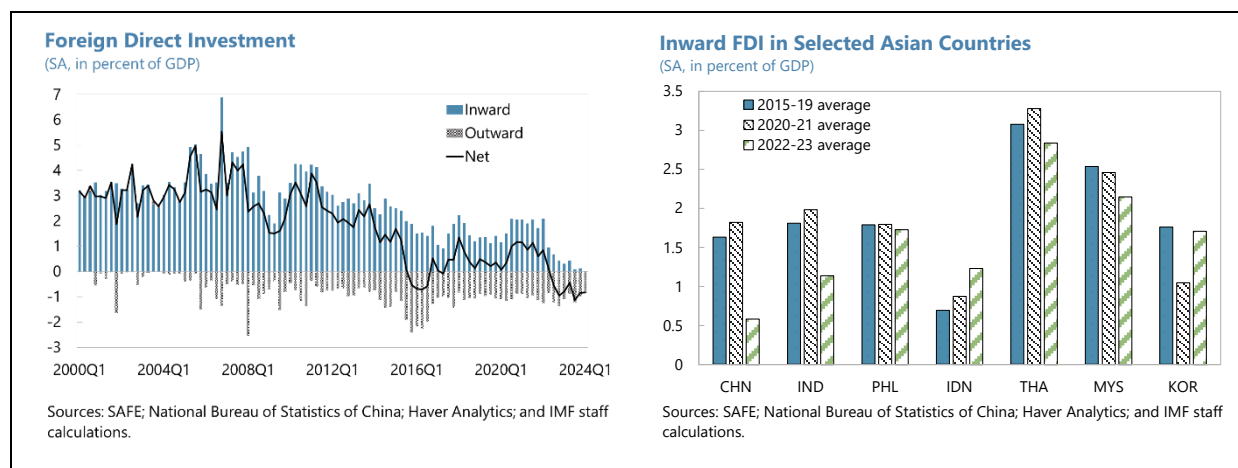# CHINA'S FOREIGN DIRECT INVESTMENT: INWARD AND OUTWARD[1]

This paper explores the potential drivers of China's foreign direct investment (FDI) flows in recent years, including by looking at sectoral trends. The analysis suggests that the downward trend in FDI inflows in recent years primarily reflects higher economic policy uncertainty, geopolitical risk, and weak future growth prospects. At the same time, the stability in total outward FDI masks an ongoing geographical diversification of Chinese FDI, higher flows to geopolitically aligned countries, and a shift away of investment from larger economies, consistent with the emergence of "connector" countries. Domestic policy uncertainty also appears to incentivize outward FDI. Reversing the decline in inward FDI will require steps to reduce policy uncertainty, work with other countries to mitigate geopolitical risks, advance structural reforms to boost potential growth, and relax inward FDI restrictions. The most attractive avenue for emerging markets to capture China's outward FDI is to implement structural reforms to increase capacity to absorb large investments, improve export diversification, and increase trade linkages with China, including by establishing free-trade agreements.

A. Introduction

1.   Net FDI as a share of GDP was trending downwards since post-2008 crisis peaks.[2] This was mostly due to declining inward FDI, a trend which accelerated in 2022-23, while outward FDI remained stable as a share of GDP. While several major Asian economies saw a sharp decline in inward FDI in 2022-23, China experienced the sharpest decline with FDI inflows reaching record-low levels (as a share of GDP).

Foreign Direct Investment
(SA, in percent of GDP)

Sources: SAFE; National Bureau of Statistics of China; Haver Analytics; and IMF staff calculations.

Inward FDI in Selected Asian Countries
(SA, in percent of GDP)

Sources: SAFE; National Bureau of Statistics of China; Haver Analytics; and IMF staff calculations.

2.   This Selected Issues Paper aims to identify main drivers behind both inward and outward FDI with a focus on recent years. Regarding inward FDI, the paper analyzes which

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[1] Prepared by Ashique Habib, Dmitry Plotnikov and Andrea Presbitero.

[2] This is based on BOP-consistent FDI data published by SAFE, which have somewhat different dynamics than the "FDI capital utilized" measure published by MOFCOM.

determinants of FDI drive the recent FDI decline. Existing hypotheses include a weaker growth outlook amid the property sector contraction, higher US interest rates, concerns regarding geopolitical tensions with the US and economic policy uncertainty. Regarding outward FDI, the paper aims at analyzing the potential changes underlying the apparent stability in China's outward FDI with a focus on the post-2018 period following imposition of US tariffs. Following Gopinath et al (2024), the role of "connector" countries is explored together with more traditional measures within a gravity-type equation.

3.   **The paper finds that the inward FDI decline is associated primarily with an increase in geopolitical risk and economic policy uncertainty, while China's outward FDI is increasingly diverse geographically and relies increasingly on geopolitically aligned countries.** While perceived weaker prospects for China matter for inward FDI, their role is smaller than that of geopolitical tensions and policy uncertainty. Global interest rates do not seem to be associated with changes in inward FDI, once controlling for the other factors. For outward FDI, to enhance granularity the paper complements official data with proprietary private sector data from fDi Markets, based on public announcements. The regressions show higher reliance on host countries that are geopolitically aligned after the 2018 US tariff increase, with lower importance of the physical distance between China and a host country. China's FDI is also shifting away from large economies consistent with growing importance of "connector" countries.

4.   **The paper covers inward FDI and outward FDI in separate sections.** Section B analyzes the determinants of inward FDI by utilizing cross-country panel regressions, and documents recent trends across sectors. Section C examines China's outward FDI through a gravity-type equations using both OLS and Poisson Pseudo Maximum Likelihood (PPML). Finally, the last section concludes and offers policy recommendation both for China and potential recipients of China's FDI.

B.   Inward FDI

5.   **To better understand the contributions of several factors to the recent FDI decline, a cross-country panel regression is estimated.** The dependent variable is quarterly BOP-consistent inward FDI/GDP for all specifications since 2000, where available. The included covariates are actual real GDP growth y_{it}, expected one year-ahead real growth from Consensus Forecasts (CF), $E_{it}[y_{it+4}]$[3], the interest rate differential between the US interest and the domestic short-term rate augmented by CF-based exchange rate expectations and EMBI spread. The regression also includes an economic policy uncertainty index (EPU, Davis, Liu and Sheng (2019)) and China's geopolitical risk index (GPR, Caldara and Iacovello (2022)).[4] Finally, the specification controls for global volatility
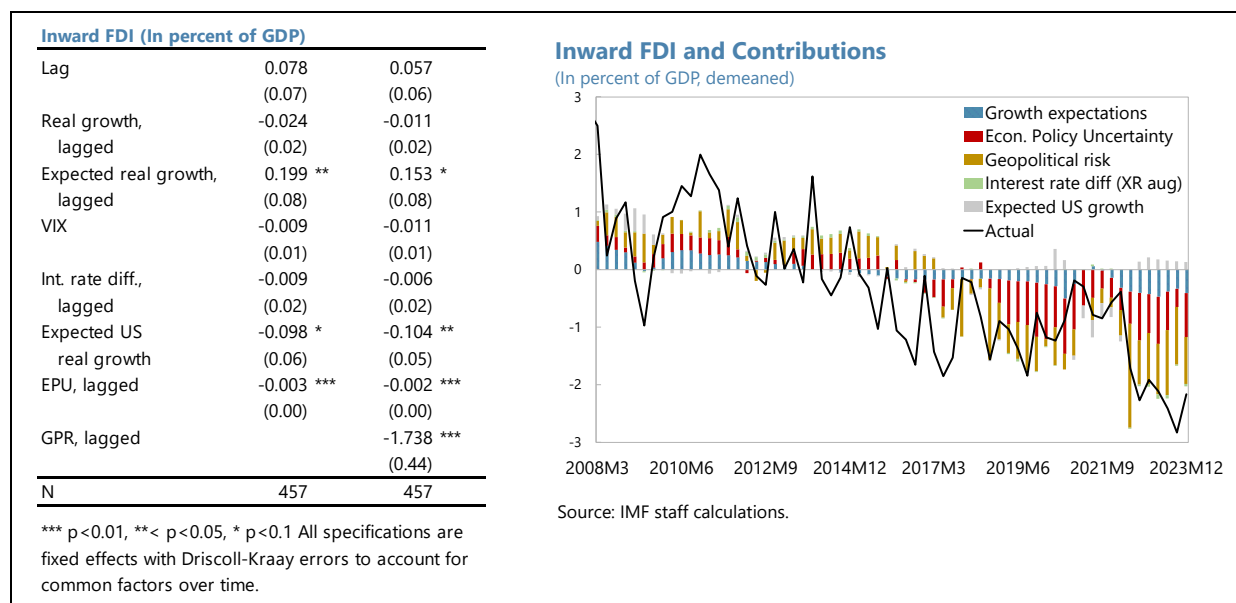
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[3] A weighted average of the current and next year growth expectations with the corresponding weights depending on the quarter.

[4] The EPU index is a monthly scaled frequency count of articles about policy-related economic uncertainty in mainland China newspapers. The GPR index is a normalized monthly China-specific share of articles mentioning adverse geopolitical events and tensions.

captured by the VIX and a year-ahead expected US growth. To minimize endogeneity, the explanatory variables are lagged (as in the equation below).

$$\frac{FDI_{it}}{GDP_{it}} = f_i + \beta_1 \frac{FDI_{it-1}}{GDP_{it-1}} + \beta_2 y_{it-1} + \beta_3 E_{it-1}[y_{it+3}] + \beta_4(i^{US}_{t-1} - (i_{it-1} + E_{it-1}[e_{it+3}] - embi_{it-1})$$

$$+ \beta_5 EPU_{it-1} + \beta_6 GPR_{it-1} + \beta_7 VIX_t + \beta_8 E_t[y^{us}_{t+4}] + \epsilon_{it}$$

6.   The regression attributes most of the decline in inward FDI in recent years to higher policy uncertainty, geopolitical risks and, to a smaller extent, lower future growth expectations. The results of the regression and the corresponding decomposition of FDI dynamics are below.[5] The results suggest both higher geopolitical tensions, proxied by GPR, as well as increased policy uncertainty are associated with lower FDI. Future domestic growth expectations as well as expected growth in the US also matter for FDI into China. All of these are statistically significant. The FDI decomposition, which is below, has a good fit.

Inward FDI (In percent of GDP)

Lag	0.078	0.057
	(0.07)	(0.06)
Real growth,	-0.024	-0.011
lagged	(0.02)	(0.02)
Expected real growth,	0.199 **	0.153 *
lagged	(0.08)	(0.08)
VIX	-0.009	-0.011
	(0.01)	(0.01)
Int. rate diff.,	-0.009	-0.006
lagged	(0.02)	(0.02)
Expected US	-0.098 *	-0.104 **
real growth	(0.06)	(0.05)
EPU, lagged	-0.003 ***	-0.002 ***
	(0.00)	(0.00)
GPR, lagged		-1.738 ***
		(0.44)
N	457	457

*** p<0.01, **< p<0.05, * p<0.1 All specifications are fixed effects with Driscoll-Kraay errors to account for common factors over time.

Inward FDI and Contributions
(In percent of GDP, demeaned)

Source: IMF staff calculations.

7.   The decline in FDI inflows since end-2021 is estimated to have been primarily driven by geopolitical risk, policy uncertainty, and weaker perceived growth prospects. An out-of-sample forecast of the FDI-to-GDP ratio suggests that of the actual 1.6 pp of GDP decline in inward FDI over this period, the regression attributes about 0.6pp of GDP to the increase in geopolitical risk, 0.4 pp of GDP to rise in policy uncertainty and 0.3 pp of GDP to worsening growth prospects. Surprisingly, the estimated role of the interest rate differential is small (0.1pp of GDP), despite

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[5] Availability of EPU and GPR is the main sample constraint.

incentives to move earnings offshore to take advantage of higher interest rates abroad.[6] Overall, the regression explains about 75 percent of the cumulative FDI decline since 2021Q4.[7]

FDI Change Since End-2021
(In percent of GDP)
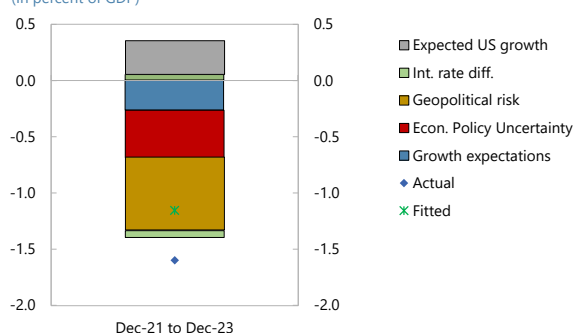

Source: IMF staff calculations.

8.   To improve granularity, the remainder of the paper complements official BOP-based FDI data with private sources. In the official data, a breakdown of FDI by sector is unavailable, and the breakdown by country for Mainland China is dominated by Hong Kong SAR and British Virgin Islands, which only channel, rather than originate investments. To address this issue, the paper uses proprietary data on bilateral gross greenfield FDI flows from fDi Markets, a service from the Financial Times which tracks new physical projects and expansions of existing investments that create new jobs and capital investment.[8] The data are collected primarily from publicly available sources (e.g., media sources, industry organizations, investment promotion agency newswires) between January 2003 and December 2023. For each investment, the data indicate the source and destination countries, as well as the sector and volume (in USD) and other characteristics (Aiyar et al (2023)).[9]

9.   According to fDi markets data, FDI into China is concentrated in manufacturing, including in strategic industries, which experienced outflows in 2022-23.[10] In China, FDI concentration in these sectors is much higher than in other Asian countries and EMDEs. The chart suggests that lower manufacturing FDI in
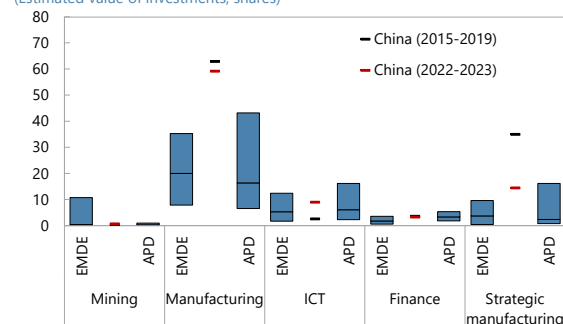
Sectoral Distribution of FDI Hosted in China
(Estimated value of investments, shares)

Sources: fDi Markets; and IMF staff calculations.
Notes: Box plots show median, 25th and 75th percentiles of distributions.

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[6] Even though the US interest rate significantly correlated with China's inward FDI, the correlation disappears once controlling for the other factors, including geopolitical tensions which broadly coincided with the increase in the US-China interest rate differential.

[7] For example, one additional factor that can partially explain the declining trend of inward FDI is a lower share of manufacturing FDI, which tends to be more capital-intensive and require larger investments. In the fDi markets data, the share of manufacturing FDI declined from 70 percent in 2017-19 to 60 percent in 2022-23.

[8] fDi Markets does not track mergers and acquisitions and other international equity investments, or investment projects that do not create new jobs, or companies which establish a foreign subsidiary without a physical company presence.

[9] For China, the fDi markets data diverge from the official SAFE BOP-consistent data, especially for inward FDI (see figure in appendix). Aiyar S. et al (2023) show that fDi markets data is broadly consistent with official BOP data for countries in the aggregate.

[10] Strategic manufacturing includes production of semiconductors, telecommunications and 5G infrastructure, equipment needed for the green transition, pharmaceutical ingredients, and strategic and critical minerals (the list proposed by the Atlantic Council) augmented by industry groups which fall in the top-3 deciles of mentions of reshoring-related terms in companies' earnings calls between 2017-2022. See Aiyar et al (2023) for details.

2022-23, which declined by about 70 percent in value terms on average between 2022-23 and 2015-19 (by 81 percent for strategic manufacturing), was a major driver behind the overall decline in FDI.[11] In terms of source countries, the reduction was primarily due declines of flows coming from the U.S. and advanced Asian economies.

Post-pandemic: Sectoral composition of FDI, hosted in China 1/
(Estimated value of investments; shares)

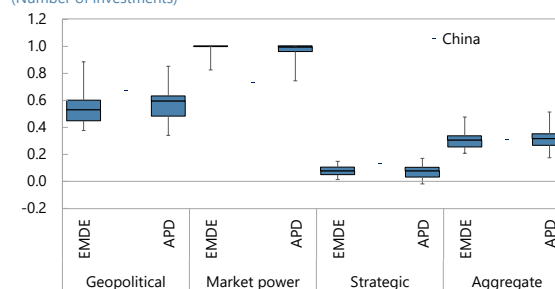| Source region and income group pairs	Mining	Manufacturing	ICT	Finance	Other	Strategic manufacturing 2/
AFR-EMDE					0.2 (0.2)	
APD-AE	0.0 (-0.3)	7.7 (-9.0)	4.3 (3.5)	1.3 (0.1)	3.7 (-10.7)	1.4 (1.4)
APD-EMDE		1.0 (-0.5)	0.7 (0.6)	0.3 (0.1)	0.0 (-3.2)	0.7 (0.7)
EUR-AE	0.1 (0.0)	39.0 (15.5)	1.2 (0.3)	1.4 (0.1)	11.9 (5.0)	15.0 (15.0)
EUR-EMDE		0.0 (-0.6)	0.2 (0.2)	0.3 (0.2)	0.9 (0.3)	
MCD-EMDE		2.0 (1.5)		0.3 (0.0)	0.3 (0.0)	
WHD-AE		14.1 (-5.8)	2.2 (1.3)	1.8 (1.1)	4.9 (0.2)	4.4 (4.4)
WHD-EMDE		0.4 (0.0)				

Sectors

Sources: fDi Markets; Atlantic Council; NL Analytics; and IMF staff calculations.
1\ Shares less than 0.1 are shown as empty cells. Green (orange) cells correspond to large increase (declines) in shares in 2022-2023 relative to 2015-2019. Shares of the first five columns (the numbers outside parenthesis) sum up to 100 percent.
2\ The shares sum up to the share of value of investments in strategic manufacturing in total investments in China.

10.   To assess future fragmentation risks to inward FDI beyond the regression analysis, we use the IMF's recently constructed fragmentation vulnerability index. The index is country-specific and has three dimensions: geopolitical, market power, and strategic. The geopolitical vulnerability is higher, the greater is the share of investments from more geopolitically distant countries. This vulnerability could be partly offset if the country has a significant market share, as foreign companies will find it costly to relocate to different countries or regions. Finally, the strategic dimension reflects the notion that FDI in strategic sectors faces heightened vulnerabilities regardless of geopolitical distance, as the source country may be motivated to bring such investments closer to home.

11.   China's large market size mostly offsets higher sensitivity to fragmentation risks coupled with a sizable share of strategic manufacturing, resulting in an overall estimated vulnerability that is close to the EMDEs median. China's geopolitical vulnerability is above the 75th percentile among EMDEs and Asia (the first subchart of the text chart), and its large share of strategic manufacturing creates an additional vulnerability for the future (the third subchart). However, as the second largest economy, China's market size is a mitigating factor as it remains an important destination for potential FDI (the second subchart). Aggregating these subindices, overall vulnerability index is broadly in line with the median EMDE.

Vulnerability Indices for FDI, hosted in China
(Number of investments)

Sources: fDi Markets; Trade Data Monitor; Bailey and others (2017); Atlantic Council; NL Analytics; and IMF staff calculations.
Note: Please see WEO April 2023 Chapter 4, technical annex, for calculation details.

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[11] The increase in the FDI share of ICT and European AEs and mostly reflects the decrease in the share of manufacturing FDI and from North American AEs.

C. Outward FDI

12.   Recent changes in China's FDI appear to be related to geoeconomic shifts. According to fDi markets data, in 2022-23 the number of China's outward FDI projects declined substantially for

many European and Asian AEs, while total flows to non-aligned "connector" countries – most notably Mexico, Vietnam – have more than doubled (Gopinath et al (2024)). Specifically, China's announced FDI to Vietnam and Mexico in 2022-23 relative to 2018-19 was about 170 and 300 percent, equivalent to 2 and 0.5 percent of these countries' GDP respectively. Ideal point distance (IPD), a measure of geopolitical distance used in this paper, which is based on voting at the UN General Assembly (Bailey et al (2017)), is strongly negatively correlated to these FDI changes.
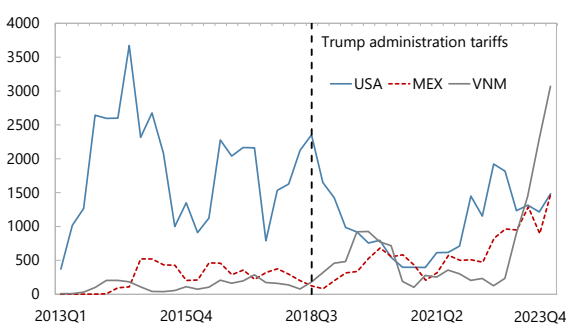

Geopolitical Distance as a Factor in China's FDI
(Number of projects)
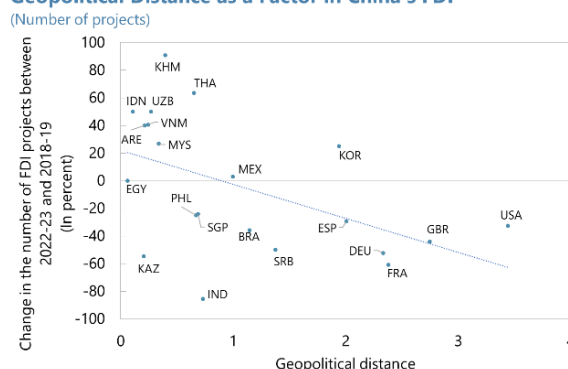
Sources: Bailey et al. (2017), fDi markets and IMF staff calculations.
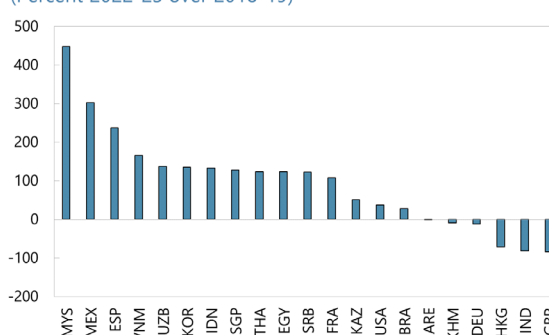

China's Greenfield FDI in Selected Economies
(4-quarter moving average; in millions of USD)

Sources: fDi markets; and IMF staff calculations.

China's FDI USD Flow Change for Selected Economies
(Percent 2022-23 over 2018-19)

Source: fDi markets and IMF staff calculations. HKG stands for China's Hong Kong SAR.

13.   To formally incorporate the idea of connector countries into a regression analysis, we consider the following definition of "proximity-to-GDP". Simplifying, when choosing a country to invest in country i, an investor should be maximizing sales of goods produced as a result of the investment domestically and externally (i.e, exports). Assuming exports behave according to a standard gravity equation, in a given period investor maximizes $\sum_j Exports_{ij} = \sum_j G_i(X_i) Y_i Y_j d_{ij}^{-\theta}$, where Y_i is GDP of country i, d_{ij} is distance between country i and j , $G_i(X_i)$ is a function of other characteristics of county i and $\theta > 0$ (typically $\theta = 1$). Then $\sum_j Exports_{ij} = G_i(X_i) Y_i \sum_j Y_j d_{ij}^{-\theta} = G_i(X_i) Y_i Y^{tot} \tilde{d}_i^{-\theta}$, where Y^{tot} is world GDP and $\tilde{d}_i = \left(\sum_j \frac{Y_j}{Y^{tot}} d_{ij}^{-\theta} \right)^{-\frac{1}{\theta}}$ is CES-aggregated distances to all potential trading partners weighted by their relative market size. We call this measure "proximity-to-GDP" and it captures the attractivennes of a country as a destination for investment based on its relative size. For example, in choosing whether to set up production in a large country like the US or a smaller neighboring country like Mexico, it's generally more practical to produce directly in the US, where "proximity-to-GDP" is higher, if you plan to sell mainly in the US. This is because products made in the US would have lower shipping costs than those made in Mexico, assuming shipping

costs increase with distance. Hence, a negative relationship between investment and "proximity-to-GDP" would be consistent with FDI shifting away from large economies and emergence of "connector" countries.

14.   To compare the relative importance of various factors as well as empirical relevance of proximity-to-GDP, a gravity model for China's outward FDI is estimated. When estimating the relevance of various FDI determinants, country-year pairs that had no China's FDI also contain information about how these factors affect FDI. Moreover, as Santos Silva and Tenreyro (2006) argue, OLS coefficients are likely to be inconsistent as the error term would be likely depend on covariates. To address this issue, the benchmark results are obtained using Poisson pseudo-maximum likelihood (PPML, specifications (3)-(5) in Table 1). Nevertheless, OLS results are also presented for comparison in Table 1 (specifications (1) and (2))[12]. The coefficients in all of the specifications correspond to semi-elasticities between either the annual number of new investment projects or annual investment value flow and corresponding potential determinants.[13] The equations also include a post-2018 dummy variable, including interaction terms to gauge changes since 2018 when the US imposed tariffs on China.

15.   This is one of the first studies that analyzes the determinants of both number of projects as well as nominal investment value based on fDi Markets data. For example, Gopinath et al (2024) focuses on the number of projects because in some cases value of investment is estimated by fDi Markets. The other difficulty is that the right tail of the density of investment values is fat, which biases linear model towards high-value invesments.[14] This paper addresses the latter issue by presenting a PPML regression for investment values where the largest 5 percent of observations are discarded (Table 1, specification 5). As such, specification 3, which treats all projects equally independent of value, is more comparable to specification 5.

16.   All specifications include standard gravity-model controls most of which are significant and have expected signs. The controls in all specifications (Table 1) include destination country and China GDP, lagged FDI variables (number of projects or investment value), labor costs (proxied by GDP USD per capita to minimize sample loss) and business start-up costs. All these variables are significant, except the start-up cost, which is insignificant after controlling for past FDI.

17.   Chinese FDI is increasingly focused on geopolitically aligned countries. Geopolitical distance was already important for Chinese investors before 2018, indicated by a significant negative coefficient, for the number of projects (specification 3), but not for the investment value (specifications 4-5). Geopolitical distance appears to be secondary for large investment projects that require higher skilled labor, technology or know-how that advanced economies tend to have. Post-

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[12] For the OLS regressions the LHS variable is $\log{(x + \sqrt{1 + x^2})}$, where x is either the number of projects or investment value. This function is well defined at $x = 0$ and quickly converges to $\log{(2x)}$.

[13] For PPML equations, the semi-elasticity is equal to exp(β)-1, where β is the number in the table, however for |β|<1, $\exp(β) - 1 \approx β$.

[14] In the China's investment value distribution, the maximum USD value is about 6.5 times larger than the 95th percentile.

2018, the negative significant interaction terms (at -0.16 in specifications 3 and 5) indicate a further increase in reliance on geopolitically aligned countries for both FDI variables.

18.   The coefficients on proximity-to-GDP are consistent with emergence of "connector" countries. Pre-2018 proximity-to-GDP contributed negatively to the number of FDI projects, but positively to investment value. This finding suggests that prior to 2018 higher-value projects, which dominate coefficients in specifications 4-5, were located in large economies where proximity-to-GDP is maximized.[15] Diverse, but less expensive projects (that imply a large number of projects) were hosted in "connector" countries, with lower "proximity-to-GDP". The hypothesis that it is larger projects that drive the positive coefficient in specification 4 is supported by a lower coefficient on proximity-to GDP in specification 5. However, post-2018, even larger investments were moved away from larger economies (in specification 5 the total coefficient on proximity-to-GDP post-2018 is -0.23, very close to the one is specification 3).

19.   Importance of physical distance has declined indicating geographic diversification of China's FDI. Physical distance (measured in kms) tended to negatively affect investment value (a significant negative coefficient of -0.2) pre-2018 (specification 4 and 5), likely driven by higher costs associated with managing larger projects that are farther away. However the positive significant interaction term for distance (specification 5) implies that, post-2018, China's FDI were destined to more distant countries.[16]

20.   Unsurprisingly, a free trade agreement (FTA) and greater reliance on manufacturing exports tend to attract Chinese FDI. An active FTA is significantly associated with about 30 percent higher number of projects and 20-30 percent increase in annual China's FDI. Having manufacturing exports as the main source of exports earnings (WEO classification) further significantly boosts the annual number of projecsts by 40 percent and annual value by about 25 percent, since most of China's outward FDI is in manufacturing. EMs that rely on fuels for exports have received large China's FDI (see the positive significant coefficient in specification 4), but these are likely limited in the number of projects (the negative significant coefficient in specification 3) mostly focused on extraction (Molnar et al (2021)).

21.   Higher domestic economic policy uncertainty appears to drive investments outward (specification 5). Statistically, higher domestic EPU is significantly associated with higher outflows. This indicates that the increase in EPU in 2022 all else equal was associated with about 20 percent increase in outward FDI value.

D. Conclusions and Policy Recommendations

22.   The recent lower inward FDI in China reflects both cyclical and structural factors and could contribute to future lower growth. Weaker growth prospects, elevated policy uncertainty, and increased geopolitical risks have contributed to lower inward FDI in recent years. This may lead

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[15] Consistent with the discussion in the previous paragraph.

[16] The total coefficient in specification 5 post-2018 on log distance is 0.11.

to a vicious cycle as lower FDI inflows could further weigh on productivity and future economic activity, underscoring the need to reverse the trend going forward.

23.   Steps to open up the economy to more inward FDI (consistent with the authorities' plans), reduce economic policy uncertainty, mitigate geopolitical risks, and advance structural reforms would support greater FDI inflows to China. The analysis suggests that higher geopolitical risks and economic policy uncertainty are the two major factors that have negatively affected inward FDI since 2022. Thus, reducing those should help minimize the negative impacts on foreign investment. Pressing ahead with pro-market structural reforms to boost productivity and improve growth prospects would also help attracting more inward FDI, which in turn have additional positive feedback effects on growth.

24.   China appears to continue investing in high-value projects even in geopolitically distant, large economies, while simultaneously building a network of geopolitically aligned "connector" countries through which it maintains market access to larger economies. ? The analysis suggests that the most promising policy avenues for EMDEs to attract Chinese FDI are to work on diversification of exports towards manufacturing, and increase trade linkages with China, including by establishing FTAs.

Table 1. China: Estimation Results from a Gravity Model for China's Outward FDI

	OLS		PPML		
	Number of projects	Value of investment	Number of projects	Value of investment	Value of investment 1\
	(1)	(2)	(3)	(4)	(5)
Destination country variables					
Log distance	-0.150 ***	-0.705 ***	-0.020	-0.203 *	-0.207 **
	(0.027)	(0.091)	(0.061)	(0.119)	(0.084)
Log proximity-to-GDP	0.122 ***	0.676 ***	-0.310 ***	0.685 ***	0.446 ***
	(0.033)	(0.113)	(0.105)	(0.167)	(0.110)
Log political distance	0.009	0.031	-0.119 ***	0.037	-0.009
	(0.011)	(0.038)	(0.029)	(0.056)	(0.043)
Post-2018	0.458	3.456 *	0.001	2.736	2.537 **
	(0.532)	(1.819)	(1.222)	(1.766)	(1.266)
Post-2018 x					
log distance	0.029	0.149	0.094	-0.006	0.319 ***
	(0.045)	(0.155)	(0.089)	(0.169)	(0.106)
log proximity-to-GDP	-0.098 *	-0.613 ***	-0.138	-0.350	-0.680 ***
	(0.054)	(0.183)	(0.148)	(0.243)	(0.148)
log political distance	-0.049 **	-0.182 ***	-0.164 ***	-0.127	-0.166 ***
	(0.020)	(0.068)	(0.056)	(0.083)	(0.058)
Active FTA	0.015	0.137	0.293 ***	0.324 **	0.195 *
	(0.033)	(0.115)	(0.080)	(0.163)	(0.114)
Export earnings: Fuel (=1)	-0.197 ***	-0.462 ***	-0.268 ***	0.368 *	-0.025
	(0.033)	(0.110)	(0.101)	(0.200)	(0.119)
Export earnings: Manuf. (=1)	0.143 ***	0.608 ***	0.418 ***	0.264 *	0.239 **
	(0.042)	(0.142)	(0.078)	(0.161)	(0.096)
Log labor cost (proxy) 2\	0.020 *	-0.039	-0.096 **	-0.240 ***	-0.133 ***
	(0.010)	(0.036)	(0.039)	(0.082)	(0.042)
Cost of business start-up 3\	0.000 *	0.000	-0.001	-0.002	0.000
	(0.000)	(0.000)	(0.001)	(0.002)	(0.001)
Lag FDI variable	0.592 ***	0.306 ***	0.020 ***	0.152 ***	0.142 ***
	(0.014)	(0.016)	(0.003)	(0.041)	(0.016)
Log destination USD GDP	0.145 ***	0.593 ***	0.602 ***	0.558 ***	0.430 ***
	(0.007)	(0.023)	(0.022)	(0.057)	(0.029)
China variables					
Log geopolitical risk 4\	0.056	-0.074	0.249	0.010	-0.234
	(0.055)	(0.188)	(0.160)	(0.310)	(0.175)
Log econ. policy uncertainty 4\	0.024	0.275 **	-0.088	-0.028	0.274 **
	(0.034)	(0.116)	(0.093)	(0.265)	(0.119)
Log China USD GDP	0.031	0.139	0.550 ***	0.723 ***	0.112
	(0.028)	(0.095)	(0.089)	(0.171)	(0.112)
R-squared/Pseudo R-squared	0.69	0.49	0.67	0.49	0.40
Number of observations	3674	3674	3674	3674	3456

*** p<.01, ** p<.05, * p<.1
1\Excluding top 5 percent of largest values.
2\ Proxied by USD GDP per capita. Other measures lead to significant sample loss. China's USD GDP per capita when included separately is insignificant in all specifications, keeping all other coefficents virtually unchanged.
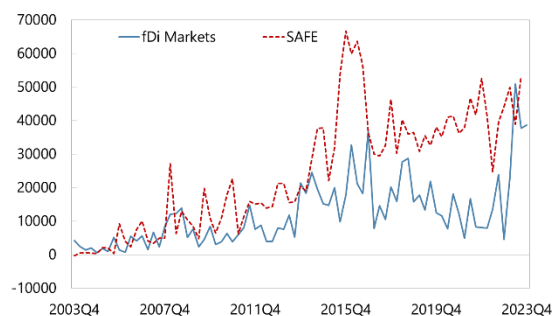3\ Measured as percent of GNI.
4\Normalized so that the long-term average is one.

Figure 1. China: Specifics of Data Used for China

While value of outward FDI is qualitatively similar to the official BOP data...
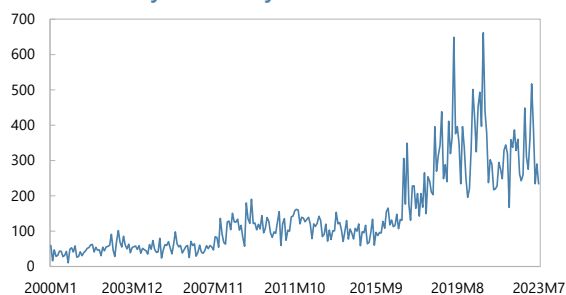
China Outward FDI
(In millions of USD)

Sources: SAFE and fDi markets

The Economic policy uncertainty started to increase in 2016
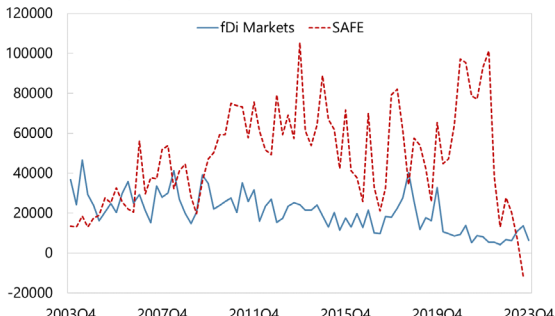
Economic Policy Uncertainty Index

Sources: ''Economic Policy Uncertainty in China Since 1949: The View from Mainland Newspapers,'' by Steven J. Davis, Dingqian Liu and Xuguang S. Sheng, 2019.

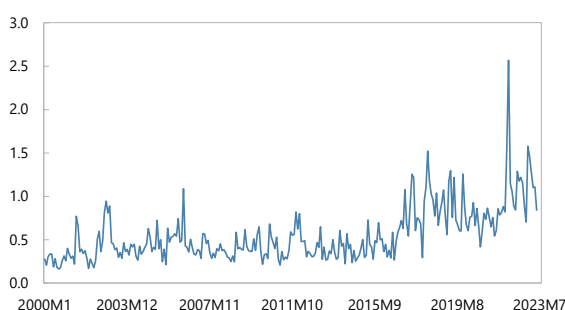*...inward FDI is very different, apart from the long-term trend.*

China Inward FDI
(In millions of USD)

Sources: SAFE and fDi markets.

...similarly with measured geopolitical risks that after declining in 2020-21, spiked in 2022.

Geopolitical Risk Index

Sources: Caldara, Dario and Matteo Iacoviello (2022), "Measuring Geopolitical Risk".

References

Aiyar S., Habib A., Malacrino D, and Andrea F. Presbitero (2023) "Investing in Friends: The Role of Geopolitical Alignment in FDI Flows", International Monetary Fund, August 2023

Bailey, Michael A., Anton Strezhnev, and Erik Voeten. "Estimating dynamic state preferences from United Nations voting data." Journal of Conflict Resolution 61.2 (2017): 430-456

Conte, M., P. Cotterlaz and T. Mayer (2022), "The CEPII Gravity database". CEPII Working Paper 2022-05, July 2022.

Davis S., Liu S. and Xuguang S. Sheng (2019) ''Economic Policy Uncertainty in China Since 1949: The View from Mainland Newspapers"

International Monetary Fund (2022), "*The Liberalization and Management of Capital Flows: An Institutional View",* Washington, DC: International Monetary Fund.

International Monetary Fund (2012), "*The Liberalization and Management of Capital Flows: An Institutional View",* Washington, DC: International Monetary Fund.

Caldara, D., and Matteo Iacoviello (2021), "Measuring Geopolitical Risk," working paper, Board of Governors of the Federal Reserve Board, November 2021

Gopinath, G., Gourinchas P., Presbitero A. and Petia Topalova (2024) "Changing Global Linkages: A New Cold War?" IMF Working paper No. 2024/076

M. C. Santos Silva and, Silvana Tenreyro (2006) "The Log of Gravity". *The Review of Economics and Statistics* 2006; 88 (4): 641–658. doi: https://doi.org/10.1162/rest.88.4.641

Molnar, M., T. Yan and Y. Li (2021), "China's outward direct investment and its impact on the domestic economy", *OECD Economics Department Working Papers*, No. 1685, OECD Publishing, Paris, https://doi.org/10.1787/1b1eaa9d-en.