Democracy and Clustered Models of Global Economic Engagement

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Abstract

One of the most fundamental economic policy choices a society makes is how to order its global economic relations. What models do states use to structure this multi-faceted decision, and how do they choose among these alternatives? We combine data on trade policies, foreign investment, exchange rate, capital flows, and international treaties to discover states' strategies of global economic engagement. We identify five distinct strategies through dynamic clustering. We then examine the economic and political drivers of states' choices among these competing strategies, focusing on the tradeoffs between public and private goods activated by differing styles of openness. In particular, we uncover a production-focused and risk-heavy model of global integration favored by non-democracies, and cautious (or insular) models of semi-globalization favored by (large) democracies. Decisions over global economic engagement are clustered and multi-dimensional: uncovering this variety unlocks new findings about the role of democracy in shaping foreign economic policy.

KEYWORDS: global economic engagement, economic policy, dynamic clustering, democracy

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Introduction

Scholars of international and comparative politics have long focused on stylized models of states' engagement with the global economy.[1] A history of the global economy could be structured as a succession of these models: mercantilism, *laissez faire*, colonialism, autarky, and social democracy in early periods; socialist development, world systems, import-substitution, Washington consensus, and export-led growth in later ones.[2] In this paper, we follow this instinct to describe stylized models, using contemporary unsupervised learning methods to discover modern strategies of global economic engagement. Focusing on these strategies reveals new insights into the links between democratic institutions and foreign economic policies.

States control a vast array of policy levers that determine their relationship to the global economy: trade barriers and agreements; the exchange rate regime and level; investment barriers and treaties; and limits on capital movements. While each of these might be explained separately, we follow a strand of the literature which assumes that states choose from a small set of distinct policy bundles – models of global economic engagement. They do so because policies interact with one another and so should be consonant; because models help states manage overwhelming choice; because states face similar challenges; and because states learn from one another. Clustering is particularly valuable if a single policy dimension (e.g. the 'level of openness') does *not* fully capture the multidimensionality of globalization strategies. These two assumptions – coherent groups of policies arrayed in a multidimensional latent space – comprise a 'cluster conjecture'.

To uncover clustered strategies of global engagement, we assemble a large set of pre-existing data across the policy areas described above. Due to pervasive missingness, we prune the data to a manageable set of years, countries, and policy measures. We employ an unsupervised clustering approach which models the dynamics of cluster evolution as it uncovers the clusters. After post-processing, we show that five clusters reasonably describe competing models of global economic integration. These clusters are coherent because countries in the same cluster are similar to one

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[1] Wallerstein (1982); Johnson (1982); Williamson (1990); Janoski and Hicks (1994).

[2] Haggard (1990); Frieden (2007); Rodrik (2000); Chang (2006); Brooks and Kurtz (2012).

another, and distinct from other clusters. Furthermore, countries' economic policies do not map onto a single issue dimension. The value of clustering is thus borne out by evidence.

We devote considerable attention to describing these five clusters in the main text, and for now summarize. Our first cluster is a set of developed countries that have adopted an open but orderly posture to the global economy. They are the costumers of a second cluster of production-focused economies with extreme levels of trade exposure. A third cluster of developed and developing countries has pursued all facets of global integration but in studied moderation. A fourth cluster represents a set of insular non-traders that still engage with the elements of the global economy and ordering institutions in various ways, while the fifth cluster is countries with a uniformly autarkic pose toward the global economy.

We then examine the role of democracy in shaping choices over these strategies. Globalization entails fundamental tradeoffs for states: between state control of a smaller and less dynamic economy versus broad-based but less controllable growth unleashed by international exchange; between consumption and production; and between relative certainty and risk. Non-democracies, owing to their need for private goods to target small winning coalitions, will favor either relative closure, to control allocation in the economy, or embrace risk and global production, to channel private goods to pro-integration elites. This leads them to clusters 5 and 2. Democracies, on the other hand, will tend to favor broad-based growth, but one that tempers the excesses of global risk and focuses more on consumption than production. This leads to clusters 3 and 1.

We find that non-democracies have indeed adopted a bifurcated approach to globalization. Some choose autarkic modes of global engagement (cluster 5), others have embraced the risk and market discipline of global production networks (cluster 2). Democracies have primarily clustered into highly open modes of integration (cluster 1) or have adopted cautious strategies of global engagement (cluster 3) to target growth, balanced consumption, and limited risk. Country size plays a moderating role: large economies embrace the insularity of cluster 4 as they democratize while smaller economies prefer clusters 3 and 1 as they democratize. We therefore illustrate how political institutions shape the economic policy ensembles of states, and show that democratization has no one-to-one mapping with the 'level of openness' in a world of competing economic models.

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In addition to long-running debates about the origins of developmental strategies, our research contributes to three other literatures. First, we build on recent literature in International Political Economy examining how different policy domains interact (Tobin and Busch, 2010; Singer, 2010; Copelovitch and Pevehouse, 2013; Peters, 2014, e.g.). Second, we follow recent work exploring latent variable models in IR data (Kim et al., 2020; Bailey et al., 2017, e.g.). Finally, we add to the vast literature on democratic institutions and external economic policies and strategies of global economic integration (Milner and Mukherjee, 2009; Mansfield et al., 2002; Milner and Kubota, 2005, e.g.). Our approach based on clusters of policies illustrates important non-linearities in the relationship between democracy and globalization. Only some strategies of globalization – emphasizing broad growth, consumption, and managed risk – are compatible with democracy, and this is truer for small countries than for large ones.

Democracy and foreign economic policy: why cluster?

How a country engages with the global economy is among the most fundamental decisions impacting its economy, society, and politics. To shape that engagement, countries make decisions across a vast array of policies. In trade, they decide on myriad barriers across imports and exports of both goods and services, as well as on international agreements. In monetary affairs, they decide whether to fix or float their currency; to make it strong or weak; and on how much inflation to permit. In managing capital flows, they consider how much foreign direct investment to encourage or admit; investment agreements; and rules on the movement of short-term capital. A strategy of global economic engagement is the complete and purposive set of these policies a country devises.

No political driver of states' decisionmaking around these choices has received more attention than whether the state is a democracy or not. Democratic institutions have been shown to lead to greater exposure to trade and to lower trade barriers (Mansfield et al., 2000; Milner and Kubota, 2005), though these effects may be conditional (Dutt and Mitra, 2002; Kono, 2006). Democracies are more likely to sign trade agreements and join international institutions (Mansfield et al., 2002, 2008; Davis and Wilf, 2017). Democracies are less likely to adopt fixed exchange rates (Leblang,
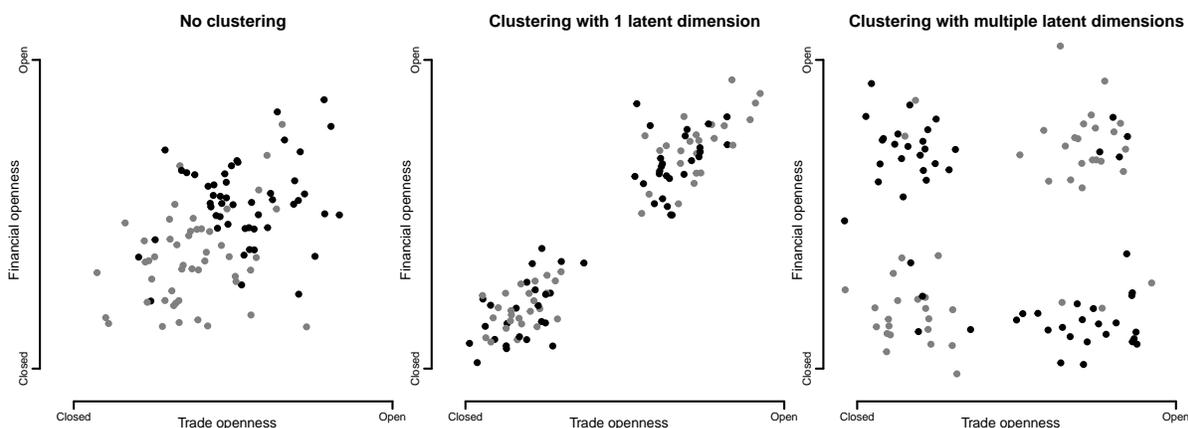
Figure 1: Benefits of clustering illustrated

1999; Bernhard and Leblang, 1999; Bearce and Hallerberg, 2011; Broz, 2002), but prefer more appreciated currencies at election time (Blomberg et al., 2005; Dreher and Vaubel, 2009). Democracies also may be more open (or attractive) to foreign direct investment (Jensen, 2003), though non-democracies might benefit more from FDI treaties (Arias et al., 2018). Democracies are more likely to loosen restrictions on short-term capital movements (Milner and Mukherjee, 2009; Quinn, 2003; Eichengreen and Leblang, 2008).

While these studies are richly diverse, they share in common that they generally focus on a single policy area at a time, and ask whether democratic institutions have an impact on that policy. There is nothing wrong with that research question, and these studies have fundamentally enriched our understanding. However, focusing on a single issue at a time also leaves the possibility for further learning about foreign economic policies through examination of entire sets of policies – strategies of global economic engagement – as the outcome of interest. Focusing on groups of policies (and how they work in concert, and interact, and are deployed collectively) has a deep history in the study of IPE, comparative politics, and development, as described above.

When should we think in terms of models? Figure 1 illustrates two general criteria: 1) clustering and 2) low- but multiply-dimensional issue spaces. Each dot in the figure represents a country's policy choices on two stylized dimensions of foreign economic policy, trade openness and financial openness. (Ignore for now the different colored dots.) First, it makes sense to think in terms

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of models when policy choices are clustered, in other words when the joint distribution of policy choices is multi-modal, as in the second and third figures but not the first. Second, people tend to think in terms of models when the underlying issue space is multi-dimensional (as in the third graph) rather than single-dimensional (as in the second). While one can think in terms of models along single dimension, most people in that setting think in terms of a continuous spectrum (e.g. open versus closed countries). At the same time, the number of latent dimensions in the issue space can't be too high, because it won't be clear how to group observations together. If the underlying choice space is 10-dimensional, for example, there are too many potential models to comprehend.

There are good reasons to think that states *cluster* into distinct strategies in a *low-dimensional space*, making a focus on models of foreign economic policy appropriate. First, states cluster into particular policy mixes because of the importance of learning and emulation (Simmons and Elkins, 2004; Elkins et al., 2006). Amidst infinite policy configurations, states tend to identify clear and successful models to structure their thinking, and then copy them (Elkins and Simmons, 2005). States confronting structurally similar problems – similar endowments, levels of development, and opportunities in the global economy – will also arrive at similar policy solutions. Second, different policies tend to be correlated because they have similar effects; are complements [e.g. free trade and investment treaties (Büthe and Milner, 2008; Tobin and Busch, 2010)]; are substitutes [free trade and immigration/currency pegs (Peters, 2014; Copelovitch and Pevehouse, 2013)]; or are mutually exclusive [e.g. the trilemma (Bernhard et al., 2002)]. These correlations reduce the dimensionality of the underlying policy space. Finally, states have different goals, constituencies, and institutions, which means that despite clustering together into models, not all economic levers will be pushed in the same direction by all states. For example, some free traders might target a weak currency while others a strong one. Thus the underlying dimensionality of foreign economic policies is not one, and so a simplistic open-versus-closed metric is insufficient.

Does thinking in terms of models have any impact on what we might learn about the causes of foreign economic policy? Consider again the question of whether foreign economic policy depends on democratic institutions, and now suppose that the black dots in Figure 1 represent democracies and the gray dots represent non-democracies. If the world look like the first picture, then thinking in

terms of clusters/models doesn't make sense as a starting premise or empirical modeling assumption for exploring the role of democracy, because states aren't clustering in the first place. If the world looks like the second picture, thinking in terms of clusters/models isn't wrong, but it wouldn't add much to our analysis, because the underlying dimensionality is unity. While a joint analysis of trade and financial openness would find that they are strongly linked with democracy, any separate analysis of democracy and trade or democracy and financial liberalization would find that, too.

Picture 3 is different, however. As constructed, a study of the links between trade openness and democracy would find they are uncorrelated; likewise financial openness and democracy are also uncorrelated. But democracy is clearly associated with some **sets** of policies and not others, so there is a great deal to be learned here about the link between democracy and developmental models. That can't be learned by going issue-by-issue but only by looking at issues together. In particular, democracy is positively linked with adopting the 'mixed' models in the upper-left and lower-right, while non-democracies adopt the other two models. Only an analysis of the foreign economic policy clusters could reveal this striking pattern. Clustering therefore enables new learning about how democratic institutions impact foreign economic policy.

Foreign economic policies: data and clustering methods

If states are choosing from among models of foreign economic engagement, then our first task is to attempt to uncover and describe those models. We explain the principles and techniques in compiling and organizing the dataset of government policies on globalization for this task, and then our clustering methodology. We provide a high level overview to preserve space for our substantive results on the nature of observed policy clusters, and explanations for choices among those clusters, in the subsequent sections. Much greater detail is provided in Appendix A.

We began by collecting measures of nine categories of international economic policy outcomes across as many countries and years as possible. These categories are described in bold in the first column of Table 1.[3] While we initially collected data on hundreds of policy measures, some dating

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[3] Four of the trade variables are country totals, for example, Goods exports. We log these variables and

back to World War II, overwhelming missingness led us to focus on the years 1990-2016. We further pruned the data using sequential hard cutoffs: variables were cut that were not observed in more than 60% of country-years, and then countries were cut with more than 50% missingness across the remaining variables.[4] This pruning left 107 countries and 20 variables, the latter of which are presented in Table 1. Missingness in the pruned data is modest, and missing values were imputed with a missing data model with country intercepts and one-year lags (Honaker et al., 2011). Post-imputation, we have complete length-20 economic policy vectors which span the major dimensions of foreign economic policy for 107 countries from 1990-2016. We use these data to search for clusters of foreign economic policies.

Because clusters are likely to exhibit significant temporal dependence, we employ a Gaussian Mixture Hidden Markov model to uncover latent clustering of the policy matrix over time. In the model, cluster memberships at time t depend on both policy choices at time t and on cluster memberships at time $t-1$, thus smoothing over year-to-year variability in policy measures. Fitting the model requires choosing a number of clusters K. Using two information criteria, we settled on $K = 7$ clusters for initial clustering.[5] We then fit the model and undertook intensive examination of the clustering results.

We found five clusters that represent relatively coherent (low intra-cluster variance) clusters covering 84.7% of the country-years. As is common in clustering, we also found two smaller clusters that were much noisier composed of outlying country-years grouped together by the algorithm to avoid destabilizing the five coherent clusters. These were 8.2% and 7.0% of country-years. Because our goal is a parsimonious set of external economic policies that represent coherent policy bundles, we ultimately chose to eliminate these two clusters and reassign them to their next most likely cluster. This is a significant decision, so we highlight two key points. First, we found that this

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then regress them on the log of country GDP and dummies for being landlocked and an island, and then use the residuals from these regressions in our clustering.

[4] We also made *ad hoc* decisions to include four variables (on MFN tariffs, and goods exports and imports) and 12 countries we felt were important for coverage across policy domains and regions.

[5] The informal elbow heuristic using plotted log-likelihoods suggests 7-9 clusters; the AIC has local maxima at 7 and 9 and a global max at 9; the BIC has is maximized at 7 though also has local maxima at 4 and 9.

Table 1: Policy variables included among global economic policies

Category	Variable	Source
Trade barriers	Mean wtd. MFN tariff, manftrs.	WDI
	Mean wtd. MFN tariff, primary prod.	WDI
Trade agreements	Total PTAs	DESTA
	Mean depth of PTAs	DESTA
Trade outcomes	Exports (% of GDP)	WDI
	Imports (% of GDP)	WDI
Goods trade outcomes	Goods exports (residuals)	WDI/constructed
	Goods imports (residuals)	WDI/constructed
Services trade outcomes	Trade in services (% of GDP)	WDI
	Service exports (residuals)	WDI/constructed
	Service imports (residuals)	WDI/constructed
Exchange rate regime	De facto ex rate regime	Rogoff et al (2017)
	De jure ex rate regime	Rogoff et al (2017)
Exchange rate level	PPP conversion to ex rate ratio	WDI
Monetary policy	% change consumer prices	WDI
	% change GDP deflator	WDI
FDI agreements	# of BITs	
FDI outcomes	Net FDI inflows (% of GDP)	WDI
	Net FDI outflows (% of GDP)	WDI
Capital openness	Capital market openness	Chinn et al (2008)

reassignment did not unduly increase the intra-cluster variability.[6] Second, when we examine the relationship between democratic institutions and these clusters later on, we show that our main findings are entirely robust to examining the original, unreassigned clusters labels.

We thus have 5 clusters of foreign economic policies. We label these clusters 1, 2, 3, 4, and 5 by ordering the clusters in terms of their distance from a hypothetical most orderly and open cluster with the lowest trade barriers, highest number of trade agreements, most fixed currency, and lowest capital controls among the clusters, as well as an analogously defined least orderly cluster. Cluster 1 is the most orderly/open and cluster 5 the least. For each country-year, we now have a cluster

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[6] The average Mahalanobis distance of country-years from the original cluster means increased with the reassigned country-years by 3-6% for clusters 1-3 and around 20% each for clusters 4 and 5. The proportions of observations with extreme Mahalanobis distances, over 20 or 40, also did not increase too dramatically after reassignment, especially for the latter metric.

label 1-5 which summarizes its strategy of foreign economic engagement.

Strategies of Global Economic Engagement

Coherent policy clusters in a multidimensional policy space

Thinking in terms of models only makes sense for clustered policy choices in a low-dimensional latent space. We now test those premises. Our modeling suggests that strategies of global engagement in the post-Cold War world are reasonably summarized by five clusters of economic policies. While of course some countries are outliers or lie on boundaries between clusters, it is striking that the optimal number of clusters is not smaller (e.g. two competing models) and not significantly larger (there aren't dozens of competing models, and each country is not a model unto itself). Thus the number of clusters recommended by the information criteria, and the coherent clusters generated by the model, validate our inclination that countries choose from among a modest set of policy bundles, and do not vary in unrelated ways across all of the dimensions of economic policy.

These clusters fall within a multidimensional latent space (despite our simplifying labeling in accordance with the level of 'openness' or 'order'). Multidimensionality is apparent in the cluster averages in policy categories displayed in Figure 2. Note in the figure that cluster means have been normalized to fall on the unit interval, and that all variables have been structured so the lefthand side represents disorder or closedness while the righthand side represents order or openness. The dots on the far-righthand side represent the ordinal rankings of the cluster averages. Figure 2 clearly shows that while cluster number is correlated with the amount of order/openness, this correlation is not extreme. For example, the ranked cluster means on the right hand side often do not follow the order 5, 4, 3, 2, and 1. Specific clusters that are consistently orderly on many dimensions stick out on other dimensions, for example, cluster 1's floating exchange rates or cluster 4's exchange rate pegs. Cluster 2 also sticks out for being quite orderly but having few trade agreements, while cluster 3 has very few BITs. Overall, the fact that policies (and clusters) are not well-summarized by a single issue dimension validates our approach to focus on distinct strategy bundles rather than

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Trade Barriers   many   ⑤   ④   ③   ②   ①   few   ⑤ ④ ③ ② ①

Trade Agreements   few/shallow   ⑤ ④   ③   ①   many/deep   ⑤ ② ④ ③ ①

Trade Outcomes   little   ④   ⑤   ③   ①   ②   lots   ④ ⑤ ③ ① ②

Goods Trade Outcomes   little   ④   ⑤   ①   ②   lots   ④ ⑤ ③ ① ②

Services Trade Outcomes   little   ④   ⑤   ③   ①   ②   lots   ④ ⑤ ③ ① ②

Exchange Rate Regime   floating   ⑤   ①   ③ ④   ②   fixed   ⑤ ① ③ ④ ②

Exchange Rate Level   depreciated   ⑤   ②   ③④   ①   appreciated   ⑤ ② ③ ④ ①

Monetary Policy   high inflt.   ⑤   ③   ④   ②   ①   low inflt.   ⑤ ③ ④ ② ①

FDI Agreements   few   ⑤   ③④   ②   ①   many   ⑤ ③ ④ ② ①

FDI Outcomes   little   ④   ⑤   ③   ①   ②   lots   ④ ⑤ ③ ① ②

Capital Openness   closed   ⑤   ④   ② ③   ①   open   ⑤ ④ ② ③ ①
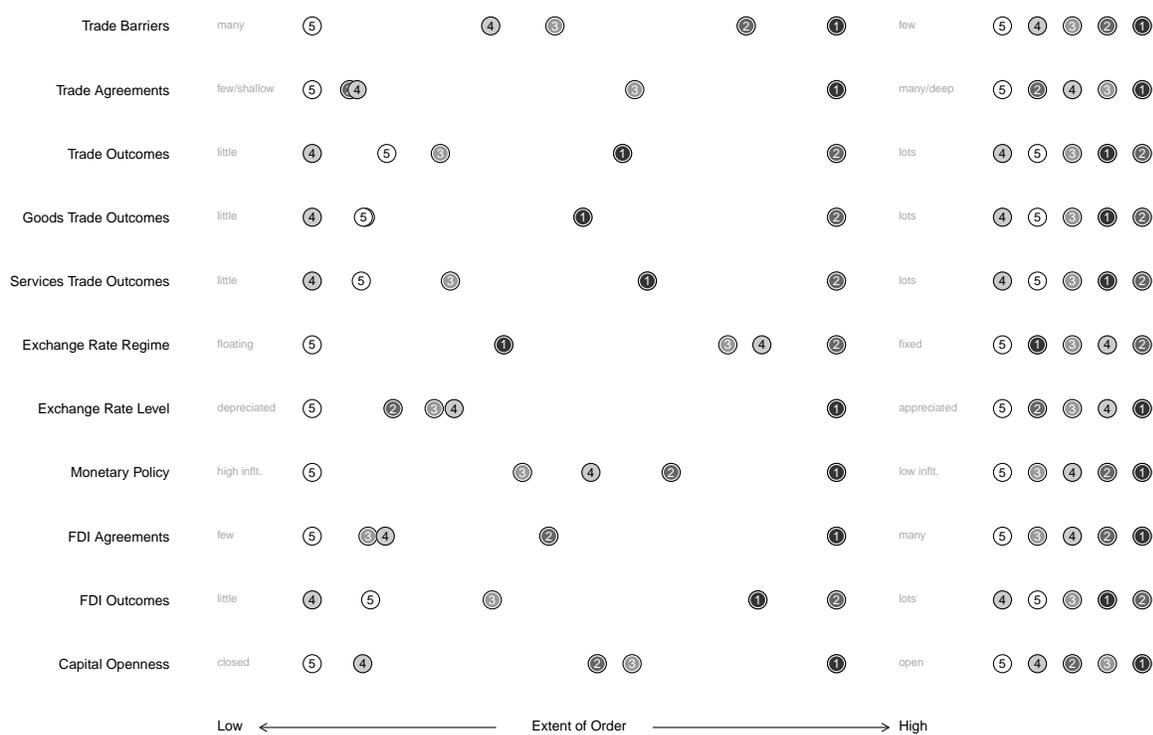
Low ⟵   Extent of Order   ⟶ High

Figure 2: Cluster means across aggregated policy categories

a single latent policy dimension or going issue-by-issue.

Describing five strategies of global economic engagement

So what are the distinct strategies of global economic engagement uncovered by our clustering? To answer this, we build off of the cluster means in Figure 2. We also look at a series of other summary statistics about the clusters, as well as lists of members and countries that 'exemplify' clusters in the sense that they are close to the cluster means. These statistics and qualitative descriptions are given in Table 2.

Cluster 1 states have embraced formal markers of global economic integration and have been consistently committed to economic order. They have the lowest trade barriers and the most/deepest trade agreements and BITs of any group though, interestingly, their trade and FDI performance is distinctly second-best compared to cluster 2. Their currencies are exceptionally strong, and

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Table 2: Qualitative description of clusters with summary statistics

	Short des.	Description	Geography
1	Open and orderly developed core	Most open to trade, and good trade performance and manf. surpluses. Very strong, lean floating ex rate and very low inflation. Extremely open to foreign capital. FDI net-exporters.	N. Europe/Canada/Isr/ RofK.
	Percent: 14.7%; Percent among developing: 0%; Avg. Dist from Cluster Mean: 19.5; Pr(change): 0.025; Change to: 4,2; Exemplar: Sweden; Pop max: Germany; GDP pc max: Norway; GDP pc min: UK.		
2	Semi-peripheral production hubs	Not a major signer of agreements, but top trade and FDI performer. Trade/FDI are balanced. Fixed (and depreciated) exchange rate.	Eastern Europe/SE Asia.
	Percent: 17.4%; Percent among developing: 18.8%; Avg. Dist from Cluster Mean: 17.6; Pr(change): 0.027; Change to: 1,5 Exemplar: Croatia; Pop max: Vietnam; GDP pc max: Singapore; GDP pc min: Cambodia.		
3	Half-hearted globalizers	Moderate trade openness, and weak trade performance. Fixed/depreciated exchange rate. Services surpluses. Moderate openness to global capital. So-so FDI performance.	S. and E. Africa/ Central America and Andes/ Northern Med.
	Percent: 15.9%; Percent among developing: 15.2%; Avg. Dist from Cluster Mean: 12.2; Pr(change): 0.025; Change to: 5,4 Exemplar: Costa Rica; Pop max: Italy; GDP pc max: Italy; GDP pc min: Tanzania.		
4	Insular non-traders	Weak performance on trade barriers/ deals, worst performance on trade outcomes. Trade and FDI deficits. Often fixed ex rates with mod. inflation. Very weak openness to and attraction of foreign capital.	West Africa and South Africa/S. Asia and Phillipines, Indonesia/ Oceania, Japan, and US. Quite diffuse.
	Percent: 26.2%; Percent among developing: 29.4%; Avg. Dist from Cluster Mean: 20.1; Pr(change): 0.054; Change to: 5,1 Exemplar: South Africa; Pop max: United States; GDP pc max: Australia; GDP pc min: Niger.		
5	Estranged autarkies	Most protectionist with bad trade outcomes. Depreciated floats with high inflation. Very closed off to foreign capital.	Latin America/Central and South Asia/ Eq. Africa
	Percent: 25.8%; Percent among developing: 36.6%; Avg. Dist from Cluster Mean: 20.2; Pr(change): 0.081; Change to: 4,3 Exemplar: Bangladesh; Pop max: Bangladesh; GDP pc max: Mexico; GDP pc min: Congo Dem. Rep. of.		

reflect a heterogeneous mixture of floats and pegs (tilting toward the latter with the creation of the Euro). They are the most open cluster to global capital. We call these countries' strategy *open & orderly*, reflecting their deep focus on international agreements, moderate/high trade flows, increasing currency discipline, and capital account liberalization.

The *open & orderly* states of cluster 1 are concentrated in Northern Europe though Canada, South Korea, New Zealand, Israel and others fit into the group at particular points. The most exemplary country of this cluster over time is Sweden, while Germany and Norway represent the largest and highest income members of the group. Cluster 1 started out as the smallest cluster in the early 1990s and had grown substantially by 2015, in line with the process of European integration and the proliferation of PTAs and BITs. Strikingly, not a single country-year in Cluster 1 comes from a country considered to be developing by the World Bank as of 2016.

The countries of cluster 2 are the top performers across every single measures of trade performance, whether imports or exports, goods or services. This superior performance owes in part to very low trade barriers and depreciated and highly stable fixed exchange rates but not to PTAs or BITs, in which they are not major participants. Despite the lack of BITs, these countries are the best in attracting FDI though they send a certain amount of FDI too. Unlike cluster 1, their openness to short-term international capital is only partial. We call these countries *semi-peripheral production hubs* reflecting their role as key links in global production networks and their deep economic integration into the global economy. Unlike cluster 1, these countries have not sought to manage or tame their integration through agreements or floats. The doors are wide open and they have utterly embraced global exchange.

These states are located on the rapidly developing margins of the developed world in Eastern Europe and Southeast Asia. A combination of reliable institutions, human capital, cheaper labor, and self-conscious strategies of engagement have made them key sites within the European and East Asian production networks. Many of them are formerly Communist. Croatia is emblematic of the group, while Vietnam (after 1997) is the largest, Singapore the richest, and Cambodia the poorest. Between 20 and 27 years of Malaysia, Singapore, Thailand, Cambodia, Vietnam, and Hong Kong fit into this group. Egypt, Jordan and Lebanon also form a small Mediterranean subcluster.

As should be evident, this cluster is overrepresented among developing countries, many of them transitioning out of relatively autarkic economic strategies.

Cluster 3 countries are tentatively or moderately engaged with almost all of the facets of global economic integration. They have partly lowered trade barriers and signed some trade agreements but markedly less than cluster 1. Their trade performance and attraction of FDI is middling to poor – they tend towards trade deficits – despite usually fixed and depreciated exchange rates. This may reflect strong disengagement from investment agreements. Their openness to capital flows is middle-of-the-road, at best, and inflationary monetary policy is an issue at times. They do all things in moderation. For this reasons, we call cluster 3 *half-hearted globalizers.*

These tentative integrators are located across the developing world with particular concentrations in Southern and East Africa and Central America and the Andes but also in Southern Europe, exemplifying a Mediterranean model of unsuccessful globalization. Spain, Portugal and Greece each spend nearly all of their time in cluster 3. Most exemplary of these countries over time is Costa Rica, while Italy is both the largest and richest. The African subcluster includes Tanzania (the least-developed of the group), Swaziland, Botswana, Uganda, and Zambia. While this cluster is geographically diverse and crosses different levels of development, it is in fact the most coherent by far. The average Mahalanobis distance of a cluster member is only 12.2 from the mean (in other clusters, these figures are mostly above 17.5). Cluster 3 is a way-station: some countries exit to globalize in clusters 1 and 2; others de-globalize and move into cluster 4 or 5.

Cluster 4 countries are the worst performers on trade and FDI outcomes except for Goods exports (where they are second worst). This bad performance is partly a result of high trade barriers (which are still lower than 5's) and relatively few trade and investment agreements (though more than 5 and 3), and may be exacerbated by floating and appreciated exchange rates. On average, the group has relatively low openness to short-term capital, too. These average statements mask some underlying splits in the group, however. One set of countries fits right in with the above description: South Africa, India (2005-2016), and Senegal, for example. Another group consists of very large developed economies that aren't so reliant on trade owing to their sheer size, but which are in other ways quite integrated into the global economy (e.g. with low trade barriers and capital

controls, and deep PTAs). Australia, the US and Japan are in this group. Another group stick out for their very high levels of minerals exports (Saudi Arabia and Venezuela) paired to low goods imports; significant services and FDI deficits; and diffident attitudes toward trade agreements.

Despite these differences, the common thread across all of these countries is a lack of exposure to trade. Given that many of these states are islands (Phillipines, Indonesia, Sri Lanka, Japan, Australia) or act as though they might be (United States, India, Argentina, Brazil) we refer to them as *insular non-traders*. The most exemplary country in this heterogeneous group is South Africa, while the biggest and richest are the US and Australia, respectively. The group has a rich set of West African nations (Benin, Burkina Faso, Cameroon, Cote d'Ivoire, Mali, Niger, Republic of Congo, Senegal, and Togo are all in the group) and a group of states from South America which give it some geographical coherence.

The final group of countries that we uncover is Cluster 5. These countries have very high barriers to trade and few trade agreements or BITs. Their trade performance is almost as bad as group 4. They have the most currency floats on average, and their depreciated currencies are paired with by far the worst average inflation across the clusters. Their openness to short-term capital is the lowest among the clusters and they only just beat cluster 4 in terms of attracting FDI.

These countries have set out on a deliberate course of isolation from global economic forces, and are alienated from the institutions that have been used to manage global trade and investment. We call them *estranged autarkies*. Most emblematic of this group is Bangladesh, while Mexico and the DRC represent the highest and lowest income members of this group. Cluster 5 has significant membership across Latin America (Colombia, Dominican Republic, Honduras, Paraguay e.g.) as well as equatorial and North Africa (Algeria, Burundi, Morocco, Nigeria, Malawi, Tunisia, Zimbabwe) and Central and South Asia (Iran, Armenia, India 1990-2004, Pakistan, and Bangladesh). Unlike cluster 2-4 which are 25-30% high income countries, only 7% of cluster 5 is high income. Cluster 5 sees the most significant exit from its ranks over time, as countries moved into cautious (cluster 3) or incautious (cluster 2) forms of globalization.

Patterns over time and space

The evolution of clusters over time and across regions may help to make our verbal and quantitative descriptions more concrete. Figure 3 shows the evolution of cluster proportions over three time periods, with arrows representing transitions from one cluster to another. As can be seen, cluster 1 has steadily grown over time while cluster 5 has steadily shrunk. Cluster 1 is virtually an absorbing state – few countries exit the cluster after entering – while cluster 5 has dramatically lost members to clusters 4, 3 and 2 as countries have exited autarkic developmental models. Clusters 2 and 3 both increased in size moving to the early 2000's and then stabilized. Cluster 2 tends to lose relatively few members while cluster 3 members have redistributed across the spectrum.

The maps in Figure 4 illustrate the distribution of clusters over several regions and how those regions have evolved over time. For example, Cluster 1 started out as primarily Northern European phenomenon in the early 1990s, but over time spread through much of Western Europe (though cluster 3's hold in the Mediterranean remains). Cluster 2 is almost non-existent in Europe and then takes over much of Eastern Europe by 2015. South and East Asia witness a similarly striking transformation from autarkic and insular models, to moderate or extreme forms of global economic integration. Cluster 2 is especially clear in SE Asia, again reflecting the importance of production networks on the edges of the most advanced economies. Finally, it is interesting to observe how little has changed in the Americas over the same time period.

Explaining Strategies of Global Economic Engagement

Democracy and foreign economic strategy

A vast literature examines the drivers of policy choices across the separate policy dimensions we discuss above, and also considers determinants of overall strategies of international economic engagement (Haggard, 1990; Doner et al., 2005; Cao, 2012; Hidalgo, 2021). Our new classification of economic strategies provides us an opportunity to reinvestigate the determinants of these policy choices. To do so, we highlight three key tradeoffs in global economic engagement: over growth
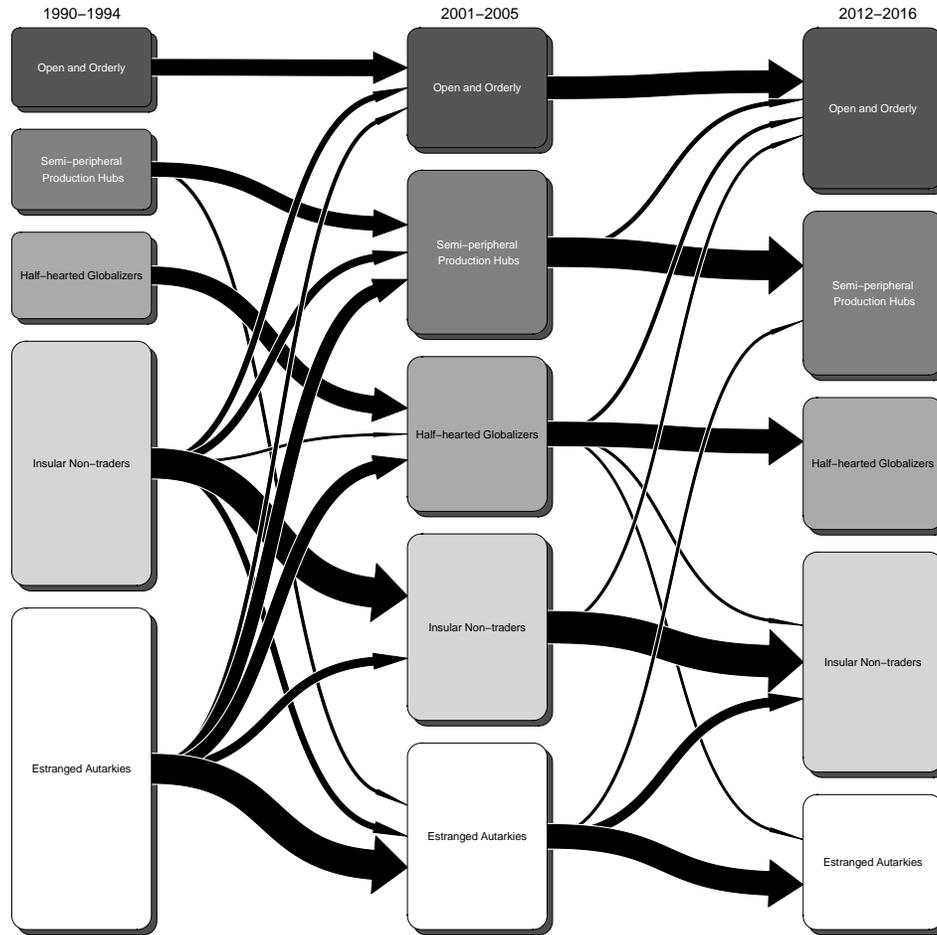
Figure 3: Change of country memberships across three time periods

versus control, production versus consumption, and risk versus certainty. The benefits of a focus on production and the upside benefits of risk are relatively concentrated in society, among elite firms, entrepreneurs, and the well-off. The benefits of broad-based growth, consumption, and mitigating downside risk are more diffuse, accruing to a wide array of ordinary consumers, workers, and citizens. Consequently, we expect non-democracies to be more willing to embrace strategies that focus on production even at the expense of greater risk. Alternatively, non-democracies may be less likely to cede control over the economy to global forces in the first place.

Growth versus control: A fundamental tradeoff faced by countries considering how open to be to the global economy concerns the benefits and costs of integration-driven economic growth. Trade
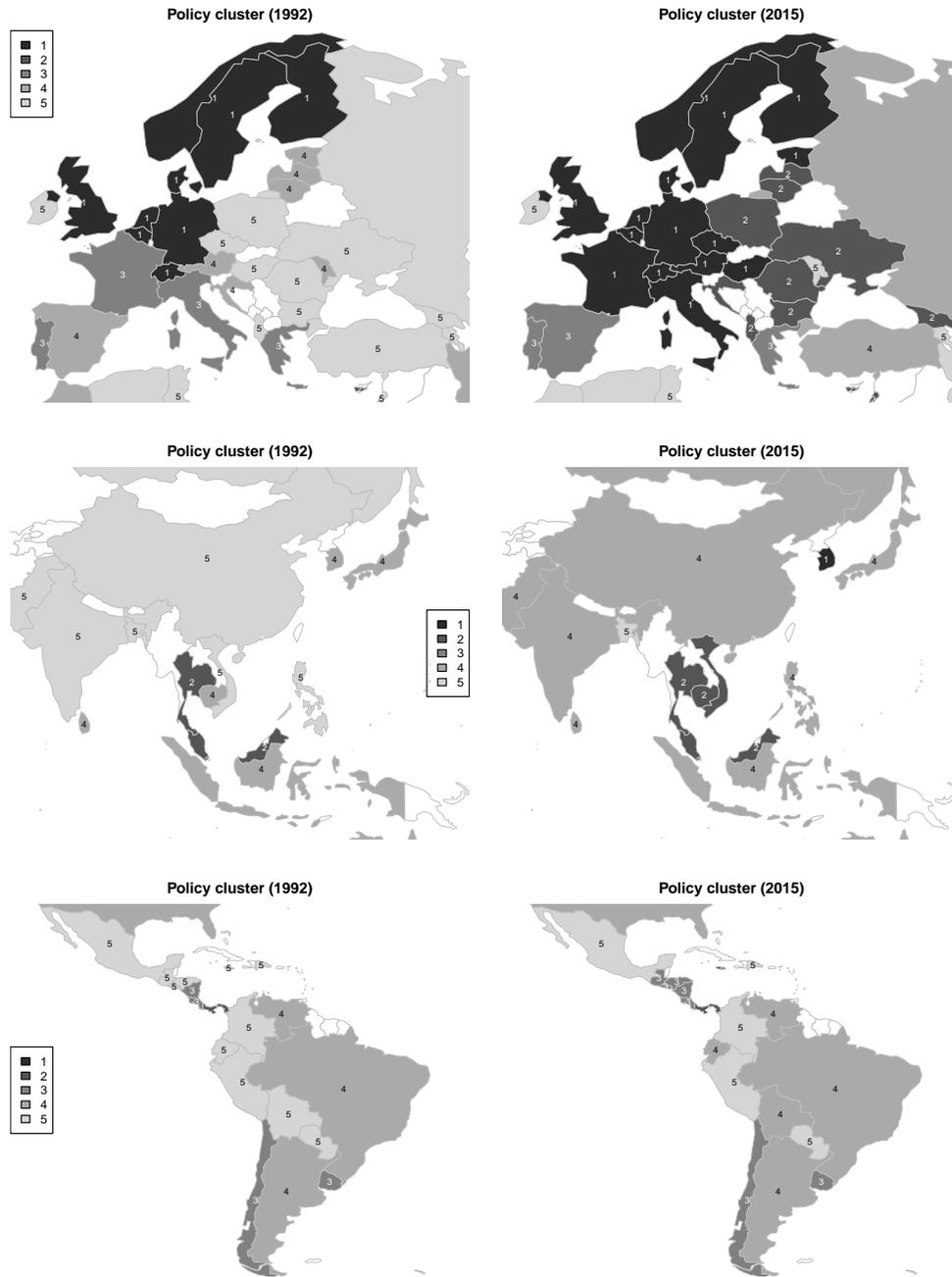
Figure 4: Clustering across geographic regions

integration generally encourages growth through gains from exchange and specialization, as well as increasing competition, market discipline, technology transfer, and a variety of other mechanisms (Milner and Kubota, 2005; Henisz and Mansfield, 2006; Mansfield and Milner, 2012). Openness to

foreign investment and short-term international financial flows can have similar effects, as do the policies that encourage movements of goods and capital like fixed exchange rates and low inflation (Bernhard and Leblang, 1999; Bernhard et al., 2002; Broz, 2002). Without ignoring the potentially negative consequences of significant economic change to some actors in society, an important long-run effect of global integration is to encourage broad-based economic growth.

For some regimes, however, this growth can be threatening. It may entail the redistribution of relative political power. Sectors, interest groups, or individuals outside of the regime's support base or inner circle may benefit in relative terms, weakening the regime's monopolization of power (De Mesquita et al., 2005, ch. 5). Openness to the global economy also entails a loss of control over how income and wealth are distributed in the political economy, as global market forces increasingly displace state power. Put another way, global integration requires a cession of power from the state to markets in picking winners and losers. Globalization may also make it harder or more costly to fully use the powers of state for political purposes, for example, as with monetary, fiscal, or tax policy. Many of the standard policies used to integrate into the global economy require standing down key tools of state power, like taxes on trade and capital controls.

Production versus consumption: A second tradeoff concerns encouraging consumption at home versus encouraging production for sale to foreigners. Countries that focus on production for export must sacrifice present consumption in order to save and invest. Owing to flourishing global production networks and secular trends in the complexity of production, this strategy requires tight integration into global networks of production in the many steps between raw materials and final consumption. Production-oriented countries must expose themselves to enormous trade flows as a share of GDP. Attracting FDI is also integral to production-focused countries. A focus on production also leads countries to adopt fixed exchange rates at moderate but depreciated values. Currency stability encourages trade and investment, while partial depreciation favors exporting without rendering input sourcing impossible. Low inflation, to encourage wage restraint, is also important. Finally, a focus on production may also limit capital controls, to attract investment in corporate stocks and bonds and limit transfer risk.

Countries that focus on consumption are less likely to concentrate on insertion into global supply networks and on export surpluses. Though they may import more final products, trade is probably not as great a share of the economy as they do not need to engage in the repeated import and export of goods across the value accumulation process that is characteristic of modern global value chains. Attracting FDI (at least of the vertical type) and foreign capital (except perhaps borrowing to fund spending) are less of an imperative. Exchange rates may therefore float, or a strong currency peg may be targeted to enhance consumer's purchasing power.

Risk versus certainty: A final tradeoff that states confront over globalization is about how much risk they can tolerate, and about who bears that risk (Quinn and Woolley, 2001; Rodrik, 1997). Globalization can increase risk substantially. An orientation towards exporting and global production is good when prices are high and the global economy is growing, but leaves the economy highly exposed to a downturn in world economic activity. Exposure to international capital, whether short- or long-term, is positive when capital is moving in but painful when capital decides to leave. A fixed exchange rate reduces risk for those engaged with the international economy, but raises risk for the broader economy in the form of a lost lever for responding to recession (monetary policy) and by introducing the risk of currency crisis.

In each of these statements, it should be clear the the burden of risk is not evenly distributed. The profits from production and exporting are mainly concentrated in the hands of capitalists (and to some extent their workers). The collapse of those firms, however, is likely to be more widely felt. In a similar way, the benefits of capital inflows (higher prices of financial assets and property, e.g.) may be relatively concentrated, while the consequences of outflows – financial, banking, or currency crises – are much more broadly felt. In these ways, the upside risk of globalization tends to be relatively concentrated and is more like a private or targeted good. The worst downside risks spread pain more broadly, and so are more like a public bad.

Public and private goods, and democracy Our discussion of the tradeoffs embodied in global integration suggests that they can (admittedly, partially and imperfectly) be mapped onto the state's search for public and private goods to satisfy its constituents. The aggregate growth unleashed

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by global economic integration has a significant public component, especially over the longer run; domestic economic autonomy provides the state more access to targetable private resources. A focus on production targets a narrow slice of producers and workers; a focus on consumption benefits a much wider group because everyone is a consumer. Because globalization's uncertain but extreme short-term benefits can be concentrated while it's downside costs are more widely shared, this tradeoff also maps onto a private/public dichotomy.

Following the logic of selectorate theory, democratic regimes with competitive elections have a larger selectorate and winning elections requires satisfying a larger share of that selectorate (De Mesquita et al., 2005). These regimes therefore find the provision of public goods to be a useful political strategy, as the benefits of public goods are widely spread and fall in no small measure on the majorities that they need to stay in office. These observations lead us to two claims. First, all else equal, democratic states are more likely to opt for the broad-based growth that is promised by globalization and the benefits for consumers of international trade. Second, and however, democracies are also likely to seek to temper some of the greatest risks of globalization by managing trade and money flows or perhaps by engaging in tentative forms of liberalization. This is likely to lead democracies into more moderated forms of globalization.

In selectorate theory, non-democratic regimes are generally considered to have much smaller selectorates, perhaps a small group of elite businesses, party members, families, or military officers. Each of these may have a significant stake in the economy and may reap some concentrated benefits from global integration; of course they may be alienated from the the global economy or have a small stake in global integration, too. Owing to the small size of the selectorate (and quite possibly a small winning coalition within that selectorate), non-democratic polities are expected to find targeted or private goods more useful as political resources. Their strategies for engaging the global economy should therefore reflect efforts to secure or distribute targeted goods.

This idea then leads us to two further observations, analogous to the discussion of democracies above. First, some non-democracies (especially those where the support base has little stake in globalization) are likely to strongly weight the benefits of economic control over the broad-based growth unleashed by economic integration. They should therefore target relative autarky. Second,

other non-democracies may have a base of political support that can benefit from globalization. But because this base of support is likely to be narrowly construed, they are more likely to embrace a production-centered mode of global economic engagement. They should also be more tolerant of the broad-based economic risks inherent in deep exposure to the global economy.

Summing up this discussion leads to the following hypothesis:

Hypothesis 1: All else equal, increasing the level of democratic institutions in a country should increase the likelihood of clusters 1 (*open & orderly*) and 3 (*half-hearted globalizers*), and decrease the likelihood of clusters 2 (*semi-peripheral production hubs*) and 5 (*estranged autarkies*).

Regression models and results on democratic institutions

We begin our tests of Hypothesis 1 with a basic bivariate test of the association between democracy and our five clusters. The outcome variables for these tests is the cluster label assigned to each year, which we call $\text{Cluster}_{it} \in \{1, 2, 3, 4, 5\}$. Because our outcome is a categorical choice variable, we use a multinomial logistic regression model. The baseline group in the model is the *estranged autarkies* (5) cluster and the outcome variables are the latent logged odds-ratio of a given outcome relative to *estranged autarkies*. To measure the level of democratization, we use the Electoral democracy index from the Varieties of Democracy (V-DEM) project (Coppedge et al., 2017). This measure is an aggregate of several subindices and captures the extent to which the government is accountable to citizens through competitive elections. We first fit a simple model with the democracy variable alone and present the predicted bivariate relationship between the policy clusters and democracy.

$$ln\frac{p(\text{Cluster}_{it} = k)}{p(\text{Cluster}_{it} = 5)} = \alpha_k + \beta_k \cdot \text{Democracy}_{it} \quad \text{with } k \in \{1, 2, 3, 4\}$$

The results from this simple model are presented in Appendix B, Table B1.[7]

We find that the predicted proportion of *estranged autarkies* (5) monotonically decreases as the

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[7] Note that a single model fits four separate regression equations. Thus we obtain four separate estimates of coefficients, one for each of the first four clusters relative to the fifth.

level of democracy grows, going from 37% at democracy's 25th percentile to 11% at its 75th. *semi-peripheral production hubs* (2) fall from about 20% of states at the democracy measure's median to 12% and 4%, respectively at its 75th percentile and maximum. Thus, both clusters 5 and 2 are negatively correlated with democracy. The predicted proportion of *open & orderly* (1) states, on the other hand, exponentially increases as the level of democracy grows, leaping from a mere 1.5% when the democracy index is at its median, to nearly 33% when the democracy index is held at its 75th quantile. The predicted proportions of *half-hearted globalizers* (3) also increases with the level of democratization up to its 75th percentile (at which point cluster 1 takes over). As above, these findings are in line with Hypothesis 1.[8]

These findings are suggestive, but there are many common causes of democracy and strategies of global economic engagement. Most important of these are developmental factors, so we control for the logged population; logged GDP per capita; and economic complexity index (ECI) from the Atlas of Economic Complexity project, which is defined as the revealed capability of a country in producing various exported goods (Hausmann et al., 2014).[9] Threats to national security can be a strong predictor of how a country pursues development (Doner et al., 2005). For this reason, we add in our model the count of militarized interstate disputes a country was involved in a given year and a count variable for the number of times a country faced militarized threats in a given year, both variables from the Militarized Interstate Dispute dataset in the Correlates of War (COW) project (Palmer et al., 2022).[10] We also include a dummy variable for whether the country is a US ally using data from the ATOP project (4.01), because alliance or acrimony with the US may shape attitudes toward the liberal global order (Leeds et al., 2002). Historical forces are also key in driving developmental strategies, so we include dummy variables for whether a state was a colony of another state after 1945 (Hensel and Mitchell, 2007); whether the state was a member of the Soviet Union; and whether the state is a non-Soviet former or currently Communist country.[11] Finally, we

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[8] *Insular non-traders* (4) show a positive association with democracy up to its 75th percentile, then slowly decrease.

[9] Population and GDP per capita data are taken from the World Bank Development Indicators.

[10] These are lagged by two years.

[11] The latter two are hand-coded by the authors.

include three geographic controls that strongly shape the costs, benefits, and potential for global commerce: whether a country is landlocked; whether it is an island; and the direct contiguity measure from the Correlates of War direct contiguity data (v3.2) which records the number of countries a country is connected to by land and sea (Stinnett et al., 2002).

We include each of these factors as a linear additive control in a matrix of coefficients called **X** in a multivariate multinomial regression model. In addition to the measured controls, we also include dummies for continents (a_{ic}) and a cubic polynomial time trend ($\zeta_t + \zeta_t^2 + \zeta_t^3$). Our resulting model is therefore:

$$ln\frac{p(\text{Cluster}_{it} = k)}{p(\text{Cluster}_{it} = 5)} = \beta_k \cdot \text{Democracy}_{it} + \boldsymbol{\gamma}_k \cdot \mathbf{x}_{it}^T + a_{k,ic} + \zeta_{k,t} + \zeta_{k,t}^2 + \zeta_{k,t}^3$$

$$\text{with } k \in \{1, 2, 3, 4\}$$

As above, note that this single model requires four separate regression equations. $\mathbf{x}_{it}$ is a length-12 vector of covariates. Missingness in these covariates reduces the number of usable observations from 2889 to 2166. For that reason, we present results of the full model in the main text using five imputation datasets generated with the Amelia software (Honaker et al., 2011).[12]

The regression results from the full model, in Table 3, suggest again that democracy is associated with the adoption of clusters 1, 3, and 4 relative to cluster 5. Non-democracy is therefore associated with clusters 2 and 5. These can be seen from the signs and significance of the coefficients in the first line of Table 3.

We illustrate the relationships uncovered in the full model in Figure . As we increase the level of democracy from its 25th to 50th and then 75th percentile, the predicted proportion of *open & orderly* and *half-hearted globalizers* increases significantly. At democracy's 25th percentile, these clusters are 7% and 11% of countries; at the 75th percentile, they rise to 15% and 24% respectively. The

[12]Our imputation model includes lags for all time-varying covariates, and we add the 20 foreign economic policies used in the clustering to the imputation model to improve predictive accuracy. We supply models fit on observations without any missing data in the online appendix, to show that the imputation is not driving our substantive conclusions.

Table 3: Results from multinomial regression model with all controls

	$\log\frac{p(\text{C1})}{p(\text{C5})}$	$\log\frac{p(\text{C2})}{p(\text{C5})}$	$\log\frac{p(\text{C3})}{p(\text{C5})}$	$\log\frac{p(\text{C4})}{p(\text{C5})}$
Democracy	7.24***	−0.27	5.46***	3.73***
	(1.40)	(0.52)	(0.51)	(0.37)
Developmental controls:				
Population	−2.64***	−2.06***	−2.45***	−0.14
	(0.27)	(0.17)	(0.21)	(0.13)
GDP pc	7.34***	−0.29	−0.68*	0.82***
	(0.71)	(0.29)	(0.26)	(0.19)
Economic Complexity	1.60***	1.56***	0.12	0.56***
	(0.25)	(0.17)	(0.16)	(0.11)
Conflict controls:				
Militarized dispute	−0.02	−0.10***	0.04*	−0.04***
	(0.02)	(0.02)	(0.02)	(0.01)
Militarized threat	0.02	−0.05	0.03	0.05***
	(0.02)	(0.03)	(0.02)	(0.01)
US ally	0.39	0.12	0.66	−0.43+
	(0.49)	(0.29)	(1.20)	(0.23)
Historical controls:				
Former Colony	−0.61+	0.92***	−1.76***	0.24
	(0.36)	(0.27)	(0.33)	(0.21)
Former Soviet State	−2.20**	−0.78*	−4.37***	−0.48
	(0.67)	(0.38)	(0.53)	(0.33)
Other Communist	0.80	0.33	−10.98	0.36
	(0.56)	(0.28)	(8.02)	(0.23)
Geographical controls:				
Landlocked	−2.25***	−6.40***	−0.76***	−0.17
	(0.49)	(0.72)	(0.20)	(0.18)
Islands	−2.34***	−1.21***	−5.48***	−0.45*
	(0.36)	(0.26)	(0.62)	(0.21)
Territorial contiguity	−0.01	−0.07*	0.08**	0.07***
	(0.04)	(0.03)	(0.03)	(0.02)

Notes: $N = 2889$. Coefficients are averaged across models from 5 imputed datasets. Model also includes continent intercepts and cubic polynomial time trend; intercepts are not reported. ***$p < 0.001$, **$p < 0.01$, *$p < 0.05$, +$p < 0.10$.

level of democracy is negatively associated with the choice of the *semi-peripheral production hubs* and the *estranged autarkies* clusters. The predicted proportion for the *semi-peripheral production hubs* cluster takes up 25% when the democracy level is fixed to the 25% percentile, but it shrinks to 12% when democracy moves to the 75% percentile. Likewise, the predicted proportion for *estranged autarkies* is reduced from 32% to 13% between the 25% and 75% percentile of the democracy index. All of these results are consistent with our main prediction in Hypothesis 1. We also note that the number of *insular non-traders* appears to increase with the level of democratization.
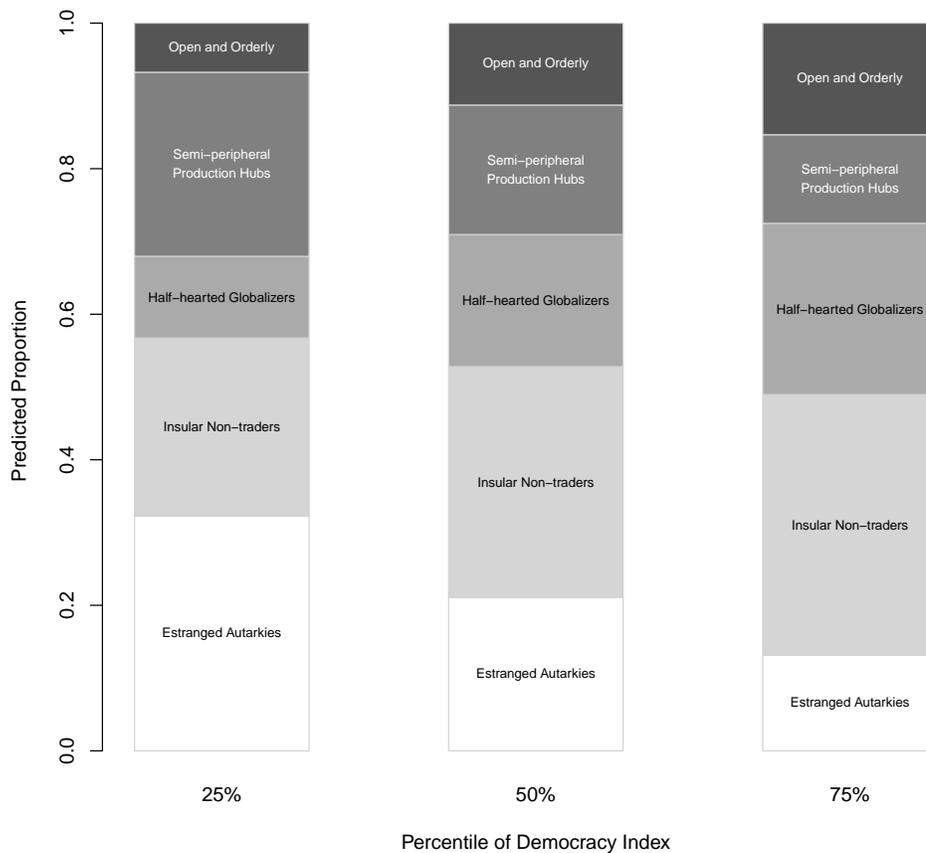
Figure 5: Predicted cluster proportions as a function of democracy

Recall that we reassigned some country-years away from two small outlier-catching clusters from the initial clustering. One key question is whether this decision might be impacting our findings. We address this in Table B2 in the appendix, where we do two things. First, we refit the exact same models as contained in Table 3 but dropping all country-years that had reassigned clusters. Second, we fit a multinomial logistic regression on the original 7 clusters. In both cases, we find that the model estimates relating the log odds of clusters 1-4 relative to cluster 5 are remarkably similar in size, sign, and significance to the original. Thus our decision on cluster reassignment is not driving our findings on democracy and strategy of foreign economic engagement. We also replicate our models from Tables 3 and B2 in the online appendix employing listwise deletion of

observations with missing data. Our findings are substantively identical.

At this point, we offer two observations. First, all of our tests offer support for Hypothesis 1, that Clusters 1 and 3 become more prevalent with democracy and Clusters 2 and 5 with non-democracy. Second, our results clearly indicate the value of clustering. One reason for this is that democracy is not uniformly linked with greater levels of liberalization or openness. For example, some democracies are wide open to trade and others are more cautious; many non-democracies are deeply closed off (cluster 5) while others are highly integrated in the global economy (cluster 2). Clustering makes this heterogeneity manifest. The value of clustering is also evident in uncovering the interactions among policies. For example, *open & orderly* democracies tend to match free trade with strong floats, while *semi-peripheral production hubs*, who tend to be non-democracies, mix free trade with depreciated currency pegs. Clustering is key to uncovering these multidimensional policy mixes.

The moderating effect of economy size

We now examine whether the positive association between democracy and clusters 4, 3, and 1 (and its negative association with clusters 5 and 2) remains consistent across countries of different economic size. Our motivation for this investigation is part theoretical-deductive and part empirical-inductive. On the theoretical side, it is generally agreed that the broad-based economic costs of non-engagement are likely to be smaller in larger economies. So while we still think that the most extreme forms of autarky (cluster 5) will be unappealing to democracies large or small, it is possible that democratization in large economies will conduce more to clusters 3 and 4 rather than cluster 1 (which will be favored by small democracies). On the empirical side, we noticed in our analysis above that cluster 4 included several very large economies, particularly the US and Japan. These democracies are quite globally engaged in some sectors, but they are also very large and internal trade is likely to be more prominent (especially given their post-industrial economic structure and the important role of non-tradables).

To see if country size moderates the predicted impacts of democracy on cluster choice, we fit a simple model which interacts logged GDP (in 2010 dollars) with our democracy variable, and

Table 4: Economic size as a moderator of democracy's impact on globalization strategy

Non-democracy $\rightarrow$ democracy	Cluster				
	1	2	3	4	5
Small economy (GDP at 25th percentile):					
Predicted change	0.28*	−0.24*	0.07*	−0.04*	−0.07*
Large economy (GDP at 75th percentile):					
Predicted change	0.20*	−0.39*	0.26*	0.06*	−0.14*
Difference in predicted changes	−0.08	−0.15*	0.20*	0.10*	−0.07*

Notes: Figures in the top two lines represent changes in predicted probabilities of the five clusters when the democracy measure is moved from its 25th to its 75th percentile. Two cases are considered: when nominal GDP is at its 25th percentile and at its 75th percentile. These simulations are drawn from a multinomial logistic regression model which interacts GDP and the democracy measure and includes GDP per capita as a control (set at its 75th percentile so that cluster 1 is 'observed').

includes GDP per capita as a control. We first simulate first differences where we change democracy from its 25th percentile to its 75th percentile in the data while holding the economy size at the 25th percentile in the GDP data. Then we did the same holding GDP at the 75th percentile in the data, and also looked to see if there was a difference between the two differences. Our main prediction is that democratization will have more a positive affect on membership for clusters 4 and 3 and will have a larger negative effect or smaller positive effect for cluster 2 and 1, respectively.

Our first observation from Table 4 is that most of the main effects of democratization we observed above are consistent across the different GDP sizes. Clusters 1 and 3 are more common among democracies; clusters 3 and 5 are more likely non-democracies. Only cluster 4 sees a different effect of democratization depending on country size. As we speculated above, smaller economies have a tendency to abandon cluster 4 during democratization (and perhaps enter clusters 3 and 1); larger economies have a tendency to enter cluster 4 with democratization (as they exit cluster 5).

This moderating effect of country size on the relationship between democracy and cluster choice is also visible across the other clusters. Democracy has a more sharply negative effect on cluster 2 among large countries, and a less sharply positive effect on cluster 1. This perhaps reflects that the allure of hyper-engagement (especially via cluster 2) is much lower for very large economies that can do quite well without vast exposure to the global economy. At the same time, democratization has a (more) positive effect on adopting cluster 4 and 3 for large economies. This may reflect the

benefits of semi-engagement or even relative insularity for large countries.

Conclusion

We highlight some limits to our study, and then discuss broader implications. First, data availability limited us to the post-Cold War era. It would be fascinating to employ clustering methods on earlier eras, though such an effort would require a much more limited palate of policies. Second, we have not explicitly considered some policy areas, like immigration policy, non-tariff barriers to trade, and domestic policies which strongly impact financial flows. Moreover, models of foreign economic policy might also be treated as part of a broader set of economic policies. Future work ought to consider clustering domestic and international economic policies to uncover development models. Third, one inherent problem with clustering is that cluster labels are specific to particular datasets, so changing the time-span, set of policies, or set of countries would change the clustering. Learning how to make clusterings more portable is a frontier research question, but our view is that the lessons learned from clustering – and the research findings, which are portable – justify the costs. Finally, we acknowledge some important heterogeneities we have not empirically tested, for example, why do some non-democracies adopt autarkic policies while others are broadly open? In our theoretical development, we emphasized that autocratic regimes that rely on political support from producers might be more inclined to cluster 2 than cluster 5. Testing this proposition is not easy, but would make a wonderful contribution.

What do our findings mean for the future of globalization? Scholars of democracy have recently focused on democratic backsliding in particular countries, and a broadly illiberal or non-democratic trend across the globe. Within IPE, scholars have focused on a related trend, the rise of populist nationalisms. In line with this literature, our results suggest that some increasingly non-democratic countries may slide into alienation from the global economy. At the same time, other non-democratic polities may embrace global economic competition and a role as a production hub for the rest of the globe. Which of these paths is taken may depend on the type of non-democracy or the ideology of the autocrats, as described above. Our bottom line is that democracy does

not have a one-to-one mapping to economic openness, so even renewed democracy might lead to half-hearted globalization (or insularity among large democracies).

Another key trend in international political economy is the fraying of economic (and political) relations between the US and EU, on one hand, and China and Russia, on the other. While talk of economic 'decoupling' goes too far, it is clear that these relationships are undergoing a process of major reevaluation. One key question for scholars is therefore how other countries will adapt their economic models to these changing circumstances, for example, will more polities embrace the potential benefits (and risks) of serving as a production hub? Or will new models emerge as a consequence of a reformed global economic structure? We think the latter question is especially interesting and scholars might consider how structural/systemic forces, and not just the domestic political and institutional variables we have considered, impact choices over development strategy.

Finally, we emphasize that the distribution of peoples, consumption, and production across the global economy will dramatically change in the coming decades. Scholars should keep a particularly close eye on how rapidly growing and developing states in Asia and Africa pick among models – or develop new models – with which to engage the global economy. Increasing data availability will make extending our approach to more countries increasingly feasible, and change over time will reveal new insights into how, and why, states position themselves in the global economy.

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