, Liao, and Weisbach (2012) consider whether recent movements in stock market valuations and exchange rates are associated with the incidence of cross-border mergers. They find that cross-border mergers are more likely following increases in the acquirer country's stock market valuation relative to the target country's, and also when the acquirer's home currency has appreciated relative to the target's home currency. This pattern is consistent with mispricing being a determinant of deals, with acquirers being overvalued relative to targets. In addition, it is also consistent with acquirers applying lower discount rates when evaluating potential deals when they are in a country with a high stock price and a currency that has recently appreciated.

A related issue concerns the relative pricing of cross-border and domestic deals. Does crossing a border to make an acquisition lead to a higher price than a purchase of a similar domestic firm? A recent paper by Hammer, Janssen, and Schwetzler (2021) says that the answer is "yes." Using a large sample of private equity buyouts, these authors find that cross-border buyouts are associated with higher valuation multiples. The authors attribute this finding to informational disadvantages of foreign buyers, although higher competition for cross-border deals could also potentially explain part of their finding.

5.2. Diversification Discounts

One empirical regularity in the corporate finance literature that is commonly attributed to inefficient acquisitions is known as the "diversification discount" (see Lang and Stulz (1994) and Berger and Ofek (1995)). This discount refers to the phenomenon that firms that are diversified

across industries are worth less than comparable firms that focus on a single industry. The most common interpretation of this finding is that diversifying acquisitions are value-destroying, although this interpretation has been disputed by some authors (see Campa and Kedia (2002)).

Denis, Denis, and Yost (2002) provide an interesting study that considers the possibility of a similar pattern occurring across countries. These authors compare the valuation multiples of firms that are diversified internationally with comparable domestic firms. Denis, Denis, and Yost find that diversified firms trade at lower multiples than domestic firms. Their findings are consistent with the view that cross-border mergers are, on average, inefficient and the costs of doing them outweigh the benefits. This is an intriguing hypothesis and worthy of future study.

5.3. The Stock-Price Reaction to Announcements of Cross-Border Acquisitions

By far the largest strand of research about cross-border acquisitions has examined the stock-price reaction to their announcements. Under the efficient markets hypothesis, the change in the stock price at the time of the announcement should reflect the market's expectation of the change in the present value of the firm's cash flows brought on by the acquisition. Consequently, event studies, which calculate the risk-adjusted abnormal return around the time of the acquisition announcement, have become a standard way to evaluate the quality of acquisitions, both domestic and cross-border.

There is an enormous literature analyzing acquirers' abnormal returns for domestic mergers. The stylized fact, which has been well-known since early surveys by Jensen and Ruback (1983) and Jarrell, Brickley, and Netter (1988), is that on average, acquirers have a small negative return. However, most studies documenting this finding are based on acquisitions of large, publicly traded U.S. companies. Acquisitions of smaller and private companies tend to be associated with

positive acquirer returns (see Netter, Stegemoller, and Wintoki (2010) and Mulherin, Netter, and Poulsen (2017)). Most likely, acquisitions of large, publicly traded companies generate more competing bids than smaller private ones, driving up acquisition prices.

Table 4 summarizes the findings of several event studies that examine acquirer returns in cross-border acquisitions, as well as other interesting findings from each paper. The samples in each paper are very different from one another. Some, such as Doukas and Travlos (1988) and Doukas (1995), consider samples of U.S. acquirers, while Bhagat, Malhotra, and Zhu (2011) rely on a sample in which the acquirers are from emerging markets. Eckbo and Thorburn's (2000) paper uses a sample of Canadian targets, and Kiyamaz (2004) only includes acquisitions made by financial institutions. Nonetheless, in each study, the abnormal return to acquirers is positive and statistically significant.

The positive acquirer returns for cross-border deals suggest that these deals add value to acquirers. Most of the studies do not report returns of targets, presumably because the majority of cross-border targets are private.¹¹ The positive acquirer returns are similar to those reported for domestic acquisitions of private firms. This result suggests that cross-border deals tend to be negotiated rather than auctioned, with some of the rents created by them captured by acquirers.

6. Conclusion

Roughly one-third of all acquisitions are of firms from different countries than their new parents. While some of these acquisitions occur for the same reasons as domestic ones, there are also several international factors that can provide motives for cross-border deals. This paper

¹¹ Two exceptions are Eckbo and Thorburn (2000) and Kiyamaz (2004), both of which report positive returns to targets.

summarizes the academic literature on cross-border mergers and acquisitions, focusing on the reasons for them that do not also explain domestic deals.

Many of the papers we discuss propose cross-country factors that could potentially lead cross-border mergers to increase, or possibly decrease, the values of two firms in different countries if they are combined into one. Consequently, these factors can serve to be a motive or a deterrent to a cross-border deal.

Many papers focus on the idea that a target can benefit from an acquirer from a country with better legal shareholder protection, which would enhance value through improved corporate governance. In addition, cross-border acquisitions can also be motivated by ‘regulatory arbitrage’, where the acquirer to take advantage of weaker regulations (e.g., banking, labor, and climate) of the target country. Firms can also facilitate tax avoidance by acquiring firms in tax haven countries and improve their distribution systems by acquiring a downstream firm in a country in which they want to sell their goods. The literature has evaluated these ideas and found evidence consistent with them.

On the other hand, a technology firm might think twice about acquiring a firm in a country that does not protect intellectual property well, for fear of losing valuable secrets. A firm considered a national treasure can run into “economic nationalism,” and become difficult to sell to a firm from another country. Trade and cultural factors work both ways – if countries get along well and/or have similar cultures, then cross-border deals become more likely between the two countries. In contrast, if the countries have tense relationships or are culturally different, cross-border acquisitions become less likely. The literature has also examined these ideas and has found empirical support for them.

Relative to domestic deals, cross-border acquisitions can be more difficult to consummate for a variety of reasons, including information asymmetries and regulation. The literature has examined factors that can ease these barriers. It turns out that large shareholders, especially private equity investors, can play a valuable role in this process.

Valuation does influence cross-border acquisitions and can make deals either more or less attractive. When valuations are high in a country, either through exchange rate movements or changes in stock prices, those countries' firms are less likely to be bought. In contrast, when valuations are low, a country's firms become targets more often. Valuations affect the likelihood of being acquirers in the opposite manner from targets: the likelihood of a firm being an acquirer is increasing in its country's market valuation relative to other countries' valuation.

Cross-border deals do appear to create value on average. Many papers have documented a small increase in stock prices for public acquirers in cross-border acquisitions and a larger increase for targets. Our own empirical analysis based on the largest, most up-to-date sample confirms these findings.

In recent years, many mergers and acquisitions combine firms from different countries. These deals are potentially affected by many factors that are not relevant to domestic deals. This paper surveys the literature that has documented the impact of these factors on cross-border mergers and acquisitions. As the world becomes more integrated and cross-border mergers and acquisitions more prevalent, these factors are likely to be increasingly important in the future.

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Figure 1. Distribution of Domestic and Cross-border Acquisitions

This figure plots the number (Panel A) and the aggregated transaction value in 2020 dollars (Panel B) of the cross-border M&A deals by the year 1991-2020. The sample includes mergers and acquisitions deals in 48 countries, announced between 1991 and 2020 and completed by the end of 2020, obtained from the mergers and acquisition deals from the Security Data Corporation’s (SDC) Mergers and Corporate Transactions database. LBOs, spin-offs, recapitalizations, self-tender offers, exchange offers, and repurchases are excluded. We further exclude partial equity stake acquisition, acquisitions of the remaining interest, and deals where either the target or the acquirer is a financial firm (SIC codes 6000-6999) or a utility firm (SIC codes 4900-4999). A deal is defined as a cross-border deal if the target's nation is different from that of the acquirer’s ultimate parents. The bars represent the numbers or values of cross-border acquisitions in a given year and the solid lines represent the fraction of cross-border acquisitions relative to the total number or aggregated deal value of all domestic and cross-border acquisitions. In Panel B, the sample is further restricted to the deals with deal value information available in SDC.

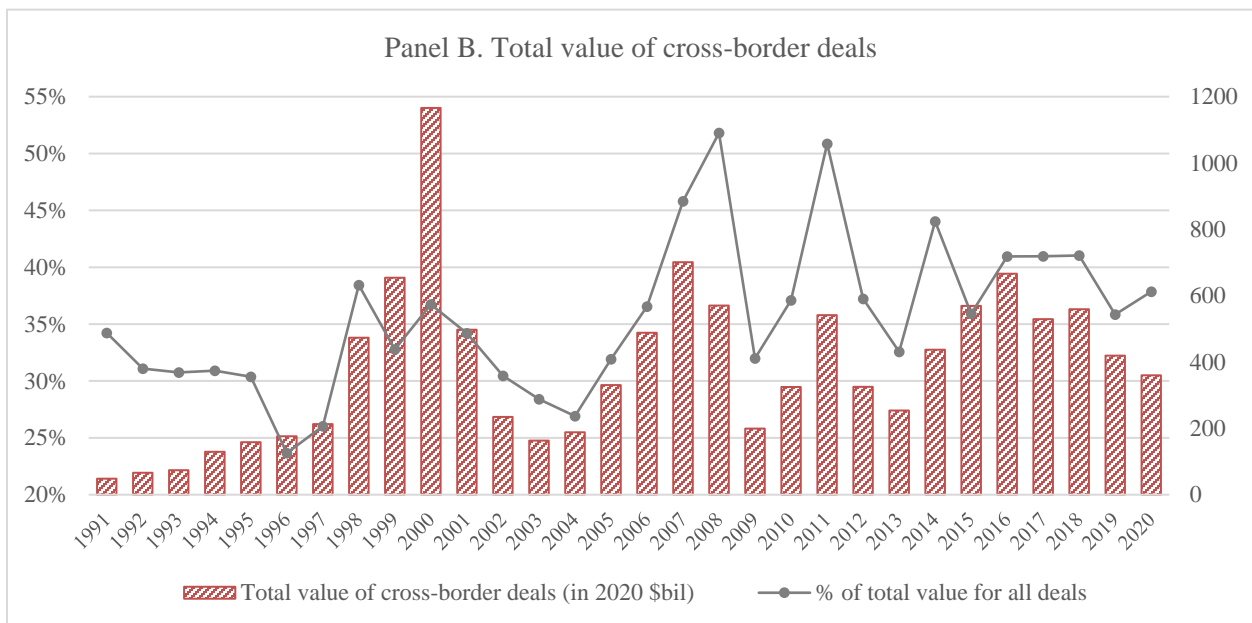
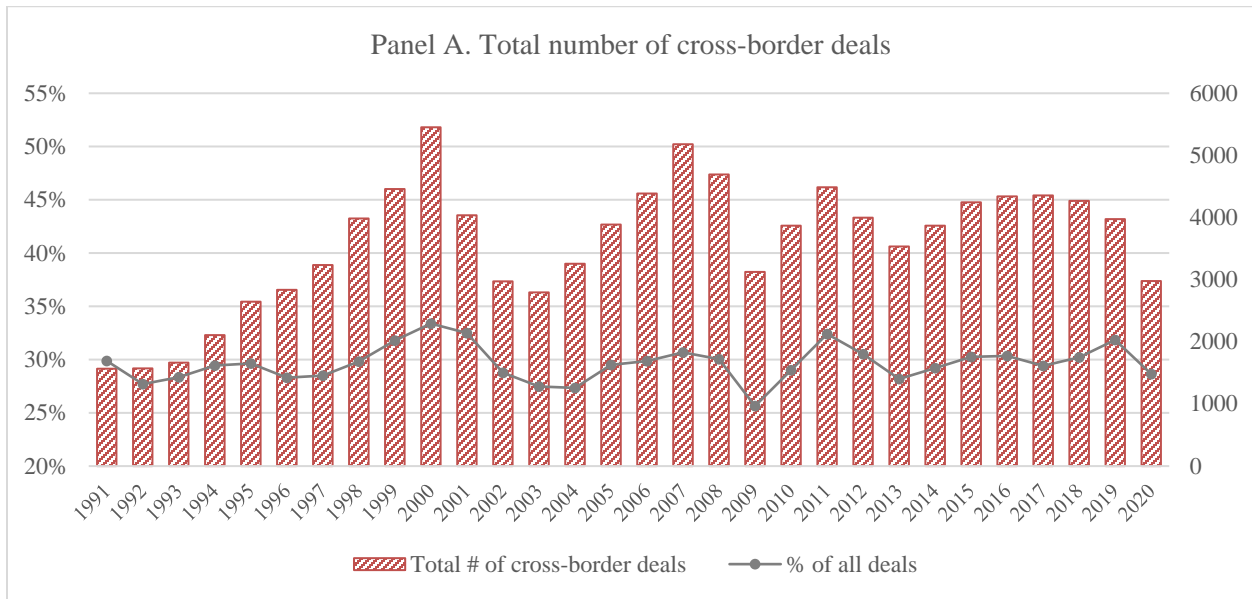


Figure 2. Distribution of Cross-border Acquisitions by Acquirer Industry

This figure presents the number of diversifying and same-industry merger deals and the percentage of diversifying deals by the acquirer industry. We use the Fama-French 12 industry classification for the acquirers. A deal is defined as a diversifying deal if the first two-digit SIC code of a target is different from that of the acquirer’s ultimate parent and as a same-industry deal if the acquirer’s ultimate parent and target have the same SIC two-digit code.

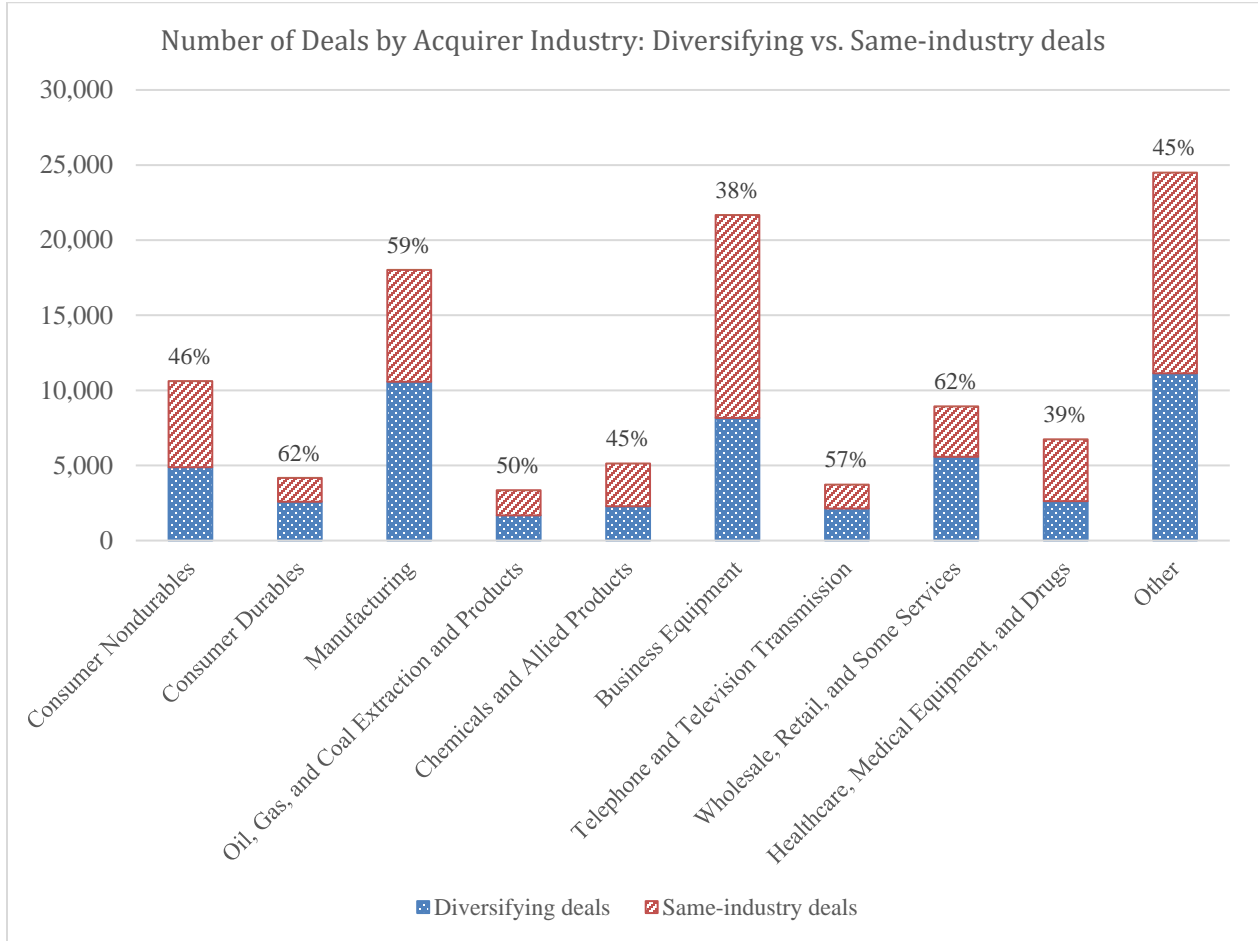


Table 2. Characteristics of Cross-border Acquisitions

This table shows the characteristics of cross-border acquisitions. The sample includes mergers and acquisitions deals in 48 countries, announced between 1991 and 2020 and completed by the end of 2020, obtained from the mergers and acquisition deals from the Security Data Corporation's (SDC) Mergers and Corporate Transactions database. LBOs, spin-offs, recapitalizations, self-tender offers, exchange offers, and repurchases are excluded. We further exclude partial equity stake acquisition, acquisitions of the remaining interest, and deals where either the target or the acquirer is a financial firm (SIC codes 6000-6999) or a utility firm (SIC codes 4900-4999). A deal is defined as a cross-border deal if the target's nation is different from that of the acquirer's ultimate parents. Panel A categorizes acquisitions based on the acquirer and target types. Panel B shows the number and the percentage of deals by acquirer and target countries. A country is categorized as an emerging or developed country based on the MSCI definition. Panel C shows a list of deal characteristics of cross-border acquisitions. The completion rate is calculated based on the sample of completed and withdrawn deals. A deal is defined as a cash (stock) deal if more than 50% of the deal value is paid in cash (stock). A deal is classified as diversifying deal if target firms are not in the same industries as acquirers based on the 2-digit SIC code. Relative size of the target is winsorized at 5% and 95%.

Panel A. Acquirer and target type

Acquirer Type		Target Type			Total
		Private	Public	Subsidiary	
Private	N	13,107	447	8,118	21,672
	Percent (%)	12.7	0.4	7.9	21.0
Public	N	28,871	2,783	16,119	47,773
	Percent (%)	27.9	2.7	15.6	46.2
Subsidiary	N	20,300	1,470	12,210	33,980
	Percent (%)	19.6	1.4	11.8	32.9
Total	N	62,278	4,700	36,447	103,425
	Percent (%)	60.2	4.5	35.2	100.0

Panel B. Emerging vs. developed country

Acquirer Country		Target Country		Total
		Emerging	Developed	
Emerging	N	2,537	7,240	9,777
	Percent (%)	2.4	6.7	9.1
Developed	N	16,707	81,295	98,002
	Percent (%)	15.5	75.4	90.9
Total	N	19,244	88,535	107,779
	Percent (%)	17.9	82.1	100.0

Panel C. Deal Characteristics

Variable				
Completion rate	97.12%			
	N	Mean	Median	Std. Dev
Payment method				
Cash deal	20,390	0.749	1.000	0.434
Stock deal	19,751	0.186	0.000	0.389
Diversifying deal	106,857	0.483	0.000	0.500
Friendly deal	107,779	0.990	1.000	0.101
Relative Size of Target				
Transaction Value/Acquirer Book Value	17,789	35.444	9.721	63.398
Transaction Value/Acquirer Market Value	12,655	0.141	0.052	0.210

Table 3. Cumulative Announcement Returns of Cross-border Acquisitions

The table shows the cumulative announcement returns of acquirers and targets around the acquisition announcement. Stock returns are obtained for ultimate parents of acquirers and targets (or ultimate parents of targets if targets are subsidiaries). CAR is calculated based on the market-adjusted model in which abnormal returns are defined as stock returns in excess of stock market returns assuming a market beta of one. Extreme values are trimmed at 1% and 99%.

	N	Mean	Std. Dev	p25	Median	p75
Acquirer						
CAR[-1,+1]	39,500	0.65%	4.21%	-1.52%	0.27%	2.40%
CAR[-2,+2]	37,906	0.73%	5.14%	-2.00%	0.37%	3.03%
Target						
CAR[-1,+1]	11,585	4.28%	11.84%	-1.27%	0.84%	4.74%
CAR[-2,+2]	11,037	4.67%	12.87%	-1.64%	1.00%	5.70%

Table 4. Summary of Event Studies on Cross-Border Acquisitions

Paper	Sample	Acquirer's return	Effect on Targets	Other
John Doukas, Nickolaus G. Travlos; Journal of Finance, 1988. "The Effect of Corporate Multinationalism on Shareholders' Wealth: Evidence from International Acquisitions."	301 M&As with US acquirers. Range: 1975-1983 Source: public announcements.	The abnormal return for acquirers is zero. US multinational firms not operating in the target firms' country experience daily abnormal return of 0.31% on the announcement day.		
John Doukas; Journal of Banking & Finance, 1995. "Overinvestment, Tobin's q and gains from foreign acquisitions."	463 M&As of U.S. bidding firms engaged in international acquisitions. Range: 1975-1989 Source: Mergers and Acquisitions, Dow Jones Retrieval Service database	CAR (-1,0) of US bidders with high Tobin's Q = 0.41%, with low Tobin's Q = -0.18%.		Bidder returns are inversely related to free cash flow for low q bidders, but not for high q bidders.
B. Espen Eckbo and Karin S. Thorburn; Journal of Financial and Quantitative Analysis, 2000. "Gains to Bidder Firms Revisited: Domestic and Foreign Acquisitions in Canada."	1846 acquisitions with Canadian target firms, and domestic and US bidders. 1261/1846 bidders are from TSE, and 390/1846 from NYSE. Range: 1964-1982 Source: Merger Register of the Canadian Department of Consumer and Corporate Affairs	Average monthly abnormal return for TSE acquirers: 3.64% during [t-12, t], and 1.27% in the announcement month. US bidders: abnormal return is zero.	Average monthly abnormal return for TSE targets: 11.40% during [t-12, t], and 3.59% in the announcement month.	

<p>Halil Kiyamaz; Journal of Banking & Finance, 2004. “Cross-border acquisitions of US financial institutions: Impact of macroeconomic factors.”</p>	<p>355 US targets and 391 US bidders involved in international M&As of financial institutions Range: 1989–1999 Source: Mergers and Acquisitions</p>	<p>For US bidders single-factor CAR (-1,1) = 0.38%, significant at 10% level.</p>	<p>For US targets single-factor CAR(-1,1) = 3.41%, significant at 1% level</p>	<p>Determinants of wealth gains: Foreign and US economic conditions, level of economic development of the target country, exchange rate volatility, the effectiveness of the foreign government, relative size of participants, and control of the target.</p>
<p>Sara B. Moeller, Frederik P. Schlingemann; Journal of Banking & Finance, 2005. “Global diversification and bidder gains: A comparison between cross-border and domestic acquisitions.”</p>	<p>4,430 M&As of US public firms that acquire either the equity or assets of domestic or foreign companies. 4047 domestic and 383 cross-border. Range: 1985-1995 Source: SDC Platinum</p>	<p>CAR (-1,1) for cross-border acquirers = 0.31%, for domestic = 1.17%.</p>		
<p>Bill B. Francis, Iftekhar Hasan, Xian Sun; Journal of Banking & Finance, 2008. “Financial market integration and the value of global diversification: Evidence for US acquirers in cross-border mergers and acquisitions.”</p>	<p>9,109 M&As with US firm as the acquirer. Range: 1990-2003 Source: SDC Platinum</p>	<p>CAR (-1, 1) for cross-border US acquirer = 0.96%, for domestic US acquirer = 1.49%, with difference being significant.</p>		<p>Firms acquiring segmented-market targets (rather than integrated) experience higher abnormal returns. Acquirer’s CAR (-1, 1) for cross-border with segmented-market</p>

				target = 1.31%, integrated = 0.90%.
Sanjai Bhagat, Shavin Malhotra, PengCheng Zhu; Emerging Markets Review, 2011. “Emerging country cross-border acquisitions: Characteristics, acquirer returns and cross-sectional determinants.”	698 cross-border M&As by firms from emerging countries: Brazil, China, India, Malaysia, Mexico, Philippines, Russia, and South Africa. Range: 1991-2008 Source: SDC Platinum.	CAR (-1, 1) for acquirer = 1.72%		Acquirer return is higher for target countries with better governance