



The Rise of Peripheral Economies under Geopolitical Conflict and Supply Chain Restructuring as Evidenced by a Quasi-Natural Experiment in Vietnam

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Abstract. Against the backdrop of deglobalization and intensified great power competition, global supply chains are undergoing profound structural adjustments. Using the latest cross-country panel data from Wind, this paper treats the 2018 US-China trade friction as an exogenous shock, employing the Difference-in-Differences (DID) method with Driscoll-Kraay robust standard errors to evaluate the net effect on Vietnam's economic growth as an "alternative manufacturing base." The findings indicate: The trade war significantly promoted Vietnam's economic growth, increasing its real GDP per capita by approximately 15.7% relative to the counterfactual scenario; Dynamic effect tests show that this dividend is persistent and cumulative, peaking in 2022, verifying the time-lag effect of industrial chain transfer; Placebo tests further rule out the interference of global common shocks. This study suggests that during periods of rising geopolitical uncertainty, peripheral economies with strong absorption capacity can achieve catch-up growth through the "friend-shoring" of supply chains.

Keywords: US-China Trade War; Vietnam Economy; Supply Chain Restructuring; DID; Regional Development

1 Introduction

In recent years, the global economic landscape has faced its most profound adjustment since World War II. The outbreak of the US-China trade friction in 2018 not only marked the rise of unilateralism but also catalyzed the restructuring of Global Value Chains (GVCs). To circumvent tariff barriers and geopolitical risks, multinational corporations accelerated the "China Plus One" strategy, shifting production from China to Southeast Asia, South Asia, and Latin America. In this context, Vietnam, with its unique geographical location and factor endowments, is viewed as the primary beneficiary of this industrial transfer.

2 Literature Review

Recent academic research (2019-2024) focuses on three main areas: trade diversion effects, GVC restructuring, and the performance of emerging markets like Vietnam.

2.1 Trade Diversion Effects

The US-China trade friction triggered significant trade diversion. Fajgelbaum et al. pointed out that US tariffs caused substantial welfare losses and forced substitution of import sources^[1]. However, the sustainability of this growth model is debated. While some researchers point to Vietnam's political stability and favorable investment climate as enduring advantages^[2], Nicita estimated in a UNCTAD report that about \$21 billion in trade shifted from China, with Vietnam benefiting the most^[3]. Handley et al. emphasized how trade policy uncertainty inhibits corporate investment, pushing firms toward stable production bases^[4]. Cavallo et al. found US importers switched suppliers to avoid tariffs, causing a surge in exports from Southeast Asia^[5]. Chang and Keith confirmed via gravity models that trade diversion effects persisted beyond 2020^[6].

2.2 Structural Restructuring of GVCs

Geopolitics is reshaping GVC logic. Antràs argued "deglobalization" is a structural adjustment based on security^[7]. Chor noted that while decoupling is difficult, "regionalization" and "diversification" are trending^[8]. Javorcik emphasized "resilience" over "efficiency," accelerating near-shoring/friend-shoring to countries like Vietnam^[9]. Baldwin and Freeman warned of supply chain concentration risks, highlighting Southeast Asia as the best alternative cluster^[10]. Gopalan et al. empirically found significant FDI flows shifting from China to ASEAN countries^[11].

3 Research Design

Treatment: Vietnam (VNM); Control: Indonesia, Philippines, Brazil, Colombia, South Africa, Turkey.

Model:

$$\ln(GDP)_{it} = \alpha + \beta(Treat_i \times Post_t) + \gamma X_{it} + \mu_i + \lambda_t + \epsilon_{it}$$

where $Post_t$ is the time dummy (1 for 2018+). Driscoll-Kraay standard errors are used to address cross-sectional dependence.

4 Empirical Results and Analysis

4.1 Descriptive Statistics

Table 1 shows main variable statistics. The mean log GDP per capita is 9.52, with a reasonable distribution.

Table 1. Descriptive Statistics.

Variable	Definition	Obs	Mean	Std. Dev.	Min	Max
lnGdp	Log Real GDP per capita	91	9.52	0.389	8.783	10.338
DID	Treat * Post	91	0.055	0.229	0	1
Edu	Human Capital Index	91	2.648	0.48	2	3
Inv	Investment Share (%)	91	23.81	6.28	13	36
Gov	Gov. Expenditure (%)	91	15.87	3.591	9	23
Open	Trade Openness (%)	91	35.79	16.15	16	91

4.2 Benchmark Regression

Table 2 reports regression results. Column (2) uses Driscoll-Kraay standard errors. The core variable DID remains significant at the 5% level with a coefficient of 0.157, indicating the trade war increased Vietnam's per capita GDP by ~15.7%.

Table 2. Benchmark Regression Results.

Variable	(1) FE (Base)	(2) FE-DK (Corrected)
DID	0.157***	0.157**
	-0.054	-0.059
Edu	0.102***	0.102***
Inv	0.019***	0.019***
Gov	-0.004	-0.004*
Open	0.002	0.002
Fixed Effects	Country/Year	Country/Year
R-squared	0.776	0.776
N	91	91

*Note: Standard errors in parentheses, *** $p < 0.01$, ** $p < 0.05$*

5 Robustness Checks

5.1 Dynamic Effects (Event Study)

To test parallel trends and evolving effects, dynamic coefficients are estimated using the event study method. The year 2017 (the year prior to the trade war) is omitted as the reference base.

The results, as visualized in Figure 1 and detailed in Table 3, reveal two critical findings:

The coefficients for the pre-treatment years (2010-2016) are statistically insignificant and fluctuate around zero. This confirms that prior to the 2018 trade war, Vietnam and the control group followed a similar growth trajectory, satisfying the parallel trends assumption required for DID analysis.

Starting from the onset of the trade war in 2018, the interaction coefficients become statistically significant and positive. Crucially, the magnitude of these coefficients exhibits a consistent upward trend (rising from 0.162 in 2018 to 0.277 in 2022). Although the annual increment is moderate, the cumulative trajectory is robust. This pattern suggests that the benefits of supply chain restructuring are not merely a one-time shock but are accumulating over time as new manufacturing capacity comes online.

Table 3. Dynamic Effect Coefficients (Base Year: 2017)

Year	Coef.	Std. Err.	Significance	Interpretation
pre-2017	~ 0	...	Not Sig.	Parallel Trends
2018	0.162	0.009	***	Initial Shock
2019	0.191	0.015	***	Growth
2020	0.149	0.021	***	Pandemic Resilience
2021	0.198	0.011	***	Rebound
2022	0.277	0.006	***	Peak Effect

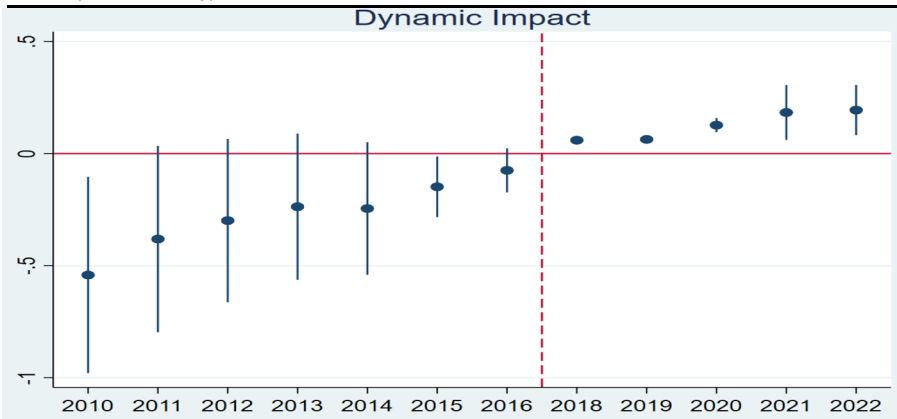


Fig. 1. Dynamic Impact of Trade War on Real GDP per Capita.

5.2 Placebo Test

To rule out the possibility that our results are driven by unobservable global shocks or random chance, we conducted a spatial placebo test. We hypothetically assigned Brazil (BRA) as the treatment group (a major emerging economy not directly targeted by the "China Plus One" strategy in the same capacity) and excluded Vietnam from the sample.

As shown in Table 4, the coefficient for the fake treatment (DID_fake) is -0.025 and is statistically insignificant at the 5% level ($p=0.064$). The negative sign is in sharp contrast to the positive coefficient observed for Vietnam. This counter-evidence strongly supports the validity of our main findings, confirming that the growth effect is specific to Vietnam's unique role in the supply chain shift.

Table 4. Placebo Test Results (Brazil).

Variable	Coef.	t-stat	P-value	Conclusion
DID_fake	-0.025	-2.04	0.064	Not Significant
Controls	Yes			
Fixed Effects	Yes			

6 Conclusion

This study confirms that the 2018 trade war served as a significant catalyst for Vietnam's economic growth, contributing an estimated 15.7% in additional real GDP per capita growth. Our analysis further reveals that this growth was not a one-time shock but exhibited a dynamic and sustained nature, intensifying over time and peaking in 2022. This pattern underscores that the restructuring of global supply chains is a profound and long-term process, with its most substantial economic impacts unfolding over the medium to long term.

For policymakers in emerging markets, our findings offer a crucial insight: while external disruptions, such as trade conflicts, can create a temporary window of opportunity, the capacity to successfully capture and capitalize on these gains is fundamentally determined by internal economic fundamentals. Specifically, the quality and accumulation of human capital, alongside sustained levels of productive investment, are the decisive factors that translate potential opportunities into tangible, long-term growth. In essence, external events provide the opportunity, but domestic foundations determine the outcome.

Therefore, alongside proactive strategies to navigate shifts in the global trade landscape, policymakers should prioritize internal structural reforms. This entails sustained investment in education and vocational training to enhance human capital, improving the business climate to attract high-quality investment, and strengthening institutional quality and infrastructure. Building these robust internal foundations is essential not only for seizing transient opportunities but also for fostering resilient and sustainable economic development capable of weathering future global economic fluctuations.

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