**Military Manpower Systems and Economic Inequality: An Empirical Model Revisited**

**1950-2005**

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**Abstract**

*Military conscription is one of the constitutive policy bargains of the modern state. From a political economy perspective taxation and conscription may be viewed as substitutable instruments of foreign and defense policy. Existing empirical studies focus mostly on the ‘political’ causal link from the choice of military manpower systems (conscript vs. professional) to defense policy as is primarily expressed by the projection of ‘hard’ military force. We, on the other hand, use a time-series cross-section (TSCS) original data set (1950-2005 state-years) to test the ‘economic’ causal link from economic (and political) inequality to the choice of military manpower system. We find that more egalitarian societies will tend to conscript at a higher rate. We manage to capture the richness of cross-country and cross-time variation in types of military organization by using both effective and statutory continuous measures of military conscription, in order to control for the discrepancy between legally enacted and effectively enforced levels of conscription. Panel-corrected standard errors and distributed lags are estimated to correct for temporal dependence, policy inertia, and other identification concerns.*

# Introduction

For all their diversity in regime types and security considerations more than half of the world’s states employ military conscription in one form or the other (Hadass, 2004), amongst them major powers like China, Russia, and Brazil. Intertemporally (even macrohistorically) the observed variation in state policy with respect to the allocation of military manpower resources by means of either volunteerism (militias), market incentives (mercenaries or professional soldiers), or military conscription (citizen soldiers or mass national armies) is even richer. While in some notable cases, namely Britain, the US, and other Anglo-Saxon democracies after both World Wars (Levi, 1996), the transition back to the *status quo* of full military professionalization was made once the extenuating circumstances of heightened security threat ceased to bind, the long-term trend towards professionalization and military downsizing only caught up with countries such as France, Italy, and Spain after the end of the Cold War. The reverse transition towards the adoption of conscription has also happened often in cases beyond the Euro-Atlantic ‘security community’.

As one of the constitutive policy bargains of the modern state, military conscription is one of those institutions that run to the core of state-society relations. From an academic point of view, the study of conscription lies at the intersection of such fields as political economy, defense economics, international security, and comparative politics. Yet, despite the richness in variation of military manpower procurement systems (MMS) both across countries and over time, the political economy of the so-called ‘conscription tax’ has yet to be studied in a systematic and consistent fashion, not least because the extant normative body of work and the corresponding policy debates have by and large been motivated by transient historical relevance essentially in the aftermath of major wars (namely the two World Wars and the Vietnam War). The heightened need for military personnel and manpower during the Vietnam War, the controversial nature of the implemented draft, and its eventual elimination in 1973, spawned a growing body of work mainly by economists interested in studying normative questions on the allocative efficiency and equity of conscript versus all-volunteer armies. Focusing on the US military system, papers by Hansen and Weisbrod (1967), Oi (1967), Fisher (1969), and more recently Warner and Asch (1996), analyze the general equilibrium costs and benefits of different military manpower procurement mechanisms, coming out overarchingly in favor of an all-volunteer force (Lee and McKenzie (1992) being a notable exception).

We rather favor a more holistic positive approach that employs some of the standard tools in comparative political economy in order to understand i) the underlying mechanism that renders military conscription politically sustainable in times of both peace and conflict and ii) the way in which the choice of military manpower systems feeds into national foreign and defense policy. In other words we are interested in explaining both institutional choice and effect.

Institutional effect in this case refers to the ‘political’ causal link from the choice of military manpower systems (conscript vs. professional) to foreign and defense policy. Grouped together as one umbrella policy jurisdiction that aggregates preferences over the provision of national security as a pure public good, foreign and defense policy essentially amounts to the projection of power through a mix of ‘hard’ (e.g., military manpower, armament) and ‘soft’ (e.g., diplomacy, alliance formation, foreign aid) policy instruments.[[3]](#footnote-3) Foreign policy ‘hawks’ will put more emphasis on the former in their pursuit of national security objectives, while ‘doves’ will tend to make more intensive use of the latter. Naturally military conscription, as a mechanism for the procurement of military personnel, is a targeted policy instrument with high levels of specificity to the projection of ‘hard’ power.[[4]](#footnote-4)

The relationship between conscription regime and particular facets of foreign policy behavior and outcomes has been the subject of a number of empirical studies in political science and political economy that treat the type of military manpower system as a right-hand-side variable. Choi and James (2003) for example show that a military manpower system with conscripted soldiers is more prone to militarized interstate disputes. Evidence for the propensity of conscript armies to engage in belligerent military force is also presented by Pickering (2010). Vasquez (2005), on the other hand, finds that conscription (especially among democratic states) is associated with a lower number of military combat casualties. Even though this body of work has produced some very interesting insights with respect to the ‘political’ repercussions of the type of military organization, the empirical identification of the so-called ‘political’ link has been on the most part plagued by confounding endogeneity issues. As we argue in this paper, the choice of conscription regime does not exogenously arise in a vacuum, but is shown to be heavily contingent on the political economy fundamentals of a society, namely the organization and distribution of economic assets and political rights. We refer to this underlying structural relationship as the ‘economic’ causal link, which we seek to estimate econometrically in this paper. Papers by Mulligan and Shleifer (2005) and Hadass (2004) that put conscription on the left-hand side as the dependent variable do not account for the role of economic inequality while their results with respect to the effect of democracy and political regime on the choice of military organization are somewhat ambiguous.

We use a time-series cross-sectional (TSCS) original data set (1950-2005 country-years) of current NATO members to test the direct effect of economic (and political) inequality on the choice of military manpower system. We expect that lower levels of economic inequality are associated with higher levels of conscription, while, on the other hand, the effect of democratization and regime type on aggregate levels of conscription is shown to be non-monotonic. Our main contribution to the empirical study of military manpower systems amounts to the fact that – unlike standard dichotomous variables employed in the literature - we have put together continuous measurements of conscription that allow us to take advantage of the rich variation in military manpower systems in our sample and hence to refine our understanding of the determinants of conscription policy. We distinguish between *statutory* (captured by the official length of compulsory military service) and *effective* (proxied by the percentage of conscripts out of total military personnel) measures of conscription. In both cases we find that inequality accounts for a large part of cross-sectional variation, whereas the intertemporal evolution of conscription policy – more specifically, the trend towards full army professionalization – is due mostly to shifting circumstances in the external security and technological environments.

While the focus of this paper is on the empirical identification of the political economy determinants of conscription policy, we wish to argue that a joint estimation of the so-called ‘economic’ and ‘political’ causal links may give rise to a system of structural equations of ‘endogenous foreign and defense policy’.[[5]](#footnote-5) Therefore the study of foreign policy effectively straddles the boundaries of academic subfields and disciplines. This is a line of research we explore in future work. We now proceed to discuss the theoretical underpinnings of our main hypotheses. The following section outlines our research design, including data description and model specification. We subsequently present and interpret our main results before concluding in the final section.

# The Political Economy of Conscription

Our empirical specification is predicated on the political economy model of conscription by Konstantinidis (2011) that derives individual preferences over the type of military organization on the basis of civilian income and political enfranchisement. From a political economy perspective taxation and conscription are viewed as substitutable instruments of foreign and defense policy towards the provision of national security. In other words the state may raise an army by recruiting professional soldiers through the competitive labor market, where personnel costs would be financed through direct taxation on civilian income, or by conscribing military service. Each of the two systems of military manpower procurement (or combination thereof) has distinct *redistributional* and *efficiency* properties. While economists have mostly focused on the latter, we choose to emphasize the former especially with respect to their implications for preference aggregation and social choice. While we remain agnostic with regard to the specific preference aggregation and policy formation mechanism in place within each country-year observation, we go on to state some generally applicable hypotheses that transcend institutional context.

Our theoretical understanding of both the cross-sectional and intertemporal variation in military conscription policy within a broader range of security settings and polities draws on our conception of conscription as a form of taxation on a civilian’s labor endowment. In the same way that income taxation is an instrument of fiscal policy conscription is part of the foreign and defense policy toolkit. Taking the analogy even further, similar to how public economists study the (pro- or anti-) cyclicality of fiscal policy in correspondence to the business cycle, we estimate the relationship between conscription policy and fluctuations in the security environment, i.e., how the type of military organization is expected to vary across times of both peace and war for exogenously given political economy fundamentals.

Along the same lines as the theoretical framework proposed by Morgan and Palmer (2000), we adopt a microeconomic type of approach to modelling the choice of military manpower system in tandem with foreign and defense policy as decisions to allocate scarce resources (time and income) towards the maximization of national security  as a collective, all-encompassing end-good:



The above expression captures a certain ‘security production function’ that circumscribes the formulation of foreign  and defense  policy. National security may be either generated through ‘hard’ or ‘soft’ instruments of power. Military defense resources  are either expended on military personnel and armed forces  or on capital investments and armaments . Governments may also choose to enhance their security status by investing in ‘soft’ instruments of influence , such as foreign aid, diplomacy, and alliances. The overall level of external military threat as well as the relative effectiveness of ‘hard’ defense policy instruments is captured by parameter . Moreover, the state of military technology, strategy, and weapons systems and the overall labor productivity of military forces is reflected by parameter .

In order to correctly identify the relationship between political economy fundamentals, the choice of military manpower systems (MMS), and foreign/defense policy, we need to distinguish between the *medium* and the *long*-term horizon of decision-makers. The *medium* term denotes just that time horizon where the overall geopolitical and technological environments (parameters  and ) are stable enough that they do not generate any shifts in foreign and defense policy; hence, the desired size of the armed forces  is held fixed. At the same time, the horizon is long enough that the transition costs across regimes of military organization, i.e., the balance between conscripted and professional military manpower, are averaged out and dissipate. In the medium run, the process of military professionalization may take place without the downsizing of armed forces, given that foreign and defense policy adjustments to real or perceived security challenges and demand for troop deployment remain fixed. How the medium run is translated into actual months or years actually depends on factors such as the volatility of the security environment, bureaucratic state capacity, and military organizational culture. Full professionalization of the French army might not appear such a daunting and time-prolonged task compared to say that of the North Korean army.

In the *long* run military procurement policy and foreign and defense policy are endogenously interrelated. The systemic geopolitical and technological environments are malleable and stochastic. Historically momentous events, such as the end of the Cold War and the 9/11 attacks, have long-term effects upon the foreign and defense policy orientation of countries. Alliances shift and so does the balance of power on a regional or global level, thereby altering the security threats and challenges faced by each country separately. Even though with the advent of modern capital-intensive warfare the long-term effects of foreign and defense policy readjustments have often been absorbed by variable defense spending on weapons systems and military technology, there remain some interesting cases of actual increased mobilization or downsizing of military manpower. The unprecedented level of mobilization right before and during the two World Wars are examples par excellence of the former, while the decision of China to downsize and modernize its army throughout the 80s and 90s from around six million to slightly more than two is a telling example of the latter. The gradual reduction in size of Russian army forces (in pursuit of higher specialization, mobility, and flexibility in military deployment) following the collapse of the Soviet Union is another case in hand.

While the overall size of the military will be endogenously determined in the long run by exogenous parameters  and , the type of military manpower system, i.e., the breakdown of total active duty military personnel  between professional volunteer soldiers  and conscripts  will be conditioned at all times by underlying political economy variables, such as economic inequality, political regime, and labor market characteristics, by dint of the redistributional consequences of conscription and pecuniary taxation on income. As conscripts are typically drawn from all social strata, the large discrepancies in their civilian productivity and therefore their opportunity cost of time spent in the military give rise to a mixed profile of derived preferences over the desired level of conscription.

As shown formally in the model by Konstantinidis (2011), there are three generic conscription policy constituencies among individuals liable for military service. The higher-income constituency favoring an all-volunteer force will consist of those civilians whose productivity is high enough (and so is for them the draft’s opportunity cost of foregone civilian income) that the medium-term level of security threat does not justify for them any form of conscription. They would rather pay in taxes for others to serve. There is also a middle-class ‘pocket’ of civilians who favor positive levels of conscription for the simple reason that their opportunity cost of foregone income is not high enough for them to oppose serving for a fraction of their time, yet they are skilled enough that they are not willing to enlist as professional soldiers. Finally, the class of liable lower-skilled citizens will also favor an all-voluntary force, however for different reasons than the high-income class. For any given security environment such that they stand more to gain by volunteering as professional soldiers rather than by plying their trade as civilians, only a fully professionalized military is the one that maximizes their military wage as determined by the labor market clearing equilibrium.

In contrast to the fundamental result in public finance that economic inequality generates higher demand for redistribution via taxation (Meltzer and Richard, 1981), this supposition does not hold with regard to the ‘conscription tax’. As it becomes evident in both the medium and the long term, it is mostly the middle class that benefits from the draft, whilst the higher and lower income strata favor full military professionalization financed through direct taxation. As such, conscription constitutes a form of redistribution from the extremes to the middle of the income distribution. Hence, a lower level of inequality implies a stronger middle class and by consequence higher aggregate demand for conscription. This allows us to state our first hypothesis with respect to the expected relationship between income inequality and conscription policy.

Hypothesis 1: All else equal, aggregate demand for positive levels of conscription is higher in more egalitarian societies.

An analogous result is replicated to derive the expected relationship between the level of democratization (or enfranchisement) and the type of military organization that maximizes the aggregate welfare of the enfranchised social groups. The type of political regime and the level of democratization are coterminous with the level of political inequality, i.e., the degree to which the right to vote and liability to serve overlap. Even if there is a linear relationship between political income levels and political enfranchisement, Konstantinidis (2011) illustrates how the relationship between democratization and conscription policy may be potentially non-monotonic. Following the same logic as above, where conscription was shown to be a form of redistribution that favors the middle-income strata, the use of the draft will maximize the aggregate welfare of the enfranchised population only in cases of limited suffrage, i.e., once the bourgeois classes gain the right to vote.

To explain variation in military manpower procurement systems across political regimes, there are other factors that we have to consider. For example we need to control for the level of state capacity as it cannot be assumed that any given conscription policy can be costlessly enforced in the medium term by the central government of any (democratic or non-democratic) polity.[[6]](#footnote-6) Moreover, the army often plays an important role in the domestic political arena as a guarantor of internal security. The role of the army and even paramilitary groups as agents of repression, coercion, and persecution is a more common pattern across non-democratic regimes. If these types of benefits were inversely proportional to the level of democratization, then one would expect military mobilization levels to peak at medium levels of enfranchisement. Of course the story is not as straightforward as that. On one hand, a mass army of conscripts could be easier to control but harder to motivate in the absence of true political legitimacy on the part of the regime. On the other hand, ruling elites often fear the proclivity of professional high-ranking officers for military coups. Therefore, a sound theory of conscription policy under dictatorial rule should seek to derive the type of military organization that maximizes the dictator’s chances of political survival.

Starting from the premise that conscription constitutes a direct distortion of civilian labor allocation decisions, we postulate that the choice of military manpower systems will be conditioned by the underlying characteristics of the labor market. Lower-skilled individuals eager to enlist as professional soldiers (thus guaranteeing themselves a sort of minimum wage) will generally oppose conscripts as unwelcome competition, effectively acting like a trade union restricting market access to non-unionized workers lest they push down industry wages. In fact, organized labor has often expressed its dissent to the draft even at times of extreme danger.[[7]](#footnote-7) Higher levels of unemployment, i.e., a higher probability of not finding a suitable job in the civilian sector, are expected to cause an expansionary shift in the military labor supply curve. Raising a professional army hence becomes relatively cheaper, therefore rendering conscription a less attractive option. By the same token, the degree of labor unionization will be associated with lower levels of conscription.

Hypothesis 2: All else equal, higher levels of structural unemployment and labor unionization are associated with lower aggregate demand for conscription.

A country’s demographic characteristics have also been shown to be strong predictors of its choice of military manpower systems. In line with the same intuitive analysis expounded above, we also consider the derived preferences of non-liable individuals over the desired type of military organization. Naturally those individuals do favor the use of conscription as it relieves them from the burden of pecuniary taxation. They would obviously rather have other liable citizens meet their country’s need for military mobilization. The fact that liability is mostly a function of age (and gender) characteristics highlights the intergenerational redistributional properties and incidence of the ‘conscription tax’.[[8]](#footnote-8)

Hypothesis 3: All else equal, countries with a lower liability ratio (liable to non-liable individuals) are expected to conscript at a higher rate in the medium run.

# Research Design

In order to test the ‘economic’ link between the underlying political economy parameters specified above and the choice of conscription regime, we have put together an original time-series cross-sectional dataset of existing NATO members covering the period from 1950 to 2005.[[9]](#footnote-9) The innovative element of our empirical approach that we employ continuous proxies of conscription, where it exists. Existing dichotomous measures in the literature fail to capture the richness of the extant variation in conscription regimes around the world. As a result the explanatory power of political economy fundamentals will be muted.

To confirm our intuition we first proceed to test our model on a simple dichotomous measure of conscription  that equals zero when there is an all-volunteer force in place and otherwise takes the value of one. We then construct an *effective* continuous variable of conscription  that measures the percentage of conscripts relative to total active duty armed forces. Finally, we have also codified a *statutory* measure  of conscription that captures the official length of service averaged out across the three branches of the military (army, navy, air force). Analogous to import tariff measurement problems, we do not find these two measures to be perfectly correlated. The discrepancy between legally enacted and effectively enforced levels of conscription can be due to varying levels of state capacity and policy implementation costs. Taking the official term of conscription as the sole focus of analysis can overstate the extant cross-sectional variation in official policy by omitting to account for the possibilities of buy-out, replacement, exemption/deferment clauses, and liability expansion as supplementary aspects of draft enforcement and military manpower procurement policy (Levi, 1998). A more sophisticated formulation of the model would take these into account and study their differential redistributive consequences and their effect on preferred levels of conscription.

Under either of the two formulations, our limited dependent variable is subject to *censoring* bias. Whenever the latent (unobservable) dependent variable  or  is below some threshold value , then the observed variable  or  takes a value of zero denoting an all-volunteer force. Note that the threshold  will generally be strictly positive because of the high bureaucratic, administrative, and training fixed costs of any positive level of conscription. We control for this type of bias by employing a Tobit estimator in one of our specifications.

Our main explanatory variables of interest consist of structural characteristics of our sample countries’ political economy, namely economic inequality (measured by the Gini index), democratization (measured by the size of the selectorate), structural unemployment, and the liability ratio (measured by the relative size of age cohorts). These variables account for a large percentage of medium-term cross-sectional variation in the choice of military manpower procurement systems. Long-term cross-sectional variation in relative military mobilization, however, is also conditioned by country-specific exogenous parameters, such as the level of external threat and access to military technology. The labor intensity of defense policy, or else the population-adjusted size of armed forces (including reserves) relative to total military armaments and weapon systems, will also depend on other geographic factors, such as the type and number of borders. Varying needs in military mobilization, i.e., the size of armed forces, imply different induced preference profiles over conscription policy, hence different social choices over the recruitment and organization of military personnel.

With respect to the longitudinal identification of our sample, we allow for the fact that our policy variables of interest are subject to different types of ‘friction’ depending on the analytical time-horizon of the decision-making environment. Military personnel procurement policies tend to be stickier than capital expenditures, while decisions over army size restructuring only come about as gradual adjustments to long-term shifts in the exogenous military security and technology environment. The existence of cross-cutting dynamic policy constituencies highlights the necessity of controlling for the dynamic decision-making horizon of policy-makers in order to gain a better understanding (and empirical identification) of both cross-country and cross-time variation in conscription policy. We correct for endogeneity issues of temporal dependence, serial correlation, and policy inertia by using lagged dependent variables and distributed lags of the size of the military.

Data description and estimation

OLS, Logit regressions with panel-corrected standard errors

Country and time fixed effects

CARMELA, i) IT MIGHT MAKE MORE SENSE TO USE POPULATION ADJUSTED TOTAL ARMY SIZE, i.e., TOTAL MILITARY PERSONNEL/POPULATIONA, ii) DON’T FORGET TO ADD REFERENCES FOR DATA SOURCES!, iii) DON’T FORGET TO ADD YOUR CONTACT DETAILS IN THE FRONT PAGE!, iv) WE MIGHT GET COMMENTS ON SAMPLE SELECTION BIAS SINCE WE ONLY INCLUDE NATO MEMBERS – FOR THAT WE NEED A DUMMY FOR EACH COUNTRY-YEAR DENOTING NATO MEMBERSHIP!

**References**

Choi, Seung-Whan and Patrick James. 2003. “Professional Soldiers, No Militarized Interstate Disputes? A New Question for Neo-Kantianism.” *Journal of Conflict Resolution* 47(6):796-816.

Fisher, Anthony C. 1969. “The Cost of the Draft and the Cost of Ending the Draft.” *American Economic Review* 59(3):239-254.

Hadass, Yael. 2004. On the Causes of Military Conscription. Harvard university mimeo.

Hansen, Lee W. and Burton A. Weisbrod. 1967. “Economics of the Military Draft.” *Quarterly Journal of Economics* 81(3):395-421.

Konstantinidis, Nikitas. 2011. Military Conscription, Foreign Policy, and Income Inequality: The Missing Link. LSE PSPE Working Paper No. 2.

Lee, Dwight R. and Richard B. McKenzie. 1992. “Reexamination of the Relative Efficiency of the Draft and the All-Volunteer Army.” *Southern Economic Journal* 59:644-654.

Levi, Margaret. 1996. “The Institution of Conscription.” *Social Science History* 20(1):133-167.

Levi, Margaret. 1998. Conscription: The Price of Citizenship. In *Analytic Narratives*, ed. Robert H. Bates, Avner Greif, Margaret Levi, Jean-Laurent Rosenthal and Barry R. Weingast. Princeton, NJ: Princeton University Press.

Meltzer, Allan H. and Scott F. Richard. 1981. “A Rational Theory of the Size of Government.” *Journal of Political Economy* 89(5):914-927.

Milanovic, Branko. 2000. “The Median-voter Hypothesis, Income Inequality, and Income Redistribution: an Empirical Test with the Required Data.” *European Journal of Political Economy* 16:367-410.

Morgan, Clifton T. and Glenn Palmer. 2000. “A Model of Foreign Policy Substitutability: Selecting the Right Tools for the Job(s).” *Journal of Conflict Resolution* 44(1):11-32.

Mulligan, Casey B. and Andrei Shleifer. 2005. “Conscription as Regulation.” *American Law and Economics Review* 7(1):85-111.

Nordhaus, William D., Oneal, John R. and Bruce Russett. 2009. The Effects of the Security Environment on Military Expenditures: Pooled Analyses of 165 Countries, 1950-2000. Cowles Foundation Discussion Paper No. 1707.

Nye, Joseph S. 2004. *Soft Power: The Means to Success in World Politics.* Public Affairs.

Oi, Walter Y. 1967. “The Economic Cost of the Draft.” *American Economic Review* 57(2):39-62.

Pickering, Jeffrey. 2010. “Dangerous Drafts? A Time-Series, Cross-National Analysis of Conscription and the Use of Military Force, 1946-2001.” *Armed Forces & Society* 20(10):1-22.

Poutvaara, Panu and Andreas Wagener. 2007. “To Draft or not to Draft? Inefficiency, Generational Incidence, and Political Economy of Military Conscription.” *European Journal of Political Economy* 23:975-987.

Vasquez, Joseph P., III. 2005. “Shouldering the Soldiering: Democracy, Conscription, and Military Casualties.” *Journal of Conflict Resolution* 49(6):849-873.

Warner, John T. and Beth J. Asch. 1996. “The Economic Theory of a Military Draft Reconsidered.” *Defence and Peace Economics* 7:297-312.

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2. Contact details: [↑](#footnote-ref-2)
3. This conceptual distinction made famous and developed by Nye (2004) provides a very intuitive proxy for how we think of ‘hawkish’ and ‘dovish’ foreign policy. [↑](#footnote-ref-3)
4. Here it should be noted that some countries (e.g., Germany) also conscribe their citizens’ labor for domestic civilian purposes in the form of civil service. Since our focus is on policy instruments geared towards the external environment, we do not generally account for this possibility. [↑](#footnote-ref-4)
5. See Milanovic (2000) for a related ‘endogenous fiscal policy approach’. [↑](#footnote-ref-5)
6. As in Mulligan and Shleifer (2005), we choose to proxy for state capacity through the legal origins of a polity, i.e., whether its legal code is based on common or civil law. [↑](#footnote-ref-6)
7. On this point see Levi’s (1996) discussion of the role of organized labor in the mobilization of military manpower by the main Anglo-Saxon democracies during the Great War. [↑](#footnote-ref-7)
8. Poutvaara and Wagener (2007) provide a sophisticated account of such questions through an overlapping-generations model of human capital formation and military conscription. [↑](#footnote-ref-8)
9. The fact that all countries in our sample currently belong to the same security alliance may in fact introduce sample selection bias. However, most of these countries joined the organization at different times in the period covered by our sample. [↑](#footnote-ref-9)