Investment, Leverage and Political Risk: Evidence from project-level FDI

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Note: **This is a post peer review, pre-print accepted version, please cite:**

King, T., Loncan, T., & Khan, Z. (2020). Investment, Leverage and Political Risk: Evidence from project-level FDI. ***Journal of Corporate Finance***, in press.

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Abstract

Does capital structure influence firms' FDI capital expenditure decisions into countries with varying degrees of political risk? We explore this question using a novel dataset that matches 10,000 unique outward foreign direct investment (OFDI) projects with 1,135 distinct U.S. firms over the period 2003-2014. We find that capital expenditures allocated to FDI projects are significantly lower for highly leveraged firms, in particular for firms with low growth opportunities. Firms also commit lower capital amounts to investments located in countries characterized by higher political risk. Furthermore, leverage and political risk interact with one another in determining the financial commitment of the FDI, with leverage exerting a significantly stronger negative effect on capital expenditures in countries where political risk is elevated. Our findings are consistent with the monitoring role of debt in curbing exposure to political risk in multinational firms' foreign operations, and corroborate the disciplinary role of leverage on firms' investment decisions.

JEL classification: F21, F23

Key Words: FDI, Capital Structure; Political Risk; Leverage; Corporate Investment

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"There is a growing binary-ism to investors' perceptions of risk…When investors have started to price in risk, they have done it with a chain saw, not a carving knife."

Peter Atwater, President of research consultancy Financial Insyghts
('The Return of the Political Risk Trade', Wall Street Journal, June 11th 2018)

1. Introduction

Formal and informal institutions are understood to influence firms' international investments, with host country regulatory environments playing a significant role in the attraction of foreign direct investment (FDI). Such "rules of the game", set by governments (Pástor and Veronesi, 2012), give rise to political risk, or uncertainty regarding a government's future actions (Pástor and Veronesi, 2012, 2013), which represents an important source of risk and one expected to influence firms' FDI decisions (Stulz, 2005; Giambona, Graham and Harvey, 2017; Lin, Mihov, Sanz, and Stoyanova, 2019)[1]. Yet one that is difficult for managers and investors to assess with accuracy, as the opening quote illustrates, which could lead to capital misallocation (Bekaert, Harvey, Lundblad and Siegel, 2016; Col, Durnev and Molchanov, 2018).

Dynamics between firm investment decisions and political risk are likely to be of particular significance in the context of FDI, given that multinational enterprises (MNEs) encounter considerable political uncertainty when choosing where to invest: balancing the benefits and costs offered by locations (Alcácer and Delgado, 2016). Such trade-offs matter because benefits from investing in specific countries might be partially, or fully, offset by the risks of host governments taking arbitrary actions that may harm foreign firms (Desai et al., 2008), such as expropriation and property rights violations (Kesternich and Schnitzer, 2010; Azzimonti, 2018; Lin et al., 2019).

[1] In the context of FDI political risk arises from the fact that foreign government actions may serve to reduce expected cash-flows from FDI projects.

Although political risk is expected to influence MNEs' FDI decisions, exactly how and in what ways remains unclear. For instance, managers are unlikely to consider political risk independently of capital structure, given the potential for market discipline to influence investment (Harris and Raviv, 1990; Lang, Ofek and Stulz, 1996; Aivazian, Ge and Qui, 2005; Ahn and Denis, 2006). On one hand, a number of studies present evidence consistent with reduced investment when political risks are higher (Julio and Yook, 2012, 2016; Pástor and Veronesi, 2012, 2013). For example, Pástor and Veronesi, (2012) provide theoretical predictions that political risk should reduce investment. Julio and Yook (2016) study cross-border investments, showing that political risk affects capital flows to foreign affiliates. On the other hand, although higher political risk should be associated with less investment on aggregate, the impact of political risk on investment can be heterogeneous across firms (Holburn and Zelner, 2010; Pástor and Veronesi, 2012; Jiménez, Luis-Rico and Benito-Osorio, 2014). Firms may misallocate capital in the presence of foreign political risk (Bekaert et al., 2016; Col et al., 2018), and in some cases in order to offset political risks, firms might adopt low resource commitment entry mode (Slangen and Beugelsdijk, 2010; Oetzel and Oh, 2014). Finally, some firms may increase international investments when political risk is high (e.g., Holburn and Zelner, 2010; Jiménez et al., 2014).

In this paper, we focus on decisions by MNEs, as to how much to invest in FDI projects. We hypothesize that capital structure, and, more specifically, leverage, serves to condition the extent to which managers are willing to commit financial resources to FDI projects, and especially so in the presence of host country political risks. Our conjecture builds on the close relationship between firm leverage and political risk (Desai et al., 2004; 2008; Kesternich and Schnitzer, 2010), and has roots in broader corporate finance and investment literatures, which establish that capital structure can influence investment in the presence of firm risks (Jensen, 1986; Harris and Raviv, 1990). This literature suggests that leverage plays an important role in disciplining agency costs of over/under investment (Lang et al., 1996; Aivazian et al., 2005; Ahn and Denis, 2006).

We outline, in the *Disciplinary effect*, an important theoretical channel through which leverage influences FDI capital expenditure choices in the presence of political risk. For example, creditor monitoring could play an important role in disciplining investments decisions. Although leverage induces the possibility of firm failure, it may convey a disciplining effect on managerial behavior since the need to repay debt mitigates the agency costs of free cash flow (Jensen, 1986; Harris and Raviv, 1990). Such a disciplining effect could induce greater managerial effort (Jensen, 1986) or, alternatively, sub-optimal investment (Col et al., 2018). The *Disciplinary effect* may be more pronounced in firms with lower growth opportunities, given that slow growing firms have limited investment options (Lang, 1996; Aivazian et al., 2005; Ahn et al., 2006).

We construct a project-level FDI dataset, sourced from *FDI Markets: Cross Border Investment Monitor* (a database provided by The Financial Times). The dataset contains valuable information at the project level, including identification of investing firms and their industries, locations of FDI, FDI type (category), and crucially, the capital expenditures allocated by investing firms to the FDI. Our dataset features outward foreign direct investment (OFDI) by MNEs originating from the United States (U.S.) to over 100 host economies with varying degree of institutional development and political risks. We supplement the FDI dataset with firm-level data from Compustat, and political risk data from the International Country Risk Guide (ICRG-PRS Group). Our final project-level dataset boasts 10,329 FDIs undertaken by 1,135 MNEs from 2003 to 2014.

By capturing financial commitments using FDI project Capex (i.e. the level of capital expenditure per FDI project), and controlling for various firm-specific determinants of FDI and fixed effects (year, FDI project category, industry and country)[2], our main result demonstrates that leverage and political risk[3] are both associated with lower financial commitments. Furthermore,

[2] It is important to note that our dataset follows a pooled structure. Each FDI project has a unique realization (with no repetition). Thus, in our setting, and different from the traditional corporate investment literature, we are unable to apply firm fixed effects.

[3] Our measure of Political Risk, The ICRG Political Risk Index. Higher (lower) values of this measure reflect lower (higher) host country political risk. We discuss this index in detail in Subsection 3.2.

we present evidence of a dynamic interplay between leverage and host country political risk. When political risk is high leverage conveys an especially strong disciplining effect on firms' commitment of financial resources, whereas, as political risk reduces, the effect of leverage loses power and converges to zero at much lower political risk levels. In terms of economic significance, we estimate that when political risk is substantial (for instance, in the case of investments located in the BRIC countries - Brazil, Russia, India and China), a 10% increase in leverage is associated with a 1.7% reduction in FDI Capex. This effect gains significant economic relevance especially when the typical investment is large, such as for manufacturing and extraction FDI and in industries such as oil and gas, energy and automobiles. In sum, leverage constraints political risk exposure, with this effect growing in magnitude as political risk becomes more acute.

Next, we explore channels through which capital structure may influence firms' financial commitments to FDI projects. Since the *Disciplinary effect* may be more pronounced for low growth firms, we interact leverage with a low growth dummy (capturing firms with low Tobin's Q ratios), and find supportive evidence that leveraged firms are less willing to commit larger financial resources to FDI when growth opportunities are low. We view these results as theoretically consistent with the *Disciplining Effect* of leverage on over-investment, since leverage moderates risk-exposure, and especially so when host country political risk is high and growth opportunities low. We also interact leverage with interest coverage, to test whether the *disciplining effect* is stronger when managers are committed to paying higher interest on firm debt. Since risky debt disciplines investment, a riskier debt profile (higher cost) should intensify the disciplinary effect. We find evidence this is indeed the case. Finally, because larger firms may have greater debt capacity and are less resource constrained, we consider the effect of firm size and find that the disciplinary effect of leverage on FDI Capex is significantly weaker (stronger) for larger (smaller) firms.

We also consider several specific FDI project types (categories): manufacturing (characterized by higher sunk costs and lower flexibility); technological (R&D and internet) (which may be

inherently riskier); and sales and retail (relatively more flexible given lower capital commitments). We find that the *disciplining effect* of leverage is stronger for technological and manufacturing FDIs but insignificant for sales and retail investments. Hence, when projects are riskier, and firms incur higher sunk costs and have less flexibility (higher exit barriers), leverage and political risk become increasingly important, with the disciplinary effect of leverage in the presence of political risk further increasing. Thus, the *disciplining effect* varies by project category and host market riskiness.

While our findings are robust to various controls and fixed effects, suggesting they are unlikely to be driven by omitted variable bias, endogeneity can arise in other ways and potentially affect our results. Causality issues may persist if firms adjust leverage as a response to political risk (Desai et al., 2008). To address endogeneity, we exploit plausibly exogenous variation in firm leverage arising from U.S. state-level unemployment insurance benefits (UI). Increases in UI affect firm leverage through their effect on workers' exposure to unemployment risk. By rendering lay-offs less costly, unemployment benefits reduce workers' compensation demands from firms in the event of job loss. Thus, firms located in U.S. states with more generous UI benefits choose significantly higher leverage (Agrawal and Matsa, 2013), making state-level UI benefits a credible source of exogenous variation in firm leverage. Consistent with this, we show that increases in UI benefits are associated with exogenous increases in leverage, and that leverage instrumented through state-level UI benefits has a negative effect on FDI Capex which becomes significantly stronger when political risk is higher. These results provide evidence that our findings are robust to endogeneity concerns.

We also perform batteries of robustness checks. We substitute our main measure of foreign investment (project *ln Capex*) with a measure of the number of jobs created by each FDI project (*ln Employment*), ensuring that our findings are robust to alternative foreign investment measures. We control for several country specific observable characteristics, since although our models

control for country fixed-effects, there may still be country observable effects that correlate with political risk and influence FDI Capex. Our findings remain robust after adding country controls.

We make several contributions. First, we advance understanding regarding the determinants of firms' FDI decisions. By focusing on the role played by capital structure in influencing MNEs' willingness to commit resources to FDI projects in the presence of host country political risks, we contribute to an unsettled debate regarding the role of leverage in influencing international investments. For example, it has been suggested that FDI may exacerbate agency costs of debt due to weaker monitoring (Doukas and Pantzalis, 2003) and that firms may misallocate capital in the presence of foreign political risk (Col et al., 2018). We add to knowledge by identifying, in firm leverage, a novel mechanism conditioning the nature of FDI, which we demonstrate reduces the level of financial commitment to FDI projects.

Second, we contribute to literature analyzing the impact of leverage on firm investments (Lang et al., 1996; Aivazian, 2005; Ahn and Denis, 2006). To the best of our knowledge, we are the first to demonstrate the relevance of leverage as a monitoring mechanism affecting the agency costs of over/under investment in the context of firms' FDI decisions, and also to explore such a rich, detailed and granular FDI database in corporate finance research. We find that the *disciplining effect* varies with host country political risk, firm growth opportunities, financial distress risk and size, and the riskiness of FDI project categories. Given that firm-level determinants of FDI are still little understood, our paper makes an important step in that direction, and adds to understanding on the impact of foreign political risk on investment (Desai et al., 2004; Desai et al., 2008; Kesternich and Schnitzer, 2010; Pástor and Veronesi, 2012; Julio and Yook, 2012, 2016, Azzimonti, 2018; Col et al., 2018).

The rest of the paper is organized as follows. Section 2 reviews literature and formulates hypotheses. Section 3 outlines data, discusses variables and presents empirical methods. Section 4 presents the main results. Section 5 presents additional robustness tests. Section 6 concludes.

2. Literature review and hypotheses development

2.1 Leverage and investment

Tension exists in the relationship between leverage and firm investment. Such tensions attributable to agency costs may have significant implications for FDI and may act to reduce or increase the riskiness and levels of investments of leveraged firms. The debt as a *Disciplinary effect* channel suggests risky debt should exert a disciplining effect on firm management; serving to reduce agency problems and preventing overinvestment (Jensen, 1986). One important source of such discipline relates to external capital market monitoring, which may reduce the likelihood that management expropriates firm rents (Eastbrook, 1984). A separate reason relates to managers' employment risks. Because managers have under-diversified human capital they are exposed to costs associated with firm default, and therefore may behave risk-aversely (Jensen, 1986). Aivazian et al. (2005) and Firth et al. (2008) offer empirical support to leverage having a disciplining role on management by limiting investment. Ahn et al. (2006) present similar findings but add that managerial discretion partially offsets the disciplining effect of corporate debt.

Debt overhang (Myers, 1977) infers that leverage can lead to underinvestment because while shareholders assume the complete costs of investment they anticipate that debtholders receive a proportion of returns from investment. In addition, although the availability of growth opportunities may be expected to be positively associated with firm investment, leveraged firms may underinvest irrespective of the availability of growth opportunities, as predicted by the

liquidity effect (Aivazian et al., 2005). Yet, empirical evidence suggests that the disciplinary role of leverage on firm investment is more pronounced in low growth firms because such firms possess poorer investment options and hence are more likely to make value-destroying investments (Lang, 1996; Ahn et al., 2006). Such findings are consistent with the view that corporate debt works as a monitoring device that curbs over-investment. Hennessy (2004) shows that debt overhang changes the nature of investment as well as constraining it by skewing investments towards short-term assets instead of longer-term assets, while Cai and Zhang (2011) find that increases in leverage are associated with lower stock returns, and that this effect is strongest for high leverage firms.

Based on these arguments, we argue that leverage, through its disciplinary role, should serve to reduce the willingness of firms and managers to commit resources to FDI projects. Formally, we hypothesize:

H1: Leverage is associated with reduced FDI project capex

2.2 Political risk, leverage, and investment

A growing literature looks at the effect of political risk on international investment. However, the exact impact of political risk and leverage on FDI is not clear from existing literature, with the impact of political risk on investment predicted to vary across firms (Pástor and Veronesi, 2012). Moreover, although investments in politically risky host countries might be costly to finance with internal funds, as with any investment, they may (or may not) be compensated with higher expected returns (Bekaert et al., 2016). For instance, Barbopoulos et al. (2014) find that stock returns that follow announcements of cross-border investments to be significantly higher for FDI in countries where political risk and expropriation likelihood are actually higher. Billett and Mauer (2003) show that political risk, which impacts on the perception of the riskiness of firm cash flows, is positively related to the return investors demand on investment. Consistent with this, Barro (1991) provides empirical evidence attributing cross-country differences in investment rates to

political risk. Hence, it is generally accepted that FDI into politically riskier countries commands a higher expected return as to offset the higher risks posed by political instability.

Therefore, political risk may be associated with lower FDI, which is consistent with conventional wisdom (Holburn and Zelner, 2010). Indeed, a majority of studies present evidence that political risk should be associated with lower investment (e.g., Pástor and Veronesi, 2012, 2013; Julio and Yook, 2012, 2016; Azzimonti, 2018). Pástor and Veronesi, (2013) outline a theoretical model in which political uncertainty increases the volatility of firms' market value, and especially so when economic conditions are weaker. Julio and Yook, (2012) demonstrate that firms respond to the political uncertainty associated with election cycles by cutting investment, and that this effect is stronger in countries more prone to government expropriation. Julio and Yook (2016) show similar findings in the context of US firms OFDI flows to foreign affiliates, while Col et al. (2018) find that political uncertainty in host countries negatively affects the market valuations of US firms as well as total factor productivity. In terms of FDI, Azzimonti (2018) document that political risk negatively effects FDI. Holburn and Zelner, (2010) argue that the willingness of firms to accept host country political risk may depend on firms' home market, with firms originating from countries with (less) more stable institutional environments less (more) likely to invest in politically riskier economies. Consistent with this, Flores and Aguilera (2007) show that U.S. firms are more likely to locate FDI in countries with similarly strongly developed political and legal institutions as the U.S.

More generally, Slangen and Beugelsdijk (2010) consider the impact of both host country cultural and formal institutional hazards, and find that formal institutional hazards, which stem from factors including government stability and corruption, convey a stronger negative impact on firms' international investments. Busse and Hefeker (2007) also demonstrate the importance of government stability and control of corruption, as well as rule of law for FDI country inflows. In addition, several studies explore the role of firms' experience in investing in politically risky

economies. Using data on the market entry of Spanish firms from regulated industries into Latin American countries from 1987-2000, Garcia-Canal and Guillén (2008) find that Spanish firms become increasingly conservative and less likely to invest in politically risky economies as they gain experience of such investments. Delios and Henisz (2003) show the opposite in the context of Japanese manufacturing firms' international expansions, with firms becoming less sensitive to host country political risk through international experience. Overall, this strand of literature indicates that to mitigate political risk firms tend to choose low resource commitment strategies (Oetzel and Oh, 2014; Slangen and Beugelsdijk, 2010). Based on this discussion, we hypothesize:

H2: Host country political risk is associated with reduced FDI project capex

Host country political risk may also influence the extent to which the *disciplining effect* of leverage conditions the willingness of managers to commit resources to FDI projects. Yet, how exactly this effect might operate is theoretically and empirically unclear. For example, Bekaert et al. (2016) argue that firms may be less likely to use appropriate project valuation techniques when considering investments into high political risk countries, leading to inaccurate estimations of the cost of capital. Moreover, although there is some evidence showing that MNEs may adjust leverage downwards subsequently to risky foreign investments—especially in countries afflicted by higher political risk (Desai et al., 2008). It has also been reported in the literature that political risk can increase the use of debt as opposed to equity in the capital structure of foreign affiliates (Kesternich and Schnitzer, 2010), and that foreign subsidiaries located in politically risky countries use more debt than their parent company (Desai et al., 2004).

Separately, Giambona et al. (2017) find that managers who are more concerned with shareholder welfare are less likely to locate FDI in politically risky economies. Moreover, several studies also argue that because non-local monitoring of foreign political risk is more challenging this may increase the return creditors require on international investments in countries

characterized by higher political risks (e.g., Doukas and Pantzalis, 2003). For instance, the over-investment hypothesis posits that leverage disciplines managers' proclivity to undertake excessively risky and/or value-destroying investment with negative NPVs (Lang, 1996; Aivazian et al., 2005). Since higher political risk might render expected returns much higher, so as to offset the risks of expropriation and investment failure more broadly (Butler, 1998; Bekaert et al, 2016), FDI projects into politically risky countries might expose MNEs to fairly higher levels of riskiness. This way, leverage might be an efficient mechanism to constrain risky foreign investment through its monitoring role on management, especially when political risk is higher. Yet, the extent to which political risk might condition the effect of leverage on FDI Capex might also depend on the ability of investing firms to diversify (protect) against political risk and its consequences (Butler and Joaquin, 1998; Barbopoulos et al., 2014; Bekaert et al., 2016; Lin et al., 2019).

Based on this discussion, we conjecture that while leverage and host country political risks should both singularly influence the willingness of managers to commit financial resources to FDI projects, there may also be an interactive join effect. That is, when considered jointly, host country political risk should intensify the *disciplining effect* of leverage on the propensity for managers to commit firm resources to FDI projects, thereby further conditioning managerial investment as political risk increases. It is well-known that leverage limits particularly risky investments that likely lead to poor performance (Firth et al., 2008). As political risk, by the reasons discussed, might amplify the risk of investment failure, the disciplining role of leverage might gain stronger relevance. Thus, the main reason why the disciplining effect of leverage might be intensified by higher political risk is because political risk exacerbates investment risk even further, thus making monitoring by leverage more important. We therefore hypothesize that firm leverage and host country political risk should interact, with increases in political risk serving to reinforce the effect of (increased) leverage on the willingness of managers to commit financial resources to FDI projects:

H3a: The negative effect of leverage on FDI capex is stronger when political risk is higher

Alternatively, the effect of leverage on FDI capex may not be stronger when political risk is higher. For instance, the extent to which political risk might condition the effect of leverage on FDI Capex might also depend on the ability of investing firms to diversify (protect) against political risk and its consequences (Butler and Joaquin, 1998; Barbopoulos et al., 2014; Bekaert et al., 2016; Lin et al., 2019). Furthermore, managers and equity-holders could exploit the benefits of investing in politically risky locations, which accrue to all stakeholders, by shifting expropriation risks associated with higher agency costs to debt-holders, as a manifestation of the asset substitution problem. Such risk-shifting or "asset-substitution" effects may be compounded when firm leverage is high and thus assets available to debt holders are low, and, therefore, could encourage managers to commit greater financial resources to risky investments (Acharya, Le and Shin, 2017). In addition, such effects may be stronger if MNEs' investors hold well diversified portfolios. In such cases, investments by individual firms in politically risky economies may be of little concern to investors if country-specific political risks are weakly correlated with political risk elsewhere (Butler and Joaquin, 1998). If true, shareholders may only be weakly exposed to potential increases in firm risk that may occur following investments in high political risk economies, whilst they stand to gain from potential redistributions of firm value from debtholders to shareholders. These alternative arguments would infer that the disciplining effect of leverage on the willingness of managers to commit financial resources to FDI projects would not necessarily be stronger for higher political risk countries. Thus:

H3b: The effect of leverage on FDI capex is not moderated by political risk

3. Data and research design

The dataset employed in this study is constructed from project-specific FDI data sourced from *FDI Markets: Cross border Investment Monitor* (an online database provided by The Financial Times)[4]. The FDI markets dataset represents a uniquely rich database on FDI, which provides details of cross-border Greenfield investments in all industries and countries worldwide. This dataset has been widely employed in the international business and economics research (e.g., see Castellani and Lavoratori, 2020; Desbordes and Wei, 2017; Duanmu, 2014). To the best of our knowledge, this is the first study to explore such a rich FDI database in corporate finance research.

The FDI Markets dataset provides granular FDI information at the project level. The dataset features the identification of the investing firms and their industry, the country where the FDI is originated and located, the purpose (type) of investment (manufacturing, R&D, sales, retail, etc. – see Appendix A1 for a comprehensive list of FDI types), the capital expenditures allocated by firms to the project and the number of employment posts generated by the FDI. We collect from this database data on outward FDI by MNEs originating from the United States to over 100 countries. Since this database contains project, but, crucially, not firm information, we meticulously hand-match individual firms and FDI projects to build a firm and project-level dataset capturing the FDI choices of publicly listed US firms. To this dataset, we then match firm-specific financial data sourced from Compustat North America and political risk data sourced from ICRG-PRS Group Our final project-level pooled dataset consists of 10,329 investments, undertaken by 1,135 MNEs from the U.S., covering a substantial period of 11 years, between 2003 and 2014.

[4] The FDI Markets database has been widely employed by UNCTAD, the Economist Intelligence Unit as well as investment promotion agencies, other development institutions and increasingly in scholarly research. For further details on the database itself we refer the reader to the provider's website: https://www.fdimarkets.com/

3.1 Dependent variable

The dependent variable in our main empirical analysis is the natural logarithm of *Capex*. For each FDI project recorded, the dataset includes valuable information on the amount of capital expenditures committed by firms to FDI projects, measured in USD million. Our measure of foreign investment is consistent with extant literature who employed the same dataset. For example, with Duanmu (2014) who used *Capex* at the project-level, and Desbordes and Wei (2017) who also utilized project *Capex* to build an aggregate industry FDI measure. In our study, we follow Duanmu (2014) and employ *Capex* at project-level. Specifically, $\ln Capex_{pict}$ is the natural logarithm of the amount of capital expenditure allocated to project *p* by firm *i* to an FDI located in country *c* in year *t*.

3.2 Explanatory variables

There are two main explanatory variables in our analysis. The first one is firm leverage (LEV_{it}), calculated as total debt scaled by total market capitalization (Agarwal and Matsa, 2013; Antoniou et al., 2008). The second one is the host country's political risk ($Polrisk_{ct}$). We assess countries' exposure to political risk by employing the ICRG Political Risk Index as a benchmark—a political risk measure well established in existing literature. Several studies in the finance, economics and international business literatures have employed the ICRG index to capture political risk, empirically demonstrating the reliability of the measure (e.g. Desai et al., 2008; Click and Weiner, 2010; Bekaert et al., 2014; Henisz, 2000; Kesternich and Schnitzer, 2010). The ICRG Political Risk index has 12 components, summing up to 100 points: Government stability, socio-economic conditions, investment profile, internal conflict, external conflict, corruption, presence of military in politics, religious tensions, law and order, ethnic tensions, democratic accountability and

bureaucracy quality.[5] Higher ratings (scores) in the index are associated with lower levels of political risk. To facilitate the interpretation of the coefficients in the empirical analysis, we divide the Political Risk index by 100 as to express the variable in a [0-1] interval, such that country political risk and firm leverage are measured in similar units.

3.3 Control variables and fixed effects

We control for various firm-specific factors expected to influence the relationship between firm capital structure and FDI capital expenditures. An important control variable is firms' growth opportunities, captured by Tobin's Q (Almeida and Campello, 2007), which is computed as the market value of equity plus the book value of debt, scaled by total assets. The impact of Tobin's Q on firm investment is theoretically unclear. The underinvestment problem (Myers 1977) predicts that in leveraged firms, managers underinvest even when growth opportunities are present, leading to loss of firm value. In support, Gutiérrez and Philippon, (2017), employing data on U.S. firms from 2000-2015, show that shocks to the Tobin's Q ratio lead to lower investment and investment in less risky investments, even when Tobin's Q is high. Conversely, other studies suggest that underinvestment becomes less likely when Tobin's Q is higher. For example, Lang et al. (1996) show that leverage is associated with underinvestment only in low Tobin's Q firms. The overinvestment problem, instead, typically associates lower investment for leveraged firms with lower Tobin's Q (low growth), with leverage serving to discipline investment (Aivazian et al, 2005).

We also control for firm size (natural logarithm of total assets), since larger firms might be more prone to undertake FDI (Markusen, 2002). Following the investment literature (Aivazian et al., 2005; Firth et al., 2008), we further account for cash flows (EBITDA/Assets) and for sales conditions (Sales/Assets). We control for asset tangibility (PPE/Assets) since firms relying more

[5] For more details we refer the reader to the ICRG methodology: https://www.prsgroup.com/wp-content/uploads/2012/11/icrgmethodology.pdf

on fixed capital might, naturally, make larger investments, further following evidence that tangible assets affect firm investment through leverage by supporting more borrowing (Almeida and Campello, 2007). To account for financial distress risk, which could impact borrowing capacity (Agarwal and Matsa, 2013), we control for interest coverage (Interest Expenses/EBITDA).

Moreover, we control for cash holdings/'financial slack' (Almeida and Campello, 2007) since firms' cash holdings represent a buffer against internal and external shocks. In particular, cash holdings represent an important source of internal funds, especially when free cash flows are insufficient to meet demand for capital (Denis and Sibilkov, 2010). We include a control for dividend pay-out. Denis and Sibilkov (2010) show that older and lower growth firms are more willing to pay dividends in order to prevent overinvestment, whilst younger and faster growth firms are less likely to pay dividends. We employ a dummy equal to 1 for dividend payers (dividends greater than zero) and equal to 0 otherwise. We control for innovation using R&D expenditure, a common proxy for firm risk-taking (e.g., Eberhart et al., 2008), which may be viewed as representing a trade-off between firm growth and risk reduction. Because R&D investments increase uncertainty surrounding firms' future cash flows, risk-averse managers may choose to invest less in R&D. However, less risk-averse managers, and those with objectives more closely aligned with equity-holders, may invest more in R&D.[6] Given the usual pattern often found in the literature with several firms recording missing values for R&D, we measure it as a dummy equal to 1 for firms undertaking R&D (non-missing) and equal to 0 otherwise.

We control for variables capturing MNEs' existing FDI portfolio. First, since experience might help firms to progressively deal with the threats arising from higher levels of political risk (Oetzsel and Oh, 2014) we include a dummy variable equal to 1 if firms have already located FDI in the host country, and equal to 0 otherwise. We add the total number of MNEs projects in the same

[6] An alternative view is that increased R&D expenditure may act to diversify firm risk.

year (FDI Portfolio) to capture firms' concomitant overall exposure to the riskiness of FDI. The larger the number of concomitant investments, higher is the outstanding risk running from foreign operations, and this could affect how much capital firms are commit to individual projects.

The last set of control variables capture a number of potential sources of unobserved heterogeneity at various levels, which might affect MNEs' FDI decisions (Alcácer and Delgado, 2016). We include a vector of country dummies to absorb country-level unobserved heterogeneity. By imposing a country fixed effect, we properly identify the effect of a country's political risk on FDI *Capex* by examining how within-country changes in political risk affect firms' FDI Capex. Since the FDI project-specific category (manufacturing, distribution, R&D, sales, etc) might affect investment (Alcácer and Delgado 2016), we include a vector of fixed effects absorbing project category. Industry is another salient factor, since some industries might have greater proclivity towards, both, internationalization of activities and also more leveraged capital structures. Hence, we include an industry fixed effect. We also control for business cycle effects, as a factor affecting MNEs' appetite for risk when investing abroad, by including year fixed effects[7].

3.4 Descriptive statistics

Table 1 presents firm-level descriptive statistics for all variables (additional FDI statistics are shown in *Appendix A:* A1, which includes statistics by FDI type and in A2 by Industry). Firms in the sample allocate, on average, 69 USD millions of Capex to each FDI project. Yet, there is substantial heterogeneity in investment. Inspecting Tables A1 and A2 we can see that Capex is strongly determined by the type of FDI and by industry. For example, among the most important FDI types (categories), the average Capex for Manufacturing FDI (with nearly 3,000 projects) is at 123 USD MM, whereas for Sales (with nearly 2,000 projects), the average Capex is much lower

[7] As previously mentioned in the introduction section, it is noteworthy that our dataset follows a pooled structure, with each FDI project having a unique realization (with no repetition). Thus, differently from the traditional corporate investment literature, we can not apply firm fixed effects.

at 6.5 USD MM. In other less representative types (like Extraction and Electricity), Capex is much higher. Regarding industries, we can see from Table A2 that Coal and Gas, Real Estate, Automotive and Alternative Energy are examples of industries where Capex is typically high. These stylized statistics reinforce the importance of controlling for FDI type and industry fixed effects in our empirical model.

In terms of employment, the average FDI project generates 198 employment posts. Firms, on average, undertake 9 concomitant FDIs per year, with 32% of projects being located in countries where the investing firm has previously invested. The average firm leverage ratio is 0.36 (36%). Country-level Political risk is on average 0.73 (out of a maximum of 1).

Table 2 presents FDI data and country averages for *Political Risk*. We show country-level data for the Top Emerging and Developed economies destinations (the full set of countries are listed in *Appendix B*). Amongst emerging economies, China (1,471), India (955), Brazil (352) and Mexico (334) are the most important recipients of FDI. Amongst developed economies, United Kingdom (751), Germany (409), Canada (399) and France (376) are the leading host economies. We also present stylized statistics comparing the levels of political risk across countries. Emerging economies obtain, on average, lower scores for the index, being exposed to systematically higher levels of political risk (average 0.68) when compared to developed economies (average 0.82).

3.5 Empirical model

We examine the effects of firm leverage and country-level political risk on the FDI's *Capex* by estimating the following pooled model via OLS (Ordinary Least Squares):

$$lnCapex_{pict} = \beta_1 LEV_{it} + \beta_2 Polrisk_{ct} + \beta_3 LEV_{it} * Polrisk_{ct} + \boldsymbol{\beta'_n X'_{it}} + \alpha + \delta_f + \theta_j + \varphi_c + \tau_t + e_{it} \quad (1)$$

In the empirical equation, $ln\,Capex_{pict}$ is the dependent variable, measured as the natural logarithm of the FDI's project *Capex*. The main variables of interest are LEV_{it} (firm leverage) and $Polrisk_{ct}$ (country political risk), and an interaction term between these two variables, which allows us to examine the dynamics between leverage and political risk on the level of capital expenditure committed by firms in FDIs. According to our proposed hypotheses, we expect $\beta_1 < 0$, as per the disciplinary role of leverage, $\beta_2 > 0$, reflecting higher investment in countries with lower political risk (recalling that a higher score in the political risk scale reflects lower levels of political risk), and $\beta_3 > 0$, capturing a stronger (weaker) disciplinary role of leverage in countries with higher (lower) political risk.

We account for a number of firm control variables, as previously described, which are summarized by the vector $\boldsymbol{X'_{it}}$. These are: Tobin's Q, firm size, cash flows, sales, asset tangibility, interest coverage, cash holdings, dividends, R&D expenditures, country investment experience and the firms' total concomitant investments. The parameters $\alpha, \delta_f, \theta_j, \varphi_c, \tau_t$ are the models' constant (α), FDI type (δ_f), industry (θ_j), country (φ_c) and temporal (year) (τ_t) fixed effects, respectively. Importantly, by accounting for country fixed-effects, we examine how within-country changes in political risk affect firms' FDI Capex decisions, absorbing unobserved country characteristics (we also test some potentially important country control variables in the robustness checks section later on in the paper). We allow for within-firm correlation in the error term by employing firm clustered standard errors.

4. Results

4.1 Main results

Estimation results are reported in Table 3.

[Insert Table 3 here]

We begin by commenting on the model reported in column (1), which is an initial specification including firm leverage, country political risk and the interaction of these two variables. The effect of firm leverage on FDI Capex is statistically significant and negative. This result corroborates hypothesis H1. The effect of political risk is significantly positive. Since higher scores on the political risk scale reflect lower levels of political risk, this finding indicates that firms commit larger resources to FDIs located in countries with lower political risk, corroborating hypothesis H2.

The interaction of firm leverage and country political risk is significantly positive. Figure 1 plots the marginal effects of the interaction between leverage and political risk. The interaction has an upward shaped slope. When the score in the political risk scale is low (high political risk), leverage has a significantly negative effect on FDI Capex. As the score in the political risk scale increases (i.e. with political risk becoming lower), the effect of leverage loses power, converging to zero at very low levels of political risk. More specifically, the effect of leverage on FDI Capex is significantly negative for all political risk ratings up to roughly 0.70. For the political risk ratings above this threshold and until very low levels of political risk (ratings at about 0.90), the effect of leverage turns insignificant (the confidence intervals are strongly tangent to 0). Interestingly, in exceptional circumstances such as countries with extremely positive political risk ratings (at about 0.95, where political risk seems negligible – the cases of Luxembourg and Finland, for instance), there is some probability that the effect of leverage on FDI might turn actually positive (the confidence interval is tangent to zero but weakly significant). But these are exceptional and isolated cases. Overall, the main conclusion from this analysis is that the extent to which leverage conditions capital allocation, and thereby conveys a disciplinary effect on FDI, depends critically on political risk. Such effect tend to be more pronounced in countries with fairly high political risk but lose power and fade when countries are more politically stable. Thus, the effect of leverage becomes stronger (weaker) in countries where political risk is higher (lower), corroborating hypothesis H3a.

[Insert Figure 1 here]

By further examining Figure 2, we can assess the economic significant of our results. We plot the elasticity of FDI Capex to leverage for varying degrees of political risk.[8] From our previous analysis, we saw that the effect of leverage is particularly relevant when political risk is typically stronger, such as in emerging economies. To gauge the economic relevance of such effects, we estimate the effect of leverage when political risk is at 0.65, which is, for instance, the average political risk rating of the BRIC countries (Brazil, Russia, India and China). These countries are quite representative in our sample, since together they account for about 3,000 investments, and over the years have become important destinations for developed markets' MNEs.

When political risk is at 0.65, the elasticity coefficient of FDI Capex with respect to leverage is equal to -0.17. Thus, we estimate that a 10% increase in leverage is associated to a 1.7% reduction in FDI Capex.[9] The economic significance of this effect should be caveated, as its magnitude depends critically on the size of the typical investment and on the industry. Furthermore, considering that firms undertake multiple investments such effect can gain more or less relevance depending on the size of investing firms. For instance, evaluating the effect at Capex's sample mean (USD 70 million), the reduction in Capex associated with a 10% increase in leverage is roughly 1.2 USD million (which might not be that substantial). Yet, for an average manufacturing FDI project (average at 123 USD million), the reduction in investment increases to about USD 2.1 million. For a typical FDI in the Gas industry (average Capex at 652 USD million), the estimated reduction is USD 12 million. For an average extraction FDI project (average at 1,200 USD million), the reduction would be much larger at about 20.4 USD million.

[8] The elasticity returns the % change in the dependent variable for a 1% change in the explanatory variables.
[9] For instance, there is a 28% difference in leverage between highly leveraged firms at the 75th percentile of leverage's distribution (leverage at 30%) compared to lowly leveraged firms at the 25th percentile of the distribution (leverage at 2%). The 28% increase in leverage between highly versus lowly leveraged firms is associated with a 4.7% reduction in FDI Capex. For the average Capex in the sample (USD 70 million), this reads as a USD 3.3 million lower investment.

[Insert Figure 2 here]

Discussing our findings with respect to existing literature, our results are theoretically consistent with the *Disciplinary effect* of leverage channel. The sensitivity of investment to leverage is typically negative (Lang et al., 1996; Aivazian et al., 2005), consistent with the view that leverage mitigates the agency costs of investment. Aligned with this literature, our results indicate that highly leveraged firms make more parsimonious foreign investments by limiting their capital expenditures. By doing so, firms commit lower resources to risky FDI projects.

Furthermore, while we find that firms also commit lower resources to investments located in countries with higher political risk (Garcia-Canal and Guillén, 2008; Holburn and Zelner, 2010; Oetzel and Oh, 2014), in the presence of acute political risk, firm leverage exerts an even stronger disciplinary effect on investment by preventing firms from increasing political risk exposure.

In column (2) we further include a number of control variables that could correlate with firm leverage and also affect FDI Capex. We start by adding a first block of main controls. Consistent with the investment literature, we find a significantly positive effect of Tobin's Q on Capex. Thus, firms with higher growth opportunities make more sizeable foreign investments. As expected, larger firms invest significantly more, and the same holds for firms with higher asset tangibility ratio and with better sales conditions. The sensitivity of Capex to cash flows is negative, though. While a positive sensitivity of investment to cash flows is more common in the literature, such negative effect might be particularly linked with our FDI-based setup. Given FDI is a strategic alternative for firms to access new markets and thus improve their performance, it might be that less profitable firms, in more pressing need to find new markets to expand and explore novel growth opportunities, might be more likely to make larger investments to earn higher returns.

In column (3) we include an additional block of control variables. We do not find any significant effect of interest coverage and cash holdings on FDI Capex. Yet, we find that riskier

firms that undertake R&D investments, as well as dividend payers, tend to make marginally smaller FDI investments. Regarding firms' FDI portfolios, we find that a larger number of concomitant FDI projects are associated with significantly lower project Capex. As expected, we find that firms with pre-existing experience in investing in the host economy make larger investments. Importantly, our findings remain robust despite controlling for additional variables and accounting for several sources of unobserved heterogeneity at country, industry, FDI type and year levels.[10]

4.2 Channels through which leverage influences FDI Capex

In this section, to further corroborate the consistency and the underlying logic of our main findings, we analyze several firm-level (Subsection 4.2.1.) and project-level (Subsection 4.2.2.) channels of influence through which leverage may influence the willingness of managers to commit financial resources to FDI projects (FDI Capex).

4.2.1 Firm level channels

We begin by focusing on firm-level channels. To this end, we employ interactions between firm leverage and several variables: firm growth, interest coverage and size. Table 4 reports these additional findings.

[Insert Table 4 here]

The disciplinary effect of leverage suggests risky debt should exert a monitoring role on firm management, serving to reduce agency problems and preventing over-investment (Jensen, 1986). The proclivity to over-invest is typically more pronounced for low growth firms (Aivazian et al., 2005; Lang et al., 1996). To test for the role of leverage in disciplining over-investment, we include an interaction between leverage and a dummy variable capturing low growth firms (those firms within the 25th percentile in the sample distribution of Tobin's Q). As per the findings reported in

[10] In untabulated results, we find robust results when scaling the FDI Capex by Total Assets (although scaling is not essential since FDI Capex and firm size are only weakly correlated, and we do control for size in the models).

column (1), the interaction of leverage and the low-growth dummy is significantly negative. Therefore, the negative impact of leverage on FDI Capex is significantly stronger for firms experiencing lower growth opportunities. This finding further corroborates the disciplinary role of leverage on firms' proclivity for over-investment as an important theoretical channel.

In column (2) we include an interaction between leverage and interest coverage. The logic is to verify whether the disciplinary role of leverage on FDI Capex is stronger when firms pay higher interest on their debts. If firms have to commit a higher share of their cash flows to repay debt, firms' borrowing capacity is likely affected, with financial distress risk surely increasing. Since risky debt disciplines investment, the riskier is the debt profile (higher cost), the stronger the disciplinary effect should be. We find a significantly negative interaction of leverage and high interest cost (firms within the 75th percentile of Interest/EBITDA's distribution). Therefore, the negative impact of leverage on FDI Capex is stronger for firms that commit a higher proportion of cash flows to repay their outstanding debts, hence, having a riskier and costlier debt profile.

Lastly, in column (3) we look at the interaction of leverage and firm size. Since larger firms control more resources and have greater borrowing capacity, the effectiveness of leverage as a disciplinary channel might be marginally less relevant since managers control more resources and might have more options and resources to service debt, even if they still make risky investments. Consistent with this view, we find a significantly positive interaction of leverage and large firms (those firms within the 75th percentile of Total Assets' distribution). Thus, the disciplinary effect of leverage on FDI Capex is significantly weaker (stronger) for larger (smaller) firms.

4.2.2 Project level channels

Next, we explore the influence of project type (category) on investment by testing triple interactions of Leverage*Political Risk*FDI Type. Although our main findings are unaffected by project type (since we employ a project type fixed effect), by running this test we are able to

examine whether the joint effect of leverage and political risk on Capex varies across different FDI types. We look at three particular FDI types: manufacturing, for having higher sunk costs and relatively lower flexibility; technological investments (R&D and internet), for being inherently riskier; and sales and retail, for being relatively more footloose given the lower capital commitment. Table 5 shows the results.

[Insert Table 5 here]

Column (1) presents the interaction of leverage, political risk and the dummy capturing manufacturing investments. The triple interaction is significantly positive, which indicates that the joint effect of leverage and political risk becomes stronger for manufacturing projects. Thus, when firms incur higher sunk costs and have less flexibility (higher exit barriers), leverage and political risk become increasingly important, with the disciplinary effect of leverage in the presence of political risk further increasing. Column (2) shows the interaction of leverage, political risk and the dummy for technological investments. We find again a significantly positive interaction, suggesting the disciplinary role of leverage in the presence of higher political risk is even stronger for technological FDIs, which are naturally riskier. Lastly, column (3) reports the interaction of leverage, political risk and purely commercial (sales and retail) investments. The interaction is marginally insignificantly ($p=0.10$) negative. Thus, when FDI carries less sunk costs (the average Capex of these investments is much lower) and features higher flexibility (it is easier to close a shop than a factory to exit a country), the joint effect of leverage and political risk is lower or even absent. Our results in this section are consistent with Janeba (2002) who outline a theoretical model of FDI, which offers a potential explanation as to why some earlier studies failed to find a strong role for political risk as a main determinant of FDI into specific countries. Specifically, he suggests that certain more footloose industries may explain insignificant findings regarding the impact of political risk on international investment in earlier literature given that firms from these industries are more likely to have simultaneous investment and production in multiple locations and have

greater flexibility. However, as noted by Janeba (2002), plants still tend to be located in countries with lower political risk. Importantly, this section provides evidence of heterogeneous effects of leverage and political risk depending on the type (category) and the risky nature of the FDI project.

4.3 Addressing endogeneity

The relationships between firm leverage, political risk and FDI may be potentially endogenous. This could occur because firms might adjust leverage as a response to foreign political risk (Desai et al., 2008). To address endogeneity, we build on the labor and finance literature and employ Unemployment Insurance benefits (UI) as a source of exogenous variation in leverage.

Increases in UI affect the financing structure of firms through their effect on workers' exposure to unemployment risk. Specifically, more generous state-level unemployment benefits make lay-offs less costly, thereby reducing workers' compensation demands from their employers in the event they face unemployment (Agrawal and Matsa, 2013). As shown by Agrawal and Matsa (2013), firms located in U.S. states offering more generous UI benefits employ significantly higher leverage. Therefore, more generous state-level UI are associated with higher firm leverage ratios, making state-level UI benefits a credible source of exogenous variation in firm leverage. To measure UI benefits, we employ the weekly maximum UI payments at the state-level.

First, to validate UI benefits as a credible source of exogenous variation in firm leverage, we regress leverage against the lagged UI maximum benefits payments (Ln Maxben[t-1]) as per the model:

$$LEV_{it} = +\beta_1 Ln\ Maxben_{st-1} + \boldsymbol{\beta_n} Controls_{it} + \alpha + \sigma_s + \theta_j + \tau_t \quad (2)$$

Following Agrawal and Matsa (2013), we control for common determinants of leverage: Growth opportunities (Tobin's Q), firm size (ln Assets), profitability (ROA) and asset tangibility (PPE/Assets). The parameters $\boldsymbol{\alpha}, \sigma_s, \theta_j, \tau_t$ are the models' constant ($\boldsymbol{\alpha}$), state (σ_s), industry (θ_j) and

temporal (τ_t) fixed effects, respectively. Importantly, by accounting for state fixed-effect, we examine how changes in UI benefits affect firm leverage, net of (absorbing) state unobserved characteristics. We also test as robustness check a model with a firm fixed effect. The results are shown in Table 6.

[Insert Table 6 here]

In column (1) we show a first specification accounting for state, industry and year fixed effects. We find a significantly positive effect of Ln Maxben [t-1] on firm leverage, in line with the results reported by Agrawal and Matsa (2013). In column (2) we impose firm fixed effects, finding that UI benefits significantly increase firm leverage once more. Thus these results establish the relevance of the IV, since they show that UI benefits payments can significantly predict increases in leverage.

[Insert Table 7 here]

Next, in Table 7, we return to our FDI Capex model, as per Equation (1), where FDI Capex is modelled as a function of firm leverage instrumented by the UI benefits and country political risk. Following a similar setup as adopted by Aivazian et al. (2005), we estimate a first-stage regression, and then use the value of leverage as predicted by the IV in the second stage, with Leverage (predicted) entering the model both alone and interacted with political risk. We find robust results (equally with and without state fixed effects) showing that leverage significantly reduces FDI Capex and further exerts a significantly stronger effect on foreign investment conveyed through its interaction with political risk. In all, these results provide compelling evidence on the disciplinary effect of leverage on FDI, being robust to endogeneity concerns.

However, one additional source of endogeneity, worthy of further discussion, is whether selection bias might affect our findings. One important source of such endogeneity relates to

whether MNEs' past exposure and experience of political risk may influence current FDI in the presence of political risk. A number of prior studies associate past exposure with greater conservatism- inferring both a lower likelihood of investing in politically risky economies (e.g., Garcia-Canal and Guillén, 2008; Bekaert et al., 2016) (i.e. the first stage or where to invest decision) as well as a greater probability of lower resource commitments in international investments (e.g., Oetzel and Oh, 2014; Slangen and Beugelsdijk, 2010) (i.e. in our setting the second stage or how much to invest decision). In the context of FDI, we consider that this would imply that a firm's previous international experience with political risk may be associated with a lower probability that they choose to locate an FDI project in a high political risk country, and similarly, once a decision where to invest has been made, a lower likelihood that managers are willing to commit financial resources to FDI projects. We consider that this would be entirely consistent with our main findings, and importantly the impact of prior experience encouraging managerial conservatism in FDI in the presence of political risk, is likely to only intensify the disciplining effect of leverage channel we present. Moreover, we include a control variable in our regressions (Country experience dummy) which absorbs the effect of prior experience on the FDI Capex. We find that prior experience in a country is also associated with higher investment after controlling for political risk (consistent with Delios and Henisz, 2003 who show similar in the case of outward FDI by Japanese manufacturing firms, but opposite to Garcia-Canal and Guillén, 2008, who look at outward FDI by Spanish firms in regulated industries)[11]. Importantly, we emphasise here, that the effect of prior experience operates independently from political risk, which renders the effects of both political risk and of leverage orthogonal to past locational experience. Therefore, to some extent, whether the firm has chosen the same country in the "first stage" at some point in the past

[11] If our sample was severely affected by selection issues, a consequence would be to observe some industries (those less prone to leverage, for instance) under-represented in our sample. This is not the case. As we show in Table A.2, we record FDI projects across a vast array of industries with quite heterogeneous characteristics (from capital intense industries like Gas to tech industries like Software). At any rate, any potential conditioning effect of selected industries would be washed out by the industry fixed effect we employ.

is controlled for in our empirical model (although we are unable to explicitly model this decision due to data limitations), hence unlikely to induce omitted variable bias nor to overturn our findings. Therefore, our findings are unlikely driven by selection issues related to location.

Our results also seem consistent with related evidence, including Doulas and Pantzalis (2003), who argue that MNEs are likely to be subject to greater agency costs than domestic firms. With one reason being that international investment makes it harder and costlier for investors to monitor, which is consistent with the main arguments and supportive evidence in our study that leveraged firms are both less likely to locate in politically risky countries as well as less likely to commit resources when decisions to invest have been made. Finally, since managerial risk-aversion may, on aggregate, be expected to decrease the willingness of managers—especially those of leveraged firms—to both invest in politically risky economies and to commit more resources to projects in such countries, our use of U.S. state-level shocks to unemployment insurance benefits (UI) as a shock to firm leverage (Agrawal and Matsa, 2013) also has the effect of introducing exogenous variation in the willingness of managers to invest in the presence of host country political risk. It is also independent of whether firms have previously located in politically risky economies. Importantly, the direction of this effect is expected to follow that of any changes to firm leverage i.e. firm managers may react to an increase (decrease) in state-level UI by either increasing (decreasing) firm leverage and/or by reducing investments in politically risky economies. Given that managers may exhibit heterogenous responses to some degree in the cross-section, we believe that irrespective of which managerial action dominates, it would still result in the main findings we document.

5. Robustness checks

5.1 Labor employment as a proxy for investment

In this subsection, we run robustness checks by relaxing our measure of foreign investment. We replace *ln Capex* with *ln Employment* (the natural logarithm of the number of employment posts generated by the FDI). The, we re-estimate Equation (1). Results are shown in Table 8.

[Insert Table 8 here]

As per the results reported in column (1), we find that leverage has a significantly negative effect on the FDI's employment. Firms employ more (less) workers in FDIs located in countries with lower (higher) political risk. Moreover, we find a significantly positive interaction of leverage and political risk, indicating that the disciplinary effect of leverage on employment investment is stronger (weaker) in countries with higher (lower) political risk. These findings remain robust after controlling for the same control variables previously employed. Therefore, firm leverage and country political risk affect not only capital allocation, but also employment in the host economy. Importantly, our findings are robust to alternative foreign investment measures[12].

5.2 Controlling for country observable characteristics

Since our empirical model includes a country fixed effect, we provide important evidence on how within-country changes in political risk affect how much capital firms allocate to FDI projects. Furthermore, our findings are robust to potential endogeneity from omitted variable biases arising from unobserved country effects. Yet one remaining concern is that there might be country observable effects correlating with political risk and affecting FDI Capex. In this section, we mitigate such possible concerns by controlling for several country observable characteristics.

Our model now accounts for main factors suggested in the international economics and international business literatures as potentially affecting FDI. In particular, we control for market

[12] In untabulated findings, we obtain robust results when scaling FDI employment by firms' total number of employees.

size employing the natural logarithm of GDP (Duanmu, 2014); for income levels by employing GDP per capita (Yeaple, 2009); for contiguous borders (Navaretti et al., 2006); for corporate taxation (Desai et al., 2004; Wheeler and Mody, 1992) employing the corporate tax rates from auditing company KPMG; for host country's currency conditions (Duanmu, 2014) by employing the ICRG Currency Stability index; for the existence of bilateral investment treaties (BIT) between the home and host economy (Desbordes and Vicard, 2009), as BITs can alleviate political risk; and lastly for OECD membership, since the US is an OECD member hence being economically and institutionally more similar to host economies which are also in the organization, facilitating FDI.

[Insert Table 9 here]

Table 9 reports the findings of the models augmented with country controls. As per the results reported in column (1), despite including several country controls, the effects of leverage, political risk and their interaction remain statistically significant and maintaining the same direction as before. We find that FDI Capex is significantly larger in host economies posting greater GDP, in line with the view that market size is a positive signal of market attractiveness. We find that firms invest lower amounts in countries with higher GDP per capita, though. This finding is in line with the stylized statistics from our dataset, since developing economies (typically having lower GDP per capita) indeed receive a larger number of FDIs from US investing firms. A negative impact of GDP per capita (as well as the more numerous investments in developing economies) might indicate that US firms are seeking to obtain cost economies through FDI, given lower income levels are typically associated with cheaper production costs as well.

Firms commit significantly larger amounts of Capex to investments located in contiguous countries (Mexico and Canada, to be precise), but invest less in OECD member states, again suggesting that developing and emerging economies, such as BRIC, dominate US firms' investment preferences. We do not find any significant effect of BITs (bilateral investment

treaties) nor of currency stability, though, but find larger Capex in countries with higher corporate tax rates, which is unexpected, though in line with the findings of Chen and Moore (2010), for instance.

We further conduct some additional tests to understand if the effects of a few important country observable characteristics can relate with leverage and political risk. First, evidence indicates that BITs increase FDI mostly when the overall institutional environment for business is stable (Desbordes and Vicard, 2009). We therefore include an interaction of political risk and BITs, which indeed changes the interpretation of the findings. After accounting for the interaction, we find that BITs have a significantly positive stand-alone coefficient and a significantly negative interaction with political risk. Hence, BITs increase FDI Capex, further having stronger (weaker) effects when political risk is high (low), since a higher score in the political risk index reflects lower political risk. Thus, our results indicate that BITs seem to play a more important in role in attracting foreign capital when the host economy is politically unstable. Second, we test an interaction of political risk with OECD membership. We find a significantly negative interaction, indicating that political risk has a weaker effect on FDI Capex in OECD member states, being thus less relevant for U.S. firms FDI allocation decisions in these countries. Since OECD economies have better economic and institutional environments for FDI, political risk should weigh on less heavily in these countries (lower expropriation risk, for instance), therefore, this finding makes sense.

Lastly, we investigate an interactive effect of corporate taxes and firm leverage. Support for this comes from several studies in the literature (e.g. Desai et al., 2004) suggesting that leveraged firms prefer investments in countries with higher corporate tax rates to increase the marginal value of tax shields accruing through corporate debt. In line with this notion, we find a significantly negative interaction of firm leverage with a dummy capturing countries with low taxes (within the 25th percentile of Corporate Tax's distribution). Therefore, leveraged firms invest lower amounts in countries with lower taxes, consistent with the argument that higher corporate taxes in host

economies may enhance the value added of tax shields. Importantly, we identify in firm leverage a possible theoretical channel explaining why taxes load significantly positively on FDI Capex.

6. Conclusion

This paper questions whether firms' capital structure matters for FDI capital expenditures decisions into countries with varying degrees of political risk. To implement our analysis, we construct a novel dataset containing 10,000 unique OFDI projects matched with 1,135 distinct U.S. firms over the period 2003-2014. Our main results demonstrate that corporate leverage influences firms' risky FDI capital allocation decisions. In particular, we offer novel evidence that firm leverage exerts a disciplinary effect on FDI by limiting capital expenditures allocated by firms, especially when political risk in the host economy is high and when investing firms enjoy poorer growth opportunities (lower Tobin's Q). Taken together, our results provide support for a monitoring role of debt in curbing foreign investment risk exposure.

The reported results are robust to a battery of further tests including treatment of endogeneity. We show that our results remain robust when exploring exogenous variation in leverage arising from state-level unemployment insurance benefits, which, according to a well-established labor and finance literature, affect firm leverage through their effect on workers' exposure to unemployment risk. We also demonstrate theoretical channels of influence at firm and project levels, control for important firm and project-level drivers and sources of unobserved heterogeneities at several dimensions (country, industry, FDI type and business cycles). Moreover, we conduct additional robustness checks relaxing measurement issues and controlling for potentially important country variables, such as market size, the existence of bilateral investment treaties between the U.S. and host economies, among others.

We acknowledge our paper's limitations as well. MNEs' internationalization process can be seen as series of staggered decisions. Firms' decide on whether to undertake FDI or to concentrate

on domestic activities, and on how much and where to invest. We study the effect of leverage directly on the "*how much*" decision, and also take into account, indirectly, to the best of our possibilities, the *"where"* decision by streamlining the effects of leverage and political risk in our analysis. However, we do not study, directly and in detail, the impact of leverage on location choices and on the decision of undertaking FDI or staying domestically oriented, which may be subject to selection issues. There is also scope to examine the characteristics of managers and boards and firms' investment decisions in high vs. low political risk countries. Finally, due to data limitations (absence of subsidiary-level data), we neglect potentially important mechanisms affecting multinational activity such as transfer pricing, ownership structure as well the role of leverage on subsidiary performance, and future divestment decisions. We consider these may be fruitful avenues for future researchers to explore.

While taking stock of these limitations, our paper contributes to an active and relevant debate at academic, managerial and policy levels, as to what are the firm-level drivers of FDI decisions. Our contribution to this debate is to demonstrate that capital structure has an important role to play in explaining how much capital multinational firms pledge to their international projects and how leverage and political risk jointly influence firms' resource commitment when undertaking risky FDI decisions.

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Table 1: Descriptive statistics

This table reports descriptive statistics. Project Capex is the capital expenditure per project, in USD MM; Leverage is capital structure (Debt/market capitalization); Political Risk is the ICRG Political Risk rating index (converted to [0,1] interval]; Tobin's Q [(Market capitalization+debt)/assets] captures growth opportunities. Total Assets is a proxy for Size, in USD MM; EBITDA is a proxy for cash flow generation (EBITDA/assets); Sales (Sales/assets) is sales (output) conditions; PPE/assets is asset tangibility; Interest/EBITDA is interest coverage; Cash/Assets is cash holdings; Dividends captures the propensity of firms to pay dividends (=1 if dividends>0, =0 otherwise); R&D is a proxy for innovation (=1 if R&D>0, =0 otherwise); Country Experience is firms' pre-existing investments in the host country (=1 if the firm previously invested, =0 otherwise); Portfolio is the total number of FDIs undertaken by firms in the same year of the project at hand; Project employment is the total number of job posts generated by the FDI.

Variables	Observations	Mean	Std. Dev.	Min	Max
Project Capex (USD mm)	10,329	69.617	317.248	0.005	12,800
Leverage ratio	10,329	0.362	0.787	0	4.828
Political Risk	10,329	0.733	0.096	0.349	0.945
Tobin's Q	10,329	1.797	1.262	0.307	7.996
Total Assets (USD mm)	10,329	65,737	144,795	0.001	797,769
EBITDA/Assets	10,329	0.132	0.104	-0.442	0.355
Sales/Assets	10,329	0.944	0.547	0	4.548
PPE/Assets	10,325	0.433	0.312	0	2.259
Interest/EBITDA	9,783	0.103	0.228	-1.127	1.290
Cash/Assets	10,329	0.126	0.106	0.002	0.604
Dividends (0/1)	10,329	0.592	0.491	0	1
R&D expenditure (0/1)	10,329	0.925	0.262	0	1
Country experience (0/1)	10,329	0.320	0.466	0	1
FDI Portfolio	10,329	9.459	13.494	0	72
Project Employment	10,329	198.457	398.499	1	6000
Number of FDI Projects	10,329				

Table 2: Descriptive statistics – FDI and Political risk by countries

This table reports descriptive statistics (country-level averages). FDI is the total number of projects recorded for each country. Political Risk is the ICRG political risk rating index from International Country Risk Guide [we divide the

raw Political risk index (which is originally measured on a [0,100] interval) by 100 as to measure political risk on a [0,1] interval. Higher scores in the political risk rating reflect lower levels of political risk.

Country	Number of FDI projects	ICRG Political Risk composite Index (2003-2014 average)
Top Emerging		
Brazil	352	0.673
China	1,471	0.664
Czech Republic	107	0.776
Hungary	113	0.781
India	955	0.614
Malaysia	159	0.736
Mexico	334	0.707
Philippines	122	0.625
Poland	151	0.767
Romania	101	0.684
Russia	288	0.643
Singapore	291	0.841
South Korea	167	0.766
Taiwan	131	0.776
UAE	191	0.784
Top Developed		
Australia	251	0.851
Austria	38	0.869
Belgium	136	0.823
Canada	399	0.867
Denmark	42	0.860
France	376	0.761
Germany	409	0.841
Ireland	327	0.847
Italy	114	0.769
Japan	203	0.818
Netherlands	117	0.853
Spain	228	0.760
Sweden	72	0.891
Switzerland	106	0.884
United Kingdom	751	0.805

Table 3: The effects of leverage and political risk on FDI Capex

We estimate the effects of leverage and political risk on FDI's Capex employing OLS regressions. The natural logarithm of FDI project Capex is modelled as a function of firm leverage, country political risk and an interaction of

firm leverage and country political risk. The model includes the following control variables: Tobin's Q, ln Assets, EBITDA/Assets, PPE/Assets, Interest/EBITDA, Cash/Assets, Payout (0/1), R&D (0/1), FDI portfolio (total number of concomitant FDI projects by firms), and Country pre-existing Experience (0/1). Vectors of fixed effects include year, FDI category (manufacturing, R&D, sales, etc), industry and country. Robust standard errors clustered at firm-level are in parentheses. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels.

Y=ln FDI Capex	(1)	(2)	(3)
Leverage	-0.346***	-0.390***	-0.406***
	(0.131)	(0.126)	(0.126)
Political risk	1.351**	1.362**	1.457**
	(0.572)	(0.566)	(0.595)
Leverage*Political risk	0.473***	0.490***	0.503***
	(0.168)	(0.162)	(0.161)
Tobin's Q		0.030*	0.029*
		(0.016)	(0.015)
Ln Assets		0.058***	0.085***
		(0.009)	(0.013)
EBITDA/Assets		-0.618***	-0.634***
		(0.195)	(0.192)
PPE/Assets		0.232***	0.236***
		(0.082)	(0.084)
Sales/Assets		0.104*	0.090**
		(0.056)	(0.046)
Interest/EBITDA			-0.045
			(0.061)
Cash/Assets			0.250
			(0.165)
R&D (0/1)			-0.446***
			(0.162)
Dividends (0/1)			-0.086*
			(0.050)
FDI Portfolio			-0.003*
			(0.002)
Experience (0/1)			0.060**
			(0.029)
Constant	1.320***	0.608	0.744
	(0.430)	(0.442)	(0.497)
Adjusted R-squared	0.496	0.501	0.505
Observations	10,222	10,218	9,679
Year FE	Yes	Yes	Yes
FDI Category FE	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
Country FE	Yes	Yes	Yes

Figure 1: The interaction of firm leverage and country political risk

This Figure plots the marginal effects of the interaction between leverage and political risk, corresponding to the regression model results which are presented in column (3) of Table 3.

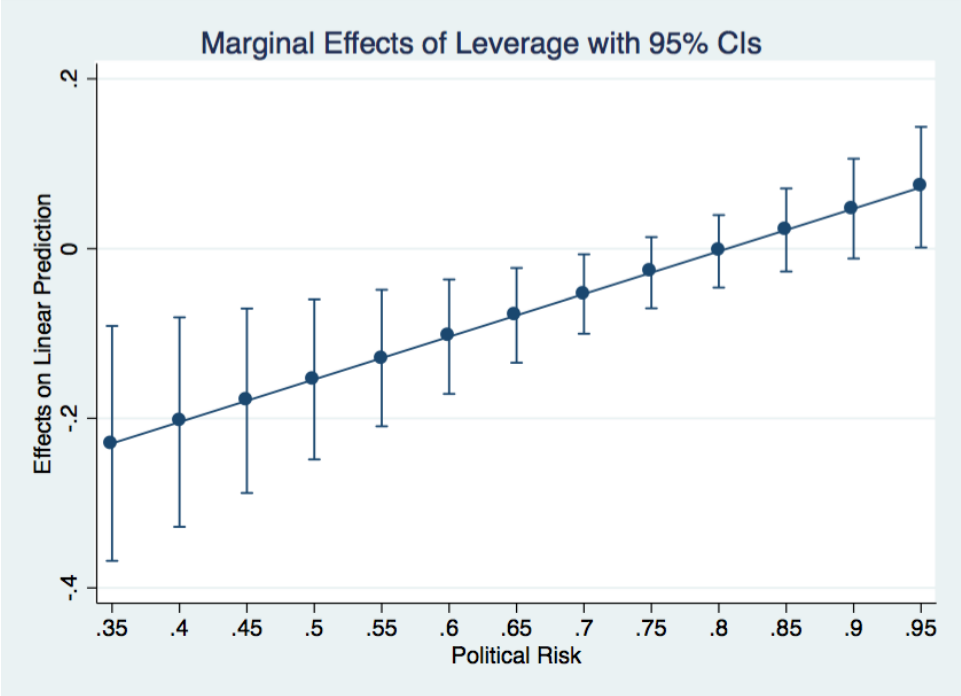

Figure 2: The interaction of firm leverage and country political risk (Elasticity)
This Figure plots the elasticity between FDI Capex and leverage for varying degrees of Political risk.

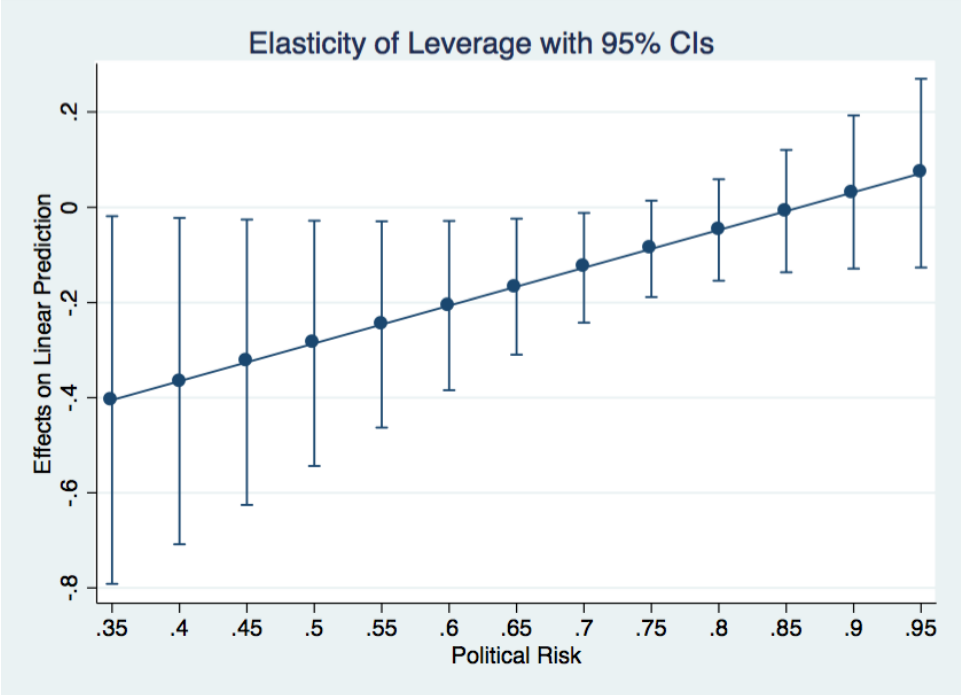

Table 4: Firm-level channels of influence

We estimate the effects of leverage and political risk on FDI's Capex employing OLS regressions. The natural logarithm of FDI project Capex is modelled as a function of firm leverage, country political risk and an interaction of

firm leverage and country political risk. We further include interactions between leverage and low growth firms (Tobin's Q within the 25th percentile of the distribution); leverage and firms paying high interest costs (Interest/EBITDA within the 75th percentile of the distribution); leverage and large firms (Total assets within the 75th percentile of the distribution). The model includes the following control variables: Tobin's Q, ln Assets, EBITDA/Assets, PPE/Assets, Interest/EBITDA, Cash/Assets, Payout (0/1), R&D (0/1), FDI portfolio (total number of concomitant FDI projects by firms), and Country pre-existing Experience (0/1). Vectors of fixed effects include year, FDI category (manufacturing, R&D, sales, etc), industry and country. Robust standard errors clustered at firm-level are in parentheses. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels.

Y=ln FDI Capex	(1)	(2)	(3)
Leverage	-0.245*	-0.331**	-0.465***
	(0.144)	(0.132)	(0.129)
Political risk	1.474**	1.465**	1.437**
	(0.596)	(0.596)	(0.596)
Leverage*Political risk	0.514***	0.519***	0.508***
	(0.160)	(0.162)	(0.159)
Leverage*Low growth	-0.172**		
	(0.077)		
Leverage*High interest		-0.117***	
		(0.036)	
Leverage*Large			0.087**
			(0.041)
Tobin's Q	0.032**	0.033**	0.027*
	(0.015)	(0.015)	(0.015)
Ln Assets	0.087***	0.084***	0.082***
	(0.013)	(0.013)	(0.013)
EBITDA/Assets	-0.654***	-0.613***	-0.613***
	(0.192)	(0.192)	(0.193)
PPE/Assets	0.227***	0.227***	0.248***
	(0.084)	(0.084)	(0.084)
Sales/Assets	0.097**	0.087*	0.095**
	(0.046)	(0.046)	(0.046)
Interest/EBITDA	-0.052	0.083	-0.024
	(0.060)	(0.073)	(0.056)
Cash/Assets	0.274*	0.261	0.210
	(0.166)	(0.164)	(0.164)
R&D (0/1)	-0.444***	-0.451***	-0.445***
	(0.162)	(0.162)	(0.162)
Dividends (0/1)	-0.086*	-0.085*	-0.096*
	(0.050)	(0.050)	(0.051)
FDI Portfolio	-0.003*	-0.003*	-0.004*
	(0.002)	(0.002)	(0.002)
Experience (0/1)	0.060**	0.058**	0.059**
	(0.029)	(0.029)	(0.029)
Constant	0.711	0.737	0.784
	(0.500)	(0.498)	(0.495)
Adjusted R-squared	0.505	0.505	0.505
Observations	9,679	9,679	9,679
Year FE	Yes	Yes	Yes
FDI Category FE	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
Country FE	Yes	Yes	Yes

Table 5: Project-level channels of influence

We estimate the effects of leverage and political risk on FDI's Capex employing OLS regressions. The natural logarithm of FDI project Capex is modelled as a function of firm leverage, country political risk and an interaction of firm leverage and country political risk. We further include interactions between leverage and political risk with (1) manufacturing projects; (2) technological (R&D and Internet) projects; and (3) sales and retail projects. The model includes the following control variables: Tobin's Q, ln Assets, EBITDA/Assets, PPE/Assets, Interest/EBITDA, Cash/Assets, Payout (0/1), R&D (0/1), FDI portfolio (total number of concomitant FDI projects by firms), and Country pre-existing Experience (0/1). Vectors of fixed effects include year, FDI category (manufacturing, R&D, sales, etc), industry and country. Robust standard errors clustered at firm-level are in parentheses. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels.

Y=ln FDI Capex	(1)	(2)	(3)
Leverage	-0.404***	-0.384***	-0.370***
	(0.115)	(0.132)	(0.116)
Political risk	1.454**	1.458**	1.471**
	(0.600)	(0.594)	(0.594)
Leverage*Political risk	0.409***	0.462***	0.479***
	(0.138)	(0.172)	(0.154)
Lev*Polrisk*Manuf.	0.182**		
	(0.084)		
Lev*Polrisk*Tech.		0.183**	
		(0.092)	
Lev*Polrisk*Sales			-0.164
			(0.100)
Tobin's Q	0.027*	0.030*	0.028*
	(0.015)	(0.015)	(0.015)
Ln Assets	0.085***	0.085***	0.084***
	(0.013)	(0.013)	(0.013)
EBITDA/Assets	-0.652***	-0.625***	-0.629***
	(0.193)	(0.193)	(0.193)
PPE/Assets	0.242***	0.233***	0.234***
	(0.085)	(0.084)	(0.084)
Sales/Assets	0.085*	0.090**	0.090**
	(0.046)	(0.046)	(0.046)
Interest/EBITDA	-0.031	-0.047	-0.037
	(0.058)	(0.061)	(0.057)
Cash/Assets	0.238	0.245	0.239
	(0.166)	(0.166)	(0.167)
R&D (0/1)	-0.438***	-0.447***	-0.435***
	(0.160)	(0.162)	(0.163)
Dividends (0/1)	-0.082*	-0.087*	-0.083*
	(0.049)	(0.050)	(0.049)
FDI Portfolio	-0.003*	-0.003*	-0.003*
	(0.002)	(0.002)	(0.002)
Experience (0/1)	0.060**	0.059**	0.060**
	(0.029)	(0.029)	(0.029)
Constant	0.769	0.745	0.738
	(0.501)	(0.496)	(0.499)
Adjusted R-squared	0.506	0.505	0.505
Observations	9,679	9,679	9,679
Year FE	Yes	Yes	Yes
FDI Category FE	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
Country FE	Yes	Yes	Yes

Table 6: Addressing endogeneity: Unemployment insurance benefits at the state level (Leverage models)

We employ unemployment insurance benefits (Ln MaxBen[t-1]) at the state level as an instrumental variable for firm leverage. In order to show that unemployment insurance benefits indeed produce exogenous increases in leverage, we regress firm leverage against Ln MaxBen[t-1] (the lagged maximum weekly unemployment insurance benefit payment, controlling for usual determinants of leverage: Tobin's Q, firm size, profitability and asset tangibility). In column (1) we include state, year and industry fixed effects, whereas in column (2) we include firm and year fixed effects. Robust standard errors are in parentheses. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels.

Y= Ln Leverage	(1)	(2)
Ln MaxBen[t-1]	0.277***	0.292***
	(0.042)	(0.034)
Tobin's Q	-0.034***	0.002
	(0.001)	(0.003)
Ln Assets	0.033***	0.128***
	(0.001)	(0.010)
ROA	-0.872***	-0.675***
	(0.039)	(0.064)
PPE/Assets	0.014	0.302***
	(0.012)	(0.040)
Constant	-1.391***	-2.839***
	(0.231)	(0.327)
Adjusted R-squared	0.598	0.795
Observations	10,322	9,957
State FE	Yes	No
Year FE	Yes	Yes
Industry FE	Yes	No
Firm FE	No	Yes

Table 7: Addressing endogeneity: Unemployment insurance benefits at the state level (Capex Models)

We employ an IV model where leverage is instrumented (predicted) by Ln Maxben[t-1] (max. UI payments) and further interacted with Political risk. Fixed effects include year, FDI category, industry, country and state. Firm-state clustered errors are in parentheses. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels.

Y=Ln Capex	(1)	(2)
Political risk	1.361**	1.309**
	(0.520)	(0.520)
Leverage (predicted by IV)	-0.396***	-0.601*
	(0.102)	(0.319)
Leverage (predicted)*Polrisk	0.533***	0.519***
	(0.131)	(0.131)
Tobin's Q	0.029	0.018
	(0.020)	(0.019)
Ln Assets	0.082***	0.082***
	(0.018)	(0.019)
EBITDA/Assets	-0.543***	-0.642***
	(0.187)	(0.190)
PPE/Assets	0.222***	0.228***
	(0.075)	(0.073)
Sales/Assets	0.087*	0.046
	(0.046)	(0.042)
Interest/EBITDA	-0.064	-0.047
	(0.058)	(0.059)
Cash/Assets	0.253	0.205
	(0.172)	(0.177)
R&D (0/1)	-0.453***	-0.497***
	(0.147)	(0.149)
Dividends (0/1)	-0.086	-0.053
	(0.079)	(0.083)
FDI Portfolio	-0.003*	-0.003
	(0.002)	(0.002)
Experience (0/1)	0.060**	0.072**
	(0.029)	(0.027)
Constant	1.388	1.616
	(1.112)	1.136
Adjusted R-squared	0.505	0.505
Observations	9,667	9,664
State FE	No	Yes
Year FE	Yes	Yes
FDI Category FE	Yes	Yes
Industry FE	Yes	Yes
Country FE	Yes	Yes

Table 8: Labor employment as a proxy for project investment

We estimate the effects of leverage and political risk on FDI's Labor Employment employing OLS regressions. The natural logarithm of FDI Labor Employment is modelled as a function of firm leverage, country political risk and an interaction of firm leverage and country political risk. The model includes the following control variables: Tobin's Q, ln Assets, EBITDA/Assets, PPE/Assets, Interest/EBITDA, Cash/Assets, Payout (0/1), R&D (0/1), FDI portfolio (total number of concomitant FDI projects by firms), and Country pre-existing Experience (0/1). Vectors of fixed effects include year, FDI category (manufacturing, R&D, sales, etc), industry and country. Robust standard errors clustered at firm-level are in parentheses. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels.

Y=ln FDI Employment	(1)	(2)	(3)
Leverage	-0.413***	-0.434***	-0.441***
	(0.090)	(0.088)	(0.091)
Political risk	2.057***	2.061***	2.174***
	(0.541)	(0.539)	(0.562)
Leverage*Political risk	0.547***	0.555***	0.560***
	(0.116)	(0.116)	(0.119)
Tobin's Q		0.027**	0.030**
		(0.012)	(0.013)
Ln Assets		0.046***	0.065***
		(0.008)	(0.012)
EBITDA/Assets		-0.378**	-0.371**
		(0.157)	(0.156)
PPE/Assets		0.116	0.111
		(0.071)	(0.076)
Sales/Assets		0.135***	0.119***
		(0.046)	(0.041)
Interest/EBITDA			-0.031
			(0.062)
Cash/Assets			0.090
			(0.160)
R&D (0/1)			-0.271*
			(0.140)
Dividends (0/1)			-0.091**
			(0.045)
FDI Portfolio			-0.002*
			(0.001)
Experience (0/1)			0.034
			(0.033)
Constant	4.409***	3.804***	3.885***
	(0.556)	(0.587)	(0.592)
Adjusted R-squared	0.448	0.452	0.448
Observations	10,222	10,218	9,679
Year FE	Yes	Yes	Yes
FDI Category FE	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
Country FE	Yes	Yes	Yes

Table 9: Country-level control variables

We estimate the effects of leverage and political risk on FDI's Capex employing OLS regressions. The natural logarithm of FDI project Capex is modelled as a function of firm leverage, country political risk and an interaction of firm leverage and country political risk. The model includes the following country-level control variables: Ln GDP, GDP per capita, a dummy variable for Contiguity, Corporate taxes, the ICRG Currency stability index; a dummy variable for the existence of bilateral investment treaties (BIT) between the US and the host economy, and a dummy for OECD membership. The same firm controls are also included (omitted from the table for brevity): Tobin's Q, ln Assets, EBITDA/Assets, PPE/Assets, Interest/EBITDA, Cash/Assets, Payout (0/1), R&D (0/1), FDI portfolio (total number of concomitant FDI projects by firms), and Country pre-existing Experience (0/1). Vectors of fixed effects include year, FDI category (manufacturing, R&D, sales, etc), industry and country. Robust standard errors clustered at firm-level are in parentheses. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels.

Y=ln FDI Capex	(1)	(2)	(3)	(4)
Leverage	-0.360***	-0.357***	-0.364***	-0.310***
	(0.129)	(0.129)	(0.130)	(0.118)
Political risk	1.861***	2.151***	3.819***	1.890***
	(0.619)	(0.652)	(0.938)	(0.618)
Leverage*Political risk	0.447***	0.443***	0.451***	0.393***
	(0.166)	(0.166)	(0.167)	(0.152)
Ln GDP	0.287***	0.292***	0.457***	0.284***
	(0.074)	(0.075)	(0.101)	(0.074)
GDP per capita	-0.000***	-0.000***	-0.000***	-0.000***
	(0.000)	(0.000)	(0.000)	(0.000)
Contiguity (0/1)	0.461***	0.489***	0.461***	0.452***
	(0.144)	(0.146)	(0.144)	(0.144)
Corporate taxes	0.021***	0.022***	0.018**	0.021***
	(0.007)	(0.007)	(0.007)	(0.007)
Currency stability	0.022	0.022	0.007	0.022
	(0.026)	(0.026)	(0.027)	(0.026)
BIT (0/1)	0.121	2.858**	0.093	0.141
	(0.244)	(1.317)	(0.244)	(0.245)
OECD (0/1)	-2.633***	-2.714***	-0.922	-2.624***
	(0.402)	(0.413)	(0.688)	(0.401)
Political risk*BIT		-3.564**		
		(1.666)		
Political risk*OECD			-3.510***	
			(1.177)	
Leverage*Low Taxes				-0.079**
				(0.039)
Constant	-0.630	-0.855	-2.027**	-0.621
	(0.645)	(0.693)	(0.825)	(0.644)
Adjusted R-squared	0.506	0.506	0.506	0.506
Observations	9,553	9,553	9,553	9,553
Firm Controls	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
FDI Category FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes

Appendix A: Additional FDI statistics

Table A1: Statistics by FDI Category

Variables	Investments	Capex
FDI category		
Business Services	264	15.959
Construction	216	148.648
Customer Contact Centre	174	10.189
Design	1,255	33.868
Education & Training	195	11.138
Electricity	71	327.593
Extraction	84	1,289.082
Headquarters	517	25.281
Internet	254	127.999
Logistics and Distribution	404	42.705
Maintenance & Servicing	170	14.504
Manufacturing	2,992	123.022
Recycling	13	66.156
Research & Development	610	47.073
Retail	851	28.011
Sales, Marketing & Support	1,973	6.582
Shared Services Centre	123	16.756
Technical Support	173	17.715

Table A2: Statistics by Industry

Variables	Investments	Capex

FDI category		
Aerospace	150	38.488
Alternative energy	95	244.719
Automotive Components	385	42.719
Automotive OEM	427	195.852
Beverages	54	50.333
Biotechnology	150	42.649
Building & Construction	18	32.250
Business Machines & Equip.	455	27.638
Business Services	218	16.459
Ceramics & Glass	53	65.674
Chemicals	572	64.735
Coal, Oil and Gas	256	652.660
Communications	679	52.614
Consumer Electronics	104	29.465
Consumer Products	433	38.405
Electronic components	334	68.980
Engines and Turbines	90	110.172
Financial services	84	33.967
Food and Tobacco	451	42.812
Healthcare	28	19.013
Hotels and Tourism	226	95.848
Industrial Machinery	738	23.516
Leisure and Entertainment	36	229.322
Medical Devices	310	28.522
Metals	178	130.704
Minerals	3	31.733
Non-Auto Transport OEM	32	28.837
Paper, Print and Packaging	99	64.041
Pharmaceuticals	391	62.867
Plastics	182	40.311
Real Estate	9	665.461
Rubber	78	56.936
Semiconductors	490	122.512
Software & IT	2,125	21.093
Space and Defense	28	16.914
Textiles	309	18.740
Transportation	35	67.236
Warehousing and Storage	16	173.562
Wood Products	8	15.787

Appendix B: Full set of recipient countries list

Recipient Country	Number of Investments	Recipient Country	Number of Investments	Recipient Country	Number of Investments
Algeria	15	Costa Rica	62	India	955
Angola	16	Cote d'Ivoire (Ivory Coast)	1	Indonesia	57
Argentina	77	Croatia	11	Iraq	11
Armenia	13	Cyprus	4	Ireland	327
Aruba	1	Czech Republic	107	Israel	64
Australia	251	Denmark	42	Italy	114
Austria	38	Djibouti	1	Jamaica	3
Azerbaijan	9	Dominican Republic	6	Japan	203
Bahamas	2	Ecuador	3	Jordan	20
Bahrain	19	Egypt	36	Kazakhstan	25
Bangladesh	6	El Salvador	11	Kenya	20
Belarus	3	Equatorial Guinea	2	Kuwait	8
Belgium	136	Estonia	12	Kyrgyzstan	1
Bolivia	3	Ethiopia	2	Latvia	13
Bosnia-Herzegovina	2	Finland	27	Lebanon	9
Botswana	2	France	376	Liberia	1
Brazil	352	Germany	409	Libya	1
Brunei	3	Ghana	10	Lithuania	17
Bulgaria	23	Greece	23	Luxembourg	17
Cambodia	8	Guatemala	6	Macau	7
Canada	399	Guinea	1	Macedonia FYR	8
Cayman Islands	1	Honduras	6	Madagascar	1
Chile	51	Hong Kong	87	Malaysia	159
China	1471	Hungary	113	Malta	4
Colombia	70	Iceland	3	Mauritania	1

Appendix: Full set of recipient countries list (continuation)

Recipient Country	Number of Investments	Recipient Country	Number of Investments	Recipient Country	Number of Investments
Mauritius	2	Romania	101	UK	751
Mexico	334	Russia	288	Uganda	1
Moldova	5	Rwanda	1	Ukraine	34
Monaco	1	Saudi Arabia	87	Uruguay	8
Montenegro	2	Senegal	5	Uzbekistan	5
Morocco	29	Serbia	22	Venezuela	19
Myanmar (Burma)	5	Singapore	291	Vietnam	89
Namibia	1	Slovakia	60	Zambia	2
Netherlands	117	Slovenia	3		
New Zealand	31	South Africa	86		
Nicaragua	2	South Korea	167		
Nigeria	39	Spain	228		
North Korea	1	Sri Lanka	3		
Norway	17	St Lucia	1		
Oman	10	Suriname	1		
Pakistan	13	Sweden	72		
Panama	19	Switzerland	106		
Papua New Guinea	4	Taiwan	131		
Paraguay	3	Tanzania	2		
Peru	26	Thailand	71		
Philippines	122	Trinidad & Tobago	2		
Poland	151	Tunisia	9		
Portugal	17	Turkey	74		
Puerto Rico	58	Turkmenistan	3		
Qatar	28	UAE	191		