Autocracy-favoring Globalization? Explaining the Reversed Patterns [draft]

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Abstract Studies have shown that autocracies have revived and thrived economically in the recent decades, contradicting the dominant literature that democratic institutions predict better outcomes (e.g., Acemoglu et al. 2001). Why this can happen is little understood. Compared to the pre-1990 period, more autocratic regimes are correlated with better economic performance than more democratic ones since the 1990s, especially on exports and external surpluses, which are associated with better development performance and fiscal capacity. Apart from the argument that more autocratic institutions after acquiring market liberalization may exogenously favor economic development (e.g., in China or Vietnam), I examine the role of globalization through the lens of the WTO, the major provider of trade integration. I show that the WTO significantly favors autocracies. In other words, autocracies may have performed better conditional on integrating into the globalized economy, contra the pre-1990 period.

1 Introduction

Since the early 1990s when the Cold War ended, economic globalization has accelerated its pace (Baldwin 2016). Global trade and financial transactions and integration significantly

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expanded. By 2010, for example, the membership of GATT/WTO nearly doubled, expanding to include more countries in Asia, Africa, Europe and Latin America, along with the unprecedented proliferation of other smaller trade agreements (e.g., RTAs and PTAs).

Meanwhile, the once promising third-wave democratization has stalled, and scholars have worried about the instability and backsliding of both young and old democracies, as well as the proliferation of stable, competitive autocracies (Ekiert and Dasanaike 2024; Haggard and Kaufman 2016). In 2020, the VDem's liberal democracy index has retreated to the 1990-level. Major literature predict that democracies should generate superior in economic performance (Acemoglu et al. 2019; Yu 2010). However, compared to the dwindling share before the 1990s, the share of autocracies in terms of GDP and industrial output has steadily risen (see Figure 1).

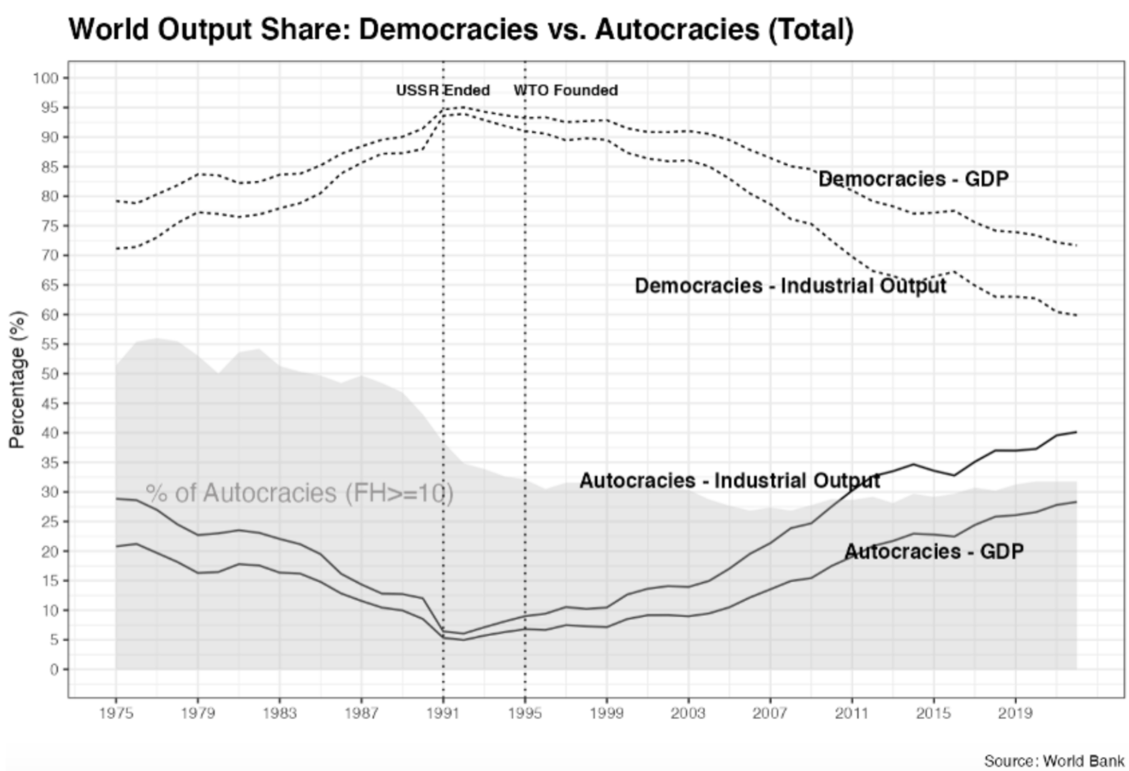


Figure 1. *The Distribution of Power Change Between Democracies and Autocracies (Data: World Bank; Autocracy: Freedom House Index $\geq$ 10).*

According to international relations theories by schools such as realism, constructivism, and democratic peace theory, a world of stronger autocracies will likely become more conflictual and less cooperative, which will in turn impact the global economy. Global conflicts (reported by ACLED) have steadily risen for the past two decades. A weakened democratic world not only sows unstable seeds domestically, but also provides poorer linkages and leverages facilitating democratization worldwide (Levitsky and Way 2006) while strengthened autocracies encourage autocratic drift worldwide (Ekiert and Dasanaike 2024). Furthermore, autocrat increasingly use good outcomes to redefine democracy (Oser and Hooghe 2018).

In a nutshell, the post-1990 econoimc globalization has gone hand-in-hand with the relative rise of autocracies and decline of democracies. But is this coincidental? Although vast scholarship has identified the merit of globalization such as lifting poverty and spreading global norms, globalization nonetheless has raised concerns (e.g., over inequality or national security) among a wide range of political spectrum. This paper seeks to explain the role of economic globalization in the rise of autocracies. I argue that although many democracies as well as autocracies have conducted market-oriented forms during the 1980/90s, autocracies may have more institutional and non-institutional advantages regarding economic performance in a globalized economy. Importantly, the expansion of economic integration that incorporated many autocracies serves as a permissive variable that enables autocracies' advantages.

The findings significantly challenge the current literature, conventional wisdom, and the original expectations of globalization that a globalized economy should strengthen a democratic world. It also complements the strand of literature that seeks to explain the effect of (domestic) political institutions on economic performance (Acemoglu et al. 2001; Acemoglu et al. 2019). I demonstrate that external factors are equally important in shaping the outcome.

Consider two typical sets of autocracies: East Asia such as China, Vietnam, Singapore, Taiwan, and South Korea (the latter two in the 70s) and the resource-rich autocratic states in the gulf area and East Europe. The former set of autocracies emulated advanced democracies to establish similar economic institutions (e.g., market liberalization, property rights protection, and relatively equal, inclusive economic opportunities). However, these reforms took place without similar political reforms. With trade integration, these countries embarked on a model heavily dependent on external demand, while their political institutions inevitably constrain domestic redistribution and thus internal demand, serving as a drag on the economies. In other words, without external demand, the effect of their domestic economic reforms would be much discounted. The lack of political constraints also lead to easy rollback for economic reforms (e.g., China). For the latter set of autocracies, trade integration and market access apparently provide market access especially for commodities, which, for sure, was quite limited during the Cold War era.

2 Regime Type and Global Economic Performance

Comparative political scientists and economists have spent energy trying to figure out what leads to better economic performance. For example, institutions matter in economic performance. Hall and Soskice (2001) have shown "varieties of capitalism" that produce differentiated economic outcomes. A stream of scholarship has pointed out the role of external factors such as globalized economy to domestic society and development (Gourevitch 1978; Rudra 2002). The country-level performance is not only affected by domestic policies, but also by external impacts which include but are not limited to trade exposure, foreign investments, and the availability of export markets.

Overall, the existing literature is optimistic on democracy's role on global economic policies and performance. Democracies have been found to be less protectionist (Eichengreen and Leblang 2007). Democracies also have advantages in economic growth (Acemoglu et al. 2019) and better trade performance (Yu 2010). The reasons why democracies may have advantages can be attributed to institutions such as contractability, rule of law, and the protection of intellectual property (Levchenko 2007, Rigobon and Rodrik 2004), which can result in, for example, product quality (Yu 2010).

However, autocracies may have advantages. Due to weak institutional constraints (Cox and Weingast 2015), autocracies may be able to sign easier deals with multinational corporations (MNCs) (Putnam 1998), which are the main players in the post-1990 global trade that rests on the global value chain (Baldwin 2016). Additionally, autocratic governments may feel more convenient or are less constrained to manipulate trade or F/X policies (Simmons 1997) and control financial institutions (Brune et al. 2001; Guiliano et al. 2009). In fact, due to weaker controlling capacity, Lipscy (2018) found that democracies tend to have more financial instability primarily due to their weaker control abilities.

Moreover, autocracies generally have weaker labor bargaining institutions (Manger and Sattler 2015) and suppress labor costs and labor unions (Rodrik 1999). Due to either weaker liberal economic norms (Dailami 2000; Quinn 2000) or narrower interest groups (Eichengreen and Leblang 2008; Milner and Kubota 2005), autocracies also tend to be more protectionist. This protectionism sometimes can foster the development of domestic industries or force MNCs to set up production locally. Some studies also find that state-owned enterprises may play a favorable role in doing so (Clegg et al. 2018; Wu 2016). Autocratic states tend to establish special economic zones that provide concessions such as tax breaks, lower tariffs, and looser regulations which boost economic performance (Allen and Ge, working paper). The notable autocracy examples include China, Vietnam, and Singapore of today, or Korea, Japan, Taiwan, Hong Kong, Thailand, Malaysia, Chile when they were in authoritarian or semi-authoritarian eras (see the discussions of developmental state (Haggard 2018)).

In sum, it is debatable whether democracies or autocracies may have more advantages regarding their global economic performance. Moreover, most of the empirical research listed above draws on data up to the early 2000s, which may miss a key global shift – post-1990 globalization that witnesses the shift of global trade from national comparative advantage to the global value chain and importantly, includes the incorporation of many autocracies.

3 The Reversed Performance

Stylized Patterns

Based on the data from the World Bank Indicators, I calculate the average values of merchandise exports, industrial output, and trade balance as shares of GDP, as well as GDP growth within both democracies and autocracies (with estimate uncertainty). All four measures show that since the 1990s, the average performance of autocracies diverge or surpass that of democracies.

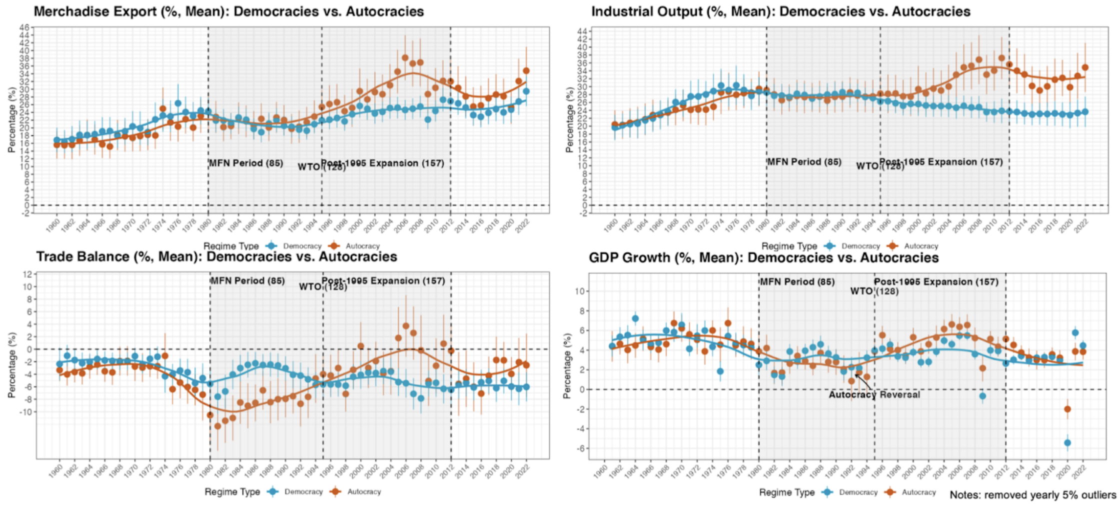


Figure 2. *Average Performance of Several Indicators of Democracies and Autocracies (FH $\geq$ 10). Estimate uncertainty of the averages are plotted.*

The Prediction of Regime Type

I test whether regime type predicts (or cause after more rigorous methods are applied) the performance divergences. As my focus lies in the potential role of globalization, I focus on exports and external balances (trade balance and current account balance), which are key international economic measures. Exports have been assumed by conventional trade theories to induce the growth in productivity, income, and innovation. For external balances, although short-run fluctuations hardly matter, persistent deficits can imply structural issues such as de-industrialization or financial vulnerability (see the literature on Global Imbalances). Moreover, as I have shown in another working paper, long-run external balances are correlated with a slew of development indicators such as economic growth and national debt.

First, similar to Yu (2010), by employing the gravity model, I find that prior to 1990, being more democratic is associated with higher exports (see Table 1). I use Polity V to measure regime type. However, during the post-1990 period, being more autocratic is associated with more trade or zero effect than being more democratic is. Specifically, I look at all dyads with exporters being within the WTO to control for the WTO effect. Since many autocracies joined the WTO after 1990 and being inside the WTO is what I am interested in, there is little sense to pool together countries both in and outside of the trade institution. The models include cross-sectional, within, interaction with logged GDP (to see whether larger autocracies matter), and weighted least squares (when larger countries are assigned with larger weights). In the OLS (interaction) model, for example, by plugging in Iran's GDP in 2005 (with the logged form = 20), the effect of polity becomes negative.

$$X_{ijk} = \frac{s_{ik}Y_iY_j}{(p_{ik})^{\sigma}\overline{y}_{ik}} \left[T_{ijk}\left(z_i, z_j\right) / P_j^k\right]^{1-\sigma} [\theta_{ik} exp(z_i)]^{\sigma - 1} \quad \text{Yu(2010)}$$

	Pre-1990	Post-1990 (within WTO)			
	OLS	OLS	OLS (Within)	OLS (Interaction)	WLS (by GDP)
Polity_i	0.022***	0.003	−0.016***	0.065***	−0.041***
	(0.001)	(0.003)	(0.004)	(0.014)	(0.001)
Polity_i x *GDP_i*				−0.004***	
				(0.001)	
Polity_j	0.003*	0.003**	0.005***	0.003**	0.003***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
GDP_i	1.583***	−1.746***	0.298***	−1.698***	−1.137***
	(0.048)	(0.139)	(0.054)	(0.141)	(0.107)
GDP_j	2.058***	0.650***	0.521***	0.644***	0.065
	(0.143)	(0.080)	(0.090)	(0.079)	(0.182)
GDPPC_i	−0.536***	3.051***	0.070	3.023***	2.154***
	(0.043)	(0.129)	(0.063)	(0.129)	(0.116)
GDPPC_j	−1.011***	0.387***	0.526***	0.392***	0.967***
	(0.137)	(0.083)	(0.092)	(0.082)	(0.185)
RTA	0.204***	0.282***	0.286***	0.278***	0.202***
	(0.051)	(0.041)	(0.039)	(0.041)	(0.031)
Custom Union	0.819***	0.590***	0.662***	0.591***	−0.335***
	(0.111)	(0.031)	(0.032)	(0.030)	(0.030)
Common Colnizer post-45	0.775***	0.998***	0.875***	0.996***	0.533***
	(0.027)	(0.022)	(0.017)	(0.022)	(0.047)
Colonial Dep. post-45	1.724***	1.034***	1.260***	1.048***	0.982***
	(0.044)	(0.061)	(0.048)	(0.060)	(0.050)
Population_i	−0.757***	2.984***	−0.112	2.955***	2.190***
	(0.041)	(0.124)	(0.093)	(0.124)	(0.109)
Population_j	−1.195***	0.445***	0.596***	0.450***	0.938***
	(0.139)	(0.072)	(0.082)	(0.071)	(0.180)
Distance	−0.785***	−1.106***	−1.244***	−1.109***	−0.960***
	(0.025)	(0.011)	(0.015)	(0.011)	(0.013)
Common Language	0.294***	0.607***	0.685***	0.612***	0.331***
	(0.023)	(0.026)	(0.030)	(0.026)	(0.020)
Common Religion	−0.059*	−0.008	0.266***	−0.010	−0.025
	(0.030)	(0.032)	(0.033)	(0.032)	(0.028)
Border	0.462***	0.806***	0.529***	0.802***	0.073
	(0.017)	(0.023)	(0.023)	(0.022)	(0.044)
Num.Obs.	194 716	313 566	313 566	313 566	313 580
R2 Adj.	0.629	0.709	0.759	0.709	0.801
FE	year	year	year/exporter	year	year

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 1. *Regime Type and Exports*

Second, I test whether regime type is associated with external balances. As said, persistent external imbalances can indicate structural issues. In contrast, those with persistent surpluses often exhibit better development performance (e.g., Core Europe, the Gulf states, and East Asia). Surplus that contributes to reserves and sovereign funds that can be used elsewhere such as welfare programs, foreign purchases, and even geopolitical implications (e.g., China's overseas investments). The dependent variables in my models are trade balances and current account balances, both as the share of GDP. To account for confounders, I add the controls from Chinn and Ito (2022) to account for both trade and financial explanations of balances. I employ a mixed-effect model based on Manger and Sattler (2020), as polity has significantly less variations since the late 1990s. This mixed-effect or hierarchical model captures within-country variations of covariates other than polity. Then the model regresses the country intercepts from the first stage on polity, assuming the random draw from the population (random effects).

$$y_{jt} = a_{1j} + a_2 X_{jt} + d_t + \epsilon_{jt}$$

$$a_{ij} = \gamma_0 + \gamma_1 POLITY_j + \eta_j$$

The results are listed below. As shown in Table 2, all models with data range of 2000-19 shows that autocracies are positively associated with current account balance (%), even after removing OPEC/Russia, rich countries, and those which joined the GATT prior to 1970. The early period (1980-2000) does not display similar patterns. In Table 3, similar models are run for trade balances (%), and the results are similar but with larger magnitudes for polity.

	DV: Current Account Balance (%)						
	Period: 2000-2019						1980-2000
	Bivar OLS	Multivar OLS	Mixed Model	No OPEC/RUS	No Rich	No pre-1970 GATT	Mixed Model
Polity2	−0.291***	−0.157***	−0.157***	−0.106**	−0.150***	−0.180**	−0.012
	(0.037)	(0.042)	(0.051)	(0.053)	(0.054)	(0.080)	(0.045)
GDP		1.600***	1.376***	1.462***	1.415***	1.746***	0.878***
		(0.118)	(0.283)	(0.291)	(0.317)	(0.554)	(0.279)
GDPpc		0.969***	−0.195	−0.954**	−0.461	0.126	0.552
		(0.242)	(0.399)	(0.427)	(0.442)	(0.724)	(0.537)
GDP Growth		−0.122	−0.056*	−0.086***	−0.075**	0.012	−0.135***
		(0.102)	(0.031)	(0.032)	(0.036)	(0.052)	(0.041)
Fiscal Balance (%)		0.583***	0.365***	0.299***	0.399***	0.548***	0.048
		(0.058)	(0.027)	(0.031)	(0.031)	(0.044)	(0.051)
Net Foreign Asset (%)		0.355*	0.070	0.076	0.052	0.049	0.734***
		(0.193)	(0.106)	(0.100)	(0.116)	(0.131)	(0.263)
KaOpen		−0.285**	−0.195	−0.045	−0.233	−0.157	−0.506***
		(0.134)	(0.166)	(0.163)	(0.179)	(0.314)	(0.188)
Δ Private Credit (%)		−0.145***	−0.099***	−0.100***	−0.132***	−0.184***	−0.188***
		(0.034)	(0.014)	(0.013)	(0.020)	(0.032)	(0.029)
Δ Terms of Trade		0.042	0.070***	0.043***	0.089***	0.053***	0.033**
		(0.027)	(0.010)	(0.014)	(0.012)	(0.016)	(0.014)
Population (%, <=14)		14.345***	19.746***	15.738***	20.549***	36.404***	−3.884
		(3.907)	(5.269)	(5.380)	(6.115)	(8.936)	(8.634)
Population (%, >=65)		3.583	34.871***	38.056***	39.868***	49.254***	−7.536
		(5.693)	(8.119)	(8.014)	(11.114)	(15.643)	(25.730)
Trade Openness		0.040***	0.042***	0.043***	0.031***	0.032***	0.033***
		(0.004)	(0.006)	(0.006)	(0.008)	(0.009)	(0.007)
Year		−0.355***	−0.017	−0.014	−0.053	−0.063	0.203***
		(0.059)	(0.154)	(0.145)	(0.047)	(0.074)	(0.052)
Country FE			✓	✓	✓	✓	✓
Year FE	✓	✓	✓	✓	✓	✓	✓
Num.Obs.	2108	1294	1294	1205	1015	604	430

* p < 0.1, ** p < 0.05, *** p < 0.01

Table 2. *Regressions of Current Account Balance on Polity.*

	DV: Trade Balance (%)						
	Period: 2000-2019						1980-2000
	Bivar OLS	Multivar OLS	Mixed Model	No OPEC/RUS	No Rich	No pre-1970 WTO	Mixed Model
Polity2	−0.410***	−0.278***	−0.211***	−0.112*	−0.211***	−0.259**	0.015
	(0.054)	(0.066)	(0.066)	(0.064)	(0.075)	(0.109)	(0.057)
GDP		2.575***	1.783***	2.065***	2.442***	2.693**	0.931
		(0.186)	(0.466)	(0.442)	(0.573)	(1.134)	(0.688)
GDPpc		3.441***	2.231***	1.311**	1.948***	3.167**	−1.040
		(0.362)	(0.591)	(0.587)	(0.707)	(1.250)	(0.975)
GDP Growth		0.037	−0.077**	−0.138***	−0.103**	−0.052	−0.175***
		(0.108)	(0.036)	(0.037)	(0.044)	(0.061)	(0.044)
Fiscal Balance(%)		0.691***	0.386***	0.290***	0.430***	0.581***	0.042
		(0.072)	(0.031)	(0.036)	(0.038)	(0.051)	(0.060)
Net Foreign Asset(%)		−0.209	0.141	0.159	0.122	0.128	−0.086
		(0.172)	(0.123)	(0.114)	(0.139)	(0.151)	(0.293)
KaOpen		−0.909***	0.104	0.320	0.152	0.495	−0.610***
		(0.245)	(0.205)	(0.195)	(0.236)	(0.409)	(0.223)
Δ Private Credit (%)		−0.184***	−0.147***	−0.146***	−0.168***	−0.249***	−0.234***
		(0.048)	(0.016)	(0.015)	(0.025)	(0.037)	(0.031)
Δ Terms of Trade		0.087**	0.073***	0.032**	0.091***	0.059***	0.032**
		(0.039)	(0.012)	(0.015)	(0.015)	(0.018)	(0.015)
Population (%, <=14)		33.202***	26.246***	22.827***	35.114***	35.837***	−46.224***
		(5.874)	(6.894)	(6.746)	(8.496)	(12.095)	(12.846)
Population (%, .=65)		7.778	19.703*	21.502**	47.244***	85.006***	−60.208
		(7.604)	(10.715)	(10.092)	(16.108)	(23.053)	(46.059)
Trade Openness		0.071***	0.051***	0.050***	0.038***	0.011	0.018
		(0.006)	(0.008)	(0.007)	(0.010)	(0.012)	(0.012)
Year		−0.772***	−0.159	−0.130	−0.206***	−0.362***	0.072
		(0.103)	(0.179)	(0.166)	(0.061)	(0.097)	(0.063)
Country FE			✓	✓	✓	✓	✓
Year FE	✓	✓	✓	✓	✓	✓	✓
Num.Obs.	2027	1294	1294	1205	1015	604	433

* p < 0.1, ** p < 0.05, *** p < 0.01

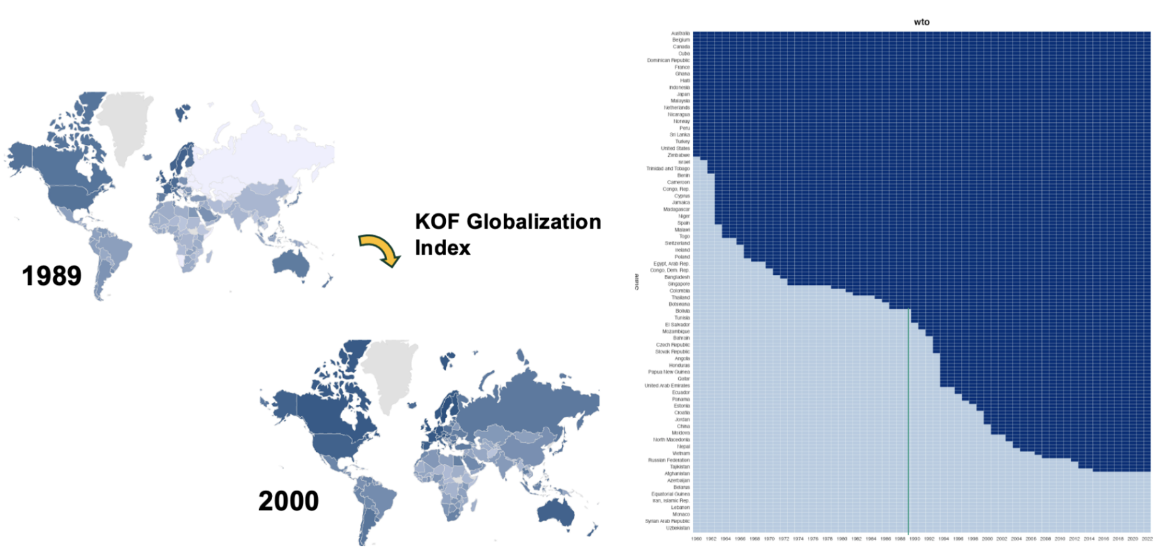
Table 3. *Regressions of Trade Balance on Polity.*

Later, in order to rigorously confirm the causation instead of prediction, more methods can be used such as instrumental variables (IV), panel matching, and sensitivity tests. There are several potential candidate IVs that can be used for regime type. For example, Yu (2005) uses the death penalty and Acemoglu et al. (2019) use regional democratic levels. Panel matching is another promising method that utilizes matching techniques to compare treated country-years to untreated ones (e.g., see Imai's work). Moreover, at least, sensitivity tests can be used to see how large an omitted confounder has to be to overturn the effect of polity.

4 Why Does the Prediction Reverse After 1990?

Although more work needs to be done to confirm causality, models such as gravity are legitimate traditionally in economics and political science for testing the causal effects on trade. Correlations also matter in this case. What has changed to reverse the prediction that being more democratic predict better trade performance? The reasons why the coefficient has changed can theoretically boils down to: 1) new confounder(s), or 2) mechanism change. I argue for the latter.

When viewed in retrospect, there are at least two major factors that have changed since the 1990s for countries worldwide. First, since the 1980s/1990s, many countries including both autocracies and democracies have followed the "Washington Consensus" to conduct market-oriented economic reforms and trade and capital account liberalization (Quinn and Toyoda 2007). This can be seen as domestic institutional reforms. Second, since the fall of the Berlin Wall, the world trade system (primarily the GATT/WTO, as well as regional ones) has begun an unprecedented expansion to incorporate many autocracies which used to participate very little in the global economy. This opened the doors for autocracies to access global markets (mostly of rich democracies) that would not have been so before.[1] The economic expansion includes trade and capital flows and globalized production. Of all, trade expansion was embodied in WTO membership expansion and the proliferation of regional trade agreements (see Figure 3). What post-1990 trade differs from previously also contains a special feature that rests on the globalization of production networks – the global value chain (Baldwin 2016; also discussed in the "New New Trade Theory").



[1]Although some autocracies joined at the late stage or still haven't joined, the spillover effect from the joined ones cannot be ignored.

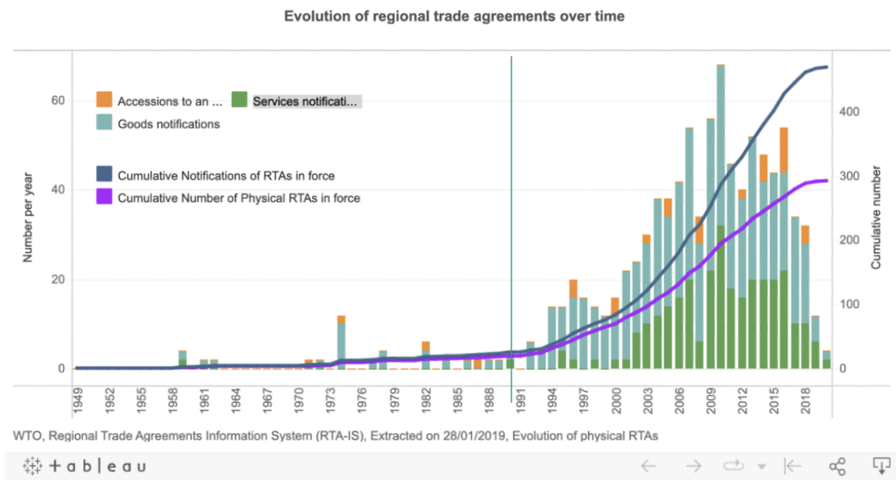


Figure 3. *KOF Globalization Index; WTO Expansion; RTA Proliferation.*

That said, the fact that a country being more autocratic conversely predicts higher exports or external balances involves two necessary reasons: 1) autocracies have done domestic reforms based on market economy which may have spurred the economic growth, and 2) autocracies are allowed to access global market especially the markets of advanced democracies, which can significantly increase their exports. This already raises the question to the argument that autocratic institutions (such as China) independently can develop economies well even without an external environment. The second reason speaks primarily to the trade integration and market access, primarily with the expansion of the WTO, and the liberalization conditions required by the WTO accession also relates to the first reason.

The Role of Domestic Reforms

[TODO]

The Role of Trade Integration: the WTO Expansion

Among the proliferation of varying types of trade deals after the Cold War, the WTO plays a significant and major role in facilitating trade liberalization across the globe (Bagwell and Staiger 2002), as the "most heralded commercial agreement in history (Goldstein et al. 2007)." The predecessor of the WTO is the GATT, which de jure began in 1948 with 23 founding members after WW2. The WTO stipulates that a member state cannot impose discriminatory tariffs on another member, so that joining the WTO guarantees market access with lower tariffs for a member especially when trading with the already much liberalized advanced democratic members. Although the WTO does not necessarily demand states to lower down tariffs, over time, lowering down tariffs have become the norm within the institution. After 1990, the WTO started a second major round of expansion which integrate many autocratic and young democratic countries in the former communist bloc and the rest of the world. Its number of members has increased from 88 in 1985 to 164 in 2020 (see Figure 3).

Studies have found that the WTO increases trade for member states (Goldstein et al. 2007). According to the simulation of Davis and Wilf (2017), if China joined the WTO earlier, its export boom would have been earlier. Apart from market access, the WTO also provides an institutional guarantee for trade-related investments. For example, Carnegie (2014) has shown that the WTO solves the "hold-up" problems that hinder investments in politically dissimilar countries. This is particularly relevant in the era of global value chain when the investment behavior of multinationals corporations which value fundamentally shapes trade patterns (Bernard et al. 2009).

However, although free trade is conventionally regarded as beneficial for both rich and poor countries, caveats remain. Moving to equilibrium of trade liberalization from autarky based on trade models is indeed a one-time gain and the long-term effects are still debatable (Garrett 2000). States, especially after equilibrium, may adopt varying policies to alter trade patterns (e.g., strategic trade policy and mercantilism for the sectors with high startup costs and high scale effects). The WTO focuses on lowering trade barriers, however, as Wu (2016) describes, is not equipped to deal with these mercantilist practices. This can be in particular salient when trade doesn't balance contra most free trade models, as the prices of one state's products can be artificially low without readjustment associated with balanced trade. As such, at least in theory, being a member of the WTO can be exploited by some to practice self-benefiting policies.

That said, trade integration may favor autocracies for a few reasons. As introduced in section 2, autocracies may have some advantages in a globalized economy such as the ease to implement industrial policies and satisfy multinational firms. Studies have found that WTO accession increased trade more for those who take longer to join due to stricter conditionality (Allee and Scalera 2012). The U.S.-dominated institution tends to set stricter examination procedures for more autocratic countries. As a result, autocracies that joined may have done more reforms to meet the institution's requirements. Additionally, autocracies may start low – during the Cold War period, many autocracies particularly those in the socialist bloc had centralized planning economies, which may have an negative impact on trade performance compared to many market-oriented democracies. Therefore, one may expect that joining the WTO which represents the significant means of enabling broad market access may favor autocracies.

	Export(log)		Export(log)		Import(log)	
	Pre-1990	Post-1990	Pre-1990	Post-1990	Pre-1990	Post-1990
WTO_i	0.334***	0.042	0.326***	0.062	0.074	−0.027
	(0.044)	(0.048)	(0.044)	(0.047)	(0.048)	(0.048)
$WTO_i \times Polity_i$			0.011***	−0.018***	−0.003	0.010***
			(0.003)	(0.003)	(0.003)	(0.003)
$Polity_i$			0.010***	−0.001	0.014***	−0.003
			(0.003)	(0.003)	(0.003)	(0.003)
WTO_i	0.075	−0.014	0.067	−0.018	0.286***	−0.078
	(0.048)	(0.049)	(0.048)	(0.048)	(0.045)	(0.048)
Both WTO	−0.029	0.197***	−0.016	0.198***	−0.033	0.237***
	(0.049)	(0.050)	(0.049)	(0.049)	(0.050)	(0.050)
GDP_i	−0.202	0.233**	−0.206	0.279**	2.136***	0.780***
	(0.256)	(0.114)	(0.256)	(0.114)	(0.242)	(0.201)
GDP_j	2.118***	1.045***	2.126***	1.043***	−0.210	0.505***
	(0.246)	(0.198)	(0.246)	(0.198)	(0.266)	(0.123)
$GDPPC_i$	0.763***	0.262**	0.755***	0.210*	−1.366***	−0.033
	(0.252)	(0.114)	(0.252)	(0.115)	(0.237)	(0.201)
$GDPPC_j$	−1.355***	−0.304	−1.361***	−0.302	0.781***	0.014
	(0.241)	(0.197)	(0.241)	(0.197)	(0.262)	(0.122)
$Population_i$	0.219	0.276**	0.226	0.219*	−1.181***	0.191
	(0.243)	(0.127)	(0.243)	(0.128)	(0.231)	(0.205)
$Population_j$	−1.129***	0.094	−1.139***	0.084	0.235	−0.065
	(0.235)	(0.201)	(0.235)	(0.201)	(0.255)	(0.135)
PTA	0.111***	0.187***	0.111***	0.178***	0.132***	0.209***
	(0.029)	(0.023)	(0.029)	(0.023)	(0.029)	(0.024)
RTA	0.558***	−0.004	0.568***	0.005	0.611***	0.083***
	(0.070)	(0.029)	(0.070)	(0.029)	(0.076)	(0.031)
FTA	−0.514***	0.005	−0.520***	0.004	−0.558***	−0.092**
	(0.073)	(0.036)	(0.073)	(0.036)	(0.080)	(0.039)
Customs Union	−0.097	0.046	−0.109	0.058	−0.108	0.032
	(0.144)	(0.076)	(0.142)	(0.076)	(0.151)	(0.075)
EU_i	0.041	0.166***	0.007	0.176***	−0.057	−0.572***
	(0.037)	(0.027)	(0.036)	(0.027)	(0.042)	(0.034)
Colonial Obit	0.622***	0.190***	0.600***	0.204***	0.577***	0.646***
	(0.091)	(0.016)	(0.091)	(0.016)	(0.097)	(0.017)
Dyad FE	✓	✓	✓	✓	✓	✓
Year FE	✓	✓	✓	✓	✓	✓
Num.Obs.	235 341	506 363	235 341	506 363	211 521	453 363
R2	0.870	0.891	0.871	0.891	0.864	0.883

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 4. *The Effects of Joining the WTO.*

The results are shown in Table 4. Conditional on other country characteristics in the gravity models, joining WTO predicts increased exports before 1990, yet the effect disappears in the post-1990 period. By looking at the WTO x polity interaction term, the effect of joining the WTO on exports is larger for democracies pre-1990, but larger for autocracies post-1990. In contrast, the WTO effect on imports is larger for democracies post-1990. This suggests that in the post-1990 period, joining the WTO leads to more export increase while less import increase for autocracies compared to democracies. This may explain why autocracy predicts higher trade balances.

[TODO: need to test the robustness of gravity model; need to apply panelmatch; need to apply sensitivity tests]

Mechanisms for External Balances

The second part seeks to understand through what mechanisms autocracies may have more advantages. As stated above, autocracies may be more likely to conduct mercantilist and protectionist policies. Meanwhile, autocracies are correlated with more natural resource endowment. Specifically regarding external balance, the level of capital market development can be a factor.

Mechanisms	Implications
Mercantilism	industrial share (r = -0.47, cross-country correlation in 2010)
Protectionism/Openness	tariff rate (r = -0.52); capital market openness (r = 0.49)
Capital Market Dev	private credit supply share (r = 0.36)
Resource-rich	natural resrouce rent share (r = -0.56)

The implication that follows is that industrial output (% of GDP), tariff rate, capital market development and natural resource output (% of GDP) may be potential mediating variables.

	DV: Current Account Balance (%)					
	Baseline	**Mercantilism**	**Protectionism**	**CapMkt Dev.**	**Resource**	**All**
Polity2	−0.158***	−0.107**	−0.162***	−0.157***	−0.113**	−0.099*
	(0.052)	(0.053)	(0.056)	(0.051)	(0.053)	(0.054)
Industrial Output(%)		0.268***				0.248***
		(0.030)				(0.036)
Tariff Rate			0.180***			0.210***
			(0.045)			(0.043)
Δ Private Credit (%)				−0.099***		−0.113***
				(0.014)		(0.013)
NatRes Rent (%)					0.220***	0.098***
					(0.031)	(0.035)
Controls	✓	✓	✓	✓	✓	✓
Country FE	✓	✓	✓	✓	✓	✓
Year FE	✓	✓	✓	✓	✓	✓
Num.Obs.	1308	1293	1189	1294	1308	1162
R^2 Conditional	0.770	0.791	0.798	0.773	0.795	0.829

* p < 0.1, ** p < 0.05, *** p < 0.01

	DV: Trade Balance (%)					
	Baseline	**Mercantilism**	**Protectionism**	**CapMkt Dev.**	**Resource**	**All**
Polity2	−0.202***	−0.068	−0.142**	−0.211***	−0.119*	−0.013
	(0.068)	(0.066)	(0.072)	(0.066)	(0.064)	(0.065)
Industrial Output(%)		0.640***				0.476***
		(0.038)				(0.043)
Tariff Rate			0.120**			0.186***
			(0.053)			(0.048)
Δ Private Credit (%)				−0.147***		−0.159***
				(0.016)		(0.015)
NatRes Rent (%)					0.614***	0.371***
					(0.036)	(0.040)
Controls	✓	✓	✓	✓	✓	✓
Country FE	✓	✓	✓	✓	✓	✓
Year FE	✓	✓	✓	✓	✓	✓
Num.Obs.	1308	1293	1189	1294	1308	1162
R^2 Conditional	0.876	0.890	0.888	0.883	0.903	0.920

* p < 0.1, ** p < 0.05, *** p < 0.01

Table 5. *Mediating Variables and External Balances.*

Domestic Reforms vs. Trade Integration?

Can we have a sense of the relative significance of domestic and external factors? As explained above, two changes that contrasted the pre-1990 period were domestic reforms and global economic integration. The two factors should collectively work to connect regime type to trade performance. Without the other, neither domestic reforms nor economic integration is likely to have substantial effect solely. For example, should China keep its planning economy, joining the WTO may not matter much, since firms would still have few incentives to produce locally. But without access to the global market, even a market-based economy will find it hard to attract investments especially from multinational corporations to bring production and know-how or significantly increase its commodity exports in the resource-exporting case. This is especially true for export-oriented development models that many autocracies rely on (be it manufactured goods or commodities) and, importantly, heavily depend on external demand. Metaphorically, joining the WTO is like opening a gateway that releases and realizes the trade performance potential of a regime. However, this type of economies often is weak in generating internal demand due to the lack of political institutions for inclusive redistribution, thus implying the limitation of its domestic, independent effect on performance. Of note, joining the WTO not only exerts an external pressure for domestic reforms, but also strengthens domestic inquisitions such as increasing contractibility of a nation and enhancing the confidence of global firms.

5 Case Illustration: China, Vietnam vs. India, Brazil

6 Conclusions

It has been under heated debate whether democratic or autocratic institutions favor economic growth. It eventually boils down to the mechanism in which economic outcomes are generated. Nonetheless, looking at domestic institutions alone misses the picture of external environment. In the age of economic integration particularly in the form of the global value chain and economic policy convergence, autocracies regimes may acquire certain advantages, although the specifics of the mechanisms are outside of this paper. For example, in a globalized setting, firms in autocracies may gain an overall competitive advantage that enable them to out-compete the rivals. Natural-resource autocracies gain unprecedented export opportunities which reinforce the regimes. China is a particularly important case, primarily because of its size that generates tremendous impacts on others.

In this article, I aim to address a puzzle why autocracy's prediction on exports and external balances reverses compared to the pre-1990 period. Although more rigorous causal methods need to be employed to better confirm causality, correlations already matter with regard to policies and the original expectations of globalization. I argue that claiming autocracies learned domestic market-oriented reforms or can better develop economies solely by themselves is at best incomplete. Economic globalization that incorporates many of them into the global economic system plays an important and even permissive role that enables some of the characteristics of autocratic institutions to exploit the global market often at the cost of others. How one should judge globalization then depends on the ends, for as Robert Keohane (1984) argues, processes and means are to be justified by ends.

7 References

To do.