Commercial Imperialism? Political Influence and Trade During the Cold War[*]

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ABSTRACT: We exploit the recent declassification of CIA documents and examine whether there is evidence of US power and influence being used to influence countries' decisions regarding trade and trade policy. To measure US influence we use a newly constructed annual panel of CIA interventions aimed at installing and supporting leaders during the Cold War. Our presumption is that the US had greater control over foreign leaders that were installed and backed by the CIA. We show that US interventions were followed by an increased flow of US goods into the intervened country. There was no similar increase in the shipment of goods from intervened countries to the US. We find that the increase in imports only occurred in autocratic regimes, where, because leaders are less accountable to their citizens, we expect US influence to have been the most effective. Testing for alternative explanations, we find that the increase in US imports did not arise from a decrease in trading costs with the intervened country. The increase in imports was in industries in which the US had a comparative *dis*advantage. We also test whether the increase in US imports arose because of the political ideology of the newly installed regime, or from an increase in the supply of grants and loans by the US. We show that these alternative explanations do not account for the surge in US imports. Examining specific mechanisms, we provide evidence that government purchases of US products play a central role.

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1. Introduction

The possibility that political influence and power may play an important role in international trade has long been recognized.[1] Despite its importance, empirical evidence identifying the effects of influence on trade remains nearly non-existent.[2] This study provides evidence that US political influence over foreign countries is an important determinant of bilateral trade flows. Specifically, we show that during the Cold War, US control over leaders that were installed and supported by the CIA was used to create a larger foreign market for US products.

We exploit the recent declassification of CIA documents to generate a new measure of US political influence. We identify instances where US covert services engaged in interventions to install and/or support political leaders in other countries. Our presumption is that the US had greater control over foreign leaders that were installed and supported by the CIA. Our analysis then examines the relationship between these interventions and annual bilateral trade flows. We find that US interventions raised the share of goods the intervened country imported from the US. We find no change in the total value of goods imported, e.g. of trade creation effects. Instead, interventions caused a shift away from the purchase of foreign non-US products and towards purchases of US products. We show that this relationship is extremely robust to a variety of specification and robustness checks.

Despite the robust finding that interventions increased the shipments of goods from the US to the intervened country, we find no evidence of increased exports from the intervened country to the US. This is consistent with the US political influence being used to create a larger market for US products in the intervened country.

As a further test of our political influence hypothesis, we examine differences in the effect of interventions on autocratic and democratic regimes. Existing theory and evidence (e.g., Grossman and Helpman, 1994, Mitra, Thomakos, and Ulubasoglu, 2002) suggests that US influence should have been greater in autocratic regimes, where leaders are supported and accountable to a relatively small group, relative to democratic regimes, where leaders are accountable to a much larger

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[1]Theoretical studies date back from at least Hirschman (1945), with more recent contributions including Galtung (1971) and Antràs and Padro-i-Miquel (2008). The recent book by Findlay and O'Rourke (2007), titled *Power and Plenty* uses historical evidence to show clearly that power, influence, and coercion are central to understanding the history of international trade. Also, from a historical perspective, Mitchener and Weidenmier (2008) document the important role that colonial empires played in international trade during the late 19th and early 20th centuries.

[2]The existing empirical evidence relies on innovative, but indirect evidence of the importance of power and influence in the international arena. One of the few pieces of evidence is from Yeats (1990) who shows that the prices paid for steel imports by former African colonies are higher if the imports are from the former colonizer than from other countries.

population. In other words, all else equal, external US influence will be more effective in autocratic regimes where the new leader is less accountable and has greater freedom to choose policies. We find that, consistent with the political influence hypothesis, US interventions only increased the share of imports from the US in autocratic regimes, and had no effect in democratic regimes.

We recognize that other interpretations for these correlations are also possible. In addition to our political influence explanation, there are three leading alternative explanations for the findings. The first is that interventions (asymmetrically) decreased the bilateral trading costs between the US and the intervened country, and because of this, it became optimal for the foreign countries to import a greater proportion of goods from the US rather than from other countries. The second is that the newly installed and/or supported leaders were ideologically more similar to the US, and for this reason imports from the US increased. Our findings are simply capturing the fact that countries import from ideologically similar countries. The third is that following an intervention, US tied foreign aid and Export-Import Bank loans increased, and this caused imports from the US to rise. According to this explanation, it is not US coercion that led to the increase, but an increased provision of loans and grants, which provided greater resources for the country to purchase US goods.

We begin by testing for the trade costs explanation for the increase in US imports. The finding that the increase in trade is unidirectional provides evidence that the increase cannot be from a decrease in bilateral trade costs, unless the decrease is for some reason asymmetric, only decreasing the costs of moving goods from the US to the foreign country, but not from the foreign country to the US. We also provide a direct test of the explanation by examining effects of interventions on US imports across different industries. We show that the increase in US imports was greatest for goods in which the US had a relative comparative *dis*advantage in producing. That is, following interventions, the new goods that were shipped from the US to the intervened country were products that US firms were not competitive in producing. These patterns are inconsistent with decreasing trade costs being the source of increased US imports. If the increase in imports arose through lower trade costs, then the increased imports should have been in industries in which the US had a comparative advantage, not disadvantage. On the other hand, the finding is consistent with US influence being used to create a larger market for US products that producers otherwise would not have been able to sell in the international market.

We then turn to the political ideology explanation for the increase in US imports. The increase in

imports from the US may have arisen because the newly installed leaders were more pro-Western or pro-capitalist. Therefore, imports from countries with similar ideological positions, and one of these countries was the US. The increase in imports from the US simply reflects an increase in imports from all countries that are now ideologically more similar to the intervened country. To test this explanation, we examine the effects of interventions on imports from other countries with ideologies similar to the US. We find no evidence that US interventions caused an increase in imports from countries that were ideologically aligned with the US. The surge in imports following an intervention was US-specific.

Last, we turn to the increased US loans and grants explanation. We test directly whether US economic and military aid or Export-Import Bank loans increased following an intervention. We find a positive and significant relationship between interventions and economic aid and Ex-Im Bank loans (but not military aid). We also find that these channels are unable to account for the more than 25% of the total effect that we identify.

Having examined alternative explanations for the increase in US imports following interventions, we then turn to mechanisms. We find evidence that government purchases are an important channel behind the increase in US imports after interventions. The strength of the relationship between interventions on US imports is increasing in the government's share of GDP. For the countries in the sample with the smallest share, we find the effect is close to zero, which suggests that nearly all of the effect can be explained by government purchases of US products.

Our use of CIA intervention data links our paper to a small literature that examines other aspects of CIA activities. Most closely related is Easterly, Satyanath, and Berger (2008), who use lower frequency data (five year intervals rather than one year intervals) and find that CIA and KGB interventions both promote transition into autocracy, and prolong autocracy. This result dovetails nicely with our finding that US influence was strongest in autocratic regimes. This suggests that the US would have had less incentive to promote transitions to democracy following a US intervention. This would have made influence less effective. This is consistent with Easterly *et al.*'s (2008) finding that interventions forestalled transitions to democracy.

Dube, Kaplan, and Naidu (2008) examine the stock prices of US companies in Iran, Guatemala, Cuba, and Chile before and after the CIA authorized plans for a covert coup. They find that the stock returns of these companies jump up after these authorizations, which they interpret as evidence that these top-secret plans were leaked to investors. The focus of their paper is

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conceptually very different from our. Because Dube *et al.* (2008) are interested in the effects of top-secret information flows only (and not of the interventions themselves), they do not include the period of the actual intervention in their analysis.

Our findings are most closely related to a small number of studies that consider the potential impacts of political influence on international trade. The hypothesis that influence and power plays a role in international trade dates back to at least Hirschman (1945). More recently, the theoretical contribution of Antràs and Padro-i-Miquel (2008) examines the welfare impacts when political influence can affect trade and trade policies. One of the rare empirical studies on this issue is Alexander Yeats' (1990) analysis, showing that among African countries, former colonies pay a 20 to 30% premium on the price of imported steel when importing from their former colonizer. The study provides one of the only pieces of empirical evidence suggesting that informal influence may play an important role in international trade. Our analysis, using an alternative determinant of influence, provides stark evidence that foreign influence plays a role in international trade.[3]

The next section of the paper describes our data and their sources. Section 3 reports our baseline estimating equations and results. We document that CIA interventions were followed by increased imports of US goods, no increase in exports to the US, and no increase in total trade. We further show that the increase in imports from the US is found among autocracies only. The results of section 4 show that the findings are robust to a variety of sensitivity checks. In section 5, we rule out alternative explanations for our findings. Section 6 turns to the specific mechanism through which increased US influence enlarged the foreign market for US exporters. We provide evidence that government purchases play a central role. Section 7 concludes.

2. CIA Intervention Data

As a measure of US influence over a country we rely on historic episodes where the CIA intervened in a foreign country to install a new leader or to support an existing leader. To identify these episodes, we rely on a number of studies examining the history of the Cold War, much of which is based on recently declassified documents. We have supplemented this information with our own

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[3]Studies have provided evidence consistent with the presence of US power and influence playing a role in the international arena. For example, Dreher and Jensen (2007) show that IMF conditionality is correlated with whether countries vote in-line with the US in the UN General Assembly. Similarly, Kilby (2009) shows that the World Bank's structural adjustment conditions are less stringent for countries whose voting in the UN is more aligned with the US.

archival research. Using these sources, we have constructed an annual data set of interventions undertaken by the CIA, as well as by the Soviet's KGB.[4]

Our baseline measure of CIA interventions is an indicator variable that equals one for a country-year observation if the CIA either installed or supported the leader of a foreign country in office. We label this variable $US\,any_{t,c}$. As a robustness check, we also use a second more narrow measure where we assign a value of zero to $US\,any_{t,c}$ for the interventions where the CIA did not install a new leader, but propped up an existing leader. We denote this variable $US\,narrow_{t,c}$.

To provide a concrete example of the construction of our variable, consider the history of CIA involvement in Chile. The time line is illustrated in table 1. During the 1964 Chilean elections, the CIA provided covert funding and support for the Christian Democratic Party candidate Eduardo Frei Montalvo. Eduardo Frei won the presidential election in 1964, and continued to receive CIA support while he was in power. In the 1970 election, Salvador Allende, a candidate of a coalition of leftist parties, was elected, and remained in power until the CIA orchestrated coup of 1973. From 1973 until 1988 Augusto Pinochet maintained power, and he was backed and supported by the CIA during this time.

Because the variable $US\,any$ equals one in all periods in which a leader is installed, backed, or supported by the CIA, for Chile the variable equals one from 1964 to 1970 when Eduardo Frei was in power. It equals zero in 1971 and 1972, the years when Salvador Allende was in office (since he was not supported or installed by the CIA). It then equals one from 1973 to 1988, the years when Augusto Pinochet – who was installed and supported by the CIA – was in power.

Our sample consists of 131 countries. Of these, 51 were subject to at least one CIA intervention between 1947 and 1989.[5] Figure 1 shows the total number of interventions among all countries in each year between 1947 and 1989, using both the baseline intervention measure and the alternative more narrow measure. Put differently, the figure reports the number of countries for which $US\,any_{t,c} = 1$ in each year, as well as the number of countries for which $US\,narrow_{t,c} = 1$.

The figure illustrates a number of patterns present in the data. The first is that interventions were common and they were long-lasting. In an average year between 1947 and 1989, 24 countries were experiencing some form of CIA intervention. Among the group of 51 countries that

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[4]See Easterly *et al.* (2008) for a detailed list of the sources. The most heavily used secondary sources include Blum (2004), Andrew and Mitrokhin (2005), and Weiner (2007).

[5]Of the 131 countries, 22 were subject to some form of KGB intervention.

Table 1: An Example: History of CIA interventions in Chile.

isocode	year	*US any*	*US narrow*	Key Historical Events
…	…	...	...	
CHL	1963	0	0	
CHL	1964	1	1	Election; CIA propoganda, funding, etc; Frei wins
CHL	1965	1	1	Continued support for right wing groups, etc.
CHL	1966	1	1	…
CHL	1967	1	1	…
CHL	1968	1	1	…
CHL	1969	1	1	…
CHL	1970	1	1	Salvador Allende wins election
CHL	1971	0	0	
CHL	1972	0	0	
CHL	1973	1	1	CIA planned coup; head of military, Pinochet takes power
CHL	1974	1	1	…
CHL	1975	1	1	…
CHL	1976	1	1	…
CHL	1977	1	1	…
CHL	1978	1	1	…
CHL	1979	1	1	…
CHL	1980	1	1	…
CHL	1981	1	1	…
CHL	1982	1	1	…
CHL	1983	1	1	…
CHL	1984	1	1	…
CHL	1985	1	1	…
CHL	1986	1	1	…
CHL	1987	1	1	…
CHL	1988	1	1	Plebiscite, democratic elections; Pinochet steps down
CHL	1989	0	0	
…	…	…	…	

experienced a CIA intervention between 1947 and 1989, the average country experienced a CIA intervention that lasted for 20 years. The figure also shows that the total number of interventions increased after 1947, peaked around the 1970s, and then fell until 1989.

This is consistent with the history of the CIA. Between 1953 and 1961 covert action increased significantly, with attention focused on political action, particularly support to political figures and political parties. The 1960s witnessed a continued presence of CIA covert activities, although there was a shift towards greater paramilitary activities. The period from 1964 to 1967 is known to have been the high point of CIA covert activities. The post-1967 slow-down was brought about, in part, by the 1967 *Ramparts* magazine article that exposed the CIA's funding of national student groups and other private organizations (Leary, 1984). Consistent with this history, figure 1 shows a leveling off of convert interventions in the late 1960s until the mid-1970s, after which the number falls. The lagged decline after 1967 arises from the persistence of interventions. Typically, newly installed or newly supported leaders remained in power, and continued to be supported by the CIA, for their remaining tenure. Overall, the temporal pattern of the total number of CIA interventions is consistent with the qualitative historical evidence about the intensities of CIA
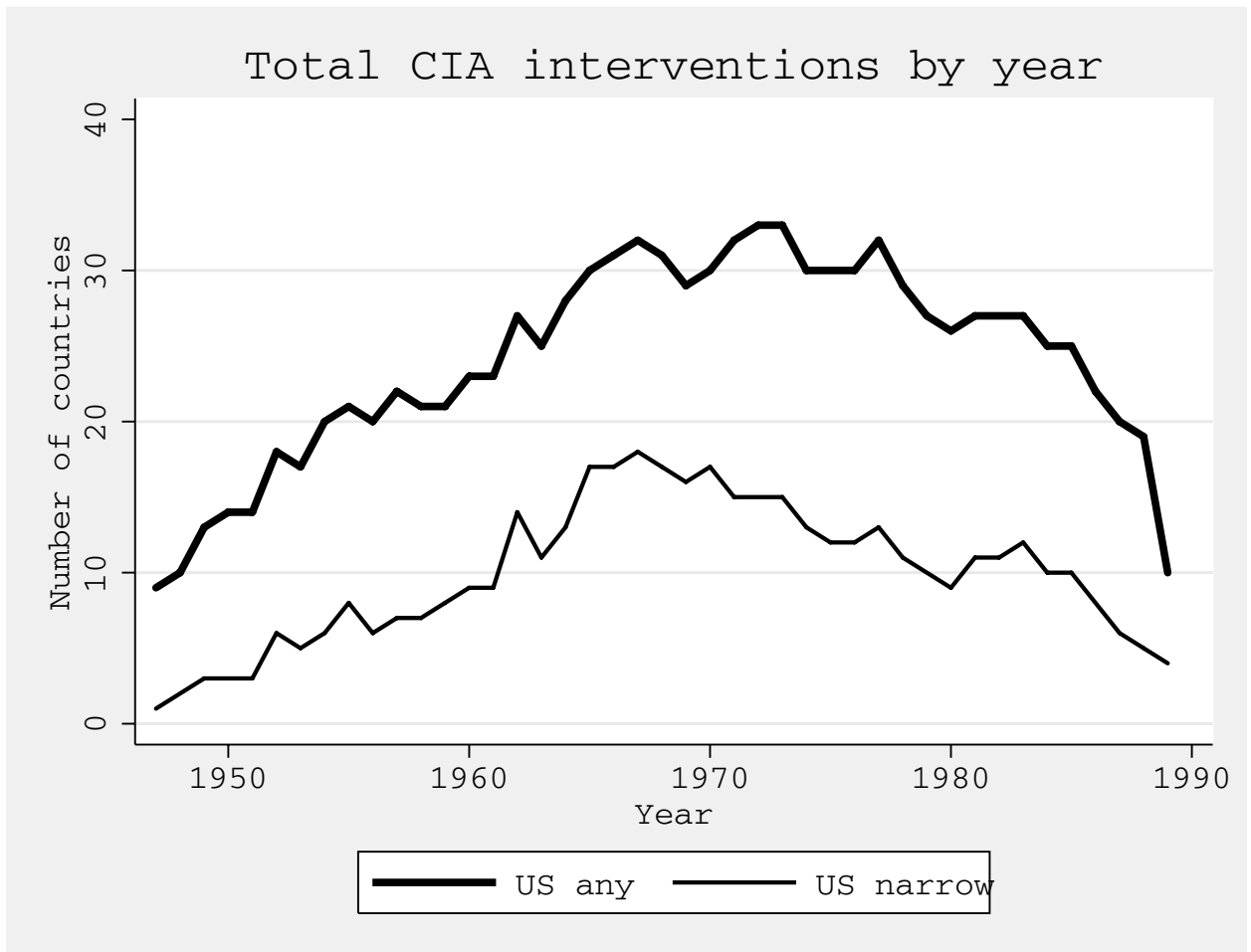
Figure 1: Total number of countries with CIA interventions.

activities during the Cold War.

An alternative to looking at total interventions over time, is to examine the pattern of all interventions across countries between 1947 and 1989. The map shown in figure 2 provides this information. The map reports, for each country, the average number of years the country experienced a CIA intervention between 1947 and 1989.[6] The cross-country distribution of interventions is consistent with the descriptive history of the CIA during the Cold War era. The CIA intervened most heavily in Latin America, but also in a few European countries - namely, Italy and Greece - as well as in a number of countries in Africa, Asia, and the Middle East.

The map also helps to illustrate exactly what our intervention variable captures and what it does not capture. For example, our intervention variable is zero for Angola throughout the period. This is the case despite the heavy and well-known involvement of the CIA in Angola's civil war. The CIA provided covert support for the anticommunist group Union for the Total Independence of Angola (UNITA). However, the group was never successful at gaining power from the Movimento Popular de Libertação de Angola (MPLA). Because the US backed UNITA forces never gained control of the government, our variable is never coded as one for Angola, despite clear intervention by the CIA in the country. The example illustrates that our intervention measure is not a measure of CIA meddling or activities in a country. It is an indicator for interventions that were successful at either installing a new leader or in maintaining the power of an existing leader.

3. Baseline Estimates

A. *Estimating Equations*

We now turn to our baseline estimates of the economic consequences of US interventions. Our first estimating equation looks at the effects of US interventions on the share of imports coming from the US.

$$\ln \frac{m_{t,c}^{US}}{m_{t,c}^{W}} = \alpha_t + \alpha_c + \beta_1 USany_{t,c} + \sum_{n=1}^{N} \gamma_n \ln \frac{m_{t-n,c}^{US}}{m_{t-n,c}^{W}} + X_{t,c}\Gamma + \varepsilon_{t,c} \tag{1}$$

$m_{t,c}^{US}$ denotes imports from the US into country c in year t, $m_{t,c}^{W}$ denotes aggregate imports from all countries. The dependent variable, $\ln \frac{m_{t,c}^{US}}{m_{t,c}^{W}}$, is the natural log of share of total imports into country c

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[6]For countries that did not gain independence until after 1947 the percentage is calculated as the fraction of years from independence to 1989 for which there was a CIA intervention.
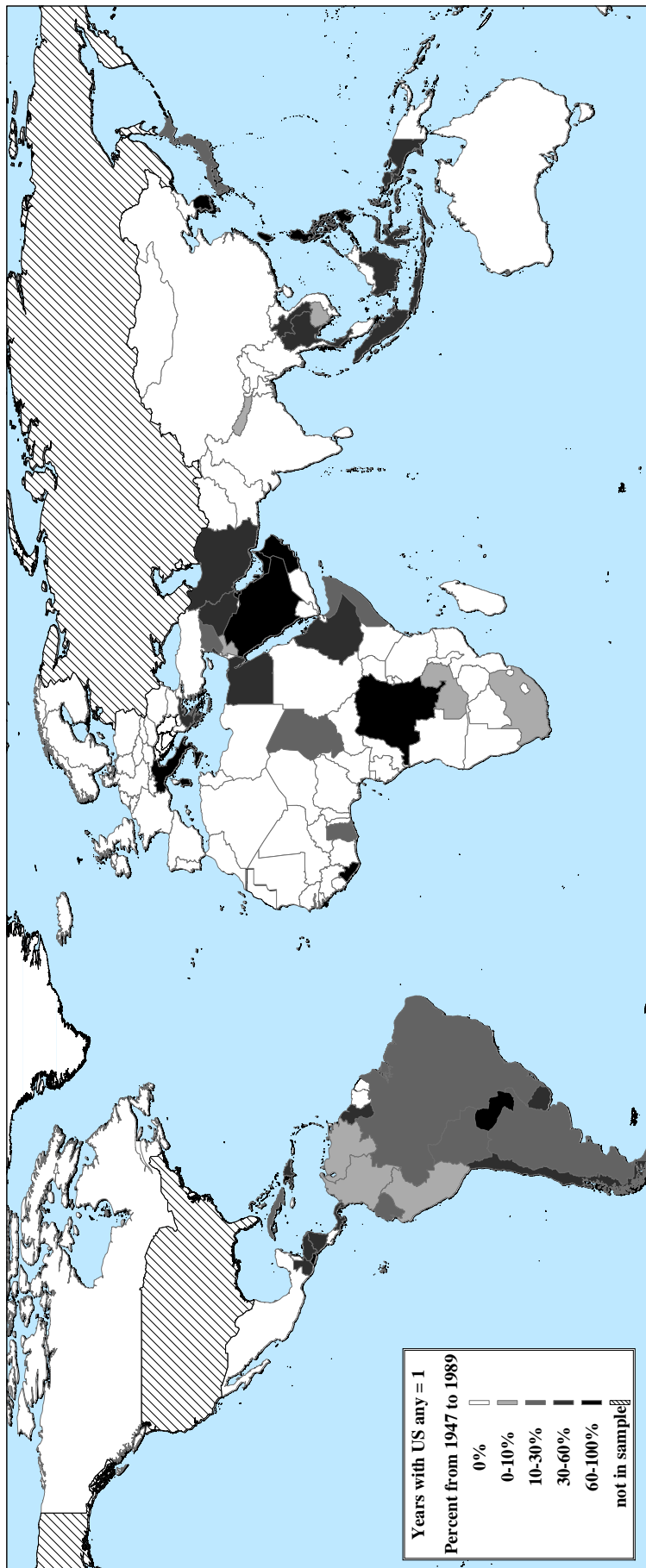
Figure 2: Map showing the fraction of years between 1947 and 1989 with a CIA intervention.

in year t that are from the US. As we illustrate in the appendix the appropriate dependent variable for the theoretically derived estimating equation is the natural log of the import share, rather than the import share itself. One consequence of this is that a small number of observations, with zero trade flows, are dropped from the sample in our baseline specifications. We show in section 4B that alternative estimation techniques that do not omit the zero observations result in qualitatively identical estimates.

Since the time period being considered is the Cold War, t ranges from 1947 to 1989. Equation (1) also includes year fixed effects and country fixed effects, α_t and α_c. Because our sample only includes trade with the US, country fixed effects are equivalent to country-pair fixed effects. They therefore capture many of the standard country-pair specific measures that are standard in bilateral gravity regressions, such as the geographic distance between the trading partners, a common language, legal/colonial origins, etc.

The equation also controls for lags of the dependent variable. This is done to capture the persistent impact of past trade, as well as its determinants. Because equation (1) includes time-period fixed effects, country fixed effects, and lags of the dependent variable, it suffers from the well-known Nickell (1981) bias. In section 3, we show that since the Nickell bias converges to zero as the time dimension of the panel increases, and since we have a large number of time periods in our panel (43 years), the actual bias is small. We also show that in practice our results are not significantly affected by the bias.

The vector $X_{t,c}$ includes a set of controls that vary across countries and years. We control for Soviet interventions, which are measured in exactly the same manner as the US interventions, but quantify KGB intervention in foreign countries. We also include two indicator variables that are intended to capture a country's openness to foreign trade. These may affect trade with the US differentially relative to other countries of the world. The first is an indicator variable that equals one if country c is a member of GATT in year t. The second is an indicator variable that equals one if country c had signed the New York Convention on or before year t.[7] We also include controls for log per capita income, and log aggregate income. These controls, which are typically included in gravity regressions, may influence aggregate trade through scale and income effects. They would also have an effect if, for example, the US trades disproportionately more with higher income or

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[7]The New York Convention is the common name for the 1958 *Convention on the Recognition and Enforcement of Foreign Arbitral Awards*. The agreement ensures that among signatory countries, in cases involving parties from two countries, court rulings and arbitration awards made in one country must be recognized in the other country.

larger countries.

Given the recent studies by Jones and Olken (2005, 2009) and Duflo and Chattopadhyay (2004) that show that leaders matter, we are particularly careful to control for leadership turnover and leader tenure.[8] We include in our estimating equation an indicator variable that equals one in a country and year if a leadership change is experienced and a measure of the tenure of the current leader.

The findings from Easterly *et al.* (2008) suggest that interventions affected democratic institutions in a country. We therefore control for the combined Polity variable from the Polity IV Database. The measure takes on integer values ranging from -10 (strong autocracy) to $+10$ (strong democracy). We include fixed effects, one for each value of the polity measure. Our results are similar if we less flexibly include the polity measure linearly.

In equation (1) the unit of observation is a country-year. By construction, the United States and the Soviet Union are not in the sample. An alternative estimation strategy is to estimate a standard bilateral gravity model, where the unit of observation is a directional country-pair in a year, and the dependent variable is the volume of imports from one country to another country. One could examine whether a US intervention increases the flow of imports from the US to the intervened country. Our equation (1) is constructed to capture this same variation, but the advantage of equation (1) over a bilateral gravity equation is that it is much more conservative, since it does not include a very large number of observations in which the US is not a trading partner. Doing this, even with clustered standard errors, would tend to result in downward biased standard errors and inflated significance of all variables (see Bertrand, Duflo, and Mullainathan, 2004). Our estimation strategy effectively aggregates all trade between non-US trade partners to be part of aggregate World trade, which we use to normalize trade flows with the US. The result is that we only have nt observations rather than $n(n-1)t$ observations in our sample (where n is the number of countries and t is the number of time periods). As we show in section 4, our results are qualitatively identical if we use a sample of all trade flows between all country-pairs, and estimate a bilateral gravity model with all country-pairs.

We also examine the effect of interventions on exports to the US. We estimate a version of

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[8]The finding in Jones and Olken (2005) that leader deaths have larger effects in autocracies is similar to our finding that US interventions appear to be benign in democracies. As well, MacGillivray and Smith (2004) provide empirical evidence showing that leadership turnover has little effect in democracies, but has a strong adverse effect on the volume of trade in autocracies.

equation (1) where the dependent variable is the share of country c's total exports that are shipped to the US:

$$\ln \frac{x_{t,c}^{US}}{x_{t,c}^{W}} = \alpha_t + \alpha_c + \beta_1 USany_{t,c} + \sum_{n=1}^{N} \gamma_n \ln \frac{x_{t-n,c}^{US}}{x_{t-n,c}^{W}} + X_{t,c}\Gamma + \varepsilon_{t,c} \qquad (2)$$

where $x_{t,c}^{US}$ indicates exports from country c to the US in year t. Similarly, $x_{t,c}^{W}$ denotes exports from country c to all countries in the world in year t. The set of control variables are identical to equation (1).

B. Baseline Estimates

Our basic findings can be illustrated if we return to the example of Chile. Figure 3 reports two graphs, which show trade flows and the variable *US any* over time for Chile. The top graph reports the natural log of imports into Chile from the US divided by imports from the World. The bottom graph reports the natural log of exports from Chile to the US divided by exports from Chile to the World. In the top graph one can see clearly that the US import share stayed stable from 1964 to 1970, when Eduardo Frei was in power and was being supported by the CIA (*US any* $= 1$). The bottom graph shows that, unlike imports, exports to the US declined steadily during this period. In 1971, when Salvador Allende took power (*US any* $= 0$), imports fell dramatically (top graph), while there is no dramatic change in exports (bottom graph). After Pinochet took power (*US any* $= 1$), one observes a larger and more immediate increase for imports than for exports. Overall, figure 3 illustrates that imports from the US are much more responsive to CIA interventions than exports to the US.

We now document this finding more formally by estimating equations (1) and (2). Estimates of equations are reported in table 2. Column 1 reports estimates of equation (4) for the full sample. The coefficient on the US intervention measure, *US any*, is positive and statistically significant. The estimated coefficient indicates that in intervention years the share of imports from the US increased by 10.1 percent.

As we have discussed, an alternative explanation for the increase is that because of the intervention the leader is now more aligned with the US and this reduced trade costs. As an initial test of this explanation we examine the effects of interventions on exports from the foreign country into the US. If the intervention reduced trade costs between the two countries, then we also expect

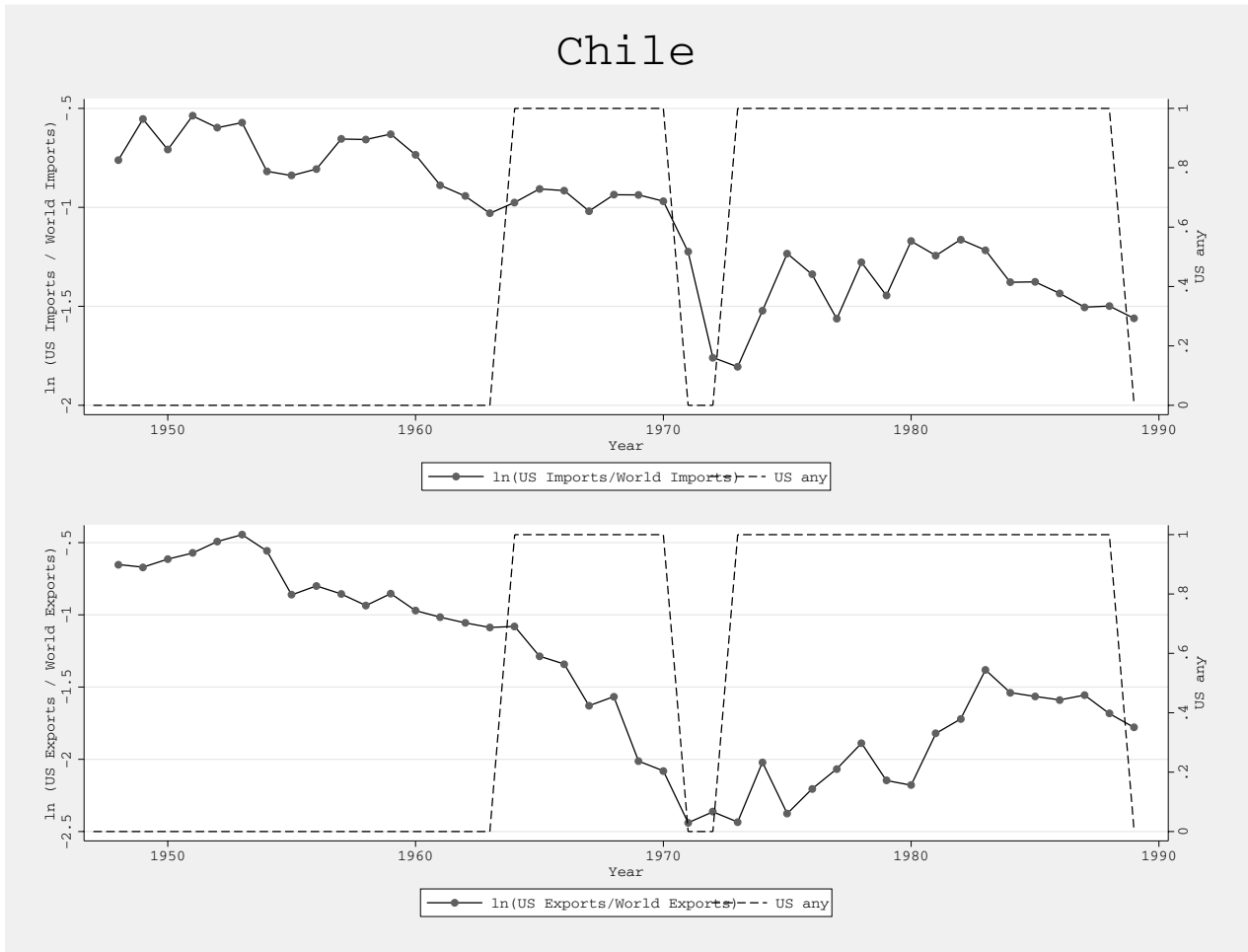Figure 3: CIA interventions and trade flows for Chile.

Table 2: The effects of US interventions on imports from and exports to the US for autocracies and democracies.

	Full sample		Autocracies only		Democracies only	
	ln US import share: ln (Imports from US / Imports from world)	ln US export share: ln (Exports to US / Exports to world)	ln US import share: ln (Imports from US / Imports from world)	ln US export share: ln (Exports to US / Exports to world)	ln US import share: ln (Imports from US / Imports from world)	ln US export share: ln (Exports to US / Exports to world)
	(1)	(2)	(3)	(4)	(5)	(6)
US any	0.101***	0.025	0.171***	0.011	0.014	0.018
	(0.029)	(0.044)	(0.051)	(0.080)	(0.025)	(0.041)
One year lagged dep var	0.529***	0.597***	0.512***	0.587***	0.554***	0.542***
	(0.075)	(0.053)	(0.083)	(0.059)	(0.070)	(0.073)
Two year lagged dep var	0.241***	0.121**	0.243**	0.125**	0.175**	0.108
	(0.088)	(0.048)	(0.100)	(0.054)	(0.061)	(0.068)
Soviet intervention control	Y	Y	Y	Y	Y	Y
ln per capita income, ln total income	Y	Y	Y	Y	Y	Y
ln total income	Y	Y	Y	Y	Y	Y
Leader turnover, leader tenure	Y	Y	Y	Y	Y	Y
GATT and NY convention controls	Y	Y	Y	Y	Y	Y
Polity fixed effects	Y	Y	Y	Y	Y	Y
Country fixed effects	Y	Y	Y	Y	Y	Y
Year fixed effects	Y	Y	Y	Y	Y	Y
R-squared	0.88	0.87	0.85	0.85	0.95	0.94
Observations	3,862	3,595	2,316	2,091	1,444	1,406

Notes: The unit of observation is a country c in year t, where t ranges from 1947 to 1989. All regressions include year fixed effects, country fixed effects, a Soviet intervention control, two lags of the dependent variable, ln per capita income, ln total income, an indicator for leader turnover, current leader tenure, an indicator variable for GATT membership, an indicator variable for signing the NY convention, and Polity fixed effects. Coefficients are reported with robust standard errors in brackets. ***, **, and * indicate significance at the 1, 5 and 10% levels.

to see an increase in goods being shipped to the US. We examine this by estimating equation (2). Estimates are reported in column 2 of table 2. The coefficient for *US any* is much smaller in magnitude and is not statistically different from zero. Together, the estimates from columns 1 and 2 show that although interventions significantly increased the share of a country's imports that come from the US, they had no effects on the share of a country's exports that go to the US. As we will see, this asymmetry is extremely robust and always comes through clearly in the data. This suggests that if the effect from column 1 is being driven by decreased bilateral trade costs, then the decline must have been asymmetric. The intervention must have decreased the cost of shipping goods from the US to the intervened country, but did not decrease the costs of shipping goods from the intervened country to the US.

The second strategy we employ to distinguish between the two explanations for the increase in trade with the US is to examine the effect of interventions separately for autocratic and democratic countries. The motivation behind this distinction derives from a straightforward logic that is at the core of a number of models in economics and political science. The best example is Grossman and Helpman's (1994) "Protection for Sale" model. In their model, governments set the level of a socially suboptimal policy (i.e., trade tariffs). In making their decisions governments trade off

the effects of the policy on aggregate welfare against the private benefits that are received from groups that have political influence. The key parameter affecting the equilibrium policy is a, the weight the government places on aggregate welfare relative to the private benefits the government receives from setting a distortionary policy. In reality the parameter a is determined, in part, by the accountability of the leader or government to the welfare of its citizens. Therefore, all else equal a will be much higher in democracies than autocracies. Empirical estimates of Grossman and Helpman's a parameter across autocracies and democracies provide strong empirical support for this (e.g., Mitra *et al.*, 2002).

Grossman and Helpman's model provides a testable prediction in our setting. We are interested in empirically identifying whether CIA interventions allowed the US to exert greater influence over intervened countries, and whether this was used to persuade the foreign leader or government to choose policies that benefit the US. Part of the rents generated by the policy can be passed on to the leader supported by the US. This setting is exactly analogous to Grossman and Helpman's setting, except that the US government takes the place of the private lobbies. In their model, those with the ability to influence policy will be more successful in autocracies where a is low, since the government is less accountable to its citizens. Therefore, if interventions increase US goods imports because of US influence, we expect to find larger effects of interventions in autocracies than in democracies.

We group our observations (i.e., country-year pairs) into two categories: autocracies and non-autocracies. A country c in year t is defined as being an autocracy if in both year t and year $t-1$ its Polity scores are zero or less.

Estimates of equations (1) and (2), with the sample restricted to autocracies only, are reported in columns 3 and 4 of table 2. Column 3 shows that among the sample of autocracies, like the full sample, the estimated coefficient for US interventions is positive and statistically significant. The estimated magnitude of this effect is very large: an intervention increases the share of US imports by 17.1 percent. This is much larger than the average increase for the full sample, which is 10.1 percent. Estimates of equations (1) and (2), with the sample restricted to democracies only, are reported in columns 5 and 6. The results show that unlike our full sample of observations and our subsample of autocracies, there is no robust evidence of any relationship between US interventions on the share of imports from the US.

To gain a better understanding of the changing share of US imports, we separately examine the

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Table 3: The effects of US interventions on imports and exports.

	ln imports from US		ln imports from world		ln exports to the US		ln exports to the world	
	Full sample	Autocracies	Full sample	Autocracies	Full sample	Autocracies	Full sample	Autocracies
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
US any	0.140***	0.209***	0.034	0.016	0.067	0.040	0.020	-0.018
	(0.031)	(0.052)	(0.019)	(0.035)	(0.046)	(0.084)	(0.020)	(0.032)
One year lagged dep var	0.614***	0.584***	0.792***	0.749***	0.615***	0.596***	0.792***	0.734
	(0.072)	(0.081)	(0.072)	(0.089)	(0.051)	(0.057)	(0.048)	(0.051)
Two year lagged dep var	0.158**	0.174**	-0.113**	-0.130**	0.142***	0.146***	-0.024	-0.013
	(0.079)	(0.090)	(0.049)	(0.060)	(0.047)	(0.054)	(0.029)	(0.034)
Soviet intervention control	Y	Y	Y	Y	Y	Y	Y	Y
ln per capita income, ln total income	Y	Y	Y	Y	Y	Y	Y	Y
Leader turnover, leader tenure	Y	Y	Y	Y	Y	Y	Y	Y
GATT and NY convention controls	Y	Y	Y	Y	Y	Y	Y	Y
Polity fixed effects	Y	Y	Y	Y	Y	Y	Y	Y
Country fixed effects	Y	Y	Y	Y	Y	Y	Y	Y
Year fixed effects	Y	Y	Y	Y	Y	Y	Y	Y
R-squared	0.97	0.94	0.98	0.98	0.95	0.93	0.99	0.98
Observations	3,862	2,316	4,077	2,527	3,595	2,091	4,073	2,522

Notes: The unit of observation is a country *c* in year *t*, where *t* ranges from 1947 to 1989. All regressions include year fixed effects, country fixed effects, a Soviet intervention control, two lags of the dependent variable, ln per capita income, ln total income, an indicator for leader turnover, current leader tenure, an indicator variable for GATT membership, an indicator variable for signing the NY convention, and Polity fixed effects. Coefficients are reported with robust standard errors in brackets. ***, **, and * indicate significance at the 1, 5 and 10% levels.

effect of interventions on imports from the US, and total imports from all countries. Specifically, we re-estimate equations (1) and (2) with log trade flows, either from the US or from the world, as the dependent variable. Estimates are reported in table 3. Columns 1–2 report estimates when the dependent variable is the natural log of imports from the US. In columns 3–4, the dependent variable is the natural log of the total volume of imports from all countries. The results show clearly that following an intervention there is an increase in the volume of imports from the US and no change in the total volume of imports from the world as a whole. This suggests that the increased share of trade with the US arises from an increase in US imports that appear to be at the expense of the country's other trading partners. In other words, the increased share of imports from the US is a result of trade diversion and not trade creation or trade destruction.

According to the estimates from columns 1–2, a US intervention increases the volume of US imports by 14.0% for the full sample, and 20.9% for autocracies. These increases are similar to the estimates for the shares, which were 10.1 and 17.1%, respectively.

Columns 5–8 report the estimated effects of interventions on exports. The estimates show that for CIA interventions, there is no evidence of an effect of interventions on exports to the US or to the world. Consistent with our findings from table 2, CIA interventions had little effect on the exports from the intervened country to the US, or on the aggregate exports of the intervened

country.

4. Robustness and Sensitivity Analysis

A. *Fixed Effects and Lagged Dependent Variables Specifications*

In deciding on our baseline estimating equations (1) and (2), we are forced to make a number
of decisions. The most significant is how we deal with omitted variables that may be correlated
with interventions and trade flows to the US. We have chosen to use a stringent and demanding
specification that includes country fixed effects, time period fixed effects, and lags of the dependent
variable.

It is well-known that in specifications with fixed effects and lagged dependent variables, there
is the potential for a Nickell (1981) bias to affect the coefficients of interest, if the time dimension is
modest. However, because this is a bias that converges to zero as t increases, it is only a problem
for panels with a modest time-dimension. The number of years included in our panel is much
greater than the environments that have typically been associated with the Nickel Bias. To obtain
a more concrete sense of the magnitude of the bias in our panel, consider the formula for the bias
originally derived by Nickell (1981). For an equation without covariates the formula is given by:

$$\text{plim}_{N \to \infty}(\hat{\gamma} - \gamma) \simeq \frac{-(1 + \gamma)}{T - 1}$$

where γ is the relationship between $\ln m_{t,c}$ and $\ln m_{t-1,c}$. In our setting, $T = 43$ and $\hat{\gamma} \approx 0.56$. If
$\gamma = .60$, then the bias is equal to $\frac{-(1+.60)}{42} = -0.038$. In addition, this is an upper bound, since the
bias is strictly lower when there are covariates.

We also test for the potential importance of the Nickell bias in our estimates by estimating
alternative specifications that do not suffer from this bias. These are reported in table 4. Columns 1
and 6 reproduced our baseline estimates of (1) with the log of the US import share and the log
of US imports as dependent variables. The remaining columns of the table report alternative
specifications that do not suffer from the Nickell bias. The first alternative is a specification
that does not control for country and time-period fixed effects, and only controls for lags of the
dependent variable. These estimates are reported in columns 2 and 7. The specification produces
coefficient estimates for US interventions that are qualitatively similar to the baseline estimates. In
both specifications, the coefficients are positive and highly significant, although their magnitudes
are lower. The second alternative specification is a standard difference-in-difference estimating

Table 4: Robustness and sensitivity of the estimated effects of US interventions on imports to the US for autocracies.

	ln US import share					ln Imports from US				
	Baseline	LDV only	FEs only	FEs with country-specific time trends		Baseline	LDV only	FEs only	FEs with country-specific time trends	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
US any	0.171***	0.109***	0.407***	0.179***	0.178***	0.209***	0.151***	0.369***	0.238***	0.237***
	(0.051)	(0.021)	(0.071)	(0.073)	(0.072)	(0.052)	(0.040)	(0.078)	(0.083)	(0.083)
Two lags of the dependent variable	Yes	Yes	No	No	No	Yes	Yes	No	No	No
Country fixed effects	Yes	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
Year fixed effects	Yes	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
Linear country-spec. time trends	No	No	No	Yes	No	No	No	No	Yes	No
Nonlinear country-spec. time trends	No	No	No	No	Yes	No	No	No	No	Yes
Full set of other covariates	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.85	0.83	0.72	0.83	0.83	0.94	0.91	0.89	0.94	0.94
Observations	2,316	2,316	2,316	2,316	2,316	2,316	2,316	2,316	2,316	2,316

Notes: The unit of observation is a country c in year t, where t ranges from 1947 to 1989. 'Full set of other covariates' includes: a Soviet intervention control, ln per capita income, ln total income, an indicator variable for leader turnover, current leader tenure, an indicator variable for GATT membership, an indicator variable for signing the NY convention, and Polity fixed effects. Coefficients are reported with robust standard errors in brackets. ***, **, and * indicate significance at the 1, 5 and 10% levels.

equation that includes time period fixed effects and country fixed effects. These estimates are reported in columns 3 and 8. Again, the results are qualitatively similar to the baseline estimates. The coefficients are positive and statistically significant, although they are around twice the magnitude of the baseline coefficient. The remaining specifications reported in the table report more stringent fixed effects specifications that also control for country-specific time trends. In other words, the regressions add to the specifications from columns 3 and 8 a full set of country fixed effects interacted with time trends. Columns 4 and 9 report estimates with linear time trend interactions, and columns 5 and 10 report estimates with a non-linear time trend (i.e., country fixed effects interacted with the year and year squared). With this more stringent fixed effects specification the estimated coefficients are now smaller, and more similar to magnitude of the baseline estimates. The coefficients remain statistically significant.

Overall, the results of table 4 show that the estimated effect of CIA interventions on imports from the US is robust to the estimation method one employs, and is not being caused by the Nickell bias.

B. *Addressing the Existence of Zero Trade Flows*

Our baseline estimating equation is derived from a log-linearization of the theoretically derived gravity model. On consequence of the log-linearization is that zero trade observations are dropped

Table 5: Alternative estimates that include zero trade flows.

	OLS Estimates		Poisson Estimates			
	Imports from US / Imports from world		Imports from the US		Imports from the world	
	Full sample	Autocracies	Full sample	Autocracies	Full sample	Autocracies
	(1)	(2)	(3)	(4)	(5)	(6)
US any	0.014***	0.025***	0.221***	0.331***	-0.033	0.029
	(0.003)	(0.005)	(0.037)	(0.067)	(0.024)	(0.044)
Two lags of dependent variable	Y	Y	Y	Y	Y	Y
Soviet intervention control	Y	Y	Y	Y	Y	Y
ln per capita income, ln total income	Y	Y	Y	Y	Y	Y
Leader turnover, leader tenure	Y	Y	Y	Y	Y	Y
GATT and NY convention controls	Y	Y	Y	Y	Y	Y
Polity fixed effects	Y	Y	Y	Y	Y	Y
Country fixed effects	Y	Y	Y	Y	Y	Y
Year fixed effects	Y	Y	Y	Y	Y	Y
R-squared	0.95	0.94	0.98	0.96	0.99	0.98
Observations	4,074	2,524	4,164	2,594	4,164	2,597

Notes: The unit of observation is a country c in year t, where t ranges from 1947 to 1989. All regressions include year fixed effects, country fixed effects, a Soviet intervention control, two lags of the dependent variable, ln per capita income, ln total income, an indicator for leader turnover, current leader tenure, an indicator variable for GATT membership, an indicator variable for signing the NY convention, and Polity fixed effects. Coefficients are reported with robust standard errors in brackets. ***, **, and * indicate significance at the 1, 5 and 10% levels.

from the sample. Although, the number of observations dropped for this reason is very small, we check that our omission of these observations is not significantly affecting our results.[9]

We pursue two strategies to assess the importance of the omission of zero trade flows from our analysis. The first is to re-estimate equation (1) with the US import share, rather than the log share, as the dependent variable. These estimates are reported in columns 1 and 2 of table 5. The estimates are similar to the baseline estimates. The coefficient for the interventions variable remains positive and statistically significant. The second strategy we pursue relies on the recent contribution by Santos Silva and Tenreyro (2006). The authors propose estimation of the gravity model using a Poisson pseudo-maximum-likelihood estimator. Because the estimating equation is not a log-linearization, all observations are included, even zero trade flows.[10] Estimates using a Poisson pseudo-maximum-likelihood estimator are reported in columns 3–6 of table 5. These estimates provide the same results as the OLS estimates. CIA interventions increase imports from the US (and this effect is stronger in democracies), but they have no effect on total imports from

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[9]To obtain a sense of the reduction in the sample size from zero trade observations, consider the regression with log imports from the US as the dependent variable. In this specification, 302 of 4,164 potential observations had zero trade and were dropped from the analysis. Therefore, the actual number of observations in the regression is 3,862 (see column 1 of table 3).

[10]The authors argue that the other advantage of the estimator is that it avoids the potential pitfalls of OLS estimation of the log-linearized gravity model in the presence of heteroscedastic error terms. They show that in the presence of heteroscedasticity, OLS may yield biased point estimates.

the world.

The coefficients from Poisson estimates are directly comparable to the estimates from columns 1 and 2 of table 3. The coefficients from the Poisson model are approximately twice the magnitude of those from the log-linearized OLS model. The magnitude of the estimates from columns 3 and 4 of table 5 suggest that interventions increase imports from the US by 22.1 and 33.1% (for the full sample and for autocracies, respectively). These are larger, but roughly the same magnitudes as the estimates of 14 and 21% from columns 1 and 3 of table 2. Overall, there is no evidence that our baseline estimates are affected in any significant way by the omission of the small number of observations with zero trade flows.

C. *An Alternative Intervention Measure*

Next, we test the robustness of our estimates to our alternative, more narrow measure of CIA interventions, $US\,narrow_{t,c}$. Recall from the description in section 2, that unlike our baseline measure the variable $US\,narrow_{t,c}$ only takes on the value of one if at the beginning of the CIA intervention a new leader was installed. Therefore, CIA interventions that support a leader that was not installed by the CIA are coded as zero.

Estimates using the alternative measure, $US\,narrow_{t,c}$, are reported in table 6. The estimates using the narrow intervention measure are qualitatively identical to the results using our baseline measure. Interventions increase the share of imports from the US; this effect is larger for autocracies; and they have no effect on the share of a country's exports to the US. A comparison of the coefficient estimates also shows that the magnitudes are quantitatively very similar.

D. *Causality*

Table 7 reports additional robustness checks for the specification with the log US import share as the dependent variable. Columns 1 and 6 report, for comparison, the baseline estimates for the full sample and for autocracies.

The primary concern is that the results may be biased by factors that affected both the likelihood of CIA interventions, as well as the temporal pattern of trade with the US. For example, consider the following scenario. Trade with the US randomly changes depending on the leader in power. When leaders that resulted in less trade with the US were in power, CIA interventions were more

Table 6: The effects of narrow US interventions on imports.

	ln US import share		ln imports from US		ln imports from world	
	Full sample	Autocracies	Full sample	Autocracies	Full sample	Autocracies
	(1)	(2)	(3)	(4)	(5)	(6)
US narrow	0.132***	0.249***	0.153***	0.281***	0.021	0.014
	(0.035)	(0.062)	(0.038)	(0.065)	(0.017)	(0.029)
Two lags of dependent variable	Y	Y	Y	Y	Y	Y
Soviet intervention controls	Y	Y	Y	Y	Y	Y
ln per capita income, ln total income	Y	Y	Y	Y	Y	Y
Leader turnover, leader tenure	Y	Y	Y	Y	Y	Y
GATT and NY convention controls	Y	Y	Y	Y	Y	Y
Polity fixed effects	Y	Y	Y	Y	Y	Y
Country fixed effects	Y	Y	Y	Y	Y	Y
Year fixed effects	Y	Y	Y	Y	Y	Y
R-squared	0.88	0.85	0.97	0.94	0.98	0.98
Observations	3,862	2,316	3,862	2,316	4,077	2,527

Notes: The unit of observation is a country c in year t, where t ranges from 1947 to 1989. All regressions include year fixed effects, country fixed effects, a Soviet intervention control, two lags of the dependent variable, ln per capita income, ln total income, an indicator for leader turnover, current leader tenure, an indicator variable for GATT membership, an indicator variable for signing the NY convention, and Polity fixed effects. Coefficients are reported with robust standard errors in brackets. ***, **, and * indicate significance at the 1, 5 and 10% levels.

Table 7: Causal Correlations? Controlling for pre and post trends.

	ln US import share: ln (Imports from US / Imports from World)									
	Full sample					Autocracies				
	Baseline	3 year pre-trend	5 year pre-trend	3-year pre- & post-FEs	5-year pre- & post-FEs	Baseline	3 year pre-trend	5 year pre-trend	3-year pre- & post-FEs	5-year pre- & post-FEs
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
US any	0.101***	0.106***	0.113***	0.096**	0.086**	0.171***	0.197***	0.201***	0.142*	0.125*
	(0.028)	(0.028)	(0.029)	(0.044)	(0.039)	(0.046)	(0.047)	(0.050)	(0.074)	(0.067)
Pre- & post-intervention fixed effects	N	N	N	Y	Y	N	N	N	Y	Y
Pre-trend of ln US import share	N	Y	Y	N	N	N	Y	Y	N	N
Lagged dependent variables	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Soviet intervention control	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
ln per capita income, ln total income	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Leader turnover, leader tenure	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
GATT and NY convention controls	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Polity fixed effects	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Country fixed effects	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Year fixed effects	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
R-squared	0.88	0.88	0.88	0.88	0.88	0.85	0.85	0.85	0.85	0.85
Observations	3,862	3,610	3,372	3,862	3,862	2,316	2,166	2,014	2,316	2,316

Notes: The unit of observation is a country c in year t, where t ranges from 1947 to 1989. All regressions include year fixed effects, country fixed effects, a Soviet intervention control, two lags of the dependent variable, ln per capita income, ln total income, an indicator for leader turnover, current leader tenure, an indicator variable for GATT membership, an indicator for signing the NY convention, and Polity fixed effects. Coefficients are reported with robust standard errors in brackets. ***, **, and * indicate significance at the 1, 5 and 10% levels.

likely. CIA interventions, had no effect on US trade, but simply installed a new leader in a random, or non-strategic manner. Because the old leader was a large negative US trade type, there will be mean reversion and the new leader will engage in more trade with the US. Therefore, even though interventions have no real effect on trade, we observe that trade with the US increased after CIA interventions. This results

We address this by including in our estimating equations three and five-year pre-trends of our dependent variable. This controls for the possibility that the estimated effect of an intervention in period t in country c may be biased by the fact that there was reduced trade in the periods prior to the intervention. Estimates controlling for the three-year pre-trends are reported in columns 2 and 7. Columns 3 and 8 report estimates controlling for the five-year pre-trends. In each case, the coefficients for $US\,any$ change little.

We also pursue a second strategy to controlling for initial trends in the dependent variable. We also control for average differences in the dependent variable in the years prior to interventions. While the pre-trends control for average changes in US trade prior to interventions, the second strategy controls for factors that affect the average level of trade prior to a CIA intervention. We do this by constructing an indicator variable $I_{t,c}^{Pre}$ that equals one if year t within three years (or five years) prior to an intervention in country c. If trade is depressed during these periods, this will be captured by the indicator variable. We also control for the possibility of a post intervention depression of trade by controlling for an indicator $I_{t,c}^{Post}$ that equals one if year t is within three years after an intervention.

With these additional controls our estimating equation becomes:

$$\ln \frac{m_{t,c}^{US}}{m_{t,c}^{W}} = \alpha_t + \alpha_c + \beta_1 US\,any_{t,c} + \eta_1 I_{t,c}^{Pre} + \eta_2 I_{t,c}^{Post} + \sum_{n=1}^{N} \gamma_n \ln \frac{m_{t-n,c}^{US}}{m_{t-n,c}^{W}} + X_{t,c}\Gamma + \varepsilon_{t,c} \qquad (3)$$

Estimates are reported in columns 4 and 9 for indicators based a three year window, and in columns 5 and 10 for indicators based on a five year window. In all specifications, the coefficients for $US\,any_{t,c}$ remain robust and highly significant.

E. *Estimates using all Bilateral Country-Pairs*

In our baseline estimating equations, the unit of observation is a country in a year, and the dependent variable is the country's trade with the US. An alternative strategy is to examine trade between a country and every other country, and not just with the US. In other words, the unit of

observation is a bilateral country-pair, with all country-pairs included in the sample. We show here that we obtain similar results using this alternative strategy.

The estimating equation is:

$$\ln m_{t,c,e} = \alpha_t + \alpha_{c,e} + \beta_1 US\,any_{t,c} + \beta_2 US\,any_{t,c} \times I_e^{US} + \gamma_n \sum_{n=1}^{N} \ln m_{t-n,c,e} + X_{t,c}\Gamma + X_{t,e}\Omega + \varepsilon_{t,c,e} \quad (4)$$

where t indexes years, c indexes importers, and e indexes exporters. The dependent variable is the natural log of imports shipped by exporting country e into importing country c in year t. As before we include the variable $US\,any_{t,c}$ which equals one if the importing country c experiences a CIA intervention in year t. However, because we now include all country-pairs in the sample, we allow the effect of the interventions on imports to differ depending on whether the exporter is the US or not. To capture this potential differential effect we also include $US\,any_{t,c} \times I_e^{US}$ in the estimating equation, where I_e^{US} is an indicator variable that equals one if the exporting country is the US.

Equation (4) includes country-pair fixed effects, time-period fixed effects, as well as lags of the dependent variable. Also, we control for our full set of importer covariates, denoted by $X_{t,c}$, and the same set of covariates for the exporter, $X_{t,e}$.

We also estimate the same equation, but examine the effect of US interventions in country c on exports from country c to importing countries, indexed by m:

$$\ln x_{t,c,m} = \alpha_t + \alpha_{c,m} + \beta_1 US\,any_{t,c} + \beta_2 US\,any_{t,c} \times I_m^{US} + \sum_{n=1}^{N} \gamma_n \ln x_{t-n,c,m} + X_{t,c}\Gamma + X_{t,m}\Omega + \varepsilon_{t,c,m}$$

$$(5)$$

Estimation results are reported in table 8. Columns 1–4 report estimates of equation (4) and columns 5–8 report estimates of (5). The odd numbered columns include all countries in the sample, while the even numbered columns only include autocratic importers (in columns 2 and 4) or autocratic exporters (in columns 6 and 8). In columns 1, 2, 5 and 6 the dependent variable is the natural log of the value of trade, while in 3, 4, 7 and 8, the dependent variable is the natural log of the world trade share.

Estimates of equations (4) and (5) provide results that are qualitatively identical to the baseline estimates from equations (1) and (2). US interventions cause no increase in imports from non-US countries, but cause a clear increase in imports from the US. These effects are also stronger if we look only at importers that are autocratic. The estimates also show no consistent and robust effect of CIA interventions on average exports and exports to the US.

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Table 8: Results using the full sample of bilateral country-pairs.

	ln imports		ln (imports / world imports)		ln exports		ln (exports / world exports)	
	Full sample	Autocracies	Full sample	Autocracies	Full sample	Autocracies	Full sample	Autocracies
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
US any	0.023	0.013	0.008	-0.005	0.008	-0.009	-0.003	-0.032*
	(0.010)	(0.016)	(0.010)	(0.016)	(0.010)	(0.018)	(0.010)	(0.018)
US any × *US exporter*	**0.132***	**0.201***	**0.122**	**0.208***				
	(0.055)	**(0.083)**	**(0.054)**	**(0.081)**				
US any × *US importer*					**0.046**	**0.106**	**0.021**	**0.092**
					(0.057)	**(0.094)**	**(0.057)**	**(0.094)**
Two lags of dependent variable	Y	Y	Y	Y	Y	Y	Y	Y
ln per capita income (importer and exporter)	Y	Y	Y	Y	Y	Y	Y	Y
ln total income (importer and exporter)	Y	Y	Y	Y	Y	Y	Y	Y
Leader turnover, leader tenure (importer and exporter)	Y	Y	Y	Y	Y	Y	Y	Y
GATT and NY convention (importer and exporter)	Y	Y	Y	Y	Y	Y	Y	Y
Polity fixed effects (importer and exporter)	Y	Y	Y	Y	Y	Y	Y	Y
Soviet intervention controls	Y	Y	Y	Y	Y	Y	Y	Y
Country-pair fixed effects	Y	Y	Y	Y	Y	Y	Y	Y
Year fixed effects	Y	Y	Y	Y	Y	Y	Y	Y
R-squared	0.91	0.89	0.90	0.88	0.91	0.88	0.90	0.88
Observations	174,038	84,339	174,038	84,339	174,038	79,510	174,038	79,510

Notes: The unit of observation is a country-pair in year *t*, where *t* ranges from 1947 to 1989. All regressions include year fixed effects, country-pair fixed effects, a full set of Soviet intervention controls, ln importer per capita income, ln exporter per capita income, ln importer total income, ln exporter total income, an indicator for importer leader turnover, an indicator for exporter leader turnover, importer current leader tenure, exporter current leader tenure, indicator variable for the importer being a GATT member, indicator variable for the exporter being a GATT member, indicator variable for the importer signing the NY convention, an indicator variable for the exporter signing the NY convention, importer Polity fixed effects, and exporter Polity fixed effects. Coefficients are reported with robust standard errors in brackets. ***, **, and * indicate significance at the 1, 5 and 10% levels.

5. Testing Alternative Explanations

A. *Are Increased Imports Driven by Trade Costs? Using Revealed Comparative Advantage*

To this point we have documented a robust relationship between CIA interventions and increased imports from the US. In an attempt to distinguish between explanations for this increase, we now move to the industry level and examine which industries experience the greatest surge in imports from the US following an intervention. According to the trade costs explanation, the increase in US imports was the result of decreased trade costs between the US and the intervened country. Because of the lower trade costs, trade rose. If this is the mechanism, then the increase in imports from the US would be in industries in which the US has a comparative advantage. This is the prediction from any model of international trade. With a movement towards free trade, countries increasingly export the goods they are relatively good at producing and import the goods they are relatively bad at producing. If interventions led to decreased trade costs and increased integration, then the increase in US imports should be in the industries in which the US is relatively good at producing.

Testing this prediction of the trade costs explanation requires a measure of US competitiveness across industries. For this, we use Balassa's (1965) measure of revealed comparative advantage

(RCA), which captures the degree of specialization of a country in a particular industry. The measure is:

$$RCA_{t,c,i} = \frac{x_{t,c,i}}{\sum_c x_{t,c,i}} \bigg/ \frac{\sum_i x_{t,c,i}}{\sum_i \sum_c x_{t,c,i}} \tag{6}$$

where $x_{t,c,i}$ denotes exports from country c in industry i and year t. The measure is a ratio of two ratios. The first ratio (i.e., the numerator) is country c's share of world exports in industry i. The second ratio (the denominator) is country c's share of world exports in all industries. Therefore, the RCA measure compares the country's share of global exports in an industry to the same share in all industries. If the ratio is above one, then this means that the country captures a greater share of global exports in the industry than it does on average. This is then taken as an indicator that the country has a comparative advantage in producing that good. If the ratio is less than one, then the country captures less of the world export share than its average, and therefore the country has a comparative disadvantage in producing this good.

To provide a reader with a sense of the constructed RCA measures, table 9 reports the RCA measures for the US in 1962 for all 2-digit SITC (Standard International Trade Classification) industries. Overall, the measures are consistent with intuition. The US has low export shares in low-end manufacturing industries like beverages, footwear, and textiles, and high export shares in high-end industries like transport equipment, scientific equipment, chemicals, and also firearms.

We use the RCA measures to test whether following an intervention the increase in imports was greatest in the industries in which the US had a comparative advantage. We test this with the following estimating equation:

$$
\begin{aligned}
\ln m_{t,c,i}^{US} =\ & \alpha_t + \alpha_c + \alpha_i + \beta_1 US\,any_{t,c} + \beta_2 US\,any \times US\,RCA_{t,i} + \beta_3 US\,any_{t,c} \times Importer\,RCA_{t,c,i} \\
& + \beta_4 US\,RCA_{t,i} + \beta_5 Importer\,RCA_{t,c,i} + \sum_{n=1}^{N} \gamma_n \ln m_{t-n,c,i}^{j} + X_{t,c}\Gamma + \varepsilon_{t,c,i}
\end{aligned}
\tag{7}
$$

In equation (7) the unit of observation is a year t, a country c, and an industry i. The dependent variable is the natural log of imports into country c in industry i from the United States. The regression includes year fixed effects, country fixed effects, and industry fixed effects, as well as the full set of covariates. As before, $US\,any_{t,c}$ denotes our composite indicator that equals one if there is an intervention in year t in country c. We allow the effect of an intervention to differ depending on the comparative advantage of the importing country and the comparative advantage of the United

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Table 9: US revealed comparative advantage (RCA) in 1962.

US RCA in 1962	sitc2	Description
0.043	11	Beverages
0.065	07	Coffee, tea, cocoa, spices and manufactures thereof
0.083	03	Fish and fish preparations
0.101	06	Sugar, sugar preparations and honey
0.108	85	Footwear
0.146	00	Live animals
0.227	91	Scrap and waste
0.308	33	Petroleum and petroleum products
0.314	63	Wood and cork manufactures excluding furniture
0.377	01	Meat and meat preparations
0.386	84	Clothing
0.415	24	Wood, lumber and cork
0.442	34	Gas, natural and manufactured
0.456	65	Textile yarn, fabrics, made up articles, etc.
0.468	02	Dairy products and eggs
0.469	68	Non ferrous metals
0.471	29	Crude animal and vegetable materials, nes
0.503	64	Paper, paperboard and manufactures thereof
0.510	28	Metalliferous ores and metal scrap
0.538	66	Non metallic mineral manufactures, nes
0.545	67	Iron and steel
0.559	83	Travel goods, handbags and similar articles
0.579	05	Fruit and vegetables
0.619	25	Pulp and paper
0.645	21	Hides, skins and fur skins, undressed
0.723	27	Crude fertilizers and crude minerals, nes
0.736	82	Furniture
0.740	61	Leather, leather manufactures nes and dressed fur skins
0.740	23	Crude rubber including synthetic and reclaimed
0.778	26	Textile fibres, not manufactured, and waste
0.800	08	Feed stuff for animals excluding unmilled cereals
0.819	53	Dyeing, tanning and colouring materials
0.836	56	Fertilizers, manufactured
0.909	81	Sanitary, plumbing, heating and lighting fixtures
0.910	88	Photographic apparatus, optical goods, watches
1.003	43	Animal and vegetable oils and fats, processed
1.137	42	Fixed vegetable oils and fats
1.155	62	Rubber manufactures, nes
1.203	52	Crude chemicals from coal, petroleum and gas
1.207	69	Manufactures of metal, nes
1.263	54	Medicinal and pharmaceutical products
1.294	55	Perfume materials, and toilet and cleansing products
1.335	57	Explosives and pyrotechnic products
1.343	76	Telecommunications and sound recording apparatus
1.373	77	Electrical machinery, apparatus and appliances nes
1.547	78	Road vehicles
1.555	51	Chemical elements and compounds
1.562	09	Miscellaneous food preparations
1.598	89	Miscellaneous manufactured articles, nes
1.626	22	Oil seeds, oil nuts and oil kernels
1.650	72	Electrical machinery, apparatus and appliances
1.654	35	Machinery, except electrical
1.669	74	General industrial machinery, equipment and parts
1.685	58	Artificial resins and plastic materials, etc.
1.701	75	Office machines and automatic data processing equipment
1.788	71	Machinery, other than electric
1.877	12	Tobacco and tobacco manufactures
1.927	04	Cereals and cereal preparations
1.976	41	Animal oils and fats
1.977	73	Transport equipment
2.058	59	Chemical materials and products, nes
2.207	87	Professional, scientific and controlling instruments
2.240	32	Coal, coke and briquettes
2.435	79	Other transport equipment
3.133	95	Firearms of war and ammunition

Table 10: Testing the trade costs and influence explanations for increased US imports: Using revealed comparative advantage.

	Full sample						Autocracies only					
	SITC 2-digit industries		SITC 3-digit industries		SITC 4-digit industries		SITC 2-digit industries		SITC 3-digit industries		SITC 4-digit industries	
	ln imports from US	ln US import share	ln imports from US	ln US import share	ln imports from US	ln US import share	ln imports from US	ln US import share	ln imports from US	ln US import share	ln imports from US	ln US import share
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
US any	0.081**	0.051**	0.131***	0.068***	0.126***	0.054***	0.185***	0.085**	0.271***	0.100***	0.281***	0.082***
	(0.034)	(0.023)	(0.031)	(0.017)	(0.030)	(0.015)	(0.059)	(0.039)	(0.054)	(0.029)	(0.057)	(0.025)
US any × US RCA	**-0.105**	**-0.213***	**-0.237***	**-0.306***	**-0.146**	**-0.245***	**-0.359***	**-0.385***	**-0.573***	**-0.424***	**-0.482***	**-0.273***
	(0.064)	**(0.056)**	**(0.070)**	**(0.059)**	**(0.068)**	**(0.056)**	**(0.087)**	**(0.078)**	**(0.105)**	**(0.091)**	**(0.107)**	**(0.090)**
US RCA	0.918***	0.911***	1.804***	1.397***	1.458***	1.338***	1.025***	1.120***	1.780***	1.305***	1.596***	1.271***
	(0.098)	(0.081)	(0.096)	(0.074)	(0.078)	(0.060)	(0.163)	(0.145)	(0.164)	(0.132)	(0.167)	(0.121)
Four lags of dependent variable	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Soviet intervention control	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Importer RCA and interaction	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
ln income per capita, ln total income	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Leader turnover, leader tenure	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
GATT and NY convention controls	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Polity fixed effects	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Country fixed effects	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Year fixed effects	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Industry fixed effects	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
R-squared	0.91	0.81	0.88	0.80	0.88	0.80	0.88	0.76	0.84	0.74	0.83	0.73
Clusters (country-year pairs)	2,525	2,525	2,453	2,453	2,379	2,379	1,556	1,556	1,499	1,499	1,446	1,446
Observations	95,762	95,762	228,094	228,094	342,378	342,378	47,744	47,744	96,591	96,591	120,897	120,897

Notes: The unit of observation is a country c in year t in an SITC industry i, where t ranges from 1962 to 1989. All regressions include year fixed effects, country fixed effects, industry fixed effects, four lags of the dependent variable, importer RCA, importer RCA interacted with *US any*, ln per capita income and one lag, and ln aggregate income and one lag, an indicator for leader turnover, a measure of current leader tenure, an indicator variable for a GATT member, and an indicator variable for signing the NY convention. Coefficients are reported with standard errors clustered at the country-year level in brackets. ***, **, and * indicate significance at the 1, 5 and 10% levels.

States. The variables that measure either country's comparative advantage in the production of good i in year t are denoted $US\,RCA_{t,i}$ and $Importer\,RCA_{t,c,i}$.[11]

If the increase in imports is from a decrease in transactions costs, then we expect $\beta_2 > 0$. The increase in US imports should be greater in industries in which the US has a comparative advantage. As is standard in any model of trade, increased integration causes countries to specialize in (and export) the products that they are relatively good at producing.

If the increase in trade does not arise because of comparative advantage then we no longer expect $\beta_2 > 0$. That is, we do not expect the increase to be greatest in industries in which it already has a comparative advantage in. Instead, the US may push to sell goods for which it is only marginally competitive in producing, and otherwise would not be able to find a market for. In this case we expect $\beta_2 \leq 0$. Therefore, the estimated coefficient for β_2 provides a test between the trade costs and influence explanations.

Estimates of equation (7) are reported in table 10. Columns 1–6 report estimates for the full sample, while columns 7–10 report estimates for autocracies only. To be as conservative as possible, we cluster all standard errors at the country-year level. We report estimates where the industry is defined by the 2-digit, 3-digit and 4-digit SITC classifications.

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[11]To allow an easy interpretation of the magnitudes of the estimated effects, we have normalized $US\,RCA_{t,i}$ and $Importer\,RCA_{t,c,i}$ to lie between zero and one by subtracting the minimum value of the variable and then dividing by the maximum value.

In all specifications, the estimated coefficient for *US any × US RCA* is negative and statistically significant, indicating that interventions increase imports less in industries in which the US has a comparative advantage. In other words, US interventions have a systematically greater effect on imports in industries in which the US has a relative disadvantage not a relative advantage, as would occur if the increased imports arose because of a decrease in trade costs.

A potential criticism of our use of the RCA measure is that it does not distinguish between the US exports to developed countries (DC) and exports to less developed countries (LDC). The two groups of countries may represent different markets for the US. To illustrate how this could affect the results, assume that in each industry the US specializes either in products to serve the markets of LDCs or products to served DCs. Because the market size of LDCs is much smaller than of DCs, when the US serves the LDC market, its share of total world exports is low and its measure of RCA is also low. Interventions decrease trade costs between the US and the intervened LDCs. This causes the US to increasingly specialize in the export of products to these countries. Therefore, imports from the US increase most in industries with a low measure of RCA.

According to this explanation, the failure of the test results because we are incorrectly measuring RCA. Rather than measuring US RCA for exports to the entire world, we should be constructing a measure of RCA based on US exports to LDCs only. To test for this possibility we construct an alternative measure of US RCA that only looks at the relative share of US exports to LDCs rather the relative share of US exports to all countries. We define the LDC market to be all countries other than Australia, Belgium, Canada, Switzerland, West Germany, Denmark, Great Britain, Italy, France, Finland, Japan, Luxembourg, Norway, Netherlands, New Zealand, Portugal, Spain, and Sweden.

Table 11 reports the estimates of the specifications from table 10 using the alternative measure of US RCA.[12] The results are nearly identical using this alternative measure of RCA.

Overall, there is strong evidence that the increase in US imports following an intervention was not caused by a decrease in trade costs between the US and the intervened country.

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[12]We also construct our measure of foreign RCA using the relative LDC export market share rather than the world market share.

Table 11: Testing the trade costs and influence explanations for increased US imports: Using revealed comparative advantage.

	Full sample						Autocracies only					
	SITC 2-digit industries		SITC 3-digit industries		SITC 4-digit industries		SITC 2-digit industries		SITC 3-digit industries		SITC 4-digit industries	
	ln imports from US	ln US import share	ln imports from US	ln US import share	ln imports from US	ln US import share	ln imports from US	ln US import share	ln imports from US	ln US import share	ln imports from US	ln US import share
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
US any	0.082**	0.055**	0.135***	0.070***	0.124***	0.051***	0.185***	0.090**	0.269***	0.100***	0.265***	0.070***
	(0.034)	(0.024)	(0.031)	(0.017)	(0.031)	(0.015)	(0.059)	(0.039)	(0.054)	(0.029)	(0.057)	(0.026)
US any × *US RCA*	**-0.152***	**-0.299***	**-0.239***	**-0.286***	**-0.125***	**-0.195***	**-0.461***	**-0.520***	**-0.489***	**-0.377***	**-0.320***	**-0.167***
	(0.084)	**(0.074)**	**(0.063)**	**(0.054)**	**(0.068)**	**(0.056)**	**(0.114)**	**(0.104)**	**(0.095)**	**(0.084)**	**(0.106)**	**(0.090)**
US RCA	1.160***	1.245***	1.551***	1.287***	0.986***	1.133***	1.273***	1.532***	1.435***	1.213***	0.783***	1.012***
	(0.128)	(0.106)	(0.103)	(0.074)	(0.190)	(0.133)	(0.208)	(0.187)	(0.164)	(0.126)	(0.250)	(0.171)
Four lags of dependent variable	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Soviet intervention control	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
ln income per capita, ln total income	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Leader turnover, leader tenure	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
GATT and NY convention controls	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Polity fixed effects	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Country fixed effects	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Year fixed effects	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Industry fixed effects	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
R-squared	0.91	0.81	0.88	0.80	0.88	0.80	0.88	0.76	0.84	0.74	0.83	0.73
Clusters (country-year pairs)	2,525	2,525	2,453	2,453	2,379	2,379	1,556	1,556	1,499	1,499	1,446	1,446
Observations	95,762	95,762	228,094	228,094	342,378	342,378	47,744	47,744	96,591	96,591	120,897	120,897

Notes: The unit of observation is a country *c* in year *t* in an SITC industry *i*, where *t* ranges from 1962 to 1989. All regressions include year fixed effects, country fixed effects, industry fixed effects, four lags of the dependent variable, ln per capita income and one lag, and ln aggregate income and one lag, an indicator for leader turnover, a measure of current leader tenure, an indicator variable for GATT membership, an indicator variable for signing the NY convention, and Polity fixed effects. Coefficients are reported with standard errors clustered at the country-year level in brackets. ***, **, and * indicate significance at the 1, 5 and 10% levels.

B. *Are Increased Imports Driven by Political Ideology?*

We now test the ideology explanation for the increase in US imports following an intervention. It is possible that countries prefer to import goods from countries with political ideologies more aligned to their own.[13] If this is the case, then the increase in imports from the US can be explained by a change in the ideology of the intervened country following an intervention. Under this explanation, the increase in imports from the US arises not because of US influence, but because the new regime has an ideology that is more aligned with the US. Imports from all ideologically similar countries increases, and the US just happens to be one of these countries.

To test this possibility, we use voting information from the UN general assembly to construct a measure of the similarity of countries' ideologies and preferences.[14] We take the voting position of the US as a references point. Define $d_{t,c}$ to be the vote distance between country *c* and the US in year *t*, and let d_t^{max} be the maximum possible vote distance in year *t*. We then construct the following measure of country *c*'s vote distance from the US in year *t*:

$$V_{t,c}^{US} \equiv 1 - 2\frac{d_{t,c}}{d_t^{max}}$$

We normalize $V_{t,c}^{US}$ to lie between zero and one.[15] We use the measure to test whether following US interventions, imports from countries that are ideologically similar to the US also increased. We

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[13] Evidence for this during the post-Cold War period has been provided by Gupta and Yu (2009).

[14] The data are from Gartzke (2006).

[15] This is done by subtracting the minimum value and dividing by the maximum value.

test this by returning to our import estimating equation with all bilateral observations, equation (4), but allowing the effect of the interventions to not only differ for imports from the US, but to differ systematically for imports from other countries using $V^{US}_{t,c}$. We do this by including the interaction of $V^{US}_{t,e}$ and $US\,any_{t,c}$ in the estimating equation. This allows for the possibility that imports from countries that are ideologically similar to the US also increased following an intervention. If the ideology explanation is correct, then we expect the coefficient on this term to be positive and significant. The estimating equation is given by:

$$
\begin{aligned}
\ln m_{t,c,e} =\ & \alpha_t + \alpha_{c,e} + \beta_1 US\,any_{t,c} + \beta_2 US\,any_{t,c} \times I^{US}_e + \beta_3 US\,any_{t,c} \times V^{US}_{t,e} + \beta_4 V^{US}_{t,e} \\
& + \sum_{n=1}^{N} \gamma_n \ln m_{t-n,c,e} + X_{t,c}\Gamma + X_{t,e}\Omega + \varepsilon_{t,c,e}
\end{aligned}
\tag{8}
$$

As before, our coefficient of interest is β_2. We are also interested in β_3, which captures whether following an intervention imports from countries that are ideologically similar to the US also increase. In the equation we also control directly for any potential relationship between voting alignment on imports from the US $V^{US}_{t,e}$.

Estimation results are reported in the first four columns of table 12. The estimates for β_2 remain robust to the inclusion of the new interaction term. The coefficients remain positive and significant, and their magnitudes barely change.[16] Also of interest is whether imports also increased for countries ideologically closer to the US. The estimates suggest that the answer is no. In three of the four specifications, the coefficient for the interaction term β_3 is actually negative, which implies an increase in ideological similarity with the US resulted in a smaller, not larger, increase in trade following a US intervention.

The remaining columns of table 12 report results using an alternative measure of country c's alignment with the US. Rather than using UN voting data, we measure $V^{US}_{t,c}$ with an indicator variable that equals one if country c was an original 1949 member of NATO. The estimates are similar using the alternative measure. The effect of US interventions on US imports into the intervened country remains robust. Further, there was no increase in imports from non-US NATO countries following a US intervention.

In all, the data do not support the hypothesis that the increase in US imports arose because the newly installed leaders were more pro-Western or pro-Capitalist. The increase in imports was US

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[16]The coefficients in columns 1–4 of table 12 can be compared to columns 1–4 of table 8. The only difference between the two estimates, besides the inclusion of $V^{US}_{t,c}$ and $US\,any_{t,c} \times V^{US}_{t,e}$, is a slightly different number of observations because of missing UN voting data.

Table 12: Testing for Ideology and Preferences.

	ln imports		ln (imports / world imports)		ln imports		ln (imports / world imports)	
	All	Autocracies	All	Autocracies	All	Autocracies	All	Autocracies
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
US any	0.054**	0.105**	0.086**	0.001	0.020	0.009	0.009	-0.007
	(0.031)	(0.044)	(0.031)	(0.043)	(0.011)	(0.018)	(0.011)	(0.017)
US any × *US exporter*	**0.143***	**0.222***	**0.151***	**0.204***	**0.122**	**0.189**	**0.125**	**0.202**
	(0.056)	**(0.085)**	**(0.056)**	**(0.083)**	**(0.057)**	**(0.086)**	**(0.057)**	**(0.084)**
US any × *US alignment of exporter*	-0.033	-0.112***	-0.096*	-0.003				
	(0.037)	(0.052)	(0.036)	(0.051)				
US alignment of exporter	0.139***	0.003	0.179***	-0.093**				
	(0.030)	(0.052)	(0.029)	(0.052)				
US any × *Original NATO member*					0.013	0.017	-0.004	0.008
					(0.021)	(0.031)	(0.021)	(0.030)
Two lags of dependent variable	Y	Y	Y	Y	Y	Y	Y	Y
ln per capita income (importer and exporter)	Y	Y	Y	Y	Y	Y	Y	Y
ln total income (importer and exporter)	Y	Y	Y	Y	Y	Y	Y	Y
Leader turnover, leader tenure (importer and exporter)	Y	Y	Y	Y	Y	Y	Y	Y
GATT and NY convention (importer and exporter)	Y	Y	Y	Y	Y	Y	Y	Y
Polity fixed effects (importer and exporter)	Y	Y	Y	Y	Y	Y	Y	Y
Soviet intervention control	Y	Y	Y	Y	Y	Y	Y	Y
Country-pair fixed effects	Y	Y	Y	Y	Y	Y	Y	Y
Year fixed effects	Y	Y	Y	Y	Y	Y	Y	Y
R-squared	0.91	0.89	0.90	0.88	0.91	0.89	0.90	0.88
Observations	162,643	78,837	162,643	78,837	174,038	84,339	174,038	84,339

Notes: The unit of observation is a country-pair in year t, where t ranges from 1947 to 1989. All regressions include year fixed effects, country-pair fixed effects, a full set of Soviet intervention controls, ln importer per capita income, ln exporter per capita income, ln importer total income, ln importer total income, an indicator for importer leader turnover, an indicator for exporter leader turnover, importer current leader tenure, exporter current leader tenure, indicator variable for the importer being a GATT member, indicator variable for the exporter being a GATT member, indicator variable for the importer signing the NY convention, and an indicator variable for the exporter signing the NY convention, importer Polity fixed effects, and exporter Polity fixed effects. Coefficients are reported with robust standard errors in brackets. ***, **, and * indicate significance at the 1, 5 and 10% levels.

specific, and there was no increase in imports from countries that were ideologically similar to the US.

C. *Are Increased Imports Driven by an Increase in US Loans and Grants?*

If interventions are followed by an increase in US foreign aid, particularly tied or conditional aid, then this may be an alternative channel through which interventions may have affected US imports.[17] To examine this empirically, we use data on the value of US foreign aid received by each country from the U.S. Agency for International Development's (USAID) *U.S. Overseas Loans and Grants, Obligations and Loan Authorizations* annual report, also known simply as the "Green Book". The aid data are disaggregated into 'Economic Aid' (which includes grants and concessional loans), 'Military Aid' (which includes grants, concessional loans, and training), and 'Food Aid'.[18]

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[17]The fact that US imports increased most in low US-RCA industries suggests that if this explanation is correct, then the provision of grants and loans were used to promote US sales in industries in which US firms were less competitive. This would also be an interesting and important finding.

[18]An important point to bear in mind is that because the evidence suggests that the increase in US trade comes about from trade diversion, our interest in foreign aid is not as a 'new' source of funding for US imports.

Table 13: The effect of Interventions on US Loans and Grants.

	Full sample				Autocracies only			
	Economic aid	Military aid	Food aid	Ex-Im Bank loans	Economic aid	Military aid	Food aid	Ex-Im Bank loans
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
US any	0.332***	0.422***	0.194**	0.353**	0.485***	0.704***	0.358***	0.586***
	(0.104)	(0.107)	(0.101)	(0.179)	(0.146)	(0.169)	(0.139)	(0.217)
Two lags of dependent variable	Y	Y	Y	Y	Y	Y	Y	Y
Soviet intervention controls	Y	Y	Y	Y	Y	Y	Y	Y
ln per capita income, ln total income	Y	Y	Y	Y	Y	Y	Y	Y
Leader turnover, leader tenure	Y	Y	Y	Y	Y	Y	Y	Y
GATT, NY convention controls	Y	Y	Y	Y	Y	Y	Y	Y
Polity fixed effects	Y	Y	Y	Y	Y	Y	Y	Y
Country fixed effects	Y	Y	Y	Y	Y	Y	Y	Y
Year fixed effects	Y	Y	Y	Y	Y	Y	Y	Y
R-squared	0.87	0.86	0.83	0.47	0.84	0.84	0.79	0.50
Observations	3,777	3,777	3,777	3,777	2,232	2,232	2,232	2,232

Notes: The unit of observation is a country c in year t, where t ranges from 1947 to 1989. All regressions include year fixed effects, country fixed effects, a Soviet intervention control, two lags of the dependent variable, ln per capita income, ln total income, an indicator for leader turnover, current leader tenure, an indicator variable for GATT membership, an indicator variable for signing the NY convention, and Polity fixed effects. Coefficients are reported with robust standard errors in brackets. ***, **, and * indicate significance at the 1, 5 and 10% levels.

As a test of whether the increase in US imports is explained by an increase in US foreign aid, we check if US foreign aid increased following CIA interventions, and if the changes in foreign aid are able to explain the increase in US imports that followed CIA interventions. Results testing whether CIA interventions were followed by increases in foreign aid are reported in table 13. The table reports estimates of our baseline estimating equation (1), but with measures of US loans and grants as dependent variables. Columns 1 and 5 report estimates when the dependent variable is the natural log of the dollar value of US economic aid provided to country c in year t. Columns 2 and 6 report results for military aid, and columns 3 and 7 report results for food aid. The results show that all forms of US aid tended to increase following CIA interventions.

We also examine loans given by the Export-Import Bank (Ex-Im Bank) of the United States. The mandate of the Bank is to provide loans to foreign firms wanting to import US products. Because the Bank only provides loans that would not be provided by private lenders, they enable foreign customers to purchase US goods, thereby increasing US exports. Columns 4 and 8 of table 13 show that Ex-Im Bank loans to the intervened country increased following US interventions.

Table 14 reports estimates that show whether the increase in foreign aid is able to account for the increase in US imports following an intervention. We do this by estimating (1) while controlling for the amount of US loans and grants received by a country in a year. Our baseline estimates without additional controls are reported in columns 1 and 6. In columns 2 and 7, we include

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Table 14: Accounting for US Loans and Grants.

	ln US import share									
	Full sample					Autocracies only				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
US any	0.099***	0.083***	0.090***	0.097***	0.079***	0.166***	0.144***	0.152***	0.158***	0.133***
	(0.029)	(0.028)	(0.028)	(0.029)	(0.028)	(0.050)	(0.049)	(0.050)	(0.049)	(0.048)
ln (1+US economic aid)		0.019***			0.012***		0.030***			0.021***
		(0.004)			(0.004)		(0.007)			(0.007)
ln (1+US military aid)		0.000			0.000		0.001			0.002
		(0.003)			(0.003)		(0.001)			(0.006)
ln (1+US food aid)			0.022***		0.015***			0.029***		0.018***
			(0.004)		(0.004)			(0.006)		(0.006)
ln (1+Ex-Im Bank loans)				0.005***	0.005**				0.011***	0.011***
				(0.002)	(0.002)				(0.003)	(0.003)
Two lags of dependent variable	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Soviet intervention controls	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
ln per capita income, ln total incom	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Leader turnover, leader tenure	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
GATT, NY convention controls	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Polity fixed effects	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Country fixed effects	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Year fixed effects	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
R-squared	0.88	0.88	0.88	0.88	0.88	0.85	0.85	0.85	0.85	0.85
Observations	3,778	3,778	3,778	3,778	3,778	2,233	2,233	2,233	2,233	2,233

Notes: The unit of observation is a country *c* in year *t*, where *t* ranges from 1947 to 1989. All regressions include year fixed effects, country fixed effects, a Soviet intervention control, two lags of the dependent variable, ln per capita income, ln total income, an indicator for leader turnover, current leader tenure, an indicator variable for GATT membership, an indicator variable for signing the NY convention, and Polity fixed effects. Coefficients are reported with robust standard errors in brackets. ***, **, and * indicate significance at the 1, 5 and 10% levels.

our measures of economic and military aid. Economic aid enters with a positive and significant coefficient, while military aid enters with positive, but insignificant coefficients. This suggests that part of US economic aid is used to purchase US products. The insignificant coefficient for military aid is not surprising, since much of military aid goes to supporting overseas US personnel, and these goods are not included in IMF DOT statistics (Fund, 1993). In columns 3 and 8 we control for food aid. Columns 4 and 9 report estimates controlling for Import-Export Bank loans received. Both variables enter with positive and significant coefficients.

Lastly, in the columns 5 and 9, we simultaneously control for all measures of US grants and loans. Controlling for the variables together has the largest impact on the the estimated coefficient for *US any*. However, the size of the declines of the coefficient magnitudes is modest. The coefficient magnitudes are reduced by about 20% for both the full sample and the smaller sample of autocracies. These results suggest that although increased in US loans and grants are able to explain some of the reduced form effect we have identified, it is a modest proportion of the total.

Table 15: Differential effects by government size for autocracies.

	ln (imports from US / imports from world)				ln imports from US			
	All countries		Autocracies		All countries		Autocracies	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
US any	0.115***	-0.055	0.191***	-0.083	0.118***	-0.063	0.202***	-0.048
	(0.031)	(0.057)	(0.057)	(0.093)	(0.034)	(0.066)	(0.060)	(0.103)
US any x Government expenditure share		0.844**		1.241***		0.893**		1.136**
		(0.305)		(0.441)		(0.343)		(0.474)
Government expenditure share	N	Y	N	Y	N	Y	N	Y
Two lags of dependent variable	Y	Y	Y	Y	Y	Y	Y	Y
Soviet intervention control	Y	Y	Y	Y	Y	Y	Y	Y
ln per capita income, ln total income	Y	Y	Y	Y	Y	Y	Y	Y
Leader turnover, leader tenure	Y	Y	Y	Y	Y	Y	Y	Y
GATT and NY convention controls	Y	Y	Y	Y	Y	Y	Y	Y
Polity fixed effects	Y	Y	Y	Y	Y	Y	Y	Y
Country fixed effects	Y	Y	Y	Y	Y	Y	Y	Y
Year fixed effects	Y	Y	Y	Y	Y	Y	Y	Y
R-squared	0.91	0.91	0.89	0.89	0.97	0.98	0.96	0.96
Observations	3,373	3,373	1,944	1,944	3,373	3,373	1,944	1,944

Notes: The unit of observation is a country *c* in year *t*, where *t* ranges from 1947 to 1989. All regressions include year fixed effects, country fixed effects, a Soviet intervention control, two lags of the dependent variable, ln per capita income, ln total income, government expenditure share, an indicator for leader turnover, current leader tenure, an indicator variable for GATT membership, an indicator variable for signing the NY convention, and Polity fixed effects. Coefficients are reported with robust standard errors in brackets. ***, **, and * indicate significance at the 1, 5 and 10% levels.

6. Examining Potential Mechanisms

A. *Government Production*

The first channel we consider is the possibility that US influence worked, at least in part, through government owned and controlled entities. The US may have directly influenced the imports of these firms. We test for this channel by examining whether the estimated impact of CIA interventions on imports from the US is stronger in countries where the government controls a greater share of the economy. We proxy for a government's control in a particular time period using the share of government expenditures in GDP, taken from the Penn World Tables Mark 6.2.

The estimates are reported in table 15. Because the data on government expenditure share are unavailable for all countries, and are only available from 1950 onwards, our sample size is reduced to 3,429 observations in our full sample, and 1,944 observations in our sample of autocracies. The odd numbered columns of the table reproduce the baseline estimates with the smaller sample size. The even numbered columns report estimates that allow the effect of CIA interventions to differ depending on the government's share of GDP. As shown, the interaction between *US any* and the share of government expenditure share is positive and statistically significant.

To get a sense of the magnitude of the heterogeneity, first note that the government expenditure

share variable ranges from .03 (i.e., 3%) to .73, and has a mean value of .21. Consider the estimation results for the full sample with the log of the US import share as the dependent variable (reported in columns 1 and 2). For the mean observation in the sample, the estimated effect of CIA interventions on the US import share is $-.041 + .21 \times .775 = .122$. This is very close to the estimated coefficient of .114 from column 1, where the effect is constrained to be the same for all observations. For the observation with the lowest level of government intervention, the estimated effect is $-.041 + .03 \times .775 = -.018$, which is not statistically different from zero. For the observation with the greatest government expenditure share, the estimated effect is $-.041 + .73 \times .775 = .525$. Therefore, there is substantial heterogeneity in the effects of CIA interventions. The effect of an intervention ranges from (essentially) zero to an increase of 52.5 percent.

The coefficient for *US any* is also of interest. It provides the estimated effect of US interventions for a hypothetical country with zero government expenditure. Conceptually, the coefficient reports the estimated effect of interventions after shutting down the channel that works through the government. Although this interpretation relies strongly on the structural form of the estimating equation, it is still informative. In all four estimates, the estimated coefficient is not statistically different from zero, suggesting that there is no additional effects of interventions other than through government expenditures.

Overall, the estimates of table 15 indicate that a large portion, and possibly all, of the effect of CIA interventions worked through the foreign government.[19]

B. *US Foreign Direct Investment*

It is possible that US-owned firms in foreign countries, either because of network effects or a home-market bias, import disproportionately more from the US than from other countries. If US interventions increased US foreign ownership (FDI), then the increase in imports we observe may be caused by an increase in US outward FDI.

Using data from the BEA we examine whether interventions were followed by increases in US FDI in the intervened country. The estimates, using a number of different measures of outward US

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[19]An interesting and related question is whether interventions affected government expenditure shares. Estimates suggest that US interventions had zero effect on the share of government expenditures, but Soviet interventions had a large positive and statistically significant effect. These estimates are completely consistent with the motivations of both sides during the Cold War. The aim of the US was to prevent communism, socialism, or similar forms of governance involving strong government involvement in the economy. Therefore, we would not expect government expenditures to increase after CIA interventions, even given the benefit that we document here. On the other hand, we would expect Soviet interventions to promote greater government involvement.

Table 16: Interventions, US outward FDI, and US imports.

	Full sample				Autocracies only			
	US owned foreign equity	Number of foreign affiliates	Foreign affiliate sales	Foreign affiliate employment	US owned foreign equity	Number of foreign affiliates	Foreign affiliate sales	Foreign affiliate employment
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
US any	-52.456	2.109	348.751	1.233	20.829	0.682	70.534	0.575
	(44.601)	(2.002)	(187.732)	(0.904)	(16.575)	(1.556)	(69.814)	(0.615)
Lags of the dependent variable	Y	Y	Y	Y	Y	Y	Y	Y
ln per capita income	Y	Y	Y	Y	Y	Y	Y	Y
ln total income	Y	Y	Y	Y	Y	Y	Y	Y
Leader turnover, leader tenure	Y	Y	Y	Y	Y	Y	Y	Y
Soviet intervention controls	Y	Y	Y	Y	Y	Y	Y	Y
Country fixed effects	Y	Y	Y	Y	Y	Y	Y	Y
Year fixed effects	Y	Y	Y	Y	Y	Y	Y	Y
R-squared	0.98	0.85	0.91	0.90	0.93	0.78	0.67	0.75
Observations	3,010	2,496	2,496	2,496	1,715	1,575	1,575	1,575

Notes: The unit of observation is a an autocratic country c, in year t, where t ranges from 1947 to 1989. All regressions include year fixed effects, country fixed effects, two lags of the dependent variable, ln per capita income, ln total income, an indicator for leader turnover, current leader tenure, a GATT membership indicator, an indicator for signing the NY Convention, and polity fixed effects. Coefficients are reported with standard errors in brackets. ***, **, and * indicate significance at the 1, 5 and 10% levels.

FDI, are reported in table 16. Although seven of the eight specifications report a positive coefficient for US interventions, non of the positive coefficients are statistically significant. This provides weak or no support for the notion that CIA interventions result in a subsequent increase in US FDI.

The insignificance of the estimates may be explained by the imprecision in the BEA's FDI data. The BEA only conducts a comprehensive census every 5 years. In the years between these benchmark years, smaller surveys are conducted sampling only a fraction of the total population. These smaller surveys, together with trends between the benchmark years, are used to estimate figures for the full sample. Because our identification relies strongly on year-to-year variation, the imprecision of the FDI data may result in estimates that are biased towards zero.

C. *Tariffs*

It is possible that the increase in US imports CIA interventions arose because the interventions provided the US with a greater ability to alter the tariff structure of the intervened country.[20] In this section we consider this possible mechanism.

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[20]Recent studies have provided evidence of foreign influence being an important determinant of domestic tariffs. See for example Gawande, Krishna, and Robbins (2006) and Desbordes and Vauday (2007).

Ideally, a test of this channel would rely on annual industry-level tariff measures for all countries. Unfortunately, these data are decades from being constructed. Instead, we pursue an alternative strategy using information from the *International Customs Journal* published by the International Customs Tariff Bureau (BITD). The BITD, which was established in 1890, translates and publishes countries' tariff schedules. When a country significantly change its tariff structure a new 'volume' is published. If minor changes to the tariff structure are made, then a 'supplement' to the most recent volume is published. We take the publication of a new volume as an indicator of a significant change in a country's tariff structure.

Using this information, we examine whether US interventions had a greater impact on US imports after a revision to the tariff schedule. If interventions affected US imports through tariffs, then we should observed that during intervention episodes, the greatest effects occur after the tariffs were altered. We check for this by constructing a variable that equals one if (*i*) there was a CIA intervention in country *c* and year *t*, and (*ii*) the period follows a change in the tariff structure that had occurred during that intervention episode (where an intervention episode is the years of continuous intervention in a country).

The variable is best illustrated with an example. We return to our example of Chile. Consider the intervention episode, lasting from 1964 to 1970, when Eduardo Frei was backed by the CIA. The first change in the tariff structure during this period was in 1967. Therefore, the new variable takes on the value of one between 1967 and 1970. These are the years during the intervention episode that followed a restructuring of industry tariffs. If a large portion of the effect of interventions on US imports was through a change in tariffs, then the increase in US imports should have been much stronger following the tariff changes. By including the post-tariff change intervention variable in the estimating equation, we are testing for this.

The estimates are reported in table 17. Columns 1 and 4 first report estimates of whether a US intervention increased the probability of a change in tariff structure.[21] The estimates provide no evidence of this. The remaining columns in the table report estimates of our baseline estimating equations including the new post-tariff change intervention variable. The estimates show no evidence that within intervention episodes, the periods after a tariff change experienced a greater increase in US imports. In none of the specifications is the post-tariff change intervention variable

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[21]We estimate a linear probability model. Logit and Probit models provide qualitatively identical estimates.

Table 17: Interventions, tariff changes, and US imports.

	Full sample			Autocracies only		
	Tariff change indicator	ln imports from US	ln US import share	Tariff change indicator	ln imports from US	ln US import share
	(1)	(2)	(3)	(4)	(5)	(6)
US any	0.031	0.196***	0.144***	0.017	0.267***	0.216***
	(0.029)	(0.049)	(0.044)	(0.036)	(0.070)	(0.061)
Post tariff change × US any		-0.060	-0.058		-0.054	-0.044
		(0.044)	(0.036)		(0.069)	(0.056)
Two lags of dependent variable	Y	Y	Y	Y	Y	Y
ln per capita income	Y	Y	Y	Y	Y	Y
ln total income	Y	Y	Y	Y	Y	Y
Leader turnover, leader tenure	Y	Y	Y	Y	Y	Y
GATT and NY convention controls	Y	Y	Y	Y	Y	Y
Polity fixed effects	Y	Y	Y	Y	Y	Y
Soviet intervention control	Y	Y	Y	Y	Y	Y
Country fixed effects	Y	Y	Y	Y	Y	Y
Year fixed effects	Y	Y	Y	Y	Y	Y
R-squared	0.17	0.97	0.88	0.14	0.84	0.84
Observations	2,695	3,593	3,593	1,594	2,079	2,079

Notes: The unit of observation is a country *c* in year *t*, where *t* ranges from 1947 to 1989. All regressions include year fixed effects, country fixed effects, a Soviet intervention control, two lags of the dependent variable, ln per capita income, ln total income, an indicator for leader turnover, current leader tenure, an indicator variable for GATT membership, an indicator variable for signing the NY convention, and Polity fixed effects. Coefficients are reported with robust standard errors in brackets. ***, **, and * indicate significance at the 1, 5 and 10% levels.

positive or statistically significant.

7. Conclusions

Our analysis has provided evidence that the increase in political influence that arose from CIA interventions during the Cold War were used by the US to create larger foreign markets for US products. Using a newly constructed panel data set of CIA interventions, we have shown that the interventions increased the shipments of goods from the US to intervened countries, but did not increase the flow of goods from intervened countries to the US. Further, we documented that the increase in imports from the US came at the expense of imports from other countries, and that the rise in US imports was concentrated among autocratic regimes, where we expect US influence to have had the greatest impact on policy outcomes. These findings are all consistent with the increased control arising from CIA interventions being used to create larger markets for US products in foreign countries.

We then turned to alternative explanations. The first is that the increase in US imports arose because of a decrease in trade costs between the US and the intervened country, and this caused an increase in imports from the US as the two economies became more integrated. An testable implication of this hypothesis is that the increase in US imports should have been in industries

in which the US had a comparative advantage. We show that instead the increase was greatest in industries in which the US had a comparative *dis*advantage. Although this finding is not consistent with the trade costs explanation, it is consistent with the increased control over foreign leaders being used to create a larger market for goods produced by uncompetitive US firms.

We then test the hypothesis that the increase in US imports arose because the newly installed leaders were more ideologically aligned with the US, being more pro-capitalist and more pro-Western. The US-specific increase in imports that we identified may have been part of a more general increase in imports from all countries that were more ideologically aligned with the new regime. We showed that the data do not provided support for this hypothesis. We observe no increase in imports from non-US countries with similar ideologies, measured using either NATO membership or voting behavior in the UN general assembly.

The last alternative hypothesis we considered was that the increase in US imports arose because the US provided more loans and grants to the new regime, which were tied to US products. This would have enabled, and encouraged, the intervened country to import more US products. We tested for this and found that loans and grants, measured by economic aid, military aid, and Ex-Im Bank loans did increase following an intervention. However, these are not able to account for more than 25% of the observed increase in imports.

We then turned to the channels underlying the reduced form relationship between CIA interventions and imports from the US. We found evidence that most, and possibly all, of the effect arises from the purchase of imports by government-owned firms and enterprises. This suggests that following a CIA intervention, the government was influenced to directly purchase US imports rather than imports from other countries.

Appendix A. Relationship between Empirics and the Theoretically Derived Gravity Model

This section describes the relationship between our estimating equations and the theoretically derived gravity model from Anderson and van Wincoop (2003). The standard equation for the theoretically derived gravity model is (e.g., equation (13) of Anderson and van Wincoop, 2003):

$$m_{i,j,t} = \frac{Y_{i,t} Y_{j,t}}{Y_t^W} \left[\frac{\tau_{i,j,t}}{P_{i,t} P_{j,t}} \right]^{1-\sigma} \tag{A 1}$$

$m_{i,j,t}$ denotes imports from j to i in year t. $Y_{i,t}$ is total GDP of country i in year t, Y_t^W is world GDP in year t. The parameter σ is the elasticity of substitution between all goods. $\tau_{i,j,t}$ measures bilateral trade related costs when shipping goods from j to i, and $P_{i,t}$ $P_{j,t}$ are multilateral resistance terms for countries i and j, respectively. These are complex non-linear functions of the set of $\{\tau_{i,j,t}\}$. See equation (12) of Anderson and van Wincoop (2003).

Equation (A 1) can be used to derive our estimating equations. First, consider equation (1) where the dependent variable is imports from the US into country i in year t. To derive the estimating equation, we first begin with the expression for imports the US into country i in year t taken from equation (A 1):

$$m_{i,t}^{US} = \frac{Y_{i,t}Y_t^{US}}{Y_t^W} \left[\frac{\tau_{i,t}^{US}}{P_{i,t}P_t^{US}} \right]^{1-\sigma} \tag{A 2}$$

Log linearizing the equation, gives:

$$\ln m_{i,t}^{US} = \ln Y_{it} + \ln \frac{Y_t^{US}}{Y_t^W} - (1-\sigma) \ln P_t^{US} + (1-\sigma) \ln \frac{\tau_{i,t}^{US}}{P_{i,t}} \tag{A 3}$$

Equation (A 3) is the theoretical version of our estimating equation (1). The first term in expression (A 3), $\ln Y_{it}$ is controlled for explicitly by the natural log of total income in equation (1). The second term, $\ln \frac{Y_t^{US}}{Y_t^W} - (1-\sigma) \ln P_t^{US}$, which varies across time periods, is absorbed by the year fixed effects in equation (1). The final term $(1-\sigma) \ln \frac{\tau_{i,t}^{US}}{P_{i,t}}$ is what our CIA intervention variable, $US\,any_{t,c}$, is expected to influence. Therefore, the estimated coefficient, β from (1) captures the reduced form effect of CIA interventions on trade costs with the US, $\tau_{i,t}^{US}$, and its effect on trade costs with all other countries, $P_{i,t}$.

Unlike other trade environments, like that of the famous border effect, our variable of interest not only directly affects trade costs between i and j, but also trade costs between i and all countries in the world. US interventions, for example, affected the difficulty of trade with the Soviet Union, other communist or socialist countries, and even neutral countries. Therefore, we are not able to separately identify the effect of interventions on the two terms from equation, $\tau_{i,t}^{US}$ and $P_{i,t}$. Instead we are only able to identify the reduced form, impact of CIA interventions on the relative costs of trading with the US, $\frac{\tau_{i,t}^{US}}{P_{i,t}}$.

Lastly, the additional control variables are intended to control for additional factors that may also affect the relative costs of trading with the US, and therefore may also influence $\frac{\tau_{i,t}^{US}}{P_{i,t}}$.

Now consider the variant of estimating equation (1) where the dependent variable is the natural log of imports form the US divided by total imports from the world. To see the relationship with

equation (A 1), first note that world imports are given by:

$$m_{i,t}^W = \sum_j \frac{Y_{i,t}Y_{j,t}}{Y_t^W} \left[\frac{\tau_{i,j,t}}{P_{i,t}P_{j,t}} \right]^{1-\sigma} = \frac{Y_{i,t}}{Y_t^W P_{i,t}^{1-\sigma}} \sum_j Y_{j,t} \left[\frac{\tau_{i,j,t}}{P_{j,t}} \right]^{1-\sigma} \tag{A 4}$$

Dividing (A 2) by (A 4) gives:

$$\frac{m_{i,t}^{US}}{m_{i,t}^W} = \frac{Y_t^{US}}{(P_t^{US})^{1-\sigma}} \left\{ \frac{(\tau_{i,t}^{US})^{1-\sigma}}{\sum_j Y_{j,t} \left[\frac{\tau_{i,j,t}}{P_{j,t}} \right]^{1-\sigma}} \right\}$$

Taking natural logs gives:

$$\ln \frac{m_{i,t}^{US}}{m_{i,t}^W} = \ln \frac{Y_t^{US}}{(P_t^{US})^{1-\sigma}} + \ln \left\{ \frac{(\tau_{i,t}^{US})^{1-\sigma}}{\sum_j Y_{j,t} \left[\frac{\tau_{i,j,t}}{P_{j,t}} \right]^{1-\sigma}} \right\}$$

The first term is captured by the time period fixed effects in equation (1). The second term is the channel through which CIA interventions are expected to affect the natural log of the US import share. Our estimates capture the reduced form effects of CIA interventions on the composite term $\frac{(\tau_{i,t}^{US})^{1-\sigma}}{\sum_j Y_{j,t} \left[\frac{\tau_{i,j,t}}{P_{j,t}} \right]^{1-\sigma}}$.

Because we are uninterested in identifying the effect of CIA interventions on the structural parameters $\tau_{i,j,t}$, it is not important that we precisely control for the multilateral terms in our estimating equations, as in a Anderson and van Wincoop (2003). Instead, the effect of interest is the full reduced form effect of CIA interventions on trade with the US.

Appendix B. Data Appendix

We use trade data from two different sources. For analyses where we are only concerned with total value of annual bilateral trade across all industries, we use trade data from the Correlates of War Project (COW) (Barbieri, Keshk, and Pollins, 2008), which reports aggregate bilateral trade flows (measured in millions of current US dollars) annually between 1870 and 2006. The data are originally from the International Monetary Fund's Direction of Trade Statistics (DOTS). Data on trade flows at the industry level are taken from the United Nations' Comtrade Database. Unlike the aggregate-level COW trade data, the Comtrade data only begin in 1962. Our industry-level analysis therefor only examines interventions between 1962 to 1989.

Data on real per capita income and aggregate GDP are from Maddison (2003). The figures are given in 1990 International Geary-Khamis dollars. The controls for leadership turnover and leadership tenure are from Bueno de Mesquita, Smith, Siverson, and Morrow (2004). Our democracy

fixed effects are constructed from the revised Polity2 measure from the Polity IV Database. The variable is a composite measure that is increasing in the extent of institutionalized democracy in a regime. The measure ranges from -10 (strongly autocratic) to $+10$ (strongly democratic).

The GATT membership indicator variable is constructed from the date countries signed the GATT. This information is available from the WTO's web page: `www.wto.org/english/theWTO_e/gattmem_e.htm`. Similarly, the New York Convention indicator variable is constructed using the date the country ratified the convention. The information is from the United Nations Commission on International Trade Law (UNCITRAL): `www.uncitral.org/uncitral/en/uncitral_texts/arbitration/NYConvention_status.html`. Information on country voting patterns in the UN General Assembly are from Gartzke (2006).

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