

Climate Policy and International Capital Reallocation

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Motivation

- Urgent need to address climate change / climate policies

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- Global issues, but local policies

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Urgent need to address climate change climate policies

Global issues, but local policies

How does the international financial market respond?

Favor countries with lax or rigorous policies? undermine or foster global regulation?

This Paper

Research Question: Climate policies International capital reallocation?

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Data and Identification

- | Bilateral asset holdings data of four types of assets: FDI, equity, debt, banking
- | Climate policy indices with various dimensions
- | Identification through granular FE: country-pair, country-year

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Main Findings

This Paper

Research Question: Climate policies International capital reallocation?

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Main Findings

- | Stringency of climate change in destination **equity and banking** assets allocated
- | **AE-AE** allocation drives the results, insignificant effect for EME
- | **Non-market policies** matter more for portfolio allocation
- | **Active reallocation** rather than passive valuation

Related Literature

Related Literature

Climate change and finance

- | Regulatory and physical risks on domestic financial markets (Krueger et al. 2020, Mueller and Sfrappini 2022, Bartram et al. 2022, Kacperczyk and Peydro 2022, Bernstein et al. 2019, Bakkensen and Barrage 2022, Nguyen et al. 2022)
- | Few studies on cross-border capital flows until recently
FDI (Gu and Hale 2023, Hanna 2010, Chung 2014, Cai et al. 2016) , cross-border loans (Demirguc-Kunt et al. 2022, Benincasa et al. 2022) , equity (Ferriani et al. 2023)

Climate change and real reallocation

- | Across sectors within the economy, consumption and investment (Khalil and Strobel 2023)
- | International production network and tax regimes (Frankovic 2022, Habla 2018)

Contribution: bilateral allocation of four types of assets in the same framework,
AE - EME comparison

Data and Variable

Data

Bilateral Holdings

FDI: Coordinated Direct Investment Survey (CDIS) by IMF

Portfolio equity and debt: Coordinated Portfolio Investment Survey (CPIS) by IMF

Banking investment: Locational Banking Statistics (LBS) by BIS

Data

Bilateral Holdings

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Banking investment: Locational Banking Statistics (LBS) by BIS

- | End-of-year positions, tax havens excluded (Cyprus, Ireland, Luxembourg, Malta, Netherlands, and Singapore)
- | Robustness check: restated bilateral portfolio data by Coppola et al. (2021), The Global Capital Allocation Project
- | Compare with trade: exports by UN Comtrade

Data

Bilateral Holdings

FDI: Coordinated Direct Investment Survey (CDIS) by IMF

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$\frac{\text{Assets}_{sdt}}{\sum_d \text{Assets}_{sdt}}$: weight of each destination country in source country baseline

$\frac{\text{Assets}_{sdt}}{\text{GDP}_{st}}$: positions in the destination country to GDP in source country robustness check

Climate **Policy** Index, from GermanWatch

- | Experts provide ratings to a questionnaire
- | Existence and implementation of national climate strategies, emission reduction targets, adaptation plans, measures to promote climate resilience
- | Ratings transformed into an index 0 - 1

Climate Change **Performance** Index, from GermanWatch

- | Greenhouse gas (GHG) emission
- | Use of renewable energy
- | Energy efficiency

Data

Climate Policies

| Policy - - Performance

Data

Climate Policies

Alternative: Environmental Policy Stringency (EPS) by OECD

- | Quantify the stringency of environmental policies based on objective metrics
- | **Market-based policies** (taxes on GHG and diesel emissions, trading schemes encompassing CO₂, renewable energy certificates, energy efficiency certificates, feed-in tariffs and premiums for renewable energy sources, deposit and refund schemes)
- | **Non-market based policies** (emissions limit values for GHG, sulfur content limits for diesel)
- | **Technology support policies** (R&D subsidies, renewable energy support)

Controls: GDP growth rate, inflation rate, central bank policy rate, exchange rate, CO₂ emission intensity

Sample: 2009-2019, 48 countries for FDI and portfolio, 21 countries for banking

Summary Statistics

	Mean	Standard Deviation	Min	Max	N
Panel A: Bilateral Variables					
Allocated Share of FDI Assets (%)	2.52	5.92	0.00	53.89	12765
Allocated Share of Portfolio Equity Assets (%)	2.52	7.28	0.00	67.26	14066
Allocated Share of Portfolio Debt Assets (%)	2.45	5.96	0.00	56.72	14074
Allocated Share of Banking Assets (%)	3.44	7.06	0.00	48.51	4900
Allocated Share of Exports (%)	2.08	3.78	0.00	29.00	16422
Panel B: Country Characteristics					
Climate Policy - Destination	0.50	0.23	0.00	1.00	437
Climate Policy - Source	0.50	0.23	0.00	1.00	410
Climate Change Performance - Destination	0.53	0.09	0.23	0.77	437
Climate Change Performance - Source	0.54	0.09	0.24	0.77	410

Empirical Analysis

Empirical Analysis

Baseline Specification

$$\text{Share}_{s;d;t}^{\text{type}} = \beta_1 \text{CP}_{s;t-1} + \beta_2 \text{CP}_{d;t-1} + \beta_3 X_{s;t-1} + \beta_4 X_{d;t-1} + \beta_5 s;d + \beta_6 t + \beta_7 s;d;t \quad (1)$$

$s; d; t$: source country, destination country, year

$\text{Share}_{s;d;t}^{\text{type}}$: the weight that country s allocate to country d

$\text{CP}_{s=d;t-1}$: climate policy ins and d ! lagged to mitigate concerns on reverse causality
country-pair and year FE absorb confounding factors

Empirical Analysis

Baseline Specification

$$\text{Share}_{s;d;t}^{\text{type}} = \beta_1 \text{CP}_{s;t-1} + \beta_2 \text{CP}_{d;t-1} + \beta_3 X_{s;t-1} + \beta_4 X_{d;t-1} + \alpha_{s;d} + \gamma_t + \epsilon_{s;d;t} \quad (1)$$

$s; d; t$: source country, destination country, year

$\text{Share}_{s;d;t}^{\text{type}}$: the weight that country s allocate to country d

$\text{CP}_{s=d;t-1}$: climate policy ins and d ! lagged to mitigate concerns on reverse causality
country-pair and year FE absorb confounding factors

$$\text{Share}_{s;d;t}^{\text{type}} = \beta_1 \text{CP}_{d;t-1} + \beta_2 X_{d;t-1} + \alpha_{s;d} + \epsilon_{s;t} + \epsilon_{s;d;t} \quad (2)$$

Further saturate with source country-year FE

$\text{CP}_{d;t-1}$ and $X_{d;t-1}$! exogenous to source country

SE clustered at the country-pair and source country-year level

Empirical Analysis

Baseline Results

	FDI			Equity			Debt			Bank			Exports		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
L.Climate Policy - Destination	0.074 (0.144)	-0.009 (0.132)	-0.008 (0.129)	0.523*** (0.187)	0.497*** (0.181)	0.456** (0.182)	0.195 (0.190)	0.172 (0.184)	0.200 (0.185)	0.536** (0.265)	0.534** (0.261)	0.512** (0.258)	0.117*** (0.040)	0.096** (0.038)	0.087** (0.039)
L.Climate Policy - Source	0.017 (0.086)	0.055 (0.094)		-0.068 (0.133)	-0.082 (0.133)		-0.176 (0.187)	-0.154 (0.183)		0.167 (0.139)	0.184 (0.129)		-0.020 (0.031)	-0.008 (0.030)	
Source-Destination Pair FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Source Country-Year FE	NO	NO	YES	NO	NO	YES	NO	NO	YES	NO	NO	YES	NO	NO	YES
Year FE	YES	YES	-	YES	YES	-	YES	YES	-	YES	YES	-	YES	YES	-
Controls	NO	YES	YES	NO	YES	YES	NO	YES	YES	NO	YES	YES	NO	YES	YES
Num.Obs.	12765	12765	12765	14066	14066	14066	14074	14074	14074	4900	4900	4900	16422	16422	16422
R2 Adj.	0.901	0.902	0.901	0.909	0.909	0.908	0.848	0.848	0.853	0.946	0.946	0.944	0.977	0.978	0.978

More restrictive climate policy is associated with more equity and banking assets allocated to the country (De Haas and Popov 2023, Demirguc-Kunt et al. 2022)

Climate policy more stringent 1 SD, equity and banking assets allocated to the country 0.10-0.12 pp
> 5 times the effect on trade reallocation

No significant effect on FDI and debt allocation

Empirical Analysis

AE and EME

	FDI			Equity			Debt			Bank			Exports		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
EM to EM x L.Policy - Destination	-0.238 (0.347)	-0.329 (0.335)	-0.190 (0.368)	0.355 (0.398)	0.356 (0.394)	0.364 (0.389)	-0.008 (0.455)	-0.040 (0.469)	0.017 (0.453)	0.796 (0.599)	0.612 (0.670)	0.643 (0.811)	0.066 (0.073)	0.044 (0.079)	0.036 (0.078)
EM to AE x L.Policy - Destination	-0.127 (0.315)	-0.196 (0.311)	-0.281 (0.345)	0.671 (0.554)	0.648 (0.551)	0.506 (0.616)	-0.099 (0.551)	-0.113 (0.539)	0.063 (0.594)	-0.288 (1.638)	-0.239 (1.602)	-0.300 (1.695)	0.188** (0.080)	0.165** (0.079)	0.142* (0.082)
AE to EM x L.Policy - Destination	0.465 (0.286)	0.361 (0.267)	0.345 (0.276)	-0.012 (0.097)	-0.059 (0.107)	-0.086 (0.120)	-0.065 (0.088)	-0.113 (0.107)	-0.073 (0.111)	0.081 (0.110)	-0.082 (0.145)	-0.135 (0.130)	0.077* (0.047)	0.055 (0.048)	0.038 (0.047)
AE to AE x L.Policy - Destination	0.043 (0.176)	-0.034 (0.173)	-0.020 (0.173)	0.779*** (0.235)	0.724*** (0.228)	0.703*** (0.231)	0.495* (0.266)	0.468* (0.259)	0.418 (0.266)	0.868*** (0.282)	0.905*** (0.268)	0.897*** (0.271)	0.115 (0.072)	0.093 (0.071)	0.094 (0.074)
EM to EM x L.Policy - Source	0.728 (0.536)	0.768 (0.575)		0.582* (0.308)	0.479* (0.286)		-0.531 (0.474)	-0.502 (0.477)		-0.731 (1.208)	-0.589 (1.206)		0.107 (0.094)	0.096 (0.092)	
EM to AE x L.Policy - Source	-0.251 (0.287)	-0.155 (0.316)		-0.408 (0.525)	-0.439 (0.526)		0.197 (0.491)	0.235 (0.470)		0.444 (0.355)	0.522 (0.379)		-0.126* (0.071)	-0.088 (0.067)	
AE to EM x L.Policy - Source	0.125 (0.129)	0.122 (0.122)		0.049 (0.134)	0.014 (0.139)		0.206* (0.119)	0.226* (0.123)		0.436 (0.297)	0.488 (0.315)		-0.039 (0.080)	-0.057 (0.079)	
AE to AE x L.Policy - Source	-0.105 (0.115)	-0.061 (0.117)		-0.131 (0.136)	-0.110 (0.134)		-0.454 (0.310)	-0.429 (0.309)		0.058 (0.192)	0.045 (0.184)		0.010 (0.056)	0.034 (0.054)	
Source-Destination Pair FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Source Country-Year FE	NO	NO	YES	NO	NO	YES	NO	NO	YES	NO	NO	YES	NO	NO	YES
Year FE	YES	YES	-	YES	YES	-	YES	YES	-	YES	YES	-	YES	YES	-
Controls	NO	YES	YES	NO	YES	YES	NO	YES	YES	NO	YES	YES	NO	YES	YES
Num.Obs.	12765	12765	12765	14066	14066	14066	14074	14074	14074	4900	4900	4900	16422	16422	16422
R2 Adj.	0.902	0.902	0.901	0.909	0.909	0.908	0.848	0.848	0.853	0.946	0.946	0.944	0.977	0.978	0.977

Driven by AE - AE capital allocation

Magnitude twice that in the baseline

Empirical Analysis

Local projection (Jorda 2005)

$$\text{Share}_{s,d;t+h}^{\text{type}} - \text{Share}_{s,d;t}^{\text{type}} = \alpha_{d;t} + \sum_{k=1}^h \beta_k \text{Share}_{s,d;t-k}^{\text{type}} + \gamma_{d;t} + \delta_{s;d} + \epsilon_{s;t} + \eta_{s;d;t}$$

Empirical Analysis

Local projection (Jorda 2005)

Discussion

Discussion

Different Categories of Climate Policies

EPS (environmental policy stringency) as a measure of climate policy

Smaller country coverage, but with granular policy classification

	FDI			Equity			Debt			Bank			Exports		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
L.EPS - Destination	0.170 (0.118)	0.008 (0.121)	-0.005 (0.120)	0.488*** (0.182)	0.422*** (0.137)	0.425*** (0.137)	0.165 (0.124)	0.152 (0.121)	0.146 (0.124)	0.268 (0.186)	0.322** (0.159)	0.353** (0.164)	0.074 (0.049)	0.011 (0.040)	0.009 (0.041)
L.EPS - Source	-0.003 (0.122)	0.027 (0.125)		0.043 (0.135)	-0.005 (0.139)		0.102 (0.144)	0.179 (0.143)		0.017 (0.129)	0.023 (0.149)		-0.006 (0.034)	0.001 (0.030)	
Source-Destination Pair FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Source Country-Year FE	NO	NO	YES	NO	NO	YES	NO	NO	YES	NO	NO	YES	NO	NO	YES
Year FE	YES	YES	-	YES	YES	-	YES	YES	-	YES	YES	-	YES	YES	-
Controls	NO	YES	YES	NO	YES	YES	NO	YES	YES	NO	YES	YES	NO	YES	YES
Num.Obs.	8337	8337	8337	9145	9145	9145	9106	9106	9106	4378	4378	4378	9760	9760	9760
R2 Adj.	0.901	0.901	0.900	0.906	0.906	0.905	0.867	0.868	0.867	0.949	0.949	0.947	0.981	0.981	0.981

Discussion

Different Categories of Climate Policies

Baseline findings driven by non-market policies (esp. SOx certificates) [Full Subcategories](#)

Market policies matter for banking allocation (esp. CO2 certificates)

Tech support policies are associated with lower imports

	FDI			Equity			Debt			Bank			Exports		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
L.Market Policies - Destination	0.128 (0.125)	-0.045 (0.113)	-0.052 (0.114)	0.251* (0.148)	0.162 (0.142)	0.162 (0.139)	-0.040 (0.117)	-0.047 (0.119)	-0.057 (0.115)	0.341** (0.170)	0.391** (0.171)	0.364** (0.176)	0.009 (0.037)	-0.076** (0.037)	-0.074** (0.037)
L.Non-Market Policies - Destination	0.222** (0.104)	0.160 (0.106)	0.166 (0.105)	0.564*** (0.158)	0.566*** (0.149)	0.572*** (0.151)	0.367*** (0.095)	0.381*** (0.093)	0.368*** (0.094)	0.288** (0.140)	0.354** (0.138)	0.379*** (0.144)	0.160*** (0.041)	0.125*** (0.038)	0.124*** (0.038)
L.Tech. Support - Destination	-0.033 (0.044)	-0.057 (0.047)	-0.066 (0.048)	-0.029 (0.054)	-0.035 (0.049)	-0.036 (0.049)	-0.063 (0.052)	-0.071 (0.054)	-0.067 (0.054)	-0.054 (0.064)	-0.043 (0.063)	-0.033 (0.063)	-0.032** (0.014)	-0.036** (0.014)	-0.037*** (0.014)
L.Market Policies - Source	-0.164 (0.113)	-0.143 (0.107)		0.003 (0.079)	-0.050 (0.078)		-0.016 (0.116)	0.082 (0.109)		0.037 (0.099)	0.066 (0.091)		-0.006 (0.027)	-0.007 (0.025)	
L.Non-Market Policies - Source	0.093 (0.090)	0.083 (0.096)		-0.016 (0.082)	-0.029 (0.088)		0.065 (0.093)	0.086 (0.092)		0.092 (0.114)	0.084 (0.121)		0.002 (0.023)	0.005 (0.023)	
L.Tech. Support - Source	-0.003 (0.048)	0.005 (0.047)		0.022 (0.053)	0.012 (0.050)		0.031 (0.056)	0.045 (0.053)		-0.021 (0.062)	-0.019 (0.064)		-0.003 (0.014)	-0.001 (0.013)	
Source-Destination Pair FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Source Country-Year FE	NO	NO	YES	NO	NO	YES	NO	NO	YES	NO	NO	YES	NO	NO	YES
Year FE	YES	YES	-	YES	YES	-	YES	YES	-	YES	YES	-	YES	YES	-
Controls	NO	YES	YES	NO	YES	YES	NO	YES	YES	NO	YES	YES	NO	YES	YES
Num.Obs.	8337	8337	8337	9145	9145	9145	9106	9106	9106	4378	4378	4378	9760	9760	9760
R2 Adj.	0.901	0.902	0.900	0.907	0.907	0.906	0.868	0.868	0.868	0.949	0.950	0.948	0.981	0.982	0.981

Discussion

Valuation Effects

Climate policy! exchange rates and stock prices?

Passive and active reallocation

Discussion

Valuation Effects

Climate policy! Exchange rates and stock prices?

Passive and active reallocation

	FX (s/d)			Difference Stock Return (s-d)		
	(1)	(2)	(3)	(4)	(5)	(6)
L.Climate Policy - Destination	0.156*** (0.021)	0.223*** (0.024)	0.223*** (0.021)	0.042*** (0.009)	-0.001 (0.014)	0.000 (0.008)
L.Climate Policy - Source	-0.159** (0.078)	-0.234*** (0.082)		-0.007 (0.055)	0.033 (0.053)	
Num.Obs.	16565	16565	16565	8306	8306	8306
Source Country-Year FE	NO	NO	YES	NO	NO	YES
Year FE	YES	YES	-	YES	YES	-
Controls	NO	YES	YES	NO	YES	YES
R2 Adj.	0.988	0.991	0.995	0.211	0.279	0.625

FX appreciation with cautious interpretation; insignificant stock return difference

Discussion

Valuation Effects

	FX		Stock Return	
	(1)	(2)	(3)	(4)
L.Climate Policy	-0.150 (0.110)	-0.224 (0.134)	-0.040 (0.052)	-0.001 (0.054)
Country	YES	YES	YES	YES
Year FE	YES	YES	YES	YES
Controls	NO	YES	NO	YES
Num.Obs.	426	426	312	312
R2 Adj.	0.988	0.990	0.507	0.538

Country-level evidence: no impact on FX rate and stock return

Discussion

US withdrawal from the Paris Agreement

US as the only source country

FDI prefer countries with more stringent climate policies after the withdrawal

	FDI			Equity			Debt			Bank			Exports		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
L.Climate Policy - Destination	0.088 (0.205)	0.123 (0.184)	0.123 (0.184)	-0.093 (0.162)	-0.092 (0.162)	-0.092 (0.162)	0.557 (0.370)	0.469 (0.350)	0.469 (0.350)	0.630* (0.357)	0.389 (0.374)	0.389 (0.374)	-0.177 (0.110)	-0.162 (0.106)	-0.162 (0.106)
L.Climate Policy - Destination x D(After 2017)	1.127*** (0.300)	0.627** (0.259)	0.627** (0.259)	-0.126 (0.271)	-0.099 (0.265)	-0.099 (0.265)	-0.848 (0.581)	-0.681 (0.591)	-0.681 (0.591)	-1.195 (1.113)	-0.590 (0.602)	-0.590 (0.602)	0.304 (0.213)	0.163 (0.197)	0.163 (0.197)
Source-Destination Pair FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Source Country-Year FE	NO	NO	YES	NO	NO	YES	NO	NO	YES	NO	NO	YES	NO	NO	YES
Year FE	YES	YES	-	YES	YES	-	YES	YES	-	YES	YES	-	YES	YES	-
Controls	NO	YES	YES	NO	YES	YES	NO	YES	YES	NO	YES	YES	NO	YES	YES
Num.Obs.	397	397	397	423	423	423	424	424	424	283	283	283	426	426	426
R2 Adj.	0.987	0.989	0.989	0.984	0.984	0.984	0.963	0.963	0.963	0.970	0.971	0.971	0.995	0.995	0.995

Discussion

US withdrawal from the Paris Agreement

US as the only destination country

Equity, banking, and exports to US decrease after the withdrawal

	FDI		Equity		Debt		Bank		Exports	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(10)	(10)
D(After 2017)	-0.091 (2.720)	-1.239 (1.714)	-4.636 (3.560)	-4.891* (2.520)	-0.225 (4.241)	-0.793 (2.236)	-0.589 (2.903)	-3.739** (1.561)	-1.888 (1.305)	-1.423*** (0.313)
Controls	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Source Country FE	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES
Num.Obs.	353	353	349	349	331	331	161	161	393	393
R2 Adj.	0.102	0.873	0.120	0.873	0.182	0.819	0.176	0.938	0.142	0.967

Robustness Checks

Robustness Checks

Climate policy v.s. performance **Performance**

Using investment stock intensity as the dependent variable **Intensity**

Restated bilateral portfolio positions from Coppola et al. (2021), **Restated Positions**

Conclusion

Conclusion

International capital reallocation effects of climate policy across four types of assets

- | Portfolio **equity** and **banking** assets prefer destinations with more rigorous climate policies
- | Climate policy shows no significant effect on FDI and portfolio debt allocation
- | Most pronounced **between AE and AE**
- | Driven by **non-market** climate policies

Policy Implications

- | International capital can foster coordination in climate policies
- | Importance of financial market development

Still preliminary, comments and suggestions are very welcome

Thank You

Full Subcategories of EPS

	FDI			Equity			Debt			Bank			Exports		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Market based Policies															
L.CO2 Certi cates - Destination	0.061 (0.046)	-0.028 (0.049)	-0.034 (0.048)	0.040 (0.067)	0.013 (0.056)	0.008 (0.055)	0.017 (0.052)	0.031 (0.058)	0.039 (0.057)	0.114** (0.049)	0.138*** (0.049)	0.134*** (0.049)	0.025 (0.015)	-0.007 (0.014)	-0.006 (0.014)
L.Renewable Energy Certi cates - Destination	0.074 (0.107)	0.032 (0.104)	0.030 (0.102)	0.068 (0.097)	0.080 (0.095)	0.084 (0.094)	-0.047 (0.085)	-0.024 (0.085)	-0.029 (0.084)	-0.113 (0.071)	-0.083 (0.067)	-0.076 (0.067)	0.072*** (0.019)	0.054*** (0.019)	0.055*** (0.019)
L.CO2 Tax - Destination	0.089 (0.075)	0.091 (0.076)	0.096 (0.077)	-0.115 (0.071)	-0.105 (0.071)	-0.104 (0.070)	-0.104 (0.079)	-0.101 (0.082)	-0.106 (0.082)	0.072 (0.075)	0.061 (0.078)	0.050 (0.080)	-0.022 (0.020)	-0.024 (0.020)	-0.025 (0.020)
L.NOx Tax - Destination	-0.047 (0.081)	-0.074 (0.081)	-0.078 (0.078)	0.016 (0.038)	0.025 (0.043)	0.030 (0.044)	-0.044 (0.054)	-0.029 (0.053)	-0.029 (0.055)	-0.067 (0.076)	-0.028 (0.078)	-0.010 (0.080)	0.013 (0.010)	0.002 (0.010)	0.003 (0.010)
L.SOx Tax - Destination	-0.019 (0.145)	-0.030 (0.149)	-0.037 (0.149)	0.120 (0.144)	0.061 (0.146)	0.051 (0.146)	0.096 (0.121)	0.063 (0.129)	0.057 (0.130)	0.266 (0.167)	0.243 (0.171)	0.228 (0.174)	-0.080** (0.037)	-0.082** (0.037)	-0.082** (0.037)
L.Diesel Tax - Destination	0.017 (0.052)	-0.023 (0.045)	-0.013 (0.044)	0.134* (0.074)	0.174** (0.086)	0.161* (0.084)	0.051 (0.058)	0.099 (0.062)	0.101* (0.061)	-0.001 (0.044)	0.004 (0.045)	-0.014 (0.045)	0.044*** (0.014)	0.015 (0.013)	0.016 (0.013)
Non-Market based Policies															
L.NOx Emission Limit - Destination	-0.047 (0.081)	-0.012 (0.077)	-0.021 (0.075)	0.027 (0.094)	-0.000 (0.103)	0.004 (0.108)	-0.240** (0.102)	-0.287*** (0.107)	-0.318*** (0.108)	0.188** (0.080)	0.097 (0.087)	0.054 (0.087)	0.037* (0.021)	0.064** (0.025)	0.060** (0.025)
L.SOx Emission Limit - Destination	0.190 (0.120)	0.152 (0.122)	0.154 (0.122)	0.434*** (0.098)	0.479*** (0.105)	0.490*** (0.110)	0.468*** (0.121)	0.528*** (0.126)	0.555*** (0.128)	0.084 (0.084)	0.205* (0.106)	0.264** (0.125)	0.099*** (0.030)	0.069** (0.032)	0.073*** (0.033)
L.PM Emission Limit - Destination	0.126* (0.074)	0.076 (0.073)	0.090 (0.071)	0.109 (0.081)	0.113 (0.086)	0.108 (0.084)	0.107 (0.069)	0.127* (0.072)	0.115 (0.072)	-0.092 (0.056)	-0.060 (0.056)	-0.052 (0.055)	0.043** (0.019)	0.016 (0.020)	0.015 (0.020)
L.Sulphur Emission Limit - Destination	-0.081 (0.049)	-0.072 (0.048)	-0.074 (0.046)	-0.125** (0.049)	-0.096** (0.046)	-0.093** (0.048)	0.048 (0.048)	0.071 (0.049)	0.097* (0.051)	0.100 (0.085)	0.151* (0.082)	0.187** (0.087)	-0.054** (0.026)	-0.048* (0.025)	-0.046* (0.024)
Technology Support															
L.R&D Expenditure - Destination	0.042 (0.042)	0.040 (0.041)	0.035 (0.042)	-0.068 (0.047)	-0.100* (0.051)	-0.100** (0.051)	0.020 (0.041)	-0.003 (0.042)	-0.008 (0.041)	-0.196*** (0.046)	-0.199*** (0.046)	-0.190*** (0.044)	-0.019* (0.010)	-0.012 (0.010)	-0.012 (0.010)
L.Adoption support Solar - Destination	-0.033 (0.036)	-0.050 (0.039)	-0.052 (0.038)	-0.020 (0.044)	-0.019 (0.042)	-0.023 (0.041)	0.028 (0.028)	0.033 (0.028)	0.034 (0.028)	-0.006 (0.029)	0.015 (0.030)	0.028 (0.029)	0.008 (0.008)	0.002 (0.008)	0.002 (0.008)
L.Adoption support Wind - Destination	0.022 (0.034)	0.009 (0.032)	0.010 (0.031)	0.058 (0.041)	0.052 (0.043)	0.054 (0.043)	-0.066 (0.040)	-0.067 (0.042)	-0.066 (0.040)	0.008 (0.041)	0.004 (0.042)	-0.005 (0.041)	-0.016 (0.011)	-0.023** (0.011)	-0.023** (0.011)
Source-Destination Pair FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Source Country-Year FE	NO	NO	YES	NO	NO	YES	NO	NO	YES	NO	NO	YES	NO	NO	YES
Year FE	YES	YES	-	YES	YES	-	YES	YES	-	YES	YES	-	YES	YES	-
Controls	NO	YES	YES	NO	YES	YES	NO	YES	YES	NO	YES	YES	NO	YES	YES
Num.Obs.	8337	8337	8337	9145	9145	9145	9106	9106	9106	4378	4378	4378	9760	9760	9760
R2 Adj.	0.901	0.902	0.901	0.908	0.908	0.907	0.868	0.869	0.869	0.950	0.950	0.948	0.982	0.982	0.981

Policy v.s. Performance

Climate performance plays a role for banking assets: uncertainty and diversification?

	FDI			Equity			Debt			Bank			Exports		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
L.Climate Policy - Destination	-0.029 (0.166)	-0.057 (0.163)	-0.066 (0.160)	0.390** (0.196)	0.422** (0.200)	0.383* (0.201)	0.135 (0.240)	0.122 (0.250)	0.156 (0.245)	0.895*** (0.308)	0.968*** (0.328)	0.942*** (0.317)	0.086* (0.051)	0.125** (0.051)	0.110** (0.051)
L.Performance - Destination	0.690 (0.695)	0.573 (0.689)	0.588 (0.688)	1.117 (0.834)	0.873 (0.856)	0.755 (0.832)	0.400 (0.996)	0.376 (1.038)	0.273 (1.003)	-3.298*** (0.951)	-3.626*** (0.957)	-3.701*** (0.980)	0.260 (0.247)	0.075 (0.244)	0.075 (0.244)
L.Climate Policy - Source	0.103 (0.126)	0.157 (0.124)		-0.198 (0.204)	-0.214 (0.220)		-0.082 (0.238)	-0.066 (0.239)		0.113 (0.233)	0.153 (0.205)		-0.041 (0.045)	-0.024 (0.043)	
L.Performance - Source	-0.756 (0.643)	-0.789 (0.589)		0.962 (0.755)	1.157 (0.778)		-0.698 (0.698)	-0.670 (0.692)		0.285 (1.021)	0.176 (0.803)		0.128 (0.194)	0.108 (0.177)	
Source-Destination Pair FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Source Country-Year FE	NO	NO	YES	NO	NO	YES	NO	NO	YES	NO	NO	YES	NO	NO	YES
Year FE	YES	YES	-	YES	YES	-	YES	YES	-	YES	YES	-	YES	YES	-
Controls	NO	YES	YES	NO	YES	YES	NO	YES	YES	NO	YES	YES	NO	YES	YES
Num.Obs.	12659	12659	12659	13912	13912	13912	13914	13914	13914	4900	4900	4900	16220	16220	16220
R2 Adj.	0.901	0.902	0.901	0.909	0.909	0.908	0.847	0.847	0.852	0.946	0.946	0.944	0.978	0.978	0.978

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Stock Intensity

	FDI			Equity			Debt			Bank			Exports		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
L.Climate Policy - Destination	0.071 (0.059)	0.038 (0.055)	0.037 (0.052)	0.271*** (0.098)	0.243*** (0.084)	0.228*** (0.080)	0.151** (0.061)	0.133** (0.057)	0.134** (0.056)	0.329** (0.142)	0.338** (0.131)	0.324** (0.132)	0.026 (0.017)	0.041** (0.016)	0.030* (0.016)
L.Climate Policy - Source	-0.045 (0.042)	-0.030 (0.052)		0.021 (0.047)	0.060 (0.063)		0.023 (0.045)	0.047 (0.047)		0.458** (0.184)	0.487** (0.194)		0.001 (0.029)	0.013 (0.025)	
Source-Destination Pair FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Source Country-Year FE	NO	NO	YES	NO	NO	YES	NO	NO	YES	NO	NO	YES	NO	NO	YES
Year FE	YES	YES	-	YES	YES	-	YES	YES	-	YES	YES	-	YES	YES	-
Controls	NO	YES	YES	NO	YES	YES	NO	YES	YES	NO	YES	YES	NO	YES	YES
Num.Obs.	12765	12765	12765	14066	14066	14066	14074	14074	14074	4900	4900	4900	16422	16422	16422
R2 Adj.	0.864	0.865	0.867	0.865	0.866	0.870	0.923	0.923	0.925	0.917	0.918	0.924	0.969	0.970	0.971

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Restated Bilateral Portfolio Equity and Debt

