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IS HUMAN TRAFFICKING THE DARK SIDE OF ECONOMIC FREEDOM?

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Economic freedom has increased living standards worldwide. Concurrent with such gains are rising concerns about potential human costs associated with free markets. This paper uses data on human trafficking and anti-trafficking policies, in conjunction with a measure of economic freedom, to examine whether free markets exacerbate or attenuate the incidence of human trafficking and policies designed to combat it. We do not find evidence suggesting that economic freedom is associated with human trafficking. In addition, our results suggest that economically free countries are more likely to enact and enforce policies to fight human trafficking.

Keywords: Economic freedom; Human trafficking; Anti-trafficking policy; Modern slavery

JEL Codes: K42, P10, O15

1. INTRODUCTION

Economic globalization has improved living standards worldwide. Poverty rates have declined substantially over the past 30 years (Chen and Ravallion 2010; Sala-i-Martin 2006). Much of this economic growth is attributed to economic freedom, including increases in international trade flows (Dollar and Kraay 2004; Hall and Lawson 2014). Concurrent with such gains, however, are rising concerns about potential human costs that may result from freer markets. A growing body of literature focuses on the effects of globalization and free markets on human rights, concentrating on issues such as sweatshops and unsafe working conditions, homicide rates, and women's rights or empowerment (Bjørnskov 2008, 2015; Carden and Lawson 2010; Cho 2013; Dreher, Gassebner, and Siemers 2012; Potrafke and Ursprung 2012; Powell 2014; de Soysa and Vadlamannati 2011).

One particular area of human rights is making headlines. News outlets showcase human trafficking, or the coercive or forced movement of individuals across borders, as a growing concern (see BBC News 2012; Flores 2014; Van Osdal 2013). A recent report estimates that

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the total number of human trafficking victims is over 12 million and growing (U.S. Department of State 2010).

Economic freedom, and the globalization it has unleashed, often gets much of the blame. For example, one headline alerts us that ‘consumerism fuels human trafficking’ (Labott 2009). In the academic literature, human trafficking is also receiving much more attention (see, Avdeyeva 2010; Cho 2013, 2015a, 2015b; Cho and Vadlamannati 2012; Di Tommaso et al. 2009; Hernandez and Rudolph 2015; Potrafke 2011; Simmons and Lloyd 2010), with trafficking being labeled as ‘one of the dark sides of globalization’ (Cho, Dreher, and Neumayer 2013, 67; Cho, Dreher, and Neumayer 2014, 430). In this paper, we seek to understand if this label is appropriate or misplaced.

Examining how liberalization in one particular market, prostitution, impacts human trafficking, Cho, Dreher, and Neumayer (2013) show that legalization in prostitution contributes to human trafficking, highlighting the impact of one particular policy. In a subsequent paper, Cho (2015a) examines a wide variety of variables and shows that prostitution is no longer a significant factor, but that crime, income, and legal enforcement are strong determinants of trafficking. Missing from previous analyses is the inclusion of economic policies and institutions, which we believe is necessary to gain a more complete understanding of the determinants of human trafficking.

The ‘dark side’ concern is that open and globalized markets favorable to trade in goods and services will also be favorable toward forcible trading in humans. So, do freer markets lead to the buying and selling of human lives? We attempt to answer this question by examining whether economic freedom exacerbates or attenuates the incidence of human trafficking and the development of policy designed to combat it. We rely on newly available data measuring direct trafficking flows and a policy index that captures anti-trafficking policies. To account for free markets, we utilize the widely cited economic freedom index from the Economic Freedom of the World (EFW) Report (Gwartney, Lawson, and Hall 2014).

First, we test the direct impact of economic freedom on the incidence of human trafficking. We do so using three different measures indicating the intensity of human trafficking flows, classifying countries as (1) a destination country, (2) an origin country, and (3) a transit country (UNODC 2006). As a robustness check, we also utilize alternative measures of trafficking inflow and outflow data (Global Slavery Index 2013) and a measure of modern slavery (Global Slavery Index 2014). We do not find any indication that economic freedom increases human trafficking flows. To the contrary, we find some evidence that economic freedom decreases trafficking, especially for country of origin.

Next, we test the indirect impact by examining economic freedom as a determinant of anti-trafficking policies. We use the recently developed 3P-anti-trafficking policy index (3P index) that captures government policies designed to limit trafficking, including prosecution, protection, and prevention (Cho, Dreher, and Neumayer 2014). Our results indicate that economic freedom may indirectly limit human trafficking by promoting the adoption of policies designed to prevent it.

Collectively, our direct results suggest that countries with more economic freedom are *not* more likely to be involved in human trafficking. If anything, the evidence suggests the contrary. Countries with more economic freedom appear to experience less human trafficking and are more likely to adopt policies to prevent such activities. These findings are robust to a variety of model specifications and control variables.

2. LINKING ECONOMIC FREEDOMS AND HUMAN TRAFFICKING

A variety of articles published in outlets ranging from academic journals to blog sites assert that free and open economies have a deleterious effect on trafficking rates (see, e.g. Agathangelou and Ling 2003; Brewer 2009; Geracoulis 2012; Sanders 2012). In order to understand this assertion, we summarize what we believe are the strongest conceptual scenarios linking human trafficking to economic freedom, thus, framing our empirical analysis.

Why are people trafficked? Both men and women can become victims for sex purposes and forced labor. Children are also trafficked, possibly to sell drugs and steal from others (Van Liemt 2004). Thus, victims may be taken for a variety of reasons and from different socioeconomic backgrounds (Bales 2007; Joarder and Miller 2014). However, a subset of authors argue that human trafficking victims may start as voluntary, though likely undocumented, migrants who often choose to leave their home country to avoid political and economic instabilities and seek better economic opportunities abroad (Aronowitz 2001; Chacón 2010).

Thus, economic freedom in a host country offering more economic opportunities will attract voluntary migrants. These individuals are not classified as trafficking victims. However, in the process of moving across borders, an (illegal) migrant could be captured, sold, and exploited for labor or sex purposes. This is human trafficking. Haynes (2009) argues this form of migrant exploitation creates a thin, gray line between migration and human trafficking, making it difficult to define and provide legal protection. The United Nations (UN) defines trafficking in persons as follows:

“Trafficking in persons” shall mean the recruitment, transportation, transfer, harbouring or receipt of persons, by means of the threat or use of force or other forms of coercion, of abduction, of fraud, of deception, of the abuse of power or of a position of vulnerability or of the giving or receiving of payments or benefits to achieve the consent of a person having control over another person, for the purpose of exploitation. Exploitation shall include, at a minimum, the exploitation of the prostitution of others or other forms of sexual exploitation, forced labour or services, slavery or practices similar to slavery, servitude or the removal of organs. (United Nations Convention against Transnational Organized Crime and the Protocols Thereto 2000, 42)

We follow the UN definition carefully distinguishing between forced slavery and immigration, as the linkages between voluntary and involuntary migration make it difficult to disentangle the role of economic opportunity in explaining the movement of people across borders. Perhaps this overlap between voluntary and involuntary migration partially sheds light on the association between globalization and human trafficking. For example, economically free countries may be attractive destination countries for voluntary migrants who then become trafficking victims. Alternatively, free economies may facilitate trade in forced services such as labor.

This naturally leads to the question: Why is there a market for forced labor in economically free countries? In other words, what are the incentives to capture and traffic migrants? Several explanations have been offered with the demand for cheap labor often given as the main driver. One argument is that developed countries, as a result of economic freedom, increase the demand for cheap labor in order to produce the quantity and variety of goods wealthier consumers desire. In addition, countries with higher levels of economic freedom have more open borders, increasing the flow of goods and people, which may lower the costs to traffic. Combined, these arguments suggest that economic freedom increases human trafficking flows in order to exploit victims as forced labor and open borders lower the costs to do so.

On the other hand, there are several reasons why freer economies may actually result in lower rates of trafficking. It is true that an open economy will expand opportunities for exchange, increasing the overall scale of economic transactions. As a result, demand for labor will likely increase, including cheap labor. However, a more free economy with fewer labor market restrictions will decrease the incentive to traffic labor, as voluntary labor is readily available for purchase on the open market at a variety of prices. As economies in general, and labor markets in particular, are less regulated, the demand for trafficked victims to exploit for labor purposes should decrease.

This argument can be generalized where economically free countries typically experience less crime, fewer black market transactions, less organized crime, and afford less opportunity to carry out illicit transactions without discovery (Dreher, Kotsogiannis, and McCorriston 2007; Dreher and Schneider 2010; Stringham and Levendis 2010). As Supreme Court Justice Louis Brandeis argued, ‘sunlight is said to be the best of disinfectants,’ economically freer societies may offer more ‘sunlight’ exposing traffickers and decreasing incentives to engage in such behavior (Brandeis 1913).¹

Lastly, it is well established that economically freer societies also have greater potential for growth (De Haan, Lundstrom, and Sturm 2006; Gwartney, Holcombe, and Lawson 2006; Heller 2009). This expanding set of opportunities may decrease the incentive to engage in trafficking in the first place. Indeed, human trafficking victims disproportionately originate from poor countries or countries experiencing economic turmoil or conflict (Akee et al. 2010; Mahmoud and Trebesch 2010). Hence, economic freedom may decrease the quantity of human trafficking victims supplied, and the subsequent economic growth may counteract a potential increase in the quantity of victims demanded by recipient countries.

3. DATA AND EMPIRICAL FRAMEWORK

To examine the relationship between free markets and human trafficking, we use the economic freedom index from the EFW Report (Gwartney, Lawson, and Hall 2014). The EFW index is a widely cited indicator of a free economy (see, Hall and Lawson 2014 for a review). The EFW index captures economic freedoms in five areas: size of government, property rights, money, international trade, and regulations. Scored on a 0–10 basis, with 10 representing more freedom, the EFW index is an aggregate index composed of up to 42 separate variables. To score highly on the index, a country must protect private property, provide efficient policing, adjudicate disputes consistent with the rule of law, keep taxes/spending low, minimize regulations of businesses and markets, provide a sound monetary system, and allow open trade with other countries. The data are for 2012, the most recent year available. If economic freedom corresponds to human trafficking, holding all else equal, the ‘dark side’ label may be appropriate as freer markets contribute to human trafficking.

We first look at the direct relationship between economic freedom and trafficking. Given the difficulty of measuring human trafficking and limited data availability, we employ several different measures. First, we rely on trafficking data from the United Nations Office on Drug and Crime (UNODC 2006). The UN *Trafficking in Persons: Global Patterns* (2006) report proposes an incidence trafficking index. This report presents three distinct measures of human trafficking: (1) incidence of human trafficking by country of destination

¹In addition, economic freedom is shown to increase women’s economic rights (Stroup 2011), an important contributing factor to reducing human trafficking (Cho 2015a).

(trafficking destination), (2) incidence of human trafficking by country of origin (trafficking origin), and (3) incidence of human trafficking transiting through a country (trafficking transit). Each measure of human trafficking incidence is ranked on an ordinal 1–5 scale reflecting ‘very low’ to ‘very high’ incidence. The data are only collected once, averaging from 1996 to 2003, and are available for up to 161 countries.

We use all three measures of human trafficking to capture any effect economic freedom might have on the illegal movement of individuals. Although we examine all three measures of trafficking, our arguments above indicate that economically free countries will become destination countries, as markets for all goods and services (including humans) increase concurrently with economic freedom (Cho, Dreher, and Neumayer 2013). Therefore, trafficking destination is the main dependent variable testing the direct effect of economic freedom and human trafficking.

As a robustness check, we use two additional variables, trafficking in and trafficking out, reflecting inbound cross-border trafficking and outbound cross-border trafficking, respectively. Both variables are coded on an ordinal scale of 1–4, where higher values reflect higher levels of cross-border human trafficking. Data are collected from the Global Slavery Index (2013), which code the data based on country reports found in the U.S. Department of State *Trafficking in Persons Report* (2013). Our data-set includes data on 111 countries. If economic freedom increases trafficking, economic freedom will have a positive coefficient.

As another robustness check, we use a measure of modern slavery, which captures the number of people enslaved as a proportion of the population in 2014 (Global Slavery Index 2014). Data are collected for 112 countries. This measure does not directly measure the extent of human trafficking; however, a country that traffics more people will more than likely also have a higher percent of the population enslaved. If economic freedom increases trafficking, we expect a positive relationship with modern slavery.

The three human trafficking selected data-sets have several advantages. First, they rely on various sources such as international reports, media, and fieldwork to create quantifiable measures of trafficking. Each data-set uses a singular definition of human trafficking and one collection agency avoiding noise and discrepancies from the collection methodology. The UNODC’s measures utilize the UN’s definition of human trafficking and data are collected from 1996 to 2003 making this the more attractive measure. However, the data are aggregated making it available only at one point in time. This is a shortcoming from all three measures as the US Department of State’s Trafficking In/Out and the Global Slavery Index are also only available as a cross-section, but both measures utilize more recent data. Given the data constraints, we employ all three measures and compare the results in order to reduce any biases.

Next, we test for an indirect relationship between free markets and trafficking by exploring how economic freedom relates to policies designed to minimize human trafficking. The 3P-anti-trafficking policy index (3P index), developed by Cho, Dreher, and Neumayer (2014), measures government policies designed to limit trafficking by adopting policies that (1) prosecute perpetrators of human trafficking, (2) prevent human trafficking, and (3) protect victims of human trafficking. Each dimension is measured on a 1–5 scale; thus, the aggregate 3P index is measured on a 3–15 ordinal scale with higher values indicating greater anti-trafficking policy effectiveness. We use the latest data available collected in 2013.

Note that this index does not directly measure human trafficking. Rather, it measures the efficacy of government anti-trafficking efforts; thus, we do not employ it as our main dependent variable. However, we assume that countries with more effective anti-trafficking

policies will see less trafficking. Hence, if economic freedom increases trafficking, we expect a negative relationship between the EFW Index and the 3P index, as a decrease in policy effectiveness encourages trafficking. However, protection of economic rights tends to correlate with civil and human rights (Carden and Lawson 2010; de Soysa and Fjelde 2010; de Soysa and Vadlamannati 2011, 2013); therefore, economic freedom may positively correlate with the 3P index and discourage trafficking.

Given the difficulty in obtaining reliable and consistent measures of human trafficking over time and across a large sample of countries, we are limited to cross-sectional analysis as in Cho, Dreher, and Neumayer (2013). For all variables, we use the most recently available data. We recognize this leads to variables being measured in different years but do so in order to maximize sample size, given the extremely limited data availability. Our empirical approach is given by the following equation:

$$T_i = \beta_0 + \beta_1 \text{EFW}_i + \beta_2 \ln \text{GDP}_i + X_{ki} \beta_k + \varepsilon_i$$

T_i represents one of the measures of human trafficking (for country i) discussed above. EFW_i represents the EFW index. Economic motivation, including income, may explain a large portion of trafficking (International Organization for Migration 2012), as previously summarized. In fact, Cho et al. (2015a) find that income has a robust impact on both origin and destination countries. Therefore, we control for income per capita, $\ln \text{GDP}_i$, measured by log gross domestic product per capita (Purchasing Power Parity, constant 2011 international dollars) (WDI 2014).

To account for other effects that may impact human trafficking, we include a number of control variables, represented by the vector of k control variables X_{ki} . We control for political and legal institutional and policy factors (Akee et al. 2010, 2012, 2014; Cho, Dreher, and Neumayer 2013; Frank 2011; Jakobsson and Kotsadam 2013), including a measure of democracy from Polity IV (Marshall, Gurr, and Jaggers 2014). In addition, we include an index of press freedom rating the free flow of information from the media sector (Freedom House 2013). We also control for a country's history with communism (Barro and McCleary 2003). Communism represents an extreme lack of political and economic freedoms, which likely impacts present-day political and economic institutions. In addition, when testing the direct impact of economic freedom and trafficking, we also control for the policy environment using the 3P index discussed above (Cho, Dreher, and Neumayer 2014).

We use a country's legal origin to control for legal institutional quality since previous work indicates this is an important determinant of trafficking (Hernandez and Rudolph 2015). Legal origin categorizes a country's respective tradition using dummy variables classified as English, German, French, or Scandinavian. The data are collected from La Porta, Lopez-de-Silanes, and Shleifer (2008).

We also include a variety of economic variables as suggested by the literature (Belser 2005; Cho 2015; Cho, Dreher, and Neumayer 2013, 2014). Standard economic controls include regional dummies, log of the population, female unemployment rate, population density, the ratio of female to male labor force participation, primary school enrollment, and income inequality (all collected from WDI 2014). In addition, we include language fractionalization (Alesina et al. 2003), suggested by Akee et al. (2010), whether a country is landlocked, as suggested by Akee et al. (2010, 2012, 2014), the proportion of the population that is Catholic (La Porta et al. 1999), and a dummy variable if prostitution is legal, both suggested by Cho, Dreher, and Neumayer (2013). All variable descriptions and sources can be found in Appendix 1.

Table I provides descriptive statistics for each of the variables described, with 116 countries included in the analysis. Appendix 2 provides a list of the countries included. Income per capita ranges across all levels, from the Central African Republic (\$584) to Luxembourg (\$87,737), with a mean of \$18,960 and a standard deviation of \$17,318. Economic freedom ranges from 3.71 (Venezuela) to 8.88 (Hong Kong) with a mean of 6.87 (Italy, for example) and a standard deviation of 0.87.

Variables representing destination, origin, and transit countries for trafficking range from 1 to 5, with 5 representing a very high incidence of these activities. Trafficking destination countries have a mean of 2.55 and a standard deviation of 1.41. Seventeen countries are classified as very low incidence, including Zimbabwe, Brazil, and Chile. At the other extreme, 10 countries are classified as very high-incidence destination countries including the USA, the Netherlands, Italy, and Greece. Trafficking origin countries have a mean of 3.05 and a standard deviation of 1.14. There are nine low origin countries (e.g. the Netherlands, Chile, and Egypt) and nine high origin countries including Ukraine, Albania, Russia, and China. Transit countries have a mean of 2.32 and a standard deviation of 1.31, with six countries classified as high-incidence transit countries including Hungary, Poland, Albania, and Italy. Looking at the raw data suggests some overlap between origin, transit, and destination countries. For example, destination countries are positively correlated with both origin (0.28) and transit countries (0.46). Origin and transit countries also correlate (0.35).

TABLE I Summary Statistics

Variable	Observation	Mean	Standard dev.	Minimum	Maximum
Trafficking destination	107	2.55	1.41	1.00	5.00
Trafficking origin	82	3.05	1.14	1.00	5.00
Trafficking transit	76	2.32	1.31	1.00	5.00
Trafficking in	111	2.27	0.81	1.00	4.00
Trafficking out	111	2.57	0.97	1.00	4.00
Modern slavery	112	0.37	0.35	0.01	2.30
Econ freedom	116	6.87	0.87	3.71	8.88
Log GDP pc	116	9.29	1.22	6.37	11.38
Democracy	110	6.01	4.90	-10.00	10.00
French	115	0.50	0.50	0.00	1.00
German	115	0.13	0.34	0.00	1.00
Scan	115	0.04	0.20	0.00	1.00
3P index	116	10.22	2.39	4.00	15.00
Press freedom	116	56.65	21.10	8.00	90.00
Communism	114	0.01	0.09	0.00	1.00
Log pop	116	16.36	1.64	12.69	21.03
Unemp, female	116	9.42	6.32	0.40	31.30
Catholic	102	0.39	0.49	0.00	1.00
Pop density	116	276	965	3	7713
Labor ratio	116	73.05	18.19	21.05	103.80
School enroll	108	106.13	12.86	66.43	164.86
Landlock	107	0.18	0.38	0.00	1.00
Gini	105	40.46	9.26	24.70	63.90
Language frac	113	0.39	0.30	0.00	0.92
Prostitution	79	0.57	0.50	0.00	1.00
GDP pc	116	18,960	17,318	584	87,737

Note: Table I presents descriptive statistics for our variables of interest as described in Appendix 1.

4. EMPIRICAL RESULTS

We begin by testing for the direct effect of economic freedom on human trafficking based on a country's incidence of human trafficking destination, origin, or transit. Recall that these data are only available for one point in time, limiting our analysis to only a cross section. Since our main dependent variables measuring human trafficking are all ordinal indicators, we report results using ordered probit regressions.² We introduce controls sequentially in order to economize on the number of observations.

In Table II, Panel A provides the estimates using trafficking destination as the dependent variable and Panel B reports the marginal effects. None of the regressions suggest that greater economic freedom yields more human trafficking. The coefficient of economic freedom is statistically insignificant in seven of the eight regressions. The beta of economic freedom found in Column (8) is negative and significant at the 5% level. Recall that lower levels of this dependent variable indicate less human trafficking. Overall, this suggests that a country with more economic freedom is less likely to be a human trafficking destination country.

Results for the marginal effects of economic freedom, found in Table II, Panel B, are similar. No marginal effect achieves statistical significance in Columns (1) through (7). In Column (8), the marginal effect is statistically significant in increasing the probability of receiving a score of 3 (medium incidence) and decreasing the probability of receiving a score of 4 (high incidence). At the mean values of other variables, this result suggests that a one point increase in economic freedom increases the probability of a country scoring a 3 by 20% points and reduces the probability of scoring a 4 by 28% points. The point estimates of the marginal effects are consistent with the interpretation that countries with more economic freedom are less likely to be high destination countries.

The betas of income per capita dominate the results, remaining positive and significant in seven of the eight specifications. This result supports the argument that economic motivation is one of the main drivers for trafficking. Most of the institutional and policy factors do not appear to determine the extent of trafficking. The betas of neither democracy, press freedom nor legal origin significantly impact trafficking (coefficients for legal origin not reported). Another interesting result is the lack of significance of the 3P index coefficient. Lastly, the beta of communism is positive and significant in one of the four specifications, giving some indication that a country with a longer experience with communism is more likely to be a destination country.

Among the economic controls, the coefficient of log population is (positively) significant in all three specifications. Language fractionalization's beta is also positive and significant. Note that the beta for prostitution, as reported in Column (8), is not statistically significant – a result that is at odds with the main finding in Cho, Dreher, and Neumayer (2013) but that supports Cho (2015) and Hernandez and Rudolph (2015). Depending on the specifications, the pseudo- R^2 of the model lies somewhere between 0.11 and 0.43.

Next, we repeat our analysis replacing trafficking destination with trafficking origin reported in Table III. Again, our results do not indicate a link between economic freedom and trafficking. Instead, the betas in six of the eight specifications suggest that economic freedom decreases trafficking origination. Marginal effects can be found in Table III, Panel

²We use ordered probit due to the presence of skewness in our dependent variables. However, the OLS and ordered logit results are available upon request and do not differ substantially.

TABLE II Economic Freedom and Human Trafficking, Destination Country

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Panel A, Dep. var: trafficking destination</i>								
Econ freedom	0.08 (0.13)	-0.01 (0.15)	-0.07 (0.22)	-0.13 (0.23)	-0.09 (0.23)	-0.16 (0.26)	-0.27 (0.33)	-0.92** (0.40)
Log GDP pc	0.51*** (0.11)	0.49*** (0.12)	0.52*** (0.18)	0.50*** (0.18)	0.51*** (0.19)	1.25*** (0.25)	1.15*** (0.33)	0.45 (0.46)
Democracy		0.03 (0.02)	0.05 (0.03)	0.04 (0.03)	0.05 (0.04)	0.07 (0.05)	0.09 (0.06)	0.16 (0.11)
Legal origins		Yes						
Regional controls			Yes	Yes	Yes	Yes	Yes	Yes
3P index				0.08 (0.06)	0.07 (0.07)	-0.05 (0.08)	0.01 (0.09)	-0.03 (0.13)
Press freedom					0.00 (0.01)	0.00 (0.01)	0.00 (0.01)	0.01 (0.01)
Communism					1.34 (1.24)	1.70 (1.42)	3.47*** (1.33)	0.43 (2.48)
Log pop						0.42*** (0.14)	0.44*** (0.16)	0.97*** (0.26)
Unemp, female						-0.02 (0.03)	-0.01 (0.03)	-0.03 (0.06)
Catholic						-0.49 (0.44)	-0.46 (0.46)	-1.08 (0.67)
Pop density						0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Labor ratio						0.02 (0.02)	0.02 (0.02)	0.07* (0.04)
School enroll						-0.01 (0.02)	-0.02 (0.02)	-0.04 (0.04)
Landlock							-0.47 (0.44)	0.61 (0.66)
Gini							-0.04 (0.04)	0.09 (0.06)
Language frac							2.37*** (0.83)	3.01*** (1.11)
Prostitution								-0.13 (0.52)
Observations	97	93	93	93	93	79	74	53
Pseudo-R-squared	0.11	0.11	0.17	0.18	0.18	0.27	0.32	0.43
<i>Panel B, Marginal effects: mean level of economic freedom</i>								
Predicted outcome = 1 (very low incidence)	-0.02 (0.03)	0.00 (0.03)	0.01 (0.04)	0.02 (0.04)	0.02 (0.04)	0.02 (0.03)	0.02 (0.02)	0.00 (0.00)
Predicted outcome = 2	-0.01 (0.02)	0.00 (0.02)	0.01 (0.04)	0.02 (0.04)	0.02 (0.04)	0.04 (0.06)	0.06 (0.07)	0.11 (0.07)
Predicted outcome = 3	0.01 (0.01)	-0.00 (0.01)	-0.01 (0.02)	-0.01 (0.02)	-0.01 (0.02)	-0.01 (0.02)	-0.01 (0.02)	0.20** (0.10)
Predicted outcome = 4	0.01 (0.02)	-0.00 (0.02)	-0.01 (0.04)	-0.02 (0.04)	-0.02 (0.04)	-0.03 (0.05)	-0.05 (0.07)	-0.28** (0.12)
Predicted outcome = 5 (very high incidence)	0.01 (0.02)	-0.00 (0.02)	-0.01 (0.02)	-0.01 (0.02)	-0.01 (0.02)	-0.01 (0.02)	-0.01 (0.02)	-0.04 (0.04)

Notes: Panel A presents ordered probit regressions with the trafficking destination as the dependent variable. Panel B reports marginal effects of economic freedom based on the mean of all variables. Robust standard errors are reported in parenthesis. ***, **, and * denote significance at 1, 5, and 10%, respectively. Variables are described in Appendix 1.

TABLE III Economic Freedom and Human Trafficking, Origin Country

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Panel A, Dep. var: trafficking origin</i>								
Econ freedom	-0.11 (0.10)	-0.19* (0.11)	-0.23* (0.12)	-0.32** (0.13)	-0.32** (0.14)	-0.52*** (0.16)	-0.77*** (0.22)	-0.65 (0.53)
Log GDP pc	0.10 (0.08)	-0.00 (0.10)	-0.20 (0.16)	-0.20 (0.15)	-0.15 (0.16)	0.01 (0.31)	-0.58 (0.36)	-0.73 (0.78)
Democracy		0.02 (0.03)	0.02 (0.03)	0.01 (0.04)	0.04 (0.04)	0.02 (0.05)	0.05 (0.06)	-0.16* (0.09)
Legal origins		Yes	Yes	Yes	Yes	Yes	Yes	Yes
Regional controls		Yes	Yes	Yes	Yes	Yes	Yes	Yes
3P index				0.15* (0.08)	0.16* (0.08)	0.14 (0.09)	0.08 (0.10)	0.31** (0.15)
Press freedom					-0.00 (0.01)	-0.01* (0.01)	-0.01 (0.01)	-0.01 (0.01)
Communism					8.02*** (0.74)	7.04*** (1.28)	5.75*** (1.32)	3.17 (3.73)
Log pop						0.42*** (0.14)	0.61*** (0.17)	0.71** (0.30)
Unemp, female						-0.11** (0.04)	-0.12*** (0.04)	-0.11 (0.08)
Catholic						-1.20*** (0.42)	-0.69* (0.40)	-0.85 (0.70)
Pop density						-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)
Labor ratio						0.01 (0.02)	0.03* (0.02)	0.05 (0.06)
School enroll						-0.01 (0.02)	-0.03* (0.02)	-0.03 (0.05)
Landlock							-0.42 (0.46)	-0.52 (0.99)
Gini							0.09** (0.04)	0.12* (0.07)
Language frac							0.42 (0.84)	0.61 (1.72)
Prostitution								0.50 (1.01)
Observations	82	79	79	79	79	69	65	41
Pseudo-R-squared	0.004	0.038	0.100	0.115	0.147	0.343	0.409	0.506
<i>Panel B, Marginal effects: mean level of economic freedom</i>								
Predicted Outcome = 1 (very low incidence)	0.02 (0.02)	0.03 (0.02)	0.03* (0.02)	0.05** (0.02)	0.04* (0.02)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)
Predicted outcome = 2	0.02 (0.02)	0.03 (0.02)	0.04* (0.02)	0.05** (0.03)	0.05** (0.02)	0.08** (0.03)	0.09** (0.04)	0.10 (0.10)
Predicted outcome = 3	0.00 (0.01)	0.00 (0.01)	0.01 (0.01)	0.02 (0.02)	0.03 (0.02)	0.08* (0.04)	0.13** (0.06)	0.07 (0.08)
Predicted outcome = 4	-0.02 (0.02)	-0.04 (0.02)	-0.06* (0.03)	-0.08** (0.03)	-0.09** (0.04)	-0.16*** (0.05)	-0.22*** (0.07)	-0.18 (0.15)
Predicted outcome = 5 (very high incidence)	-0.02 (0.02)	-0.03 (0.02)	-0.03 (0.02)	-0.03* (0.02)	-0.03 (0.02)	-0.01 (0.01)	-0.01 (0.01)	-0.00 (0.00)

Notes: Panel A presents ordered probit regressions with the trafficking origin as the dependent variable. Panel B reports marginal effects of economic freedom based on the mean of all variables. Robust standard errors are reported in parenthesis. ***, **, and * denote significance at 1, 5, and 10%, respectively. Variables are described in Appendix 1.

B. Statistical significance of the marginal effects is scattered throughout Columns (3)–(7). The marginal effects uniformly point in the direction that, at means, economic freedom increases the probability that a country receives a low incidence score, while it also reduces the probability of receiving a score of high incidence. For example, according to the marginal effects from Column (7), a one unit increase in economic freedom is significantly associated with a 9% point higher probability of low incidence (score of 2), a 13% point higher probability of medium incidence (3), and a 22% point lower probability of high incidence (4).

Interestingly, the beta of log GDP per capita is insignificant in all specifications, suggesting that income does not predict which countries will have humans taken. Combined with the previous finding, income strongly predicts the destination of those trafficked but not the origin of those taken.

Several of the institutional and policy factors relate to origin of trafficking. As above, the betas of democracy and legal origin are insignificant. However, the betas of the 3P index positively and significantly relate to trafficking origin, suggesting that countries that have more humans taken have also adopted policies to try and prevent this human rights violation. We do not believe this finding suggests that the 3P index is causing more people to be taken; instead, high-incidence countries may be attempting to fight the problem via government policies. Press freedom's coefficient is negative and significant in one of the four regressions, suggesting that access to information in the origin country may decrease the probability that individuals are taken to be trafficked. Lastly, the betas of communism are positive and significant in three of the four specifications, suggesting that former communist countries are more likely to traffic humans. Depending on the specification, our models achieve pseudo- R^2 values up to 0.51.

Lastly, we replicate our analysis using trafficking transit as the dependent variable reported in Table IV. The betas of economic freedom are negative and significant in Columns (1) and (8), and negative but insignificant in the remaining regressions. Three marginal effects are statistically significant. In Column (1), the probability of receiving a score of 1 (very low incidence) is increased by 12% points and the probability of receiving a score of 5 (very high incidence) is reduced by 4% points, both at the 90% significance level. In Column (8), the probability of receiving a score of 1 increases by 70% points and is statistically significant at the 95% level. This point estimate suggests that the economic significance of economic freedom is quite large. Overall, these findings support the previous results that economic freedom is not related to more trafficking.

Supporting findings from Table II, the betas of log GDP per capita are positive and significant in the majority of the regressions. Democracy's coefficients are significant in four of the seven specifications; however, the coefficients are positive, suggesting that transit countries may be more democratic. The betas of the 3P index suggest that adopting anti-trafficking policies does not significantly deter transit, nor have transit countries adopted policies designed to limit such activities. Communism's betas are also insignificant. Of the other variables, the coefficient of press freedom is positive and significant in one of the four regressions, and the betas of log population are positive and significant in all three specifications. The coefficients of population density, school enrollment, landlock, and language fractionalization are significant, but only in one specification each. The pseudo- R^2 values are as high as 0.43.

Collectively, our results suggest that economic freedom is not associated with more human trafficking in any form: as a destination, origin, or transit country. Rather, for

TABLE IV Economic Freedom and Human Trafficking, Transit Country

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Panel A, Dep. var: trafficking transit</i>								
Econ freedom	-0.33* (0.18)	-0.38 (0.23)	-0.35 (0.29)	-0.37 (0.29)	-0.39 (0.29)	-0.41 (0.39)	-0.38 (0.43)	-1.98* (1.04)
Log GDP pc	0.53*** (0.15)	0.58*** (0.17)	0.51** (0.22)	0.51** (0.23)	0.54** (0.25)	0.84** (0.39)	1.18** (0.49)	-0.76 (1.17)
Democracy		0.05* (0.03)	0.07* (0.04)	0.06* (0.04)	0.07* (0.04)	0.07 (0.05)	0.07 (0.05)	0.14 (0.13)
Legal origins		Yes	Yes	Yes	Yes	Yes	Yes	Yes
Regional controls		Yes	Yes	Yes	Yes	Yes	Yes	Yes
3P index				0.05 (0.09)	0.05 (0.10)	0.06 (0.09)	0.03 (0.09)	-0.34 (0.25)
Press freedom					-0.00 (0.01)	-0.00 (0.01)	0.00 (0.01)	0.04* (0.02)
Communism					1.10 (0.75)	-0.37 (0.97)	-0.11 (1.10)	0.85 (3.04)
Log pop						0.42** (0.18)	0.41** (0.19)	0.92** (0.42)
Unemp, female						0.00 (0.02)	-0.01 (0.03)	0.05 (0.06)
Catholic						-0.84 (0.56)	-0.61 (0.55)	-0.62 (0.59)
Pop density						-0.00 (0.00)	-0.00 (0.00)	0.00* (0.00)
Labor ratio						0.01 (0.02)	0.01 (0.02)	-0.06 (0.05)
School enroll						0.02 (0.02)	0.03* (0.02)	-0.06 (0.08)
Landlock							-0.85* (0.51)	1.01 (1.06)
Gini							-0.03 (0.03)	0.00 (0.07)
Language frac							-1.93** (0.95)	1.15 (2.49)
Prostitution								-0.48 (0.93)
Observations	76	73	73	73	73	64	61	42
Pseudo-R-squared	0.05	0.12	0.24	0.24	0.24	0.32	0.34	0.43
<i>Panel B, Marginal effects: mean level of economic freedom</i>								
Predicted outcome = 1 (very low incidence)	0.12* (0.07)	0.15 (0.09)	0.14 (0.11)	0.15 (0.12)	0.15 (0.12)	0.16 (0.15)	0.15 (0.17)	0.70** (0.35)
Predicted outcome = 2	0.00 (0.01)	-0.01 (0.01)	-0.04 (0.04)	-0.04 (0.04)	-0.04 (0.04)	-0.06 (0.07)	-0.06 (0.07)	-0.24 (0.22)
Predicted outcome = 3	-0.04 (0.03)	-0.06 (0.04)	-0.07 (0.06)	-0.07 (0.06)	-0.08 (0.06)	-0.07 (0.07)	-0.07 (0.08)	-0.38 (0.24)
Predicted outcome = 4	-0.04 (0.03)	-0.05 (0.03)	-0.02 (0.02)	-0.03 (0.02)	-0.03 (0.02)	-0.02 (0.03)	-0.02 (0.03)	-0.07 (0.06)
Predicted outcome = 5 (very high incidence)	-0.04* (0.02)	-0.03 (0.02)	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.01)

Notes: Panel A presents ordered logit regressions with the trafficking transit as the dependent variable. Panel B reports marginal effects of economic freedom based on the mean of all variables. Robust standard errors are reported in parenthesis. ***, **, and * denote significance at 1, 5, and 10%, respectively. Variables are described in Appendix 1.

trafficking destination and transit, income per capita is the largest predictor. Once the effect of economic freedom is isolated, our findings more accurately capture the relation between free markets and trafficking in persons.³ In addition, other institutional and policy factors, including the 3P index, do not consistently determine trafficking. Neither democracy, press freedom, nor legal origin exhibit a robust association with trafficking. Communism is only a strong determinant for origin countries.

Next, we undertake several robustness checks to test the strength of our results by including a variety of additional control variables and replacing our dependent variables with alternative measures of trafficking. Overall, our main findings hold where economic freedom is not associated with human trafficking.

In Table V, Panel A, we report the results including four additional control variables to the specification controlling for economic freedom, log GDP per capita, democracy, legal origin, and regional controls. Panel B presents the marginal effects (at the means). We use two measures of governance, rule of law and control of corruption, collected from the Worldwide Governance Indicators (2014). Both corruption and the quality of law enforcement are suggested as important determinants of human trafficking (Akee et al. 2010, 2014; Cho, Dreher, and Neumayer 2013, 2014; Cho and Vadlamannati 2012; Hernandez and Rudolph 2015; Jakobsson and Kotsadam 2013). We also include a measure of women's economic rights as suggested by Clawson and Layne (2007), Cingranelli et al. (2014). Lastly, Cho (2015b) finds that crime is the strongest predictor of human trafficking. Therefore, we include a measure of violent crime, the homicide rate, collected from UNODC (2014).

In Table V, Columns (1)–(4) report the findings using trafficking destination as the dependent variable. Economic freedom is insignificant as are all four additional control variables. Again, the beta of income per capita maintains statistical significance. All marginal effects, reported in Panel B, are insignificant.

Columns (5)–(8) use trafficking origin as the dependent variable. The beta of economic freedom is negative and significant in regression (7), suggesting that economic freedom decreases the probability of being a country of origin. The betas of rule of law, control of corruption, and women's economic rights are negative and significant, suggesting that a country with more human rights and legal security and less corruption reduces the likelihood of being a country of origin. Homicide's coefficient is positive and significant, indicating that homicide increases the probability of being a country of origin. The marginal effects from this specification support the previous findings where economic freedom increases the probability of being a low-incidence country by 4% points (score of 2) but decreases the probability of being a high-incidence country by 6% points (score of 4).

Columns (9)–(12) use trafficking transit as the dependent variable. The beta of economic freedom is insignificant in all four regressions. The coefficients of both rule of law and control of corruption are negative and significant. The marginal effects are insignificant. Collectively, these results support the previous findings.

In Tables VI and VII, we use two different measures of human trafficking, trafficking in and trafficking out. Both variables are measured on a scale of 1–4 with 4 indicating higher levels of trafficking. In general, our previous findings are supported.

The results for trafficking in are reported in Table VI, Panel A, and the marginal effects are reported in Panel B. The betas of economic freedom are negative and significant in two of the eight specifications, suggesting that countries with more economic freedom are

³The simple correlation coefficient between log GDP per capita and economic freedom is only 0.58, which should alleviate any major collinearity concerns.

TABLE V Economic Freedom and Human Trafficking, Additional Controls

	Destination			Origin					Transit			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<i>Panel A, Dep var</i>												
Econ freedom	-0.01 (0.27)	-0.02 (0.26)	-0.08 (0.22)	-0.22 (0.28)	0.25 (0.18)	0.26 (0.16)	-0.25** (0.13)	-0.07 (0.15)	-0.01 (0.33)	0.00 (0.30)	-0.34 (0.29)	0.01 (0.35)
Log GDP pc	0.59*** (0.22)	0.59*** (0.21)	0.54*** (0.17)	0.89*** (0.23)	0.23 (0.19)	0.28 (0.20)	-0.13 (0.17)	-0.08 (0.18)	0.87*** (0.25)	0.94*** (0.25)	0.53** (0.22)	0.61** (0.27)
Democracy	0.06* (0.03)	0.06* (0.03)	0.06 (0.04)	0.06 (0.05)	0.05 (0.04)	0.03 (0.04)	0.04 (0.03)	0.03 (0.04)	0.09** (0.04)	0.09*** (0.04)	0.08* (0.05)	-0.01 (0.05)
Legal origins	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Regional controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Rule of law	-0.13 (0.29)				-1.13*** (0.36)				-0.73** (0.32)			
Control corruption						-1.20*** (0.30)						
Women econ rights												
Homicide												
Observations	93	93	93	72	79	79	79	65	73	73	73	54
Pseudo-R-squared	0.17	0.17	0.17	0.24	0.15	0.17	0.13	0.12	0.26	0.27	0.24	0.24
<i>Panel B, Marginal effects: mean level of economic freedom</i>												
Predicted outcome = 1 (very low incidence)	0.00 (0.05)	0.00 (0.05)	0.01 (0.04)	0.05 (0.06)	-0.03 (0.03)	-0.03 (0.02)	0.03 (0.02)	0.01 (0.02)	0.00 (0.13)	-0.00 (0.12)	0.13 (0.12)	-0.00 (0.14)
Predicted outcome = 2	0.00 (0.05)	0.00 (0.05)	0.01 (0.04)	0.03 (0.04)	-0.04 (0.03)	-0.05 (0.03)	0.04* (0.02)	0.01 (0.02)	-0.00 (0.04)	0.00 (0.03)	-0.04 (0.04)	0.00 (0.02)
Predicted outcome = 3	-0.00 (0.02)	-0.00 (0.02)	-0.01 (0.02)	-0.04 (0.05)	-0.01 (0.02)	-0.01 (0.02)	0.01 (0.01)	0.00 (0.01)	-0.00 (0.07)	0.00 (0.06)	-0.07 (0.06)	0.00 (0.09)
Predicted outcome = 4	-0.00 (0.05)	-0.00 (0.05)	-0.01 (0.04)	-0.04 (0.05)	0.07 (0.05)	0.07 (0.05)	-0.06* (0.03)	-0.02 (0.04)	-0.00 (0.02)	0.00 (0.02)	-0.02 (0.02)	0.00 (0.02)
Predicted outcome = 5 (very high incidence)	-0.00 (0.03)	-0.00 (0.02)	-0.01 (0.02)	-0.01 (0.01)	0.02 (0.02)	0.02 (0.02)	-0.03 (0.02)	-0.01 (0.01)	-0.00 (0.00)	0.00 (0.00)	-0.01 (0.01)	0.00 (0.01)

Notes: Panel A presents ordered probit regressions with trafficking destination, origin and transit as the dependent variables, respectively. Panel B reports marginal effects of economic freedom based on the mean of all variables. Robust standard errors are reported in parenthesis. ***, **, and * denote significance at 1, 5, and 10%, respectively. Variables are described in Appendix 1.

TABLE VI Economic Freedom and Human Trafficking, Trafficking In

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Panel A, Dep. var: trafficking in</i>								
Econ freedom	-0.22* (0.13)	-0.20 (0.14)	-0.23 (0.17)	-0.27 (0.17)	-0.31* (0.17)	-0.27 (0.22)	-0.19 (0.24)	-0.58 (0.36)
Log GDP pc	0.31*** (0.10)	0.34*** (0.12)	0.49*** (0.17)	0.46*** (0.18)	0.54*** (0.18)	0.87*** (0.27)	0.64** (0.30)	0.86 (0.55)
Democracy		-0.02 (0.02)	0.01 (0.03)	0.00 (0.03)	0.00 (0.03)	0.04 (0.04)	0.04 (0.05)	0.18* (0.10)
Legal origins		Yes						
Regional controls			Yes	Yes	Yes	Yes	Yes	Yes
3P index				0.10 (0.07)	0.13* (0.07)	0.07 (0.08)	0.05 (0.09)	0.31*** (0.12)
Press freedom					-0.00 (0.01)	-0.01 (0.01)	-0.00 (0.01)	0.01 (0.01)
Communism					-0.47 (0.98)	-0.25 (1.21)	0.48 (1.22)	5.25** (2.48)
Log pop						0.13 (0.13)	0.12 (0.14)	0.21 (0.20)
Unemp, female						-0.05** (0.03)	-0.06** (0.03)	-0.04 (0.04)
Catholic						0.09 (0.35)	0.31 (0.45)	0.65 (0.61)
Pop density						-0.00* (0.00)	-0.00* (0.00)	-0.00 (0.00)
Labor ratio						-0.01 (0.02)	-0.00 (0.02)	-0.04 (0.04)
School enroll						-0.01 (0.02)	-0.02 (0.02)	-0.03 (0.04)
Landlock							-0.90** (0.40)	-0.06 (0.76)
Gini							0.01 (0.03)	-0.08* (0.04)
Language frac							-0.17 (0.84)	-0.53 (1.17)
Prostitution								0.30 (0.48)
Observations	111	107	107	107	106	91	85	59
Pseudo-R-squared	0.03	0.04	0.09	0.10	0.12	0.18	0.18	0.32
<i>Panel B, Marginal effects: Mean level of economic freedom</i>								
Predicted outcome = 1 (lower levels)	0.05* (0.03)	0.05 (0.03)	0.05 (0.04)	0.06 (0.03)	0.06* (0.04)	0.04 (0.03)	0.03 (0.04)	0.04 (0.03)
Predicted outcome = 2	0.03 (0.02)	0.03 (0.02)	0.03 (0.03)	0.04 (0.03)	0.05 (0.03)	0.05 (0.05)	0.04 (0.05)	0.16 (0.10)
Predicted outcome = 3	-0.05* (0.03)	-0.05 (0.03)	-0.06 (0.04)	-0.07 (0.04)	-0.08* (0.04)	-0.07 (0.06)	-0.05 (0.07)	-0.19 (0.12)
Predicted outcome = 4 (higher levels)	-0.03 (0.02)	-0.03 (0.02)	-0.02 (0.02)	-0.03 (0.02)	-0.03 (0.02)	-0.02 (0.02)	-0.01 (0.02)	-0.01 (0.01)

Notes: Panel A presents ordered probit regressions with the trafficking in as the dependent variable. Panel B reports marginal effects of economic freedom based on the mean of all variables. Robust standard errors are reported in parenthesis. ***, **, and * denote significance at 1, 5, and 10%, respectively. Variables are described in Appendix 1.

TABLE VII Economic Freedom and Human Trafficking, Trafficking Out

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Panel A, Dep. Var: Trafficking out</i>								
Econ freedom	-0.30* (0.17)	-0.26 (0.18)	-0.21 (0.20)	-0.22 (0.20)	-0.21 (0.19)	-0.00 (0.29)	0.07 (0.29)	-0.01 (0.42)
Log GDP pc	-0.53*** (0.13)	-0.48*** (0.14)	-0.63*** (0.15)	-0.64*** (0.15)	-0.65*** (0.16)	-0.27 (0.23)	-0.41 (0.30)	-1.05* (0.61)
Democracy		-0.01 (0.03)	-0.01 (0.04)	-0.01 (0.04)	0.02 (0.04)	-0.03 (0.05)	-0.04 (0.05)	0.03 (0.09)
Legal origins		Yes	Yes	Yes	Yes	Yes	Yes	Yes
Regional controls								
3P index				0.02 (0.07)	0.00 (0.07)	-0.15* (0.09)	-0.18** (0.09)	-0.52*** (0.14)
Press freedom					-0.01 (0.01)	-0.00 (0.01)	-0.00 (0.01)	-0.04*** (0.01)
Communism					7.41*** (0.95)	5.92*** (1.35)	4.10*** (0.99)	5.32*** (1.96)
Log pop						0.70*** (0.14)	0.69*** (0.16)	2.56*** (0.44)
Unemp, female						0.01 (0.02)	-0.01 (0.03)	-0.13* (0.07)
Catholic						-0.22 (0.37)	-0.26 (0.42)	-1.93** (0.83)
Pop density						0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Labor ratio						0.03 (0.02)	0.02 (0.02)	0.16*** (0.05)
School enroll						0.00 (0.02)	0.00 (0.02)	-0.12*** (0.03)
Landlock							-0.61 (0.44)	0.27 (0.79)
Gini							0.04 (0.03)	0.03 (0.05)
Language frac							0.28 (0.69)	-3.17*** (1.55)
Prostitution							85	-3.07*** (0.90)
Observations	111	107	107	107	106	91	85	59
Pseudo-R-squared	0.17	0.20	0.24	0.24	0.26	0.39	0.41	0.69
<i>Panel B, Marginal effects: mean level of economic freedom</i>								
Predicted outcome = 1 (lower levels)	0.05* (0.03)	0.05 (0.04)	0.04 (0.03)	0.04 (0.03)	0.03 (0.03)	0.00 (0.02)	-0.00 (0.01)	0.00 (0.00)
Predicted outcome = 2	0.06* (0.04)	0.05 (0.04)	0.05 (0.05)	0.05 (0.05)	0.05 (0.05)	0.00 (0.09)	-0.02 (0.10)	0.00 (0.13)
Predicted outcome = 3	-0.06* (0.04)	-0.06(0.05)	-0.05 (0.05)	-0.06 (0.05)	-0.06 (0.05)	-0.00 (0.09)	0.02 (0.09)	-0.00 (0.14)
Predicted outcome = 4 (higher levels)	-0.05 (0.03)	-0.04 (0.03)	-0.03 (0.03)	-0.03 (0.03)	-0.03 (0.03)	-0.00 (0.02)	0.00 (0.02)	-0.00 (0.00)

Notes: Panel A presents ordered logit regressions with the trafficking out as the dependent variable. Panel B reports marginal effects of economic freedom based on the mean of all variables. Robust standard errors are reported in parenthesis. ***, **, and *denote significance at 1, 5, and 10%, respectively. Variables are described in Appendix 1.

generally less likely to be high trafficking countries. Most marginal effects are insignificant; however, the significant marginal effects support the argument that economic freedom reduces, rather than increases, human trafficking. From specifications (1) and (5), for example, the probability of being a low-level trafficking country (score of 1) is reduced by 5 and 6% points, respectively, and the likelihood of receiving a score of 3, higher level of trafficking, is reduced by 5 and 8% points, respectively.

The betas of income per capita are positive and significant in seven of the eight specifications. Communism's coefficient is positive and significant in one specification. The coefficients from female unemployment rate, population density, landlock, and gini are negative and significant in at least one specification.

Table VII presents the results using trafficking out as the dependent variable. In the first specification, economic freedom's coefficient is negative and significant, suggesting that an increase in economic freedom reduces the probability of a country engaging in trafficking. The marginal effects, reported in Panel B, support this finding. The remaining specifications report insignificant coefficients of economic freedom and insignificant marginal effects.

The betas of income per capita are negative and significant in six of the eight regressions, and the betas of the 3P index are negative and significant in three of the five regressions, suggesting that higher income and government policies may reduce the likelihood of individuals being taken to be trafficked. Supporting the above findings, all four regressions report positive and significant betas on communism, indicating that former communist countries traffic humans out of the country. Population's coefficients are all positive and significant and labor ratio's coefficient is positive and significant in one specification. In addition, the last regression reports negative and significant coefficients on press freedom, female unemployment, catholic, school enrollment, language fractionalization, and prostitution, suggesting that these variables may decrease the probability of a country trafficking out individuals. The values of the pseudo- R^2 fall between 0.03 and 0.32 for trafficking in and fall between 0.17 and 0.69 for trafficking out.

In Table VIII, we replace the human trafficking measures with a 2014 measure of modern slavery capturing the proportion of the population enslaved (Global Slavery Index 2014). Thus, we utilize OLS estimators. Economic freedom is, once again, negative in all specifications, and significant in one. This supports our main findings. In contrast to our previous findings, income per capita and democracy are negative and significant in several specifications, suggesting that wealthier, more democratic countries are less likely to enslave their citizens. The 3P index is negative and significant in one specification, suggesting that anti-trafficking policies may reduce modern slavery. Also, communism is negative and significant in one specification. Overall, these specifications explain between 40 and 68% of the variation in modern slavery.

We also ran additional robustness checks not reported. We reran our main model specifications from Tables II–IV, dropping low-income countries. The results are unchanged. In addition, we replaced economic freedom with either a measure of trade to GDP or FDI to GDP and found similar results. In fact, trade and FDI are negative and significant in several specifications. At a minimum, more economic interaction through trade and FDI does not lead to more trafficking and it may lead to less.

Lastly, we assess economic freedom's potential indirect impact on human trafficking by examining how economic freedom relates to anti-trafficking policies as measured by the 3P index. Recall the 3P index measures government policies to prosecute, prevent, and protect victims of human trafficking. Each sub-index is measured on a 1–5 scale; thus, the aggregate 3P index is measured on a 3–15 ordinal scale with higher values indicating greater

TABLE VIII Economic Freedom and Human Trafficking, Modern Slavery

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dep. Var: modern slavery								
Econ freedom	-0.05 (0.04)	-0.03 (0.05)	-0.02 (0.04)	-0.01 (0.04)	-0.02 (0.04)	-0.05 (0.04)	-0.07* (0.04)	-0.01 (0.03)
Log GDP pc	-0.16*** (0.04)	-0.15*** (0.04)	-0.11* (0.06)	-0.10* (0.06)	-0.10* (0.06)	0.00 (0.05)	0.02 (0.06)	-0.04 (0.05)
Democracy		-0.02** (0.01)	-0.02** (0.01)	-0.02* (0.01)	-0.02* (0.01)	-0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)
Legal origins	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Regional controls	No	No	Yes	Yes	Yes	Yes	Yes	Yes
3P index				-0.02* (0.01)	-0.02 (0.01)	-0.02 (0.01)	-0.01 (0.01)	0.00 (0.01)
Press freedom				0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)
Communism				-0.39** (0.19)		-0.11 (0.17)	-0.11 (0.20)	0.04 (0.24)
Log pop						-0.02 (0.03)	-0.02 (0.03)	-0.01 (0.02)
Unemp, female						-0.00 (0.00)	-0.00 (0.01)	-0.00 (0.00)
Catholic						0.06 (0.07)	-0.00 (0.07)	-0.00 (0.06)
Pop density						-0.00** (0.00)	-0.00** (0.00)	-0.00** (0.00)
Labor ratio						-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)
School enroll						-0.00 (0.00)	-0.00 (0.00)	-0.01** (0.00)
Landlock							0.06 (0.07)	-0.00 (0.07)
Gini							-0.00 (0.01)	-0.01* (0.00)
Language frac							0.01 (0.17)	-0.01 (0.12)
Prostitution								-0.04 (0.06)
Constant	2.18*** (0.21)	2.09*** (0.23)	1.69*** (0.37)	1.76*** (0.38)	1.77*** (0.42)	1.80** (0.69)	1.78** (0.72)	2.58*** (0.69)
Observations	112	108	108	108	107	91	85	59
Adj. R^2	0.40	0.43	0.46	0.47	0.44	0.61	0.58	0.68

Notes: This table presents OLS regressions with modern slavery as the dependent variable. Robust standard errors are reported in parenthesis. ***, **, and * denote significance at 1, 5, and 10%, respectively. Variables are described in Appendix 1.

TABLE IX Economic Freedom and Human Trafficking, 3P Index

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Panel A, Dep. var: 3P index</i>							
Econ freedom	0.32** (0.14)	0.28** (0.13)	0.31** (0.13)	0.45*** (0.13)	0.45*** (0.15)	0.48*** (0.16)	0.46*** (0.17)
Log GDP pc	0.31*** (0.10)	0.23** (0.10)	0.20** (0.10)	0.28** (0.14)	0.27 (0.18)	0.20 (0.17)	-0.03 (0.21)
Democracy		0.09*** (0.02)	0.09*** (0.02)	0.07** (0.03)	0.07** (0.03)	0.06** (0.03)	0.07* (0.04)
Legal Origins		Yes	Yes	Yes	Yes	Yes	Yes
Press freedom		0.00 (0.00)	0.00 (0.00)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)
Communism		1.45*** (0.48)		0.97 (0.90)	0.97 (0.90)	0.92 (0.88)	0.72 (0.96)
Log pop				0.20* (0.11)	0.20* (0.11)	0.21** (0.10)	0.24** (0.12)
Unemp, female				0.03 (0.02)	0.03 (0.02)	0.03 (0.02)	0.04 (0.02)
Catholic				0.55** (0.25)	0.55** (0.24)	0.57** (0.25)	0.91*** (0.32)
Pop density				0.00* (0.00)	0.00** (0.00)	0.00* (0.00)	0.00 (0.00)
Labor ratio				0.03*** (0.01)	0.03*** (0.01)	0.03*** (0.01)	0.03*** (0.01)
School enroll				-0.02* (0.01)	-0.02* (0.01)	-0.02** (0.01)	-0.02* (0.01)
Control corruption					0.01 (0.22)	-0.08 (0.24)	0.11 (0.27)
Women econ rights						0.23 (0.17)	0.18 (0.19)
Landlock							-0.65* (0.36)
Gini							-0.02 (0.02)
Language frac							0.19 (0.51)
Observations	116	109	108	91	91	91	85
Pseudo-R-squared	0.06	0.12	0.12	0.19	0.19	0.20	0.22
<i>Panel B, Marginal effects: mean level of economic freedom</i>							
Predicted outcome = 3 (no compliance)		-	-	-	-	-	-
Predicted outcome = 4		-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)
Predicted outcome = 5		-0.01 (0.01)	-0.01 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)
Predicted outcome = 6		-0.01 (0.01)	-0.01 (0.00)	-0.01 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)
Predicted outcome = 7		-0.03* (0.02)	-0.02* (0.01)	-0.03* (0.01)	-0.02* (0.01)	-0.03 (0.02)	-0.02 (0.02)
Predicted outcome = 8		-0.04** (0.02)	-0.03** (0.02)	-0.03** (0.02)	-0.04** (0.02)	-0.05** (0.02)	-0.04** (0.02)

(Continued)

Predicted outcome = 9	-0.03** (0.02)	-0.04* (0.02)	-0.04** (0.02)	-0.05** (0.02)	-0.05** (0.02)	-0.06** (0.03)	-0.05** (0.02)
Predicted outcome = 10	-0.00 (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.05** (0.02)	-0.05** (0.02)	-0.06** (0.03)	-0.05** (0.02)
Predicted outcome = 11	0.02* (0.01)	0.02* (0.01)	0.02* (0.01)	0.03 (0.02)	0.03 (0.02)	0.03 (0.02)	0.02 (0.02)
Predicted outcome = 12	0.03* (0.01)	0.03* (0.02)	0.03* (0.02)	0.06** (0.02)	0.06** (0.02)	0.06** (0.03)	0.06** (0.03)
Predicted outcome = 13	0.04** (0.02)	0.04* (0.02)	0.04** (0.02)	0.06** (0.03)	0.06** (0.03)	0.07** (0.03)	0.07** (0.03)
Predicted outcome = 14	0.03** (0.02)	0.02* (0.01)	0.03** (0.01)	0.03** (0.02)	0.03* (0.02)	0.03* (0.02)	0.03 (0.02)
Predicted outcome = 15 (<i>full compliance</i>)	0.01 (0.01)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)

Notes: Panel A presents ordered probit regressions with the 3P index as the dependent variable. Panel B reports marginal effects of economic freedom based on the mean of all variables. Robust standard errors are reported in parenthesis. ***, **, and * denote significance at 1, 5, and 10%, respectively. Variables are described in Appendix 1.

TABLE X Economic Freedom and Human Trafficking_3P Index Sub-indices

	Prosecution index			Protection index			Prevention index		
	(1)	(2)	(3)	(4)	(5)	(6)			
Panel A, Dep. var									
Econ freedom	0.29* (0.16)	0.54** (0.23)	0.23 (0.15)	0.29 (0.19)	0.27** (0.14)	0.33* (0.17)			
Log GDP pc	0.25** (0.10)	0.24 (0.23)	0.29*** (0.10)	0.07 (0.22)	0.23** (0.10)	-0.33 (0.25)			
Democracy		0.09** (0.04)		0.04 (0.04)		0.02 (0.04)			
Legal origins		Yes		Yes		Yes			
Press freedom		0.00 (0.01)		0.01 (0.01)		0.00 (0.01)			
Communism		0.15 (1.18)		-0.04 (0.93)		5.91*** (1.13)			
Log pop		0.31** (0.15)		-0.05 (0.12)		0.24** (0.12)			
Unemp, female		-0.01 (0.02)		0.03 (0.02)		0.05* (0.02)			
Catholic		-0.04 (0.36)		0.76** (0.32)		0.91*** (0.35)			
Pop density		0.00*** (0.00)		-0.00 (0.00)		-0.00 (0.00)			
Labor ratio		0.03*** (0.01)		0.02** (0.01)		0.03*** (0.01)			
School enroll		-0.02 (0.01)		-0.03* (0.01)		-0.02* (0.01)			
Landlock		0.17 (0.37)		-0.55 (0.37)		-1.02*** (0.39)			
Gini		0.00 (0.02)		-0.02 (0.02)		-0.02 (0.02)			
Language frac		-0.31 (0.60)		0.19 (0.58)		0.42 (0.60)			
Control corruption		-0.23 (0.30)		0.07 (0.26)		0.38 (0.28)			
Women econ rights		0.02 (0.24)		-0.07 (0.23)		0.45** (0.19)			
Observations	116	85	116	85	116	85			
Pseudo-R-squared	0.07	0.26	0.08	0.23	0.06	0.29			
Panel B, Marginal effects: mean level of economic freedom									
Predicted outcome = 1 (no compliance)	-	-	-0.01 (0.01)	-0.00 (0.00)	-0.01 (0.01)	-0.00 (0.00)			
Predicted outcome = 2	-0.06* (0.03)	-0.06* (0.03)	-0.07 (0.05)	-0.09 (0.06)	-0.03 (0.02)	-0.01 (0.01)			
Predicted outcome = 3	-0.05* (0.03)	-0.12** (0.05)	0.02 (0.02)	-0.00 (0.02)	-0.07** (0.03)	-0.10* (0.05)			
Predicted outcome = 4	0.03 (0.02)	0.03 (0.04)	0.04 (0.02)	0.06 (0.04)	0.04* (0.02)	0.04 (0.03)			
Predicted outcome = 5 (full compliance)	0.08* (0.04)	0.14** (0.06)	0.03 (0.02)	0.03 (0.02)	0.07** (0.04)	0.08* (0.04)			

Notes: Panel A presents ordered logit regressions with the 3P index sub-indices as the dependent variables. Panel B reports marginal effects of economic freedom based on the mean of all variables. Robust standard errors are reported in parenthesis. ***, **, and * denote significance at 1, 5, and 10%, respectively. Variables are described in Appendix 1.

anti-trafficking policy effectiveness. As before, the categorical and ordinal structure suggests that ordered probit is the most appropriate estimator.⁴

In all regression specifications, reported in Table IX, Panel A, the betas of economic freedom are positive and significant. This indicates that economic freedom correlates with more stringent anti-trafficking policies. The marginal effects of economic freedom, which can be found in Table IX, Panel B, are considerably more complicated to interpret due to the 13 different states the dependent variable can take. Overall, the marginal effects universally point in the direction that economic freedom is related to better anti-trafficking policies. In the majority of specifications, economic freedom significantly reduces the probability of receiving a score lower than 10 and it significantly increases the likelihood of receiving a score of 11 or higher on the 3P index. Thus, the results indicate that higher levels of economic freedom increase the probability of having strong anti-human trafficking policies. The pseudo- R^2 values range from 0.06 to 0.22.

To gain further insight, we investigate which policies economic freedom impacts by replacing the overall 3P index with the three sub-indices measuring policies related to (1) prosecution, (2) protection, and (3) prevention. For each dependent variable, we only report the regression specification, controlling for economic freedom and income, as well as the specification including all control variables.

As shown in Table X, Panel A, economic freedom is positively and significantly related to both human trafficking prosecution and prevention. Columns (3) and (4) report that the betas of economic freedom are not significantly related to trafficking protection at conventional levels (p -values of 0.11 and 0.14, respectively). The marginal effects of economic freedom are reported in Table X, Panel B. It appears that economic freedom significantly increases the probability of scoring a 4 or a 5 (the latter corresponding to full compliance with the law), while reducing the probability of a low compliance score of 2 or 3. Combined with the findings above, economic freedom promotes policies designed to limit human trafficking, specifically policies related to prosecution and prevention. In addition, the results suggest that democracy only promotes anti-trafficking prosecution policies. The pseudo- R^2 values range from 0.06 to 0.29.

We briefly compare our results to Cho, Dreher, and Neumayer (2014), who examine determinants of the 3P index, but do not control for economic institutions. The main similarity is that democracy positively impacts the 3P index. However, Cho et al. find that democracy relates to all three sub-indices, whereas it is only correlated with prosecution in our specifications. We find that the beta of income per capita positively and significantly impacts the 3P index in most specifications, whereas Cho et al. do not find a significant relationship with income. Betas for women's economic rights and control of corruption are highly significant in Cho et al.'s findings, but are insignificant across our specifications.

Collectively, our direct results indicate that countries with more open, liberal economic policies are *not* more likely to be involved in human trafficking. If anything, the evidence points in the opposite direction. Countries with more economic freedom seem to experience less human trafficking and are more likely to adopt policies designed to prevent it.

5. CONCLUDING REMARKS

Economic freedom and globalization of markets have had many beneficial impacts in terms of income creation and poverty reduction. One worry is that a more open and globalized

⁴We also estimate with ordered logit and OLS and find similar findings, which are available upon request.

world favorable to trade in goods and services will also be more favorable toward forcible trading in human beings. Our analysis uses multiple data sources to examine how economic freedom relates to direct measures of trafficking flows and an indirect measure of anti-trafficking policies. We find no evidence in support of the idea the economic freedom is associated with greater human trafficking. On the contrary, there is evidence that countries with more economic freedom are more likely to enact and enforce strict policies to fight human trafficking and some evidence that the actual incidence of trafficking is diminished among countries with more economic freedom.

Based on these findings, normative conclusions may suggest that (1) economic freedom should not be resisted out of fear that freer markets imply more trade in humans and (2) economic freedom should be used to combat human trafficking, given the propensity of economically free countries to adopt anti-trafficking policies.

Although our findings are robust, we do acknowledge limitations surrounding this type of work. Despite the definition of human trafficking noted in the beginning, human trafficking statistics frequently do not make firm distinctions between forced transportation of individuals and the voluntary (though likely illegal) movement of individuals across borders in search of employment opportunities. For example, as noted in the *2012 Report on Trafficking in Persons* ‘... the number of victims of forced labour as a result of trafficking in persons remains unknown’ (UNODC 2012, 9).

To the extent that the UNODC statistics are capturing those individuals engaged in forced labor and other violations of individual rights, this research can be viewed as a first step examining the impact of economic freedom on other aspects of human freedom. However, the data may be capturing voluntary migration that should not be viewed as human trafficking in a strict sense. Indeed, many economists would likely favor an increase in the voluntary migration of people across borders (e.g. Clemens 2011), but none would likely support the violations of human rights and individual sovereignty that a core definition of human trafficking involves. It is important to keep this distinction in mind when thinking about the implications of the present work.

DISCLOSURE STATEMENT

No potential conflict of interest was reported by the authors.

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APPENDIX 1. DATA DESCRIPTION

Variable	Description	Source
Trafficking destination	Incidence of human trafficking by country of destination; scaled between 1 and 5 reflecting 'very low' to 'very high' incidence. Averaged from 1996 to 2003	UNODC (2006)
Trafficking origin	Incidence of human trafficking by country of origin; scaled between 1 and 5 reflecting 'very low' to 'very high' incidence. Averaged from 1996 to 2003	UNODC (2006)
Trafficking transit	Incidence of human trafficking transiting through a country; scaled between 1 and 5 reflecting 'very low' to 'very high' incidence. Averaged from 1996 to 2003	UNODC (2006)
Trafficking in	Reflects inbound cross-border trafficking based on country reports found in the US Department of State Trafficking in Persons Report (2013). Coded on an ordinal scale of 1–4, where higher values reflect higher levels of cross-border human trafficking. Measured in 2013	Global Slavery Index (2013)
Trafficking out	Reflects outbound cross-border trafficking based on country reports found in the US Department of State Trafficking in Persons Report (2013). Coded on an ordinal scale of 1–4, where higher values reflect higher levels of cross-border human trafficking. Measured in 2013	Global Slavery Index (2013)
Modern slavery	Number of people enslaved by proportion of the population. Measured in 2014	Global Slavery Index (2014)
Econ freedom	Economic freedom measures the level of economic freedom on a scale from 0 to 10, with 10 representing a greater degree of freedom. The index is grouped in five broad categories: size of government (EFW Area 1), monetary policy and price stability (EFW Area 2), legal structure and security of security of private ownership (EFW Area 3), freedom to trade with foreigners (EFW Area 4), and regulation of credit, business, and labor (EFW Area 5). Data are from 2012	Fraser Institute, <i>Economic Freedom on the World</i> (2014)
Log GDP pc	Log of gross domestic product per capita, PPP, constant 2011 international dollar. Measured in 2012	WDI (2014)
Democracy	Measures autocracy versus democracy on a scale from –10 to 10 with 10 being democratic. Measured in 2013	Polity IV, Marshall, Gurr, and Jaggers (2014)
Legal Origins	Three dummy variables coded 0 or 1: 1 indicates that a country was colonized by France, German, or Scandanavia and French, German, Scandanavian legal code was transferred, respectively	La Porta, Lopez-de-Silanes, and Shleifer (2008)
Regional Controls	Dummy variables reflecting a country's location in the following regions: East Asia Pacific, Eastern and Central Europe, Middle East and North Africa, South Asia, Western Europe, Sub-Saharan Africa, Latin America and the Caribbean, and North America	World Bank
3P index	3P Anti-trafficking Policy Index evaluates governmental anti-trafficking efforts along three policy dimensions; prevention, prosecution, and protection. Measured in 2013	Cho, Dreher, and Meumeyer (2014)

(Continued)

APPENDIX 1. (Continued)

Variable	Description	Source
Press freedom	Freedom House's index of press freedom rating the independence of the media sector based on the extent to which the country allows free flow of news and information. It ranges from 0 to 100 with 100 being the most free. Measured in 2012	Freedom House (2013)
Communism	Measures a history of communism. The average of dummy variables equal to 1 for whether a country is communist at six points during the twentieth century, every 15 years starting in 1925. We average all six dummies to get a measure of the share of the century a country was communist	Barro and McCleary (2003)
Log pop	Log of total population. Measured in 2012	WDI (2014)
Unemp, female	Unemployment rate among female labor force. Measured in 2012	WDI (2014)
Catholic	Measured as the percentage of population in 1980 (or for 1990–1995 for countries formed more recently) that belonged to Roman Catholic religion	La Porta et al. (1999)
Pop density	Population divided by land area. Measured in 2012	WDI (2014)
Labor ratio	Ratio of female to male labor force participation. Measured in 2012	WDI (2014)
School enroll	Primary school enrollment rate. Measured in 2012	WDI (2014)
Landlock	Dummy variable equal to 1 if a country is landlocked, 0 otherwise	CIA World Fact Book
Gini	Measure of income inequality. This measure ranges from a value of 0, which indicates perfect income equality, to 100, which indicates perfect income inequality. Data vary by different years using the most recent data	WDI (2014)
Language frac	Measures the degree of language heterogeneity	Alesina et al. (2003)
Prostitution	Dummy variable equal to 1 if prostitution is legal, 0 otherwise. As of February 2015	Legal Prostitution (2015)
Rule of law	Captures the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence. Data are from 2013	Worldwide Governance Indicators (2014)
Control corruption	Measures control of corruption using multiple sources. Captures the assessment of the intrusiveness of the country's bureaucracy. Data are from 2013	Worldwide Governance Indicators (2014)
Women's econ rights	The variable women's economic rights has three possible categories. A score of 0 represents a category of countries, which has no economic rights for women under the law. A score of 1 represents a category of countries which has some economic rights for women under the law. A score of 3 represents a category of countries which has all or nearly all of economic rights protected by law. Data are from 2011	Cingranelli-Richards (CIRI) Human Rights Database (2014)
Homicide	Measures the intentional homicide rate per 100,000 population. Data are from 2012	UNODC (2014)

Note: All variables are collected for the most recent year(s).

APPENDIX 2. COUNTRY SAMPLE

Albania	Denmark	Kenya	Paraguay
Algeria	Dominican Republic	Korea, Rep.	Romania
Australia	Ecuador	Lithuania	Russia
Austria	Egypt	Luxembourg	Rwanda
Burundi	Estonia	Latvia	Senegal
Belgium	Finland	Morocco	Singapore
Benin	Fiji	Madagascar	Sierra Leone
Bangladesh	France	Mexico	El Salvador
Bulgaria	Gabon	Mali	Slovak Republic
Bahrain	Germany	Malta	Slovenia
Bahamas	Ghana	Mauritius	South Africa
Belize	Guinea-Bissau	Malawi	Spain
Bolivia	Greece	Malaysia	Sri Lanka
Brazil	Guatemala	Namibia	Sweden
Botswana	Guyana	Niger	Switzerland
Central African Rep	Hong Kong	Nigeria	Togo
Canada	Honduras	Nicaragua	Thailand
Chile	Haiti	Netherlands	Trinidad and Tobago
China	Hungary	Norway	Tunisia
Cote d'Ivoire	Indonesia	Nepal	Turkey
Cameroon	India	New Zealand	Tanzania
Chad	Ireland	Oman	Uganda
Congo, Rep.	Iran	Pakistan	Ukraine
Colombia	Iceland	Panama	Uruguay
Costa Rica	Israel	Peru	United Kingdom
Croatia	Italy	Philippines	United States
Cyprus	Jamaica	Papua New Guinea	Venezuela
Czech Republic	Jordan	Poland	Zambia
Democ Rep of Congo	Japan	Portugal	Zimbabwe
