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DOMESTIC PARTISAN CONFLICT AND IMPORTS: EVIDENCE FROM THE US

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ABSTRACT

This study investigates the impact of US partisan conflict on its import from 156 economies from 1981 to 2016, the results show that the rise of US Trade Partisan Conflict Index indeed inhibits US imports, especially for imports from East Asian economies, which is consistent with the history of US-Japan and US-China trade conflict. Our results remain robust after using alternative models.

KEYWORDS:- Partisan conflict; Trade policy uncertainty; Imports; Regional Heterogeneity.

1. INTRODUCTION

Most researchers argue that political conflicts not only affect trade or investment policy, but also bring pessimistic expectations of producers or investors (Rodrik, 1991; Canes-Wrone and Park, 2012;Du, Ju and Ramirez, 2017; Azzimonti, 2018 and 2019), which then hinder the international transaction. The deterioration of political relations (Hegre, Havard, Russett and Bruce, 2010), military conflicts (Simmons, 2005) and territorial disputes (Pollins, 1989) will all have an adverse impact on bilateral trade. However, little research focuses on the impact of partisan conflict on international transaction except for Azzimonti (2019) and Jiang and Shi (2020). The former develops a novel trade partisan conflict index (TPCI) of US and shows that an increase of TPCI is associated with a significant decline in FDI flows to the US. The latter utilizes the “partisan conflict index” proposed by Azzimonti and finds that the increased US political uncertainty will have a negative effect on China's exports to the US, while have positive effect on the US exports to China.

Complementing the finding of Azzimonti (2019) and Jiang and Shi (2020), we demonstrate that similar to FDI, the partisan conflict of US indeed affects imports from other countries, but with regional heterogeneity.

2. MODEL AND DATA

Our regression model is based on classical gravity model and set as follows:

$$\ln(import_{i,t}) = \alpha_0 + \beta_0 \ln(TPCI_t) + \beta_1 \ln GDP_{i,t} + \beta_2 \ln GDP_{USA,t} + \beta_3 \ln ex_{i,t} + \beta_4 FTA_{i,t} + \gamma Z_{i,USA} + \partial QTR_t + \varepsilon_{i,t} \quad (1)$$

$import_{i,t}$ Represents US imports from country i within time t, $TPCI_t$ is the US TPCI at time t. As a sub-index of Partisan Conflict Index developed by Azzimonti (2018), TPCI is constructed by shallow big data (text from newspapers) and deep small data (domain expertise) to track the degree of political disagreement in trade policies of US policymakers, by measuring the frequency of newspaper articles related to trade policy disagreement within a given month. The higher the index, the greater the conflict between parties, Congress and the President over trade-related polices[1]. $\ln GDP_{i,t}$ and $\ln GDP_{USA,t}$ are the real output of country i and the United States. $\ln ex_{i,t}$ is the real exchange rate between country i's currency and the US dollar, $FTA_{i,t}$ shows whether there is an FTA between country i and the USA. $Z_{i,USA}$represents a country fixed effect, serving as multilateral-resistance factors in traditional gravity model, such as the geographic distance, common border, same language, same colony origins and so on. QTR_trepresent a set of quarter dummy variables to control for potential seasonality in imports. The vector QTR_trefers to three dichotomic variables, with QTR_1 =1 in the first quarter, and zero otherwise, QTR_2 and QTR_3 are similarly defined. $\varepsilon_{i,t}$ is the error term.

We select the trade data between156 economies and the United States from 1981Q1 to 2016Q4 as the TPCI index only updated to 2016, and the data of TPCI comes from the personal website of Azzimonti[2]. Import data are derived from the IMF DOTS database, denominated in US dollars and monthly imports are added up to obtain quarterly imports.GDP data is drawn from IMF IFS, which shows real value in constant 2015 dollars and is seasonally adjusted. The data of real exchange rate comes from CEIC database. Data of FTA is obtained from the WTO regional trade agreements database. The descriptive statistics for these variables are shown in table 1.

Table 1 Descriptive statistics of variables

Variable	Mean	Std. Dev.	Min	Max	Obs
$lnimport_{i,t}$	4.3375	3.1270	-12.429	11.782	19011
$lnTPCI_t$	4.3923	.4661	3.3173	5.7835	143
$lnGDP_{USA,t}$	14.939	.2892	14.389	15.354	143
$lnGDP_{i,t}$	8.8890	2.2275	1.6694	14.923	19596
$lne_{i,t}$	2.8362	3.0262	-9.2103	23.859	19784
$FTA_{i,t}$	0.0408	.1980	0	1	22308

Source: author's calculation based on data from IMF IFS, IMF DOTS, CEPII, CEIC and personal website of Azzimonti

[1]As for the TPCI index, please refer to Azzimonti (2019) for more details.
[2] http://marina-azzimonti.com/datasets/

3. THE EMPIRICAL RESULTS

1. Basic Results

The empirical results in Table 2 shows that the coefficient of $\ln TPCI_t$ is negative and significant at 1% confidence, indicating that partisan conflict related trade policy uncertainty will lead to a drop in US imports. Especially, a 1% increase in US trade partisan conflict index will result in a 0.17% drop in its imports according to model 3. This is in line with the expectation for two reasons: (1) Traditional uncertainty theory points out that exporters tend to delay export that are irreversible and incur significant sunk costs during the period of elevated uncertainty (Bernanke, 1983; Dixit, 1989; Handley and Limão, 2015), and rising TPCI will cause a higher degree of trade policy uncertainty, thus significantly increasing the risk to export; (2) Greater partisan conflicts significantly discourage investment, output, and employment in the US (Azzimonti, 2018 and 2019),which may reduce US domestic demand for products, especially for intermediate and manufactured products (Jiang and Shi, 2020). Furthermore, Nguyen (2012) believes that demand uncertainty may lead companies to "wait-to-see" and postpone export behavior to obtain foreign demand information.

Table 2 Basic regression results

	Model 1	Model 2	Model 3
$ln(TPCI_t)$	-0.5984***		-0.1129***
	(0.0530)		(0.0326)
$ln(GDP_{USA,t})$		0.5008**	0.4324*
		(0.2426)	(0.2474)
$ln(GDP_{i,t})$		1.3213***	1.3231***
		(0.1965)	(0.1974)
$ln(e_{i,t})$		-0.0806***	-0.0798***
		(0.0265)	(0.0262)
FTA_{it}		0.2844	0.2837
		(0.2032)	(0.2015)
Cons	Yes	Yes	Yes
QTR_t	Yes	Yes	Yes
Country fixed-effects	Yes	Yes	Yes
R-squared	0.866	0.910	0.911
F value	947.68	1755.97	1330.09
Observations	19010	17153	17153

Note: standard errors are in parenthesis ; ***,**and *denotes significance at 1%, 5% and 10% level, respectively.

2. Regional Heterogeneity

According to Azzimonti (2019), the impact of US TPCI on foreign direct investment (FDI) varies due to different relationships between different economies and the United States. For example, the members of NAFTA (Canada and Mexico) are better informed about trade policy and hence do not over-react to TPCI or news about political uncertainty as much as other countries do. Similar to Azzimonti (2019), we first classify the countries into six sub-regions, namely NAFTA, Non-NAFTA America, Europe, East Asia, Other Asia and other countries, and set corresponding dummy variables as, $LatinAmerica_{i,t}$, $Europe_{i,t}$, $OtherAsia_{i,t}$ and$Others_{i,t}$. In addition, we also introduce a dummy variable$NON\text{-}OECD_{i,t}$to represent the countries which do not belong to OECD. The exact name of economies of each region is listed in Appendix. Then we regress the following three equations:

$$\ln import_{i,t} = \alpha + \beta_1 \ln tpci_t \times NAFTA_{i,t} + \gamma X_{i,t} + \varphi_i + \mu_t + \varepsilon_{i,t} \quad (2)$$

$$\ln import_{i,t} = \alpha + \theta_1 \ln tpci_t \times LatinAmerica_{i,t} + \theta_2 \ln tpci_t \times Europe_{i,t} + \theta_3 \ln tpci_t \times EastAsia_{i,t} + \theta_4 \ln tpci_t \times OtherAsia_{i,t} + \theta_5 \ln tpci_t \times Others_{i,t} + \gamma X_{i,t} + \varphi_i + \mu_t + \varepsilon_{i,t} \quad (3)$$

$$\ln import_{i,t} = \alpha + \tau_1 \ln tpci_t \times Non-OECD_{i,t} + \gamma X_{i,t} + \varphi_i + \mu_t + \varepsilon_{i,t} \quad (4)$$

The results are shown in table 3, the coefficient of $lntpci_{t-1} \times NAFTA_{i,t}$is positively significant in row 1, indicating that the impact of TPCI is lower for the imports from Mexico and Canada than other countries. Just as the argument by Azzimonti (2019): NAFTA countries are better informed about trade policy and the import form these countries was more protected by other changes in tariffs or import/export quotas debated, and hence less sensitive to the TPCI. Among other different regions, East Asian economies are more susceptible to the partisan conflict on trade policy, this could happen because East Asian economies especially the mainland China and Japan had severe trade frictions with US in history or even now, higher level of partisan conflict in US congress will induce more trade policy uncertainty for Chinese or Japanese exporters than exporters from other economies. In consistent with Azzimonti (2019), there seems no difference about the effect of TPCI between OECD and Non-OECD economies.

Table 3 Country-heterogeneous effect regression results

	Model 1	Model 2	Model 3
$lnTPCI_t \times NAFTA_{i,t}$	0.2381*		
	(0.1281)		
$lnTPCI_t \times latinAmericas$		-0.0021	
		(0.0959)	
$lnTPCI_t \times Europe$		0.0558	
		(0.0944)	
$lnTPCI_t \times EastAsia$		-0.3645***	
		(0.0784)	
$lnTPCI_t \times \text{otherAsia}_{i,t}$		-0.1314	
		(0.0848)	
$lnTPCI_t \times Others_{i,t}$		0.0387	
		(0.0205)	
$lnTPCI_t \times non\_OECD_{i,t}$			-0.0118
			(0.0689)
$lnGDP_{i,t}$	1.4565***	1.441***	1.4550***
	(0.2032)	(0.1998)	(0.2030)
$lne_{i,t}$	-0.0849***	-0.0840***	-0.0851***
	(0.0266)	(0.0266)	(0.0269)
FTA_{it}	0.3387*	0.3480*	0.3483*
	(0.1970)	(0.1952)	(0.1999)
QTR	Yes	Yes	Yes
Country fixed effects	Yes	Yes	Yes
R^2	0.7071	0.6710	0.7117
N	148	148	148
Observations	17073	17073	17073

Note: standard errors are in parenthesis ; ***,**and *denotes significance at 1%, 5% and 10% level, respectively.

4. ROBUSTNESS CHECK

1. Controlling the impact of EPU index

Besides the trade policy uncertainty related partisan conflict, other policy uncertainties such as economic policy uncertainty will also affect the level of imports (Liao et al., 2021). Therefore, we include economic policy uncertainty index (EPU) which is proposed by Baker et al.(2016) into the baseline equation as a control variable[3]. Similar to TPCI, we use the lagged EPU, as the effect of EPU may also delay for some time.

According to the table 4, consistent with Liao et al.(2021), the rise of lagged EPU will inhibit the import of US, and more importantly, the coefficient of $ln(TPCI_t)$and control variables remain the same as baseline results, indicating the impact of TPCI is indeed significantly negative after controlling the effect of EPU.

Table 4 The regression results of adding EPU index

	Model 1	Model 2
$ln(TPCI_t)$	-0.558***	-0.145***
	(0.018)	(0.018)
$ln(EPU_t)$	-0.426***	-0.133***
	(0.022)	(0.021)
Other control variables	No	Yes
QTR	Yes	Yes
Country fixed effects	Yes	Yes
R-squared	0.884	0.918
F value	672.13	919.96
Observations	17296	15832

Note: standard errors are in parenthesis ; ***,**and *denotes significance at 1%, 5% and 10% level, respectively.

2. PPML method

According to Santos Silva and Tenreyro (2006), when using log-linear gravity model for empirical analysis of trade, the heteroscedasticity will lead to biased estimation as the existence of Jensen's inequality (E(ln y) ≠ ln E(y)) and they suggest to use the Poisson Pseudo-Maximum Likelihood Estimation (PPML) method to overcome these problems. Therefore, we use the PPML method as a robustness test. The specific regression is set as:

$$import_{i,t} = \exp\begin{Bmatrix} \alpha_0 + \beta_0 \ln(TPCI_t) + \beta_1 \ln GDP_{i,t} + \beta_2 \ln GDP_{USA,t} \\ +\beta_3 \ln ex_{i,t} + \beta_4 FTA_{i,t} + \gamma Z_{i,USA} + \partial QTR_t \end{Bmatrix} + \varepsilon_{i,t} \quad (5)$$

Results in table 5 confirm the impact of TPCI is still significantly negative after considering the Heteroscedasticity and the estimation bias problem, indicating that empirical results are robust.

[3]According to Azzimonti(2019), the correlation between the monthly indexes of TPCI and EPU over the whole period is just 0.20.

Table 5 Regression results of PPML

	Model 1	Model 2
$ln(TPCI_t)$	-0.134***	-0.097***
	(0.044)	(0.018)
Other Control variables	No	Yes
QTR	Yes	Yes
Country-fixed effects	Yes	Yes
R-squared	0.788	0.929
Observations	17153	17153

Note: standard errors are in parenthesis ; ***,**and *denotes significance at 1%, 5% and 10% level, respectively.

5. CONCLUSIONS

To the best of our knowledge, this study is the first to demonstrate the impact of partisan conflict on trade using panel data, and our results suggest that such conflict indeed decrease the trade, and the effect is heterogeneous across different regions. Our findings improve the under-standing of how domestic political conflict affects international trade.

Appendix:

The name list of economies in different regions (1981Q2—2016Q4)

Region	Name of Economies
NAFTA	Canada, Mexico
Non-NAFTA Latin America	Argentina, Bolivia, Brazil, Chile, Colombia, Cuba, Dominican Republic, Ecuador, Guatemala, Guyana, Honduras, Haiti, Jamaica, Nicaragua, Peru, Paraguay, El Salvador, Suriname, Trinidad and Tobago, Uruguay, Venezuela
Europe	Albania, Austria, Belgium, Bulgaria, Bosnia andHerzegovina, Belarus, Czechia, Germany, Denmark, Spain, Estonia, Finland, France, UnitedKingdom, Greece, Croatia, Hungary, Iceland, Italy, Lithuania, Latvia, Moldova, North Macedonia, Montenegro, Netherlands, Norway, Poland, Portugal, Romania, Russian, Serbia, Slovak, Slovenia, Sweden, Turkey, Ukraine, Kosovo
EastAsia	China, Japan, South Korea, Mongolia, Korea
OtherAsia	Afghanistan, United Arab Emirates, Armenia, Azerbaijan, Bangladesh, Brunei Darussalam, Bhutan, Georgia, Indonesia, India, Iran, Iraq, Israel, Kazakhstan, Kyrgyzstan, Cambodia, Kuwait, Lao, Sri Lanka, Myanmar, Malaysia, Nepal, Oman, Pakistan, Philippines, Qatar, Saudi Arabia, Syrian, Thailand, Tajikistan, Timor-Lester, Turkey, Vietnam, Yemen
Other	Angola, Australia, Burundi, Benin, Burkina Faso, Botswana, Central African Republic, Cameroon, Congo, Dem. Rep., Congo, Rep., Comoros, Cabo Verde, Algeria, Egypt., Eritrea, Ethiopia, Fiji, Faroe Islands, Gabon, Ghana, Guinea, Gambia, Guinea-Bissau, Equatorial Guinea, Kenya, Kiribati, Libya, Lesotho, Morocco, Madagascar, Mali, Mozambique, Mauritania, Malawi, Namibia, New Caledonia, Niger, Nigeria, New Zealand, Palau, Papua New Guinea, French Polynesia, Rwanda, Sudan, Senegal, Solomon Islands, Sierra Leone, Somalia, South Sudan, Eswatini, Chad, Togo, Tuvalu, Tanzania, Uganda, South Africa, Zambia, Zimbabwe
OECD	Australia, Austria, Belgium, Canada, Chile, Czechia, Germany, Denmark, Spain, Estonia, Finland, France, United Kingdom, Greece, Hungary,

	Iceland, Israel, Italy, Japan, South Korea, Lithuania, Latvia, Mexico, Netherlands, Norway, New Zealand, Poland, Portugal, Slovak, Slovenia, Sweden, Turkey

REFERENCES

Azzimonti, M.,2019. Does partisan conflict deter FDI inflows to the US? Journal of International Economics, 120, 162-178.

Azzimonti, M., 2018, Partisan conflict and private investment. Journal of Monetary Economics, 93, 114-131.

Baker, S. R., Bloom, N., Davis, S. J., 2016, Measuring Economic Policy Uncertainty. Quarterly Journal of Economics, 131, 1593-1636.

Bernanke, B.S., 1983, The Determinants of Investment: Another Look. American Economic Review, 73(2), 71-75.

Caldara, D., Iacoviello, M., Molligo, P., Prestipino, A. and Raffo, A., 2020. The Economic Effects of Trade Policy Uncertainty. Journal of Monetary Economics, 109, 38-59.

Canes-Wrone, B., Park,K., Elections, 2012, Uncertainty and Irreversible Investment. British Journal of Political Science, 44(1), 83-106.

Dixit, A.K., 1989,Entry and exit decisions under uncertainty. Journal of Political Economy. 97 (3), 620–638

Du, Y. X., Ju,D., Ramirez, C. D., Yao, X., 2017, Bilateral trade and shocks in political relations: Evidence from China and some of its major trading partners, 1990–2013. Journal of International Economics, 108, 211-225.

Handley, K., Limão, N., 2015, Trade and investment under Policy Uncertainty: Theory and Firm Evidence. American Economic Journal: Economic Policy, 7(4), 189-222.

Hegre, H., 2010, Trade does promote peace: New simultaneous estimates of the reciprocal effects of trade and conflict. Journal of Peace Research, 47(6), 763-774.

Nguyen, D.X.,2012. Demand uncertainty: Exporting delays and exporting failures. Journal of International Economics, 86(2), 336-344.

Jiang, X. D., Shi, Y. L., 2020,Does US Partisan Conflict Affect US–China Bilateral Trade?International Review of Economics & Finance, 69, 1117-1131.

Liao, J., Luo, L., Xu, X.Y. & Wang, A.C., 2021, Perceived macroeconomic uncertainty and export: evidence from cross-country data, Economic Research-Ekonomska Istraživanja, 213-229

Pollins, B. M., 1989, Does Trade Still Follow the Flag?American Political Science Review, 83(2), 465-480.

Rodrik, D., 1991,Policy uncertainty and private investment in developing countries. Journal of Development Economics, 36(2), 229-242.

Santos Silva, J.M., Tenreyro, S., 2006, The log of gravity. Review of Economics and Statistics, 88(4), 641-658.

Simmons, B.A., 2005, Rules over Real Estate: Trade, Territorial Conflict, and International Borders as Institution. Journal of Conflict Resolution, 49(6), 823-848.