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On the Effect of Investment Disputes on Bilateral Portfolio Investment in Emerging Markets

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Abstract

This paper investigates the effect of arbitral proceedings on bilateral portfolio equity investments in emerging markets. Investment disputes may deter foreign investors as they reveal a government's poor behavior towards foreign investors. The analysis investigates the effects of the first initiation of arbitral proceedings, the first outcome in favor of the investor, and the first outcome in favor of the respondent state of arbitration proceedings. The database is an unbalanced panel of 55 home and 36 host countries from 2001 to 2018. Estimations do not reveal an unconditionally significant effect of arbitral proceedings on bilateral portfolio equity holdings. The impact becomes significant considering the interplay with bilateral investment treaties and political risk.

Keywords: Investment disputes, Arbitration proceeding, Bilateral portfolio investment, Bilateral investment treaty, Investment protection, Emerging markets

JEL-Codes: F32, F53, G15, K33

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1 Introduction

Investor-state arbitration has become quite common over the past two decades. About 40 arbitral proceedings are initiated annually (see Figure 1). On average, investment disputes last about 3.6 years, and investors claim roughly 800 million \$US in compensation. The average awarded damage is noticeably smaller at roughly 228 million \$US. In about 87% of investment disputes, non-developed countries are sued. About 28% of the decided or terminated investment disputes ended in the investor's favor¹. Usually, the media coverage of arbitral proceedings is high, and initiation or results of trials are publicly available information.

[Figure 1]

This paper investigates how arbitral proceedings' first initiations and outcomes affect cross-border portfolio equity holdings in emerging markets. Investment disputes reveal that host countries allegedly expropriated foreign investors despite the threat of compensation payments and reputation losses from arbitral proceedings. Based on this information, foreign investors might delay, suspend, or withdraw cross-border portfolio investments. Since the respondent country in arbitral trials is usually an emerging market, the analysis is limited to these countries. The impact of investment disputes is investigated based on three different events: the first initiation of arbitral proceedings, the first ruling of an arbitral tribunal in favor of the foreign investor, and the first ruling in favor of the respondent state. Additionally, the interplay of the investment disputes with bilateral investment treaties (BITs), a host country's political risk, and the combination of both is investigated. Thus, this paper is the first to address the influence of investment disputes on portfolio equity investments and differentiate the results using BITs and political risk together.

This paper finds a significantly negative effect of first dispute initiations on bilateral portfolio equity in countries with low political risk when investments are not protected by a BIT (-26.5%). If an investor wins an investment dispute against a low-risk country, bilateral portfolio equity will significantly decrease, regardless of the existence of a BIT (without BIT: -45.3%, with BIT: -48.5%). In high-risk countries, BIT-protected bilateral portfolio equity holdings will be -29.6% lower if a foreign investor wins an investment dispute. Arbitral proceedings decided in favor of the respondent state will have only significantly negative effects if investments are BIT protected and the host country's political risk is high (-16.9%).

The initiation of arbitral proceedings is likely to reduce cross-border portfolio equity investments. Allee & Peinhardt (2011) show that initiating arbitral proceedings and decisions favoring the foreign investor

¹ Investment dispute information is based on 499 arbitral proceedings decided or terminated between 1990 and 2019 (UNCTAD, 2020).

reduce foreign direct investments (FDI). Net FDI inflows of low- and middle-income countries decrease significantly with the number of pending arbitral proceedings. The authors explain this with the reputation loss from arbitral proceedings. They argue that proceedings are time-consuming and costly and send a strong signal to all other investors about the allegedly poor performance of the host county. Brada et al. (2020) show that a company's average market value will increase by 3% if a firm receives an award from arbitral proceedings. If the claimant loses the trial, the average market value will decrease by 2%. Wellhausen (2015) finds that only investments from the compatriots of the claimant reduce significantly after the initiation of arbitral proceedings. Investments from other countries are not significantly affected by disputes. She argues that the sanctity of the BIT, which protects a foreign investor, is more crucial than the breach of an investment treaty that protects other investors. Other papers argue that dispute characteristics drive the effect of arbitral proceedings. Kerner & Pelc (2021) argue that the effect depends on the affected industry and the fixed asset intensity.

Rulings in favor of foreign investors are likely to deter cross-border investments. Allee & Peinhardt (2011) find that net FDI inflows decline even further after a ruling against a respondent state. The authors assume the treaty breach will likely reduce investors' confidence in the government. A conviction highlights the poor behavior of the host country's government towards foreign investors.

The effect of decisions in favor of the respondent state is less clear. On the one hand, a non-conviction is unlikely to send a positive signal to foreign investors. No breach of the investment treaty found does not indicate investor-friendly policies of the host country, especially if one assumes that only serious disputes will be litigated. On the other hand, one could argue that the responded state evidently did not violate the claimant's rights. The latter could send a positive signal to foreign investors. The literature on arbitral proceedings is nearly silent on dispute outcomes favoring the respondent state. The closest hint comes from Aisbett et al. (2018), who test for the impact of initiated investment disputes that will end in favor of the respondent state on bilateral FDI inflows and do not find significant effects.

The paper by Aisbett et al. (2018) is interesting since it considers the interplay between investment disputes and BITs. Such contracts allow foreign investors to claim compensation at international arbitral courts when they are expropriated or discriminated by the host country. Recent papers provide clear evidence of the positive effect of BITs on FDI (Frenkel and Walter, 2019; Bhagwat et al., 2021). Aisbett et al. (2018) distinguish the effects of BITs, considering whether the host country has already got involved in arbitral proceedings. The authors differentiate effects for country-pairs, which had a BIT in force when the claim against the host came up, and country-pairs, which entered into a BIT after the host got sued. Both effects are significantly negative and predominate the investment-enhancing effect of BITs.

Also, the interplay of BITs and investment disputes will likely affect bilateral portfolio equity investments. Arbitral proceedings reveal that the threat of consequences by BITs has not been sufficient to prevent expropriations. From this, foreign investors protected by BITs learn that their investments are less well protected than previously thought. Investments from BIT-protected countries should decline accordingly. Investment disputes should hardly affect investments from countries not protected by BITs since the protection of foreign investors against expropriations remains unchanged.

In addition to BITs, a country's political risk may substantially impact bilateral portfolio investments. Jensen (2008) shows that risk premiums paid for coverage against expropriation and contract disputes decrease with higher executive constraints. Lee et al. (2012) highlight the importance of the host country's legal system and the rule of law on portfolio investments. The impact of a host country's level of investor protection on portfolio investment is frequently discussed in the literature (Bae et al., 2006; Poshakwale and Thapa, 2011; Giofré, 2013; Cao and Ward, 2014; Giofré, 2014). In a study on executives' risk perception, Giambona et al. (2017) show that multinational firms avoid foreign investments in countries with high political risk. In general, it can be stated that countries with lower political risk attract more cross-border investments than other countries.

Therefore, one should expect that the political risk of the host country also affects a foreign investor's response to arbitral proceedings. When a country with high political risk is sued, this should be hardly surprising. Foreign investors are likely to consider this risk when deciding on investment. In contrast, arbitration proceedings are probably not anticipated in investment decisions in countries with low political risk. Therefore, the effect of investment disputes on cross-border investment should be substantial in countries with low political risk.

The combination of political risk and the existence of BITs allows an even more detailed discussion of effects. One can expect a seriously negative effect from arbitral proceedings on BIT-protected crossborder investments in countries with low political risk. Investment disputes rattle the perception of both BIT protection and political risk. In countries with high political risk, the impact of arbitral proceedings on foreign investments without BIT protection should be neglectable. The risk of investment disputes should already be anticipated. Effects for the intermediate categories are less clear. For countries with low political risk, the effect of arbitration on not BIT-protected investments is unclear. Investors might be shocked by an investment dispute since it is in a low-risk country or anticipate it since there is no investment treaty. The same applies to BIT-protected investments in countries with high political risk. It is unclear whether the BIT violation will deter foreign investors or whether they anticipate investment disputes since the political risk is high. The rest of the paper is structured as follows: Section 2 describes the used data and the variables' construction. Section 3 presents the empirical analysis, and Section 4 summarizes the paper and concludes.

2 Data

2.1 Bilateral portfolio equity investments

An unbalanced panel dataset is used to empirically test the impact of investment disputes on foreign portfolio equity investment. The dataset contains information on 36 host and 55 home countries, covering 2001 to 2018. Host countries are limited to emerging markets. Table 1 presents summary statistics. A list of host and home countries is presented in Table A1. Table A2 summarizes data sources and variable definitions. Pairwise correlations are presented in Table A3.

Information on bilateral portfolio equity holdings is provided by the IMF's Coordinated Portfolio Investment Survey (CPIS). Portfolio investments are predestined for such an analysis, as they are easy to liquidate and can easily be shifted to other countries. The survey provides information on cross-border positions of tradeable equity at market prices. Information is provided in million \$US at an end-of-year basis and is adjusted to real terms with the US consumer price index (CPI). Host countries that did not implement a single BIT are excluded from the analysis. Furthermore, financial hubs are excluded from host countries to avoid double-counting portfolio holdings.² Also, a few observations with negative values are excluded from the analysis.

2.2 Arbitration proceedings

Arbitral proceedings are typically hosted at the World Bank's International Center for Settlement of Investment Disputes (ICSID) or the United Nations Commission on International Trade Law (UNCITRAL). Based on investment treaties such as BITs, foreign investors may claim compensation for expropriations or other interventions of the host country. Venezuela, for example, was sued to pay 8.3 billion \$US in compensation after nationalizing three oil production facilities (ICSID Case No. ARB/07/30). However, most compensation payments are significantly smaller. Poland was sentenced to pay 9.3 million \$US in compensation after a gambling law reform that destroyed the business model of a foreign investor (PCA Case No. 2014-31). The average compensation awarded in arbitral proceedings is roughly 228 million \$US (UNCTAD, 2020).

Decisions on arbitral proceedings are rendered by an arbitral tribunal, which usually has three members: A chairman and two arbitrators. One of the arbitrators is appointed by the claimant, the other by the

² Bahrain, Jordan, Lebanon, Mauritius, and Panama are excluded as host countries. Nevertheless, these countries may enter as home countries since many financial hubs have implemented BITs. For international arbitration, the residence country of an investment vehicle may be decisive.

respondent. The chairman is usually appointed jointly by the claimant and the respondent. On average, it takes more than 3.6 years from initiation to the decision (UNCTAD, 2020). To avoid long trials, the claimant and the respondent may agree to settle the dispute at any time. If there is no such agreement, the tribunal decides either in favor of the respondent state or in the claimant's favor. The latter may entail compensation payment for the claimant. Such a conviction is rather powerful and can be enforced internationally. Nearly all UN members have committed themselves to recognizing and enforcing foreign awards in the *New York Convention* from 1959. The agreement allows claimants to have the respondent state's property seized by a member country to enforce an arbitral award.

Information on the arbitral proceedings used in this paper comes from UNCTAD's Investment Dispute Settlement Navigator (UNCTAD, 2020). The used data release contains various information on pending and concluded arbitral proceedings until July 31, 2020³. This paper focuses on the effects of disputes based on bilateral investment treaties. Arbitral proceedings based on other contracts were excluded from the sample. Also, disputes were excluded when claimants used two different BITs to enforce their rights. In such cases, it is unclear which treaty is the decisive one. The same applies to investment disputes based on BITs and other contracts. Some arbitral procedures rely on the *Energy Charter Treaty* and a BIT. Also, for these disputes, it is unclear which treaty is decisive. Some arbitral proceedings are initiated jointly by several claimants. If claimants come from different countries, the contracting countries of the BIT will be used to determine the claimant's home country⁴.

Two dummy variables are used to investigate the effects of the initiation of arbitral proceedings on crossborder portfolio investments. The *first dispute initiated* dummy indicates whether a foreign investor has ever sued a country. For a specific country, the dummy is 1 for the year of the first initiation and all following years. Otherwise, the dummy is 0. To additionally cover country-pair specific effects of investment disputes, the *first dispute initiated bilateral* dummy indicates if a home country investor has ever sued the host country. Again, the dummy indicates the initiation year and all following years. Thus, the latter dummy targets only cross-border investment between countries directly affected by a dispute.

Investment disputes may be decided in favor of the respondent state or in favor of an investor.⁵. The *first time investor wins* dummy covers the first time a respondent state loses an investment dispute. The dummy is 1 in the year of the decision and all following years. The *first time investor wins bilateral* dummy covers the same information but on the country-pair level. This dummy is 1 if a home country

³ According to the database, the first arbitration was initiated in 1987. However, it cannot be ruled out that there were arbitration proceedings before that. In addition, some arbitration proceedings might not be included in the database.

⁴ A particular case are the BITs signed by the Belgium-Luxembourg Economic Union. Disputes based on these BITs were manually assigned using the claimant's nationality to one of the two countries.

⁵ Other outcomes of arbitral proceedings, such as settlement or discontinuation, are not considered.

investor has won an arbitral proceeding against the host country. Otherwise, the dummy will be 0. Therefore, the dummy only indicates country-pairs directly affected by decisions favoring the investor.

Dummies reading decisions in favor of the respondent state are generated similarly. The *first time state wins* dummy indicates whether an arbitral proceeding has ever been decided in favor of the respondent state. Again, the dummy equals 1 in the decision year and all following years. The *first time state wins bilateral* dummy covers the same information for the country-pairs. The dummy will be 1 only if the host country has won an investment dispute against a home country investor. Thus, the dummy variable only covers country-pairs directly affected by the decision favoring the respondent state.

2.3 Control variables

Bilateral investment treaties determine cross-border investments (Frenkel and Walter, 2019; Bhagwat et al., 2021). Such treaties regulate terms and conditions of investments (direct investment as well as portfolio investment) between the contracting countries. BITs protect foreign investors against inappropriate government practices by providing legal protection. Foreign investors may claim compensation in arbitral proceedings in case of expropriations or the like.

A BIT between the home and host country is essential for the investment disputes considered in this paper. Information on these contracts comes from UNCTAD's Investment Policy Hub. A binary dummy variable controls for the existence of BITs. The variable equals 1 if a BIT is in force between two countries and 0 otherwise. If a treaty is terminated, the dummy variable will return to 0. Signed but not yet ratified BITs are not considered.

To control for the potential effects of trade agreements on portfolio investment, a *regional trade agreement (RTA)* dummy is used. The dummy comes from CEPII's Gravity dataset and equals 1 if the home and the host country have a regional trade agreement and 0 otherwise.

To account for cultural, social, and legal similarities, information from CEPII's Gravity dataset is included. A commonly used approximation for similarity is the *ln distance* between two country capitals. With greater distance informational asymmetries, institutional differences, and transaction costs increase, and bilateral portfolio investment should decline (Portes and Rey (1998), Ghosh and Wolf (2000), Portes et al., (2001), Portes and Rey (2005), Guerin (2006)). Additionally, cultural distance and trust shape bilateral investment (Luigi Guiso et al. (2009), Aggarwal et al. (2012), Karolyi (2016)). Therefore, a *common border dummy* (accounting for neighboring countries), a *colonial relationship* dummy, a *common language* dummy, a *common legal system* dummy, and a *common religion index* are included.

Information from the International Country Risk Guide (ICRG) is included to approximate political risk. The dataset covers 12 dimensions of political risk, which add up to an overall score. This *ICRG score* can range from 0 to 100, while higher values indicate low political risk.

The natural logarithm of *real GDP* for the home and the host country is included to control the market size of the home and the host country. Large Economies provide more investment opportunities for foreign investors. Also, both countries' yearly changes in the bilateral exchange rate (*exchange rate change*) and CPI-based inflation rates are included. Furthermore, the yearly *volatility of national inflation rates* and *bilateral exchange rates* are included to account for macroeconomic stability. A higher exchange rate volatility might bias cross-border investments (Fidora et al. (2007)). The index from Chinn and Ito (2006) on *capital account openness* includes legal restrictions to cross-border capital flows.

Also, the yearly *stock market return* and the yearly *stock market volatility* are included in the analysis. A higher stock market return should attract higher foreign portfolio investment if a return-chasing behavior is assumed. A higher *stock market volatility* should distract foreign investors. Also, the size of the stock market (*stock market to GDP*) and *stock market turnover* are included as controls. Larger stock markets should provide more investment opportunities for foreign investors. Higher turnovers should indicate more vibrant markets.

[Table 1]

3 Estimation

3.1 Unconditional effects

The impact of investment disputes on yearly bilateral portfolio investment is tested using gravity models. The estimations rely on a Poisson Pseudo-Maximum-Likelihood (PPML) estimator, which has two advantages compared to an Ordinary Least Squares (OLS) estimator (Silva and Tenreyro, 2006). First, it can incorporate observations where bilateral portfolio investment is zero. In a conventional OLS framework, these observations would be omitted due to the log-linearization of the data. Second, the PPML estimator is less sensitive to distortions from heteroskedasticity than the OLS estimator. The interpretation of the estimated parameters is also simple. An estimator can be interpreted as an elasticity when the independent variable is logged. If the independent variable enters the model untransformed, the estimated parameter will be interpreted as a semi-elasticity.

To investigate the unconditional effects of investor-state disputes on bilateral portfolio holdings, we use the following model:

 $Bilateral \ portfolio \ investment_{ijt} = \exp \left[\alpha_0 + \beta_1 * Dispute_{it} + \beta_2 * Bilateral \ dispute_{ijt} \right]$

$$+\beta_{3} * BIT \ dummy_{ijt} + \sum_{k} \gamma_{k} * Gravity_{kij} + \sum_{l} \delta_{l} * Controls_{lit} + \sum_{m} \theta_{m} * Controls_{mjt}$$
(1)
+ $\gamma_{i} + \gamma_{j} + \eta_{year}$] + ε_{ijt} ,

Bilateral portfolio investment_{ijt} in host country *i*, originating from home country *j* in year *t*, is regressed on a dummy variable, $Distpute_{it}$, indicating whether a first investment dispute against country *i* has been initiated or concluded. Additionally, the *Bilateral dispute_{ijt}* dummy indicates country-pair-specific investment disputes. The *BIT dummy_{ijt}* controls for BITs between countries *i* and *j*, which is essential to start a trial. The model also includes bilateral gravity variables, $Gravity_{kij}$, control variables for the host country *i*, $Controls_{lit}$, and control variables for the home country *j*, $Controls_{ljt}$. In addition, host and home country fixed effects, γ_i and γ_j , year fixed effects, η_{year} are included. The standard errors, ε_{ijt} , are heteroscedasticity- and autocorrelation-robust and clustered for country-pairs.

Table 2 presents BIT-based arbitral proceedings' unconditional effects on bilateral portfolio equity investments. The first column presents results on initiating investment disputes, while columns two and three investigate the outcome of disputes. The outcome of disputes is either favoring the foreign investor (column II) or the respondent state (column III).

At first glance, portfolio investments are unaffected by arbitral proceedings. Neither initiation nor decisions favoring the foreign investor or the respondent state reveal unconditionally significant effects on bilateral portfolio investment. Following Allee and Peinhardt (2011), one would expect negative effects. The authors find significantly negative effects of pending disputes and decisions favoring the foreign investor on FDI net inflows.

Considering only investments between the countries involved in a dispute, we find a significantly negative effect of decisions favoring a foreign investor (-29.1%). This finding is similar to Wellhausen (2015), who finds negative effects of the initiation of arbitral proceedings on FDI only for country-pairs directly involved in an investment dispute. The author argues that for foreign investors, the sanctity of their BIT is more important than the violation of other investment treaties. The latter might explain the positive effect of the investment dispute on bilateral portfolio equity investment. The proven bilateral investment protection should make investments between the home country of the claimant and the respondent state less risky and should attract additional investments.

[Table 2 here]

In addition, several control variables enter the analysis. The *BIT dummy* has positive but largely insignificant effects on bilateral portfolio equity investments. The effects of *regional trade agreements* are significantly positive. To account for time-invariant country-pair fixed effects, gravity variables for

In distance, common border, colonial relationship, common language, and a *common legal system* are included. Bilateral portfolio equity investment decreases significantly with distance. A common language significantly increases bilateral investment. The estimates for *common border, colonial ties,* and a *common legal system* do not reveal significant effects. The estimated coefficients for the *common religion index* indicate that bilateral equity investments are higher when countries are religiously more similar. Furthermore, host countries with lower political risk (higher *ICRG score*) receive more bilateral investments.

Larger host countries (in terms of *real GDP*) attract significantly more bilateral portfolio equity investment. A higher *inflation rate* in the host country deters foreign investors. Inflation rate volatility does not reveal a significant impact. Bilateral *exchange rate changes* affect bilateral portfolio equity significantly, while the *exchange rate volatility* does not. Home countries with higher *capital account openness* provide more bilateral portfolio investments.

The *stock market returns* have no significant effect on bilateral investment. A higher *stock market volatility* in the home country reduces bilateral portfolio equity. The stock market size of the host country has a significantly positive impact. Surprisingly, bilateral portfolio equity investments decrease with the stock market size of the home country. *Stock market turnover* does not reveal significant effects.

3.2 Effects conditional on BITs

This Section will take a closer look at the effect of investment disputes on bilateral portfolio investments conditional on the existence of a BIT. Such treaties are designed to prevent expropriation and allow for compensation in the event of one. The decision to maintain or withdraw portfolio investments may depend on BITs, as foreign investors learn from disputes that a host country is willing to breach an investment agreement. To investigate the interplay of investment disputes and BITs on bilateral portfolio investments, the baseline model is expanded as follows:

$$Bilateral \ portfolio \ investment_{ijt} = \exp\left[baseline \ variables\right]$$
(2)

$$+ \beta_4 * Dispute_{ijt} * BIT dummy_{ijt}] + \varepsilon_{ijt}.$$

The interaction term $Dispute_{ijt} * BIT \ dummy_{ijt}$ covers the effect of investment disputes on portfolio investments covered by a BIT. The rest of the baseline specification remains unchanged.

Table 3 presents estimation results and marginal effects of disputes based on model (2). Column I investigates the interplay of the initiation of investment disputes and BITs. None of the estimated coefficients in this specification is statistically different from zero. The initiation of arbitral proceedings is not investment-relevant for portfolio equity investors, independently from BITs.

[Table 3]

Results in the second column are based on dispute outcomes favoring the foreign investor. The interaction of the *BIT dummy* and the *dispute dummy* significantly negatively affects bilateral portfolio equity (-27.5%). Also, the marginal effect of a dispute won by an investor is at -22.8%, significantly different from zero. Investments that are not protected by BITs are not affected by disputes. BIT-protected investors learn from decisions favoring foreign investors that the threat of compensation payments was insufficient to prevent expropriations. The latter reduces bilateral investment since the BIT-provided investment protection is weaker than expected.

Also, decisions favoring the respondent state negatively affect bilateral portfolio equity investments, albeit smaller (column III). The corresponding marginal effect of decisions in favor of the respondent state on BIT-protected investments is at -12.8%, somewhat smaller than for decisions in favor of the foreign investor. Decisions in favor of the respondent state prove that there was no treaty breach. Nevertheless, it can be assumed that the host country's actions were not investor-friendly. Therefore, investors are still deterred, albeit to a lower extent, compared to proven treaty violations.

These results are similar to Aisbett et al. (2018). The authors find that interactions between BITs and arbitral proceedings significantly reduce bilateral FDI. However, the results of Aisbett et al. (2018) are based on initiations of arbitral proceedings. For portfolio investments, only decisions of arbitral proceedings reveal significant effects on BIT-protected portfolio investors.

3.3 Effects conditional on political risk

Next to the investment protection of BITs, the political risk of host countries shapes the investment decisions of foreign investors. Therefore, it might be interesting to investigate the effects of investment disputes on countries with low political risk. In such countries, investment disputes are less common and might surprise foreign investors. To investigate the interplay of investment disputes and political risk on bilateral portfolio investments, the baseline model is expanded as follows:

$$Bilateral \ portfolio \ investment_{ijt} = \exp \left[Baseline \ variables + \beta_5 * Low \ political \ riks_{it} + \beta_6 * Dispute_{ijt} * Low \ political \ riks_{it} \right] + \varepsilon_{ijt}.$$
(3)

The baseline model is extended by a *Low political riks_{it}* dummy, which indicates countries with an ICRG score above the sample median. The risk dummy enters the model in an interaction term with investment disputes and as a standalone variable.

Results for including the interaction of political risk and investment disputes on bilateral portfolio equity investments are presented in Table 4. Column I investigates effects based on the initiation of investment disputes. The marginal effect of a dispute imitation in a country with low political risk is significantly negative at -18.9%. This indicates that countries with low political risk experience a severe decline in

foreign portfolio equity investments if they become respondents in an investment dispute. Due to the low political risk, foreign investors will likely be surprised by the investment dispute and adjust their investment decisions accordingly. In contrast, effects for countries with high political risk are not significantly different from zero. Foreign investors seem to anticipate investment disputes in politically risky countries.

[Table 4]

The second column presents results based on decisions favoring the foreign investor. Countries with low political risk will experience an even larger reduction of bilateral portfolio equity investments if a treaty breach is proven. The corresponding marginal effect is significantly negative at -38.7%. Effects for countries with high political risk are again not significantly different from zero. Investors seem to anticipate even the sentencing of an arbitral court when investing in countries with high political risk. Column III presents results based on dispute decisions favoring the respondent state. In this specification, the double interaction term does not reveal a significant impact on bilateral portfolio equity. Conditional on low political risk, a decision favoring the respondent state has no significant effect on bilateral portfolio equity holdings.

3.4 Effects conditional on BITs and political risk

The previous Sections show that both the existence of a BIT and the political risk of host countries shape bilateral portfolio investment. This Section tests for the complementarity of these factors. The baseline model is expanded as follows:

Bilateral portfolio investment_{ijt} = exp [Baseline variables + β_4 * Dispute_{ijt} * BIT dummy_{ijt}

 $+ \beta_{5} * Low political riks_{it} + \beta_{6} * Dispute_{ijt} * Low political riks_{it} + \beta_{7} * BIT dummy_{ijt} *$ (4) Low political riks_{it} + \beta_{8} * Dispute_{ijt} * BIT dummy_{ijt} * Low political riks_{it}] + \varepsilon_{ijt}.

In addition to the *BIT dummy*_{*ijt*}, the *Low political riks*_{*it*} dummy, and the corresponding double interaction terms, the model includes the interaction of the *BIT dummy*_{*ijt*} and the *Low political riks*_{*it*} dummy, as well as the triple interaction of the *Dispute*_{*ijt*} dummy, the *BIT dummy*_{*ijt*}, and the *Low political riks*_{*it*} dummy.

Table 5 presents results for this model. The first column uses the initiation of arbitral proceedings as a dispute variable, while the second and third apply decisions of an arbitral court favoring the investor or the respondent state. To give an overall view of the effects of investment disputes conditional on political risk and BITs, Table 6 presents the corresponding marginal effects.

[Table 5]

In the upper panel of Table 6, the first initiation of an arbitral proceeding reveals significantly negative effects on bilateral equity holdings in countries with low political risk when foreign investors are not protected by a BIT (-26.5 %). Apparently, investors did not expect investment disputes in a country with low political risk. The lack of investment protection by a BIT amplifies this effect. In countries with high political risk, dispute initiations have no significant effect. In such countries, the risk of investment disputes seems to be already considered.

The middle panel of Table 6 presents marginal results based on investment dispute decisions favoring the foreign investor. Bilateral portfolio equity is significantly reduced when a country with low political risk is convicted, regardless of the investment protection of a BIT (without BIT: -45,3%, with BIT: -48,5%). Foreign investors are seriously deterred when a host country with low political risk is found guilty of a treaty breach. Foreign investors probably did not anticipate this behavior since political risk is low. Marginal effects for countries with high political risk are also significantly negative when investments are protected by BITs. Foreign investors protected by BITs will significantly reduce bilateral portfolio equity investments in countries with high political risk after a conviction of the host country (-29.6%). Only investments in host countries with high political risk that are not protected by a BIT do not react to the decision in favor of a foreign investor. For these investments, arbitration seems to be priced in already.

The lower panel of Table 6 presents results for dispute outcomes favoring the respondent state. In such proceedings, the arbitral tribunal could not find a breach of the investment treaty. For countries with low political risk, there is no significant effect on bilateral portfolio equity investments, regardless of the existence of a BIT. Since the political risk of the host country is low, foreign investors presumably expected precisely this outcome. There is no effect for host countries with high political risk when investments are not protected by a BIT. If the investments are protected by a BIT, an outcome favoring the respondent state leads to a reduction of bilateral investments at -16.9%. It might be that foreign investors assume that the dismissed claim was justified since the host country is politically risky and expropriations are likely. In this case, a dismissed claim illustrates a lack of investor protection by the BIT, which became apparent by the trial.

[Table 6]

3.5 Robustness checks

This Section tests the robustness of the previous results. This Section only discusses findings based on disputes that have been decided in favor of the claimant. The results presented in the previous Section are estimated, including gravity variables to cover the bilateral connectedness of the home and host country. Since gravity variables typically do not vary over time, they can be replaced by bilateral fixed

effects. The first column of Table 7 uses these fixed effects to estimate the impact of investment dispute decisions favoring the foreign investor. The corresponding marginal effects are presented in the upper panel of Table 8. The results support the conclusions already made in Section 3.4. Bilateral portfolio equity investments are significantly reduced if countries with low political risk are found guilty, regardless of the existence of a BIT. In countries with high political risk, only BIT-protected investments are affected significantly.

[Table 7]

[Table 8]

The second column of Table 7 presents results using lagged control variables. Since most economic information is published with a time delay, lagged variables are more likely to represent an investor's level of information on an investment decision. Also, this specification's marginal effects support the previously made conclusions (middle panel of Table 8).

The third column of Table 7 applies a conventional OLS estimation technique. The dependent variable is transformed via an inverse hyperbolic sine transformation. This transformation approximates the natural logarithm and allows the use of observation where bilateral equity investments are zero.⁶. A simple logarithmic transformation of the data would result in the loss of observations. The used control variables, fixed effects, and the clustering of standard errors remain unchanged. The lower panel of Table 8 presents the corresponding marginal effects, which are mostly very similar to the PPML-based results. The OLS-based marginal effect is also significantly negative when a country with low political risk loses a dispute and foreign investors are not protected by BITs. For investments protected by a BIT, the marginal effect differs. There is no significant effect based on OLS results, while PPML results suggest a significantly negative effect. For countries with high political risk, the marginal effects are similar to PPML-based results, regardless of the existence of a BIT. There will be no significant impact from dispute outcomes in favor of the claimant if foreign investors are not protected by a BIT. With BIT protection, the marginal effect is significantly negative. Table A4 and Table A5 (Table A6 and Table A7) report robustness checks for the first initiation of disputes (outcome in favor of the respondent state). Overall, the findings presented in Section 3.4 are mainly robust to a modified estimation method.

To check that specific countries do not drive the results, the sample's composition can be varied. The results presented in Table 9 are based on a reduced sample. The first column presents results estimated without the Latin American countries.⁷. The corresponding marginal effects are presented in the upper panel of Table 10. Effects for countries with low political risk are smaller and less significant than the

⁶ Inverse hyperbolic sine transformation: $y^{ihst} = ln(y + \sqrt{y^2 + 1})$.

⁷ Chile, Colombia, Jamaica, Mexico, Panama, and Peru have been excluded from the sample.

results based on the whole sample. However, a decrease in significance levels is not unusual due to the reduced number of observations. For countries with high political risk, the marginal effects are similar to the results of the whole sample. The second and third columns of Table 9 also present results based on reduced sample size. The model in column II excluded Southeast Asian countries.⁸. Column III waives Central and East Asian countries⁹. The corresponding marginal effects are presented in the middle and lower panels of Table 10. Both panels reveal similar marginal effects of dispute decisions favoring the claimant on bilateral portfolio equity. Table A8 and Table A9 (Table A10 and Table A11) report robustness checks for the first initiation of disputes (outcome in favor of the respondent state). Overall, the influence of individual countries on the findings is neglectable.

[Table 9]

[Table 10]

4 Conclusion

This paper examines the effect of the initiation and outcome of investment disputes on bilateral portfolio investment. The analysis is based on an unbalanced panel dataset of 55 home and 36 host countries, which covers the years from 2001 to 2018. The investigation considers bilateral portfolio equity investments using gravity models and a PPML estimator. This paper is the first to examine the impact of arbitral proceedings on bilateral portfolio holdings. In addition, the effect of disputes is examined for the first time, considering the interaction with BITs and political risk in conjunction.

At first glance, bilateral portfolio equity investment is unaffected by arbitral proceedings. Neither initiation nor decisions favoring the foreign investor or the respondent state reveal unconditionally significant effects. This changes as soon as the existence of BITs and the political risk of the host country are included.

In response to dispute initiations, bilateral equity investments reduce significantly in countries with low political risk when not protected by a BIT. Decisions in favor of the claimant reduce bilateral investment significantly. Only investments in countries with high political risk not protected by BITs are unaffected. Decisions in favor of the respondent state reduce bilateral equity investments significantly only when investments are BIT-protected and made in countries with high political risk.

⁸Indonesia, Laos, Malaysia, Philippines, Singapore, Thailand, and Vietnam have been excluded from the sample. ⁹ China, Japan, Mongolia, Korea, and Kazakhstan have been excluded from the sample.

In general, portfolio equity investors react most sensitively to decisions in favor of the foreign investor. Initiation of disputes and decisions favoring the host country have notably less impact. Thus, portfolio equity investments react later to investment disputes than FDI. Literature on direct investments already finds negative impacts of dispute initiations. The difference might be because portfolio investments are easier to withdraw than direct investments. This allows portfolio investors to assess the situation in the host country longer without suffering losses. Furthermore, the impact of disputes tends to be stronger in countries with low political risk. Presumably, foreign investors expect a low expropriation risk due to the low political risk. Arbitral proceedings shatter this assumption and update investors' perception of a country's willingness to expropriate.

For future research, it remains to clarify how dispute-specific information affects the response of portfolio investment to arbitral proceedings. The impact of investment disputes might also depend on made allegations and claimed compensation, as literature on FDI suggests. Furthermore, the response of FDI to dispute outcomes needs to be clarified. It is unclear whether FDI will decrease after an investor wins a dispute since investments have already decreased after the initiation. Similarly, the response of FDI to decisions favoring the respondent state remains unclear.

References

- Aggarwal, R., Kearney, C., Lucey, B., 2012. Gravity and culture in foreign portfolio investment. J. Bank. Financ. 36, 525–538. https://doi.org/10.1016/j.jbankfin.2011.08.007
- Aisbett, E., Busse, M., Nunnenkamp, P., 2018. Bilateral investment treaties as deterrents of hostcountry discretion: the impact of investor-state disputes on foreign direct investment in developing countries. Rev. World Econ. 154, 119–155. https://doi.org/10.1007/s10290-017-0285-1
- Allee, T., Peinhardt, C., 2011. Contingent credibility: The impact of investment treaty violations on foreign direct investment. Int. Organ. 65, 401–432. https://doi.org/10.1017/S0020818311000099
- Bae, K., Yun, Y., Bailey, W., 2006. Determinants of bond holdings by foreign investors. BIS Pap. no. 30.
- Bhagwat, V., Brogaard, J., Julio, B., 2021. A BIT goes a long way: Bilateral investment treaties and cross-border mergers. J. financ. econ. 140, 514–538. https://doi.org/10.1016/j.jfineco.2020.12.005
- Brada, J.C., Chen, C., Jia, J., Kutan, A.M., 2020. Does Bilateral Investment Treaty Arbitration Have Any Value for Multinational Corporations? BOFIT Discuss. Pap. 10/2020. https://doi.org/10.2139/ssrn.3764765
- Cao, X., Ward, M.D., 2014. Do Democracies Attract Portfolio Investment? Transnational Portfolio Investments Modeled as Dynamic Network. Int. Interact. 40, 216–245. https://doi.org/10.1080/03050629.2014.880697
- Chinn, M.D., Ito, H., 2006. What matters for financial development? Capital controls, institutions, and interactions. J. Dev. Econ. 81, 163–192. https://doi.org/10.1016/j.jdeveco.2005.05.010
- Disdier, A.C., Mayer, T., 2007. Je t'aime, moi non plus: Bilateral opinions and international trade. Eur. J. Polit. Econ. 23, 1140–1159. https://doi.org/10.1016/j.ejpoleco.2006.09.021
- Fidora, M., Fratzscher, M., Thimann, C., 2007. Home bias in global bond and equity markets: The role of real exchange rate volatility. J. Int. Money Financ. 26, 631–655. https://doi.org/10.1016/j.jimonfin.2007.03.002
- Frenkel, M., Walter, B., 2019. Do bilateral investment treaties attract foreign direct investment? The role of international dispute settlement provisions. World Econ. 42, 1316–1342. https://doi.org/10.1111/twec.12743
- Ghosh, S., Wolf, H., 2000. Is There a Curse of Location? Spatial Determinants of Capital Flows to Emerging Markets, in: Edwards, S. (Ed.), Capital Flows and the Emerging Economies: Theory, Evidence, and Controversies. The University of Chicago Press, pp. 137–158.
- Giambona, E., Graham, J.R., Harvey, C.R., 2017. The management of political risk. J. Int. Bus. Stud. 48, 523–533. https://doi.org/10.1057/s41267-016-0058-4
- Giofré, M., 2014. Domestic investor protection and foreign portfolio investment. J. Bank. Financ. 46, 355–371. https://doi.org/10.1016/j.jbankfin.2014.05.027

- Giofré, M., 2013. Investor protection rights and foreign investment. J. Comp. Econ. 41, 506–526. https://doi.org/10.1016/j.jce.2012.07.002
- Guerin, S.S., 2006. The Role of Geography in Financial and Economic Integration: A Comparative Analysis of Foreign Direct Investment, Trade and Portfolio Investment Flows. World Econ. 29, 189–209.
- Guiso, L., Sapienza, P., Zingales, L., 2009. CULTURAL BIASES IN ECONOMIC EXCHANGE? Q. J. Econ. 1095–1131. https://doi.org/https://doi.org/10.1162/qjec.2009.124.3.109
- Head, K., Mayer, T., Ries, J., 2010. The erosion of colonial trade linkages after independence. J. Int. Econ. 81, 1–14. https://doi.org/10.1016/j.jinteco.2010.01.002
- Jensen, N., 2008. Political risk, democratic institutions, and foreign direct investment. J. Polit. 70, 1040–1052. https://doi.org/10.1017/S0022381608081048
- Jung, Y.S., Owen, E., Shim, G.S., 2021. Heterogeneity in how investors respond to disputes: Greenfield foreign direct investment and coindustrial disputes. J. Polit. 83, 1260–1274. https://doi.org/10.1086/715164
- Karolyi, G.A., 2016. The gravity of culture for finance. J. Corp. Financ. 41, 610–625. https://doi.org/10.1016/j.jcorpfin.2016.07.003
- Kerner, A., Pelc, K.J., 2022. Do Investor-State Disputes (Still) Harm FDI? Br. J. Polit. Sci. 52, 781– 804. https://doi.org/10.1017/S0007123420000721
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., 2008. The Economic Consequences of Legal Origins. J. Econ. Lit. 46, 285–332.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., Vishny, R., 1999. The quality of government. J. Law, Econ. Organ. 15, 222–279. https://doi.org/10.1093/jleo/15.1.222
- Lee, H., Staats, J.L., Biglaiser, G., 2012. The importance of legal systems for portfolio investment in the developing world. Int. Area Stud. Rev. 15, 339–358. https://doi.org/10.1177/2233865912465604
- Mayer, T., Zignago, S., 2011. Notes on CEPII's Distances Measures: The GeoDist Database. CEPII Work. Pap. 25. https://doi.org/10.2139/ssrn.1994531
- Portes, R., Rey, H., 2005. The determinants of cross-border equity flows. J. Int. Econ. 65, 269–296. https://doi.org/10.1016/j.jinteco.2004.05.002
- Portes, R., Rey, H., 1998. The Euro and International Equity Flows. J. Jpn. Int. Econ. 12, 406–423. https://doi.org/10.1006/jjie.1998.0412
- Portes, R., Rey, H., Oh, Y., 2001. Information and capital flows: The determinants of transactions in financial assets. Eur. Econ. Rev. 45, 783–796. https://doi.org/10.1016/S0014-2921(01)00138-6
- Poshakwale, S.S., Thapa, C., 2011. Investor protection and international equity portfolio investments. Glob. Financ. J. 22, 116–129. https://doi.org/10.1016/j.gfj.2011.10.003
- Silva, J.M.C.S., Tenreyro, S., 2006. The Log of Gravity. Rev. Econ. Stat. 88, 641-658.
- UNCTAD, 2020. Investment Dispute Settlement Navigator: full data release as of 31/07/2020 (excel

format) [WWW Document]. URL

https://investmentpolicy.unctad.org/publications/1242/investment-dispute-settlement-navigator-full-isds-data-release-as-of-31-07-2020-in-excel-format-

Wellhausen, R.L., 2015. Investor–State Disputes: When Can Governments Break Contracts? J. Conflict Resolut. 59, 239–261. https://doi.org/10.1177/0022002713503299

World Bank, 2019. Global Financial Development Database.

Tables and Figures

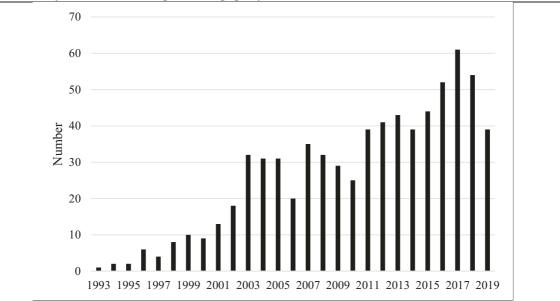


Figure 1: Newly initiated arbitral proceedings per year

Notes: Investment disputes based on bilateral investment treaties from 1993 to 2019. Source: (UNCTAD, 2020).

Table	1:	Summary	Statistics
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Table 1. Summary Statistics	N	Mean	Median	SD	Min.	Max.
Bilateral portfolio equity	14430	820.1	1.4	5532.4	0.0	160721.0
First dispute initiated	14430	0.8	1.0	0.4	0.0	1.0
First time investor wins	14430	0.4	0.0	0.5	0.0	1.0
First time state wins	14430	0.5	0.0	0.5	0.0	1.0
First dispute initiated bilateral	14430	0.1	0.0	0.2	0.0	1.0
First time investor wins bilateral	14430	0.0	0.0	0.1	0.0	1.0
First time state wins bilateral	14430	0.0	0.0	0.1	0.0	1.0
BIT dummy	14430	0.5	1.0	0.5	0.0	1.0
RTA dummy	14430	0.3	0.0	0.5	0.0	1.0
Ln distance	14430	8.6	8.9	0.8	4.8	9.9
Common border dummy	14430	0.0	0.0	0.2	0.0	1.0
Colonial relationship dummy	14430	0.0	0.0	0.1	0.0	1.0
Common language dummy	14430	0.1	0.0	0.3	0.0	1.0
Common legal system dummy	14430	0.3	0.0	0.5	0.0	1.0
Common religion index	14430	0.2	0.0	0.3	0.0	1.0
ICRG score (host)	14430	65.0	64.3	8.9	42.8	83.6
ICRG score (home)	14430	75.8	78.3	10.2	44.3	96.1
Ln real GDP (host)	14430	26.3	26.3	1.3	22.9	30.0
Ln real GDP (home)	14430	26.9	26.8	1.5	22.7	30.5
Inflation rate (host)	14430	5.2	4.1	4.6	-1.1	43.4
Inflation rate (home)	14430	2.7	2.2	2.8	-4.6	43.4
Inflation rate volatility (host)	14430	1.1	0.7	1.1	0.1	10.2
Inflation rate volatility (home)	14430	0.7	0.5	0.6	0.1	10.2
Exchange rate change	14430	2.5	1.2	21.6	-85.8	658.8
Exchange rate volatility	14430	2.6	2.1	5.1	0.0	171.0
Capital account openness (host)	14430	0.5	0.4	0.3	0.0	1.0
Capital account openness (home)	14430	0.8	1.0	0.3	0.2	1.0
Stock market return (host)	14430	11.0	6.7	27.3	-62.7	208.8
Stock market return (home)	14430	4.5	4.4	20.4	-74.6	125.0
Stock market volatility (host)	14430	19.9	18.2	8.7	5.8	64.3
Stock market volatility (home)	14430	19.7	17.9	8.9	3.9	64.3
Stock market to GDP (host)	14430	54.4	38.9	48.3	0.0	322.7
Stock market to GDP (home)	14430	97.7	61.3	164.2	0.6	1274.8
Stock market turnover (host)	14430	49.6	25.5	103.5	0.3	1721.5
Stock market turnover (home)	14430	65.4	48.4	66.5	0.2	927.8

Notes: This Table displays summary statistics of the variables used in the analysis.

	Portfolio equity I II III		
	First dispute	First time	First time
	initiated	investor wins	state wins
Dispute dummy	-0.006	-0.026	-0.009
	(0.061)	(0.069)	(0.045)
Dispute dummy bilateral	0.057	0.291**	0.222
1 5	(0.087)	(0.136)	(0.135)
IT dummy	0.185	0.152	0.189*
5	(0.115)	(0.115)	(0.114)
TA dummy	0.386***	0.402***	0.373***
	(0.128)	(0.127)	(0.125)
n distance	-0.321***	-0.318***	-0.328***
	(0.089)	(0.088)	(0.087)
ommon border dummy	0.106	0.128	0.088
	(0.239)	(0.231)	(0.226)
olonial relationship dummy	-0.153	-0.144	-0.132
	(0.178)	(0.168)	(0.168)
ommon language dummy	0.518***	0.520***	0.517***
	(0.149)	(0.145)	(0.146)
ommon legal system dummy	0.090	0.097	0.079
-	(0.082)	(0.081)	(0.078)
ommon religion index	0.722***	0.704***	0.739***
-	(0.234)	(0.238)	(0.236)
CRG score (home)	0.020***	0.020***	0.020***
	(0.006)	(0.006)	(0.006)
CRG score (home)	0.005	0.005	0.005
	(0.008)	(0.008)	(0.008)
n real GDP (home)	1.387***	1.399***	1.407***
· · · ·	(0.213)	(0.218)	(0.219)
n real GDP (home)	0.493	0.520	0.515
· · · ·	(0.453)	(0.452)	(0.451)
flation rate (home)	-0.020***	-0.018***	-0.019***
· · · ·	(0.006)	(0.006)	(0.006)
flation rate (home)	0.004	0.004	0.004
	(0.020)	(0.021)	(0.020)
flation rate volatility (home)	-0.014	-0.016	-0.015
	(0.019)	(0.019)	(0.019)
flation rate volatility (home)	0.008	0.008	0.006
	(0.058)	(0.058)	(0.058)
xchange rate change	-0.004***	-0.004***	-0.004***
	(0.001)	(0.001)	(0.001)
xchange rate volatility	-0.007	-0.007	-0.006
	(0.010)	(0.011)	(0.010)
apital account openness (home)	-0.068	-0.133	-0.095
	(0.185)	(0.165)	(0.176)
apital account openness (home)	-1.106*	-1.126*	-1.149*
	(0.626)	(0.594)	(0.665)
ock market return (home)	0.000	0.000	0.000
	(0.001)	(0.001)	(0.001)
ock market return (home)	-0.002	-0.002	-0.001
	(0.002)	(0.002)	(0.002)
ock market volatility (home)	0.001	0.002	0.001
/	(0.002)	(0.002)	(0.002)
ock market volatility (home)	-0.012***	-0.013***	-0.013***
- 、 /	(0.004)	(0.004)	(0.004)
ock market to GDP (host)	0.005***	0.005***	0.005***
× /	(0.001)	(0.001)	(0.001)

Table 2: The effect of initiation and outcome of investment disputes on bilateral portfolio equity investment

Stock market to GDP (home)	-0.002*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)
Stock market turnover (host)	-0.001 (0.000)	-0.001* (0.000)	-0.001 (0.000)
Stock market turnover (home)	0.000	0.000	0.000
Constant	(0.001) -41.636***	(0.001) -42.728***	(0.001) -42.639***
	(13.243)	(12.837)	(13.344)
Observations	14,430	14,430	14,430
Pseudo R2	0.951	0.952	0.951

Notes: This Table presents the PPML estimation results of model (1): *Bilateral portfolio investment*_{*ijt*} = exp [$\alpha_0 + \beta_1 * Dispute_{it} + \beta_2 * Bilateral dispute_{ijt} + \beta_3 * BIT dummy_{ijt} + \sum_k \gamma_k * Gravity_{kij} + \sum_l \delta_l * Controls_{lit} + \sum_m \theta_m * Controls_{mjt} + \gamma_i + \gamma_j + \eta_{year}$] + ε_{ijt} . All regressions include home and host country fixed effects as well as year fixed effects. Robust standard errors clustered on the country-pair level are reported in parentheses. *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

	Portfolio equity			
	I II		III	
	First dispute	First time	First time	
	initiated	investor wins	state wins	
Dispute dummy	-0.006	0.046	0.081	
	(0.064)	(0.079)	(0.058)	
BIT dummy	0.184	0.240*	0.279**	
	(0.135)	(0.125)	(0.118)	
Dispute dummy * BIT dummy	0.000	-0.275***	-0.209***	
	(0.096)	(0.097)	(0.074)	
Dispute dummy bilateral	0.057	0.383***	0.285**	
	(0.089)	(0.140)	(0.142)	
Marginal effect of a dispute on BIT-protected investments	-0.006	-0.228***	-0.128*	
e 1 1				
(Disp. dummy + Disp. dummy * BIT dummy)	(0.094)	(0.082)	(0.068)	
Observations	14,430	14,430	14,430	
Pseudo R2	0.951	0.952	0.952	

Table 3: The effect of initiation and outcome of investment disputes on bilateral portfolio equity investment conditional on BITs

Notes: This Table presents the PPML estimation results of model (2): *Bilateral portfolio investment*_{ijt} = $\exp[baseline variables + \beta_4 * Dispute_{ijt} * BIT dummy_{ijt}] + \varepsilon_{ijt}$. All regressions include control variables and fixed effects of the baseline model (see Table 2). Additionally, the marginal effects of disputes on BIT-protected investments are presented. Robust standard errors clustered on the country-pair level are reported in parentheses. *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

Table 4: The effect of initiation and outcome of investment disputes on bilateral portfolio equity investment conditional on political risk

investment conditional on pointear risk	Portfolio equity		
	Ι	II	III
	First dispute	First time	First time
	initiated	investor wins	state wins
Dispute dummy	0.005	-0.003	-0.019
	(0.063)	(0.069)	(0.047)
Low political risk	0.042	0.039	0.012
	(0.046)	(0.045)	(0.050)
Dispute dummy * Low political risk dummy	-0.195**	-0.384***	0.094
	(0.096)	(0.106)	(0.159)
Dispute dummy bilateral	0.057	0.286**	0.222
	(0.087)	(0.134)	(0.136)
Marginal effect of a dispute on investments in low	189*	387***	.076
political risk countries	(.115)	(.105)	(.157)
(Disp. dummy + Disp. dummy * Low pol. risk dummy)	(((
Observations	14,430	14,430	14,430
Pseudo R2	0.951	0.952	0.951

Notes: This Table presents the PPML estimation results of model (3): Bilateral portfolio investment_{ijt} = exp [Baseline variables + β_5 * Low political riks_{it} + β_6 * Dispute_{ijt} * Low political riks_{it}] + ε_{ijt} . All regressions include control variables and fixed effects of the baseline model (see Table 2). Additionally, the marginal effects of disputes on investments in low-political-risk countries are presented. Robust standard errors clustered on the country-pair level are reported in parentheses. *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

	Portfolio equity		
	I II		III
	First dispute	First time	First time
	initiated	investor wins	state wins
Dispute dummy	0.039	0.100	0.093
1 2	(0.070)	(0.081)	(0.061)
BIT dummy	0.233	0.279*	0.305**
-	(0.148)	(0.144)	(0.133)
Low political risk dummy	0.077	0.074	0.046
	(0.047)	(0.051)	(0.059)
Dispute dummy * BIT dummy	-0.076	-0.397***	-0.262***
	(0.086)	(0.117)	(0.077)
Dispute dummy * Low political risk dummy	-0.303**	-0.554***	-0.011
	(0.125)	(0.129)	(0.165)
BIT Dummy * Low political risk dummy	-0.107	-0.132	-0.079
	(0.121)	(0.122)	(0.122)
Dispute dummy * BIT dummy *			× /
Low political risk dummy	0.237	0.497***	0.219
1	(0.159)	(0.190)	(0.157)
Dispute dummy bilateral	0.058	0.385***	0.263*
	(0.088)	(0.139)	(0.139)
Observations	14,430	14,430	14,430
Pseudo R2	0.951	0.953	0.952

Table 5: The effect of initiation and outcome of investment disputes on bilateral portfolio equity investment conditional on BITs and political risk

Notes: The Table presents the PPML estimates for model (4): Bilateral portfolio investment_{ijt} = exp [Baseline variables+ β_4 * Dispute_{ijt} * BIT dummy_{ijt}+ β_5 * Low political riks_{it} + β_6 * Dispute_{ijt} * Low political riks_{it} + β_7 * BIT dummy_{ijt} * Low political riks_{it} + β_8 * Dispute_{ijt} * BIT dummy_{ijt} * Low political riks_{it}] + ε_{ijt} . All regressions include control variables and fixed effects of the baseline model (see Table 2). Robust standard errors clustered on the country-pair level are reported in parentheses. *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

Table 6: The marginal effect of investment disputes on bilateral portfolio equity investment conditional on BITs and political risk

First dispute initiated	No BIT	BIT	Difference
Low political risk	-0.265**	-0.211	0.054
	(0.127)	(0.158)	(0.147)
High political risk	0.039	-0.037	-0.076
	(0.07)	(0.09)	(0.086)
First time investor wins			
Low political risk	-0.453***	-0.484***	-0.031
	(0.126)	(0.155)	(0.153)
High political risk	0.100	-0.296***	-0.397***
	(0.081)	(0.101)	(0.117)
First time state wins			
Low political risk	0.082	-0.040	-0.123
	(0.16)	(0.206)	(0.141)
High political risk	0.093	-0.169**	-0.262***
	(0.061)	(0.073)	(0.077)

Notes: The marginal effects are based on regression results from Table 5. Robust standard errors clustered on the country-pair level are reported in parentheses. *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

	Portfolio equity		
	Ι	II	III
	Country-pair FEs	Lagged controls	OLS
Dispute dummy	0.100	0.093	-0.166
	(0.076)	(0.075)	(0.152)
BIT dummy	0.400*	0.280**	-0.356**
	(0.219)	(0.143)	(0.155)
Low political risk dummy	0.088*	0.017	-0.025
1 5	(0.053)	(0.059)	(0.121)
Dispute dummy * BIT Dummy	-0.422***	-0.372***	-0.203
1 5 5	(0.114)	(0.123)	(0.198)
Dispute dummy * Low political risk dummy	-0.341**	-0.425***	-0.153
	(0.136)	(0.142)	(0.188)
BIT Dummy * Low political risk dummy	-0.157	-0.122	-0.034
	(0.122)	(0.127)	(0.176)
Dispute dummy * BIT Dummy *			
Low political risk dummy	0.013	0.469**	0.552**
	(0.265)	(0.195)	(0.268)
Dispute dummy bilateral	0.204	0.399***	0.243
-	(0.154)	(0.133)	(0.351)
Observations	11,316	12,009	14,430
Pseudo R2	0.976	0.952	0.696

Table 7: Robustness checks I: Country-pair FEs, lagged controls, OLS

Notes: The Table presents the PPML estimates for model (4): Bilateral portfolio investment_{ijt} = exp [Baseline variables+ β_4 * Dispute_{ijt} * BIT dummy_{ijt}+ β_5 * Low political riks_{it} + β_6 * Dispute_{ijt} * Low political riks_{it} + β_7 * BIT dummy_{ijt} * Low political riks_{it} + β_8 * Dispute_{ijt} * BIT dummy_{ijt} * Low political riks_{it}] + ε_{ijt} . All regressions also include control variables and fixed effects of the baseline model (see Table 2). Robust standard errors clustered on the country-pair level are reported in parentheses. *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

Table 8: Marginal effects for Robustness checks I

Country-pair FE	No BIT	BIT	Difference
Low political risk	-0.240*	-0.806***	-0.565**
Low political fisk	(0.136)		(0.275)
	· · · · ·	(0.213)	
High political risk	0.1	-0.321***	-0.422***
	(0.076)	(0.102)	(0.114)
Lagged controls			
Low political risk	-0.332**	-0.358**	-0.026
	(0.137)	(0.161)	(0.151)
High political risk	0.093	-0.279***	-0.372***
	(0.075)	(0.104)	(0.123)
OLS			
Low political risk	-0.319*	-0.004	0.315
	(0.168)	(0.218)	(0.207)
High political risk	-0.166	-0.369**	-0.203
	(0.152)	(0.151)	(0.198)

Notes: The marginal effects are based on regression results from Table 7. Robust standard errors clustered on the country-pair level are reported in parentheses. *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

	, ,	Portfolio equity			
	Ι	II	III		
	Without Latin	Without Southeast	Without Central		
	America	Asia	and East Asia		
Diamete dummer	0.118	0.068	0.038		
Dispute dummy					
	(0.085)	(0.089)	(0.082)		
BIT dummy	0.317**	0.139	-0.036		
	(0.144)	(0.149)	(0.127)		
Low political risk dummy	0.077	0.058	0.041		
	(0.049)	(0.057)	(0.059)		
Dispute dummy * BIT Dummy	-0.416***	-0.428***	-0.203*		
1 7 7	(0.122)	(0.112)	(0.105)		
Dispute dummy * Low political risk dummy	-0.489***	-0.520***	-0.420***		
	(0.171)	(0.128)	(0.119)		
BIT Dummy * Low political risk dummy	-0.114	-0.089	0.017		
	(0.120)	(0.122)	(0.130)		
Dispute dummy * BIT Dummy *					
Low political risk dummy	0.517**	0.543***	0.313*		
1 V	(0.213)	(0.176)	(0.189)		
Dispute dummy bilateral	0.398***	0.291**	0.388***		
	(0.135)	(0.135)	(0.140)		
Observations	11,323	10,697	12,026		
Pseudo R2	0.954	0.960	0.949		
Notes: The Table presents DDML estima	tag for model (Dilatoral nortfol	io immostra ont -		

Table 9: Robustness checks II: Excluding regions

Notes: The Table presents PPML estimates for model (4): *Bilateral portfolio investment*_{ijt} = exp [*Baseline variables*+ β_4 * *Dispute*_{ijt} * *BIT dummy*_{ijt}+ β_5 * *Low political riks*_{it} + β_6 * *Dispute*_{ijt} * *Low political riks*_{it} + β_7 * *BIT dummy*_{ijt} * *Low political riks*_{it} + β_8 * *Dispute*_{ijt} * *BIT dummy*_{ijt} * *Low political riks*_{it}] + ε_{ijt} . All regressions also include control variables and fixed effects of the baseline model (see Table 2). Robust standard errors clustered on the country-pair level are reported in parentheses. *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

Table 10: Marginal effects for Robustness checks II

Without Latin America	No BIT	BIT	Difference
Low political risk	-0.371**	-0.384	-0.013
	(0.17)	(0.236)	(0.205)
High political risk	0.118	-0.298***	-0.416***
	(0.085)	(0.106)	(0.122)
Without Southeast Asia			
Low political risk	-0.452***	-0.425***	0.027
	(0.124)	(0.155)	(0.154)
High political risk	0.068	-0.359***	-0.428***
	(0.089)	(0.113)	(0.112)
Without Central and East Asia			
Low political risk	-0.381***	-0.254*	0.127
	(0.115)	(0.133)	(0.123)
High political risk	0.038	-0.165*	-0.203*
	(0.082)	(0.094)	(0.105)

Notes: The marginal effects are based on regression results from Table 9. Robust standard errors clustered on the country-pair level are reported in parentheses. *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

Appendix

Table A1: Countries in sample

Host countries:

Bangladesh, Bulgaria, Chile, China, Colombia, Croatia, Egypt, Ghana, Hungary, India, Indonesia, Jamaica, Kazakhstan, Kenya, Kuwait, Malaysia, Mexico, Morocco, Namibia, Nigeria, Oman, Pakistan, Peru, Philippines, Poland, Qatar, Russia, Saudi Arabia, South Africa, Sri Lanka, Thailand, Tunisia, Turkey, Ukraine, United Arab Emirates, Vietnam

Home countries:

Australia, Austria, Bahrain, Bangladesh, Belgium, Bulgaria, Canada, Chile, China, Colombia, Cyprus, Czechia, Denmark, Egypt, Finland, France, Germany, Greece, Hong Kong, Hungary, India, Indonesia, Ireland, Israel, Italy, Japan, Kazakhstan, Korea, Kuwait, Lebanon, Malaysia, Malta, Mexico, Netherlands, New Zealand, Norway, Pakistan, Panama, Peru, Philippines, Poland, Portugal, Russia, Saudi Arabia, Singapore, Slovakia, Slovenia, South Africa, Spain, Sweden, Switzerland, Thailand, Turkey, United Kingdom, United States of America

Variable	Definition	Source
Bilat. portfolio equity	Data on bilateral equity and investment fund shares from <i>Coordinated Portfolio Investment Survey</i> in million \$US at end-of-year basis. The US consumer price index is used to adjust the data to real terms.	CPIS - Coordinated Portfolic Investment Survey, IMF.
First dispute initiated dummy	The dummy variable indicates whether a first arbitral proceeding against a host country has been initiated. The dummy is 1 in the year of initiation and all following years, otherwise the dummy is 0. The considered arbitral proceedings rely only on single BITs. Investment disputes based on two BITs or a BIT and another investment treaty are excluded. If a dispute relies on two contracts, it is not possible to decide which one is crucial for the trial. Moreover, observations are excluded if more than one arbitral proceeding is initiated in a given year. If claimants come from different countries the contracting countries of the BIT are used to determine the claimant's concluded with the Belgium Luxemburg Economic Union are manually assigned to either Belgium or Luxemburg using the nationality of the claimant.	UNCTAD's Investment Dispute Settlement Navigator, (UNCTAD, 2020).
First dispute initiated bilateral dummy	The dummy variable indicates whether a first arbitral proceeding between the host country and the home country has been initiated. The dummy is 1 in the year of initiation and all following years, otherwise the dummy is 0. As described in the paragraph on the <i>first dispute initiated dummy</i> above, some observations are excluded from the sample.	UNCTAD's Investment Dispute Settlement Navigator, (UNCTAD, 2020)
First time investor wins dummy	The dummy variable indicates whether a first arbitral proceeding against a host country is decided in favor of the investor (claimant). The dummy is 1 in the year of decision and all following years, otherwise the dummy is 0. As described in the paragraph on the <i>first dispute initiated dummy</i> above, some observations are excluded from the sample.	UNCTAD's Investment Dispute Settlement Navigator, (UNCTAD, 2020)
First time investor wins bilateral	The dummy variable indicates whether a first arbitral proceeding against a host country is decided in favor of	UNCTAD's Investment Dispute Settlement

Table A2: Variables and data source

dummy	an investor (claimant) from the home country. The dummy is 1 in the year of decision and all following years, otherwise the dummy is 0. As described in the paragraph on the <i>first dispute initiated dummy</i> above, some observations are excluded from the	Navigator, (UNCTAD, 2020)
First time state wins dummy	sample. The dummy variable indicates whether a first arbitral proceeding against a host country is decided in favor of the host country (respondent). The dummy is 1 in the year of decision and all following years, otherwise the dummy is 0. As described in the paragraph on the <i>first dispute initiated</i>	UNCTAD's Investment Dispute Settlement Navigator, (UNCTAD, 2020)
	<i>dummy</i> above, some observations are excluded from the sample.	
First time state wins bilateral dummy	The dummy variable indicates whether a first arbitral proceeding initiated by a home country investor (claimant) against a host country is decided in favor of the host country (respondent). The dummy is 1 in the year of decision and all following years, otherwise the dummy is 0. As described in the paragraph on the <i>first dispute initiated dummy</i> above, some observations are excluded from the	UNCTAD's Investment Dispute Settlement Navigator, (UNCTAD, 2020)
BIT dummy	sample. The dummy variable indicates whether a country-pair has an active Bilateral Investment Treaty (BIT). BITs that have been signed but not yet ratified are not considered. If a BIT is terminated, the dummy will be 0 in the years following the termination year.	Investment Policy Hub – International Investment Agreements Navigator, UNCTAD.
Low political risk dummy	The binary <i>low political risk dummy</i> indicates countries where the ICRG index scores above the sample median. The ICRG index is based on the 12 risk components provided by the <i>International Country Risk Guide</i> (ICRG): government stability, socioeconomic conditions, investment profile, internal conflict, external conflict, corruption, military in politics, religious tensions, law and order, ethnic tensions, democratic accountability, and bureaucracy quality. The aggregated ICRG index (sum of the 12 sub-components) ranges from 0 to 100, while high values indicate low risk.	International Country Risk Guide (ICRG), The PRS Group.
RTA dummy	This dummy variable is 1 if the home and host county are engaged in a regional trade agreement of any type.	CEPII Gravity Dataset, WTO's Regional Trade Agreements Information System.
Ln distance	This variable represents the natural logarithm of the distance between the two counties' capitals.	CEPII Gravity Dataset, Mayer and Zignago (2011).
Common border dummy Colonial relationship dummy	This dummy variable indicates whether two countries share a common border. This dummy indicates whether the two countries have ever been in a colonial relationship.	CEPII Gravity Dataset, Mayer and Zignago (2011). CEPII Gravity Dataset, Head et al. (2010).
Common language dummy	This bilateral dummy indicates if a common language is spoken by at least 9% of the population in both countries	CEPII Gravity Dataset, Head et al. (2010).
Common legal system dummy	or if both countries share a common language. This dummy variable indicates if the two countries share common legal origins after 1991.	CEPII Gravity Dataset, La Porta et al. (1999), La
Common religion index Ln real GDP (host/home)	The index on religious proximity runs from 0 to 1 and increases when both countries have a large population share of the same religious group. This variable represents the natural logarithm of the real GDP for the host and home country.	Porta et al. (2008). CEPII Gravity Dataset, La Porta et al. (1999), Disdier and Mayer (2007). WDI - World Development Indicators, World Bank.

Inflation rate (host/home) Inflation rate volatility (host/home) Exchange rate change	The Inflation rate is computed as the average annual change of the consumer price index (CPI). This variable represents the standard deviation of the inflation rate for a given year. The computation is based on monthly or quarterly CPI data. Ln-growth of the monthly bilateral exchange rates from end-of-year to end-of-year. The bilateral exchange rates are expressed in the host country currency per home country currency. The bilateral exchange rates are computed using monthly exchange rates of home and	IFS - International Financial Statistics, IMF. IFS - International Financial Statistics, IMF. IFS - International Financial Statistics, IMF.
Exchange rate volatility	host countries to \$US. This variable represents the standard deviation of the monthly ln-growth of the bilateral exchange rates within a given year. The bilateral exchange rates are expressed in host country currency per home country currency. The bilateral exchange rates are computed using monthly exchange rates of home and host countries to \$US.	IFS - International Financial Statistics, IMF.
Capital account openness (host/home)	The Chinn-Ito Index represents the first principal component comprising the presence of multiple exchange rates, restrictions on current account transactions, restrictions on capital account transactions and the surrender of exports proceeds.	Chinn and Ito (2006).
Stock market return (host/home)	The year-on-year growth rate of the average stock market index.	GFDD - Global Financial Development Database, World Bank.
Stock market volatility (host/home)	The yearly average of the 360-day volatility of the stock market index.	GFDD - Global Financial Development Database, World Bank.
Stock market to GDP (host/home)	Value of listed shares in a stock market relative to the GDP.	GFDD - Global Financial Development Database, World Bank.
Stock market turnover ratio (host/home)	The yearly value of traded shares divided by the average market capitalization.	GFDD - Global Financial Development Database, World Bank.

Notes: This Table summarizes definitions and data sources of the used variables.

Table A3: Correlations:																		
	Bilateral portfolio equity	First dispute initiated	First time investor wins	First time state wins	First dispute initiated bilateral	First time investor wins bilateral	First time state wins bilateral	Ymmub TIB	Ymmub ATA	Ln distance Common border	ymmub IsinoloD	ymmub qintanoitalar relationshin nommo Sangna language	Common legal	system dummy Common religion	index ICRG score (host)	ICRG score (home)	Ln real GDP (host)	(home) Ln real GDP
Bilateral portfolio equity	1.000		[[
First dispute initiated	-0.017	1.000																
First time investor wins	-0.005	0.459	1 000															
First time state wins	-0.026	0 533	0.424	1 000														
First dispute initiated bilateral	0.028	0.134	0.136	0.123	1.000													
First time investor wins bilateral	0.033	0.074	0.161	0.093	0.552	1.000												
First time state wins bilateral	0.007	0.073	0.076	0.137	0.545		1.000											
BIT dummy	-0.048	0.106	0.097	0.106	0.217			000										
RTA dumny	-0.016	0.057	0.152	0.094	0.045				000									
Ln distance	0.047	-0.085	-0.068	-0.133	-0.072													
Common border dummy	0.007	0.026	0.039	0.059	0.035													
Colonial relationship dummy	0.026	-0.018	-0.013	-0.018	0.197							000						
Common language dummy	0.119	-0.086	-0.112	-0.082	0.008													
Common legal system dummy	0.023	0.008	0.012	0.009	0.027									00(
Common religion index	-0.048	0.079	0.050	0.042	0.046	0.013	0.028 0	0.035 0.	0.273 -0.	-0.117 0.0	0.075 0.1	0.136 0.	0.145 0.1	0.136 1.00	00			
ICRG score (host)	-0.030	-0.116	-0.057	0.100	-0.016													
ICRG score (home)	0.090	-0.089	-0.081	-0.108	0.083												0	
Ln real GDP (host)	0.187	0.152	0.115	-0.054	0.032												_	
Ln real GDP (home)	0.209	-0.005	-0.008	0.005	0.181													
Inflation rate (host)	-0.026	0.018	0.114	-0.039	0.036									011 -0.143	43 -0.417	17 0.052	2 -0.011	0.004
Inflation rate (home)	-0.052	-0.006	-0.017	-0.013	-0.070													
Inflation rate volatility (host)	-0.029	-0.035	0.035	0.040	0.027													
Inflation rate volatility (home)	-0.036	-0.015	-0.020	-0.012	-0.065	_												
Exchange rate change	-0.007	-0.003	0.047	-0.001	0.008													
Exchange rate volatility	-0.019	-0.024	0.026	-0.011	-0.007													
Capital account openness (host)	-0.084	0.026	0.017	0.083	-0.011			_										
Capital account openness (home)	0.096	-0.039	-0.031	-0.044	0.112						_							
Stock market return (host)	-0.001	-0.075	-0.023	-0.090	-0.005													_
Stock market return (home)	0.021	0.004	0.002	-0.018	0.001													
Stock market volatility (host)	-0.003	-0.040	0.069	-0.075	0.014													
Stock market volatility (home)	-0.039	-0.060	-0.051	-0.043	0.005													
Stock market to GDP (host)	0.090	-0.215	-0.212	-0.099	-0.046													
Stock market to GDP (home)	0.029	0.012	0.011	0.014	-0.019													_
Stock market turnover (host)	0.060	-0.087	-0.067	-0.137	-0.018													
Stock market turnover (home)	0.130	-0.034	-0.036	-0.029	0.101													

Notes: This Table presents pairwise correlations of used variables

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Stock market turnover (home)	1.000
Stock market Stock market	1.000
GDP (home) Stock market to	1.000 -0.011
GDP (host) GDP (host)	1.000 0.011 -0.070
Stock market volatility (home)	1.000 -0.017 -0.036 0.154
Stock market volatility (host)	1.000 0.307 -0.199 0.085
Stock талket return (home)	1.000 -0.149 -0.051 -0.003 -0.003
Stock market return (host)	$\begin{array}{c} 1.000\\ 0.311\\ -0.001\\ 0.024\\ 0.029\\ -0.022\end{array}$
Capital account openness (home)	1.000 0.028 0.012 0.015 0.015 0.005
Capital account openness (host)	1.000 0.007 0.0133 0.007 0.018 0.018
Exchange rate volatility	1.000 -0.043 -0.043 -0.023 -0.023 -0.043 0.118 0.118 0.118 -0.021 -0.040
Exchange rate	1.000 0.785 0.070 0.003 0.0017 0.0017 0.003 0.0017 0.0017 0.003 0.0017
Inflation rate volatility (home)	$\begin{array}{c} 1.000\\ -0.057\\ -0.057\\ -0.057\\ -0.043\\ 0.128\\ 0.128\\ 0.002\\ 0.002\\ 0.019\\ 0.019\end{array}$
Inflation rate volatility (host)	1.000 1.000 0.157 0.139 0.038 0.141 0.139 0.018 0.142 0.139 0.018 0.018 0.018 0.018 0.018 0.009 0.005 0.007 0.072
Inflation rate (home)	1.000 1.000 0.024 0.0493 0.024 0.052 0.052 0.052 0.052 0.051 0.049 0.021 0.049 0.021 0.049 0.021 0.049 0.021 0.023 0.021 0.024 0.021 0.023 0.021 0.024 0.021 0.021 0.021 0.024 0.021 0.022 0.021 0.021 0.024 0.021 0.021 0.021 0.021 0.021 0.024 0.021 0.021 0.022 0.024 0.021 0.024 0.022 0.024 0.021 0.024 0.021 0.024 0.022 0.024 0.022 0.024 0.021 0.024 0.022 0.024 0.021 0.022 0.021 0.022 0.024 0.021 0.022 0.022 0.024 0.021 0.022 0.022 0.024 0.022 0.022 0.024 0.022 0.024 0.022 0.022 0.024 0.022 0.022 0.024 0.022 0.022 0.024 0.022 0.022 0.024 0.022 0.022 0.024 0.022 0.024 0.024 0.022 0.024 0.022 0.024 0.022 0.024 0.024 0.022 0.024 0.022 0.024 0.024 0.022 0.024 0.024 0.022 0.024 0.022 0.024 0.022 0.024 0.022 0.024 0.024 0.024 0.022 0.024 0.022 0.024 0.022 0.024 0.024 0.024 0.022 0.024 0.022 0.024 0.022 0.024 0.022 0.024 0.022 0.022 0.024 0.024 0.022 0.024 0.024 0.022 0.024 0.022 0.024 0.02200000000
Inflation rate (host)	1.000 1.000 1.000 1.58 0.158 0.158 0.158 0.158 0.158 0.158 0.158 0.158 0.075 0.007 0.015 0.005 0.051 0.076
	Bilateral portfolio equity First dispute initiated First time investor wins First time state wins First time state wins First time state wins bilateral First time investor wins bilateral First time investor wins bilateral First time state wins bilateral Common border dummy Colonial relationship dummy Colonial relationship dummy Common legal system dummy Common legal system dummy Common legal system dummy Common legal system dummy Common religion index Common ret (cost) Common comperate religion index Common religion (n
	Billat First First

		Portfolio equity	
	Ι	II	III
	Country-pair FE	Lagged controls	OLS
Dispute dummy	0.020	0.055	0.397***
1 5	(0.071)	(0.064)	(0.134)
BIT dummy	0.202	0.219	-0.211
5	(0.265)	(0.155)	(0.205)
Low political risk dummy	0.085*	0.006	0.164
1	(0.051)	(0.064)	(0.152)
Dispute dummy * BIT Dummy	0.052	-0.046	-0.307
	(0.096)	(0.090)	(0.203)
Dispute dummy * Low political risk dummy	-0.162	-0.228*	-0.376**
	(0.193)	(0.132)	(0.168)
BIT Dummy * Low political risk dummy	-0.077	-0.087	-0.282
	(0.122)	(0.134)	(0.241)
Dispute dummy * BIT Dummy *			
Low political risk dummy	-0.167	0.206	0.601**
· ·	(0.306)	(0.159)	(0.266)
Dispute dummy bilateral	-0.258***	0.077	0.372**
	(0.084)	(0.090)	(0.181)
Observations	11,316	12,009	14,430
Pseudo R2	0.976	0.951	0.696

Notes: The Table presents the PPML estimates for model (4): *Bilateral portfolio investment*_{ijt} = exp [*Baseline variables*+ $\beta_4 * Dispute_{ijt} * BIT dummy_{ijt}+\beta_5 * Low political riks_{it} + \beta_6 * Dispute_{ijt} * Low political riks_{it} + \beta_7 * BIT dummy_{ijt} * Low political riks_{it} + \beta_8 * Dispute_{ijt} * BIT dummy_{ijt} * Low political riks_{it}] + \varepsilon_{ijt}$. All regressions include control variables and fixed effects of the baseline model (see Table 2). Robust standard errors clustered on the country-pair level are reported in parentheses. *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

Table A5: Marginal effects for Robustness checks I ba	based on initiation of investment disputes
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Country-pair FE	No BIT	BIT	Difference
Low political risk	-0.141	-0.333*	-0.191
	(0.202)	(0.172)	(0.292)
High political risk	0.02	0.073	0.052
	(0.071)	(0.084)	(0.096)
Lagged controls			
Low political risk	-0.173	-0.101	0.072
	(0.136)	(0.171)	(0.153)
High political risk	0.055	0.008	-0.046
	(0.064)	(0.09)	(0.09)
OLS			
Low political risk	0.022	0.034	0.012
	(0.153)	(0.237)	(0.229)
High political risk	0.397***	0.091	-0.307
	(0.134)	(0.144)	(0.203)

Notes: The marginal effects are based on regression results from Table A4. Robust standard errors clustered on the country-pair level are reported in parentheses. *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

		Portfolio equity	
	Ι	II	III
	Country-pair FE	Lagged controls	OLS
Dispute dummy	0.013	0.158**	-0.072
Dispute duffiny	(0.054)	(0.065)	(0.136)
BIT dummy	0.260	0.314**	-0.405**
	(0.274)	(0.129)	(0.167)
Low political risk dummy	0.081	-0.013	-0.138
1 2	(0.056)	(0.061)	(0.119)
Dispute dummy * BIT Dummy	-0.055	-0.253***	-0.079
	(0.081)	(0.083)	(0.183)
Dispute dummy * Low political risk dummy	0.077	-0.151	0.166
	(0.228)	(0.164)	(0.195)
BIT Dummy * Low political risk dummy	-0.158	-0.081	0.103
	(0.124)	(0.122)	(0.184)
Dispute dummy * BIT Dummy *			
Low political risk dummy	-0.078	0.225	0.137
	(0.278)	(0.159)	(0.255)
Dispute dummy bilateral	-0.183***	0.282**	0.116
	(0.068)	(0.134)	(0.250)
Observations	11,316	12,009	14,430
Pseudo R2	0.976	0.951	0.695

Notes: The Table presents the PPML estimates for model (4): Bilateral portfolio investment_{ijt} = exp [Baseline variables+ β_4 * Dispute_{ijt} * BIT dummy_{ijt}+ β_5 * Low political riks_{it} + β_6 * Dispute_{ijt} * Low political riks_{it} + β_7 * BIT dummy_{ijt} * Low political riks_{it} + β_8 * Dispute_{ijt} * BIT dummy_{ijt} * Low political riks_{it}] + ε_{ijt} . All regressions also include control variables and fixed effects of the baseline model (see Table 2). Robust standard errors clustered on the country-pair level are reported in parentheses. *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

Table A7: Marginal effects for Robustness checks I based on disputes decided in favor of the respondent	;
state	

Country-pair FE	No BIT	BIT	Difference
Low political risk	0.089	-0.202	-0.292
*	(0.224)	(0.198)	(0.288)
High political risk	0.013	-0.042	-0.055
	(0.054)	(0.058)	(0.081)
Lagged controls			
Low political risk	0.007	-0.102	-0.109
	(0.158)	(0.202)	(0.138)
High political risk	0.158**	-0.095	-0.253***
	(0.065)	(0.086)	(0.083)
OLS			
Low political risk	0.093	0.254	0.161
	(0.178)	(0.22)	(0.209)
High political risk	-0.072	-0.151	-0.079
	(0.136)	(0.115)	(0.183)

Notes: The marginal effects are based on regression results from Table A6. Robust standard errors clustered on the country-pair level are reported in parentheses. *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

	Portfolio equity		
	Ι	II	III
	Without Latin	Without Southeast	Without Central
	America	Asia	and East Asia
Dispute dummy	0.058	0.017	0.165*
	(0.071)	(0.081)	(0.092)
BIT dummy	0.274*	0.023	-0.104
5	(0.147)	(0.151)	(0.169)
Low political risk dummy	0.077	0.036	0.112***
	(0.049)	(0.054)	(0.041)
Dispute dummy * BIT Dummy	-0.085	0.037	-0.016
	(0.088)	(0.123)	(0.151)
Dispute dummy * Low political risk dummy	-0.180	-0.291**	-0.422***
	(0.130)	(0.142)	(0.114)
BIT Dummy * Low political risk dummy	-0.091	0.014	-0.142
	(0.119)	(0.113)	(0.121)
Dispute dummy * BIT Dummy *			
Low political risk dummy	0.223	0.193	0.458***
· ·	(0.171)	(0.182)	(0.169)
Dispute dummy bilateral	0.080	-0.103	0.121
	(0.087)	(0.100)	(0.101)
Observations	11,323	10,697	12,026
Pseudo R2	0.953	0.959	0.949

Table A8: Robustness checks II based on initiation of investment disputes

Notes: The Table presents the PPML estimates for model (4): Bilateral portfolio investment_{ijt} = exp [Baseline variables+ β_4 * Dispute_{ijt} * BIT dummy_{ijt}+ β_5 * Low political riks_{it} + β_6 * Dispute_{ijt} * Low political riks_{it} + β_7 * BIT dummy_{ijt} * Low political riks_{it} + β_8 * Dispute_{ijt} * BIT dummy_{ijt} * Low political riks_{it}] + ε_{ijt} . All regressions also include control variables and fixed effects of the baseline model (see Table 2). Robust standard errors clustered on the country-pair level are reported in parentheses. *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

Table A9: Marginal effects for Robustness checks II based on initiation of investment disputes

Without Latin America	No BIT	BIT	Difference
Low political risk	-0.122	-0.074	0.048
	(0.127)	(0.175)	(0.166)
High political risk	0.058	-0.027	-0.085
	(0.071)	(0.092)	(0.088)
Without Southeast Asia			
Low political risk	-0.273*	-0.029	0.244
	(0.148)	(0.185)	(0.172)
High political risk	0.017	0.054	0.037
	(0.081)	(0.13)	(0.123)
Without Central and East Asia			
Low political risk	-0.257*	0.042	0.299*
	(0.139)	(0.172)	(0.16)
High political risk	0.165*	0.149	-0.016
	(0.092)	(0.151)	(0.151)

Notes: The marginal effects are based on regression results from Table A8. Robust standard errors clustered on the country-pair level are reported in parentheses. *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

	Portfolio equity		
	I II		III
	Without Latin	Without Southeast	Without Central
	America	Asia	and East Asia
Dispute dummy	0.153**	0.036	0.118
	(0.061)	(0.081)	(0.089)
BIT dummy	0.367***	0.081	0.088
	(0.130)	(0.138)	(0.118)
Low political risk dummy	0.092*	0.006	0.006
	(0.047)	(0.062)	(0.075)
Dispute dummy * BIT Dummy	-0.317***	-0.133	-0.283***
	(0.079)	(0.085)	(0.098)
Dispute dummy * Low political risk dummy	-0.429**	0.026	-0.041
	(0.178)	(0.200)	(0.188)
BIT Dummy * Low political risk dummy	-0.103	0.040	-0.019
	(0.122)	(0.114)	(0.120)
Dispute dummy * BIT Dummy *	0.321*	0.122	0.338**
Low political risk dummy			
J. T. T. T. T. T. J.	(0.179)	(0.145)	(0.163)
Dispute dummy bilateral	0.232*	0.135	0.264**
	(0.120)	(0.173)	(0.123)
Observations	11,323	10,697	12,026
Pseudo R2	0.953	0.959	0.949

Notes: The Table presents the PPML estimates for model (4): Bilateral portfolio investment_{ijt} = exp [Baseline variables+ β_4 * Dispute_{ijt} * BIT dummy_{ijt}+ β_5 * Low political riks_{it} + β_6 * Dispute_{ijt} * Low political riks_{it} + β_7 * BIT dummy_{ijt} * Low political riks_{it} + β_8 * Dispute_{ijt} * BIT dummy_{ijt} * Low political riks_{it}] + ε_{ijt} . All regressions also include control variables and fixed effects of the baseline model (see Table 2). Robust standard errors clustered on the country-pair level are reported in parentheses. *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

Table A11: Marginal effects of Robustness checks II based on disputes decided in favor of the respondent state

Without Latin America	No BIT	BIT	Difference
Low political risk	-0.276	-0.375*	-0.099
1	(0.179)	(0.217)	(0.16)
High political risk	0.153**	-0.164**	-0.317***
	(0.061)	(0.072)	(0.079)
Without Southeast Asia			
Low political risk	0.062	0.091	0.029
	(0.183)	(0.209)	(0.142)
High political risk	0.036	-0.097	-0.133
	(0.081)	(0.085)	(0.085)
Without Central and East Asia			
Low political risk	0.077	0.114	0.037
	(0.17)	(0.198)	(0.123)
High political risk	0.118	-0.164	-0.283***
	(0.089)	(0.104)	(0.098)

Notes: The marginal effects are based on regression results from Table A10. Robust standard errors clustered on the country-pair level are reported in parentheses. *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.