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Asia's four regionalisms (Southeast Asia, South Asia, Central Asia and East Asia): a view from multilateral treaties of the United Nations

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This study presents a quantitative framework to analyze the engagement of four Asian sub-regions with global issues through their participation in multilateral treaties across various policy areas. The research addresses key questions regarding the speed of Asian states' involvement in multilateral treaties and their adaptation to these treaties within the United Nations system over time. The approach combines empirical data and conceptualization to ensure a robust evidentiary basis. A dataset comprising 600 major multilateral treaties deposited in the United Nations system, covering diverse global issues, was collected. Additionally, ratification actions from twenty-eight Asian countries were categorized into four sub-regions: East Asia, South Asia, Southeast Asia, and Central Asia. To quantitatively measure states' engagement with multilateral treaties, the study developed and calculated the Treaty Participation Index for each Asian country and sub-group. In an area predominantly characterized by qualitative research, this paper contributes to the existing literature by providing quantitative and metric findings for comparative analyses of multilateral treaty participation among the four Asian sub-regions, as well as comparisons between Asia and the rest of the world. By analyzing the results, the paper offers an evidence-based assessment of the feasibility of these four regionalisms in Asia, particularly in the context of the transition from international politics to the paradigm of global politics.

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Introduction

Asia is not only the largest and most populous continent but also one of the most diverse places in the world. This huge landmass that boasts from snowy Himalayan regions to tropical beaches and jungles consists of countries with different religions, cultures, ethnicity, and languages. The disparity in economic and social development between Asia's constituent subregions was, nevertheless, the greatest. Asia was shattered by World War II and its domestic reverberations were unprecedented in its cruelty and death tolls in human history. Timing diverged for independence, early for South Asia from the British colony, late in Southeast Asia, very late in Central Asia, and civil war or occupation followed by freedom in East Asia. War threats and conflicts, such as Japanese aggression in World War II, civil war threats in East and Southeast Asia, and religious strife in South Asia, gave dark shadows over Asia. Recently, global issues like climate change and infectious disease diffusion have been shown to have been no less tangibly impacting Asian politics. How have the Asian sub-regions responded to such global change in their development?

Empirical evidence indicates a strong correlation between a country's development performance and the presence or absence of participation in multilateral treaties. Since World War II, one of the most striking trends in international relations has been the proliferation of treaties that touch all global issues, from human rights or environmental protection to the matters associated with worldwide peace and disarmament. Yet, despite the growing number of international agreements, a comprehensive picture of the response of the Asian states to global issues through their participation in these multilateral treaties has to be provided systematically and statistically (Ikenberry and Iriye, 2002; Inoguchi and Le, 2020; Kajima Institute of Peace, 2015; Malcolm and Shaw, 2017; Rosenberg, 2012). In particular, there is a lack of empirical studies assessing states' speed of participation in the system of multilateral treaties that can reflect their adaptability to globalizing environments. Why do some states ratify an agreement as soon as it becomes available for signature, while others take years to do so? The way states join quickly or slowly in the multilateral treaty of a given policy area will appeal to their interests and preferences with mixed motives toward a shared global issue. However, the literature is mostly qualitative and only focuses on governments' compliance with multilateral agreements rather than their ratification practices (Miles and Posner, 2008).

One of the broadest examinations of multilateral treaty-making has been carried out by Denmark and Hoffmann in their collaborative project (Denmark and Hoffmann, 2008). In their project, a massive dataset of 7000 agreements concluded between 1595 and 1995, so-called the Multilateral Agreements and Treaties Record Set (MATRS), has been built up. The treaties in MATRS collection are categorized into six general issues: social affairs, war and peace, communication and transportation, environment, states and relations, trade, and economy. Considering each such treaty as a discrete and observable instance of a given form of cooperation treaty, Denmark and Hoffmann has analyzed MATRS to discover what patterns of treaty-making might exist across time, space, and issue area over the past 400 years and show evidence of the diffusion of the practice across the world (Denmark and Hoffmann, 2008). More recently, Wusten, Glas, and others have enriched their product in many ways. Wusten has focused on the geographical pattern of places where multilateral treaties have been signed over the life course of the state system (Van Der Wusten et al. 2011). He has pointed out that a large proportion of all negotiations occurred in just a few places and the collection of most frequently selected locations shows considerable continuity over time. The actual selection of specific venues suggests that functional and political

considerations have been most influential (Van Der Wusten et al. 2011). From another perspective, Glas has recently observed the number of common multilateral treaties signed by states to represent the relative strength of the ties between states in a kind of network (Glas et al. 2018). By applying the tools of network theory, they can explore the structural attributes of a network of states, determine the position of a given state as a node in that kind of network and show how relationships among particular actors shape behavior. These observable implications of multilateral treaty-making practices constitute both states and the international system (Glas et al. 2018). Although Denmark, Hoffmann, Wusten, Glass, and others have touched on different patterns, including the temporal, spatial, and substantive features of multilateral treaty-making, the time patterns considered as a variable to measure the speed of state's ratification action have not been discussed yet.

This paper aims to make a valuable contribution to the ongoing discussion on Asian states' engagement and adaptation to global issues by investigating the first research question of the speed at which Asian states participate in the United Nations' multilateral treaties. To achieve this, we propose the use of a quantitative index called the Treaty Participation Index (TPI), which measures the speed at which Asian states become parties to these treaty-based regimes. This study serves as an initial exploration of the time it takes for Asian states to ratify multilateral treaties across a broad range of global policy issues, including peace and disarmament, human rights, intellectual property, environmental protection, trade and commerce, and labor.

Furthermore, although it is widely recognized that Asian countries have historically been more cautious about entering into legally binding agreements compared to other regions, particularly the West, recent shifts in global politics have led to an East-West rebalancing (Milanovic, 2019). In terms of multilateral cooperation, Asian nations have demonstrated an increased willingness to participate in multilateral agreements and collaborate on shared solutions in recent years. However, previous research has primarily relied on qualitative methods, leaving a gap in the empirical and graphical representation of these changes. Therefore, the second research question addressed in this paper is "How have Asian states adapted to the United Nations' multilateral treaties over time?" To answer this question, the study examines the evolution of Asian states' attitudes toward the UN's multilateral treaty system by examining their behavior during and after the Cold War. This analysis aims to highlight variations in multilateral treaty participation across the four Asian sub-regions and provide a comparative perspective between Asia and other regions of the world over time. By observing and analyzing these trends, the study aims to provide empirical evidence and graphical representations of the changes occurring in Asian states' engagement with the UN's multilateral treaty system.

Based on the analysis results, the paper examines the feasibility of what we refer to as the "four regionalisms in Asia": East Asia, Southeast Asia, South Asia, and Central Asia, in the context of globalized conditions in the third millennium. It investigates whether these regionalisms can sustain themselves considering the multilateral treaty participation of states. The paper generates an evaluation of the sustainability of these regionalisms by assessing the extent to which states are willing to join multilateral treaties, despite the constraints imposed by their global surroundings and the global policy domains of the treaties.

The article is followed by a conceptualization of the quantitative index, the so-called TPI, to measure the speed with which states participate in multilateral treaties within the scope of our

study. Following that, a dataset of 600 major multilateral treaties deposited in the United Nations system in various major global issues, as well as the ratification years of twenty-eight Asian countries divided into four sub-regions, East Asia, South Asia, Southeast Asia, and Central Asia, was collected and presented. This quantitative index is used in the empirical sections to provide step-by-step answers to the two research questions raised. Finally, there will be some evidence-based assessment of the feasibility of these four regionalisms in Asia, particularly in the context of the transition from international politics to the paradigm of global politics.

Conceptualization of states' speed of multilateral treaty participation

In principle, there are five stages in the development of a treaty: (stage I) norm emergence; (stage II) negotiation and drafting; (stage III) signature; (stage IV) ratification; and (stage V) implementation, compliance, and enforcement (Sitaraman, 2013). Among these phases, ratification is the official action a state takes to engage in a multilateral treaty and will be the first move toward implementation and enforcement. Hence, focusing on the ratification act is essential to explain state behavior towards the international law system. In addition, ratification of any United Nations treaty represents a country's interests in a particular area of international policy. The ratifying country's commitment to comply with international law and thus collaborate with other partners in governing transnational processes is then reflected.

Indeed, multilateral treaties lack legal force unless and until states choose to join them through ratification. As a result, why do some countries ratify an agreement as soon as it becomes available for signature, while others take years to do so? There are many reasons why ratification might take longer in some circumstances. Firstly, some treaties that are developed and negotiated within international organizations (IOs) to respond to a crisis and may not be as closely related to the issue as a purpose-written treaty. Being 'off point' might make the ratification process more difficult. One example that illustrates the statement is the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). The NPT is an international treaty aimed at preventing the spread of nuclear weapons, promoting disarmament, and facilitating the peaceful use of nuclear energy. It was opened for signature in 1968 and has been ratified by a large number of countries. While the NPT addresses the critical issue of nuclear non-proliferation, it is a complex treaty that encompasses various aspects beyond its core objective. It includes provisions related to peaceful uses of nuclear energy, disarmament negotiations, and the right to withdraw from the treaty. These additional elements were included to strike a balance between the interests and concerns of different countries during the negotiation process. The inclusion of these additional elements in the NPT demonstrates how IO-based treaties can respond to various political and diplomatic considerations, often resulting in a broader scope than a purpose-written treaty solely focused on nuclear non-proliferation. While these additional provisions may be seen as necessary compromises to garner broader support and ensure the participation of key states, they can also make the ratification process more complex. The comprehensive nature of the NPT, with its multiple dimensions and additional provisions, can lead to divergent interpretations, differing priorities among member states, and challenges during the ratification process. The inclusion of off-point elements may create debates and disagreements among countries, potentially hindering the ratification process as states navigate through complex and sometimes controversial provisions. Secondly, different countries have different legislative calendars, and the UN is not always attentive to such things.

Thirdly, there are internal political processes that are often relevant. Opposition parties may make ratification difficult regardless of either party's interest in a quick agreement. Moreover, election cycles may hold things up. Last but not least, it is important to note that the time required for multilateral treaty ratification can vary widely across different countries based on their regime type, legislative procedures, and other contextual factors. In presidential democracies, the President may be required to sign a treaty into law soon after the legislature has passed it. Ratification in parliamentary democracies may require approval from both the legislature and the Prime Minister, which can take longer. Furthermore, the procedure for passing treaties can influence the time required for ratification. In some countries, a treaty may require multiple readings before it can be passed, which can significantly lengthen the ratification process. In addition, the number of parties involved in a treaty can also extend the ratification period, as each party has to take their own steps to finalize the treaty.

Regardless of the reasons stated above, it can be argued that the time it takes a state to demonstrate her ratification should be indicative. It is worth noting that the faster the ratification act, the more willing the country is to cooperate in multilateral negotiations. In other words, the timeline of ratification has significance because it reveals a sovereign state's intense desire and eagerness or reluctance to legislate or revise domestic laws to comply with international law (Inoguchi and Le, 2020). According to regime theorists, when treaties are ratified, states indicate their ambitions by approving and prioritizing the issue. The faster a nation's participation in international treaties, the further it demonstrates its intention to cooperate with all participants in the international community (Le et al. 2014). In other words, ratifying a treaty on time demonstrates agile or cautious behavior in response to a common global issue. As a result, this study investigates how quickly states join these treaty-based regimes through the year of ratification. To that end, we developed the Treaty Participation Index (TPI), a quantitative index that measures a state's desire to engage in multilateral treaties in a wide range of international cooperation areas.

To be more specific, to measure how fast a national policy responds to a typical multilateral treaty, we counted the delayed years between the promulgation of a treaty and its ratification. For a typical treaty, let D_i denote the delayed years between the promulgation of a treaty and its ratification by country i . If Y_P is the year of the treaty's promulgation, and Y_i the year of ratification by country i , then $D_i = Y_i - Y_P$ takes account of delayed policy-making decisions of a state towards a treaty. Let the reciprocal of the number of elapsed years that reflects the Treaty Participation Index of a state; be defined by the following formula:

$$TPI = \frac{1}{1 + D_i}$$

The country that ratified the treaty immediately without any delay is rewarded the highest value of TPI of 1; while the country that has not yet joined this given treaty is scored 0.

It is worth noting that the D_i and TPI pattern varies greatly between treaties. Our analysis reveals that there is a significant variation in ratification timing among global issues (Table 1). For example, environmental movements embedded in international environmental treaties, such as the Convention on Biological Diversity and the United Nations Framework Convention on Climate Change, have quickly gained support from the Asian community. They are among the top global issues attracting the participation of all sovereign states in the Asia region within the first three years of their adoption (the average TPI score for Asia is 0.212). Indeed, climate change and global warming, ozone layer

Table 1 Comparison of the average TPI score for Asia across different policy domains and versus the world.

Policy domain	Average TPI of the world	Average TPI of Asia
Environment	0.215	0.212
Human rights	0.170	0.197
Intellectual property	0.120	0.118
Labor and health	0.165	0.175
Peace and disarmament	0.155	0.150
Trade, commerce, and communication	0.225	0.245

depletion, and biodiversity loss are among the most serious threats to humankind worldwide. A majority of nations recognize the urgent need for an effective and efficient international law that regulates global action to mitigate these threats. That explains why all Asian countries have taken the initiative by committing themselves very quickly to those agreements in a short period. On the contrary, it is most surprising to discover that the regulations concerning intellectual property protection took the longest time (nearly 10 years on average, with Asia receiving a TPI score of 0.118) to extend the commitment among Asian memberships. It can be explained that standards and intellectual property regulations are more difficult to reach a unified agreement on than others because of the nature of global trade competitiveness among states.

Dataset of UN multilateral treaties

There is a wealth of information available on treaties and international agreements. It is reported that up to now, there are over 40,000 bilateral or multilateral treaties registered with the United Nations (Barker, 2004). It has also been noted that states negotiated up to ten times as many bilateral treaties as multilateral treaties (Glas et al. 2018). Nonetheless, multilateral treaties have a different historical origin and continue to play a different role (Glas et al. 2018). When multilateral problems are recognized as requiring a global solution because national solutions are insufficient, collaborative solutions are more likely to be productive and effective. Multilateral treaties are one option in which sovereign states agree to carry out the tasks at hand on a multilateral basis. Problems can also arise as time goes on and more treaties or agreements are added. While Denmark, Hoffmann, and their colleagues use 7000 multilateral treaties signed by three or more sovereign states (or international organizations) over the 400 years from 1595-to 1995 for their analyses, we focus on the sample of 600 treaties deposited to the UN system since the foundation of this organization in 1945 until 2020.

We chose to consider the 600 UN multilateral treaties as our cases for several main reasons. Firstly, since 1945, the number of treaties has experienced a remarkable increase (Hale and Held, 2017; Le et al. 2014). While each treaty addresses a specific aspect of international issues, the founding instruments of the United Nations' principal organs hold significant relevance in global politics. The negotiation and drafting processes of many national governments' bureaucracies and UN specialized agencies involve the participation of foreign scientists, academics, and professionals (Marsh and Inoguchi, 2007; Weiss and Wilkinson, 2018). As of 2020, over 500 major multilateral instruments covering a wide range of topics have been deposited with the UN Secretary-General, encompassing areas such as human rights, disarmament, commodities, refugees, the environment, and the law of the sea (United Nations Treaty Collection, 2022). Additionally, the World Intellectual Property Organization (WIPO), one of the newer UN-specialized agencies, currently administers 26

Table 2 Six policy issues covered in the dataset.

Policy domain	Number of treaties
Environment	52
Human rights	53
Intellectual property	36
Labor and health	110
Peace and disarmament	84
Trade, commerce, and communication	265
Total	600

multilateral treaties on intellectual property. On the other hand, the International Labor Organization (ILO), one of the oldest agencies, deals with over one hundred multilateral treaties on labor rights. Our survey focuses on the 600 multilateral treaties deposited with the principal organs of the United Nations, including the Secretary-General, WIPO, and ILO. These treaties are regarded as significant contributors to the emergence and development of global governance following World War II (Multilateral Treaties Deposited with the Secretary-General, United Nations, New York, 2022).

For each of the 600 multilateral treaties, the ratification year of states was recorded to fit the particular format used for this analysis. The dataset contains information on whether a specific UN member state ratified a treaty and, if so when it became a member. The ratification status records are collected from three primary open-access resources: the United Nations Treaty Collection (UNTC), the World Intellectual Property Organization-Administered Treaties Collection, and the Information System on International Labour Standards, also known as NORMLEX.

After being gathered from various sources, our dataset of 600 multilateral treaties of the UN is classified into domains and corresponding subdomains based on their primary goal of resolving a specific global governance issue. In this study, we adopted and modified the categorizations used by Mathias Koenig-Archibugi, Denmark, and Hoffmann. We started with Koenig-Archibugi's map of global governance organizational infrastructure (Koenig-Archibugi, 2009). It consists of various formal international and transnational organizations that operate globally and are divided into four categories: security, human welfare, the environment, and the economy (Koenig-Archibugi, 2009). We also adopted the idea of six broader categorizations from the examination on multilateral-treaty-making by Denmark and Hoffmann (Denemark and Hoffmann, 2008). They have grouped their multilateral agreement and treaty record set in six issues-areas, including social affairs, war and peace, communication and transportation, environment, states, relations, and trade and economy. For our survey of multilateral treaties, we rearranged our collected data in a simple but reasonably comprehensive format to cover the list of "problems without passports," as listed in Table 2.

How quickly do the Asian states participate in the UN's multilateral treaties?

The TPI metric, which indicates the speed with which Asian states ratify multilateral treaties, is used in this section to capture the intention of Asian states to join multilateral treaties. Based on our collective data of 600 UN multilateral treaties, this indicator is gradually applied to six global regime domains: (1) peace and disarmament, (2) trade, commerce, and communication, (3) intellectual property, (4) human rights, (5) environment, and (6) labor and health. We progress from national to regional analysis. Twenty-eight Asian countries have been chosen and divided into four sub-regions. South East Asia (comprised of ten ASEAN member countries: the Philippines, Vietnam, Myanmar,

Peace and Disarmament

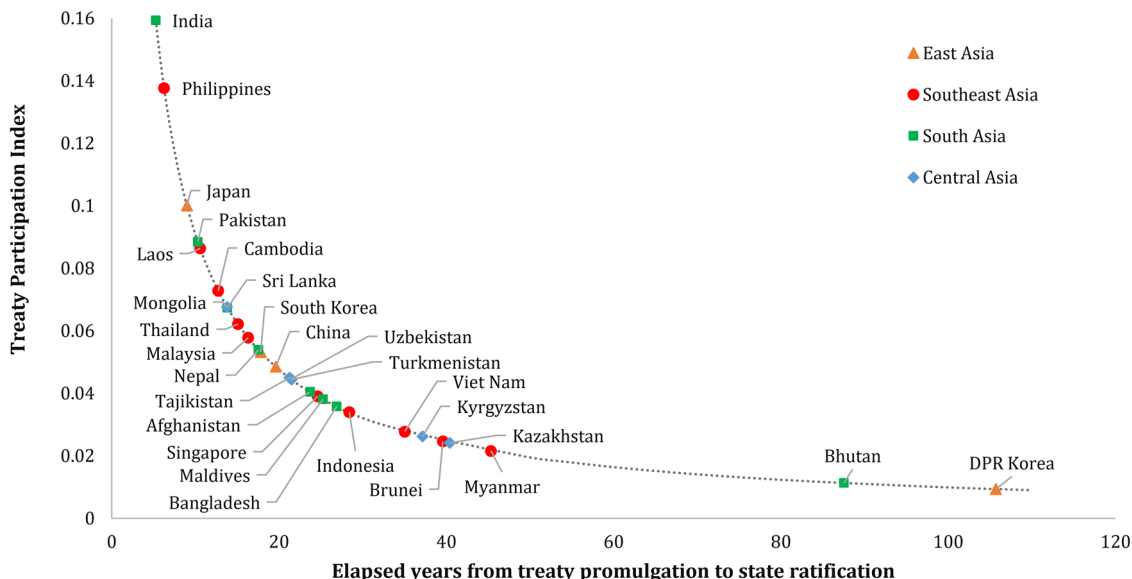


Fig. 1 TPI of Asian states in Peace and Disarmament policy domain.

Thailand, Cambodia, Laos, Malaysia, Brunei, Singapore, and Indonesia) has been chosen to provide a comparative comparison to other Asian sub-regions, including East Asia (China, Japan, South Korea, North Korea), South Asia (India, Pakistan, Bangladesh, Nepal, Sri Lanka, Bhutan, the Maldives, Afghanistan) and Central Asia (Kazakhstan, Uzbekistan, Tajikistan, Kyrgyzstan, Turkmenistan, Mongolia). The comparable TPI quantitative index results for 28 Asian states in four sub-groups will be explained to show how quickly they join multilateral treaties in various policy arenas. Then, in each of the four regional groups, we will describe the diversity within and between states.

Peace and disarmament. Figure 1 lists the TPI scores of Asian states in the peace and disarmament policy domain. The data analysis shows that among Asian countries, India has taken the most aggressive action in the multilateral treaties in peace and disarmament with the highest score of TPI among the Asia states (TPI = 0.16). This South Asian member has taken initiatives by committing quickly (five years on average) to the peace and disarmament of multilateral treaties. The Philippines and Japan are the following runners in this domain, with less than eight years on average (TPI of 0.14 and 0.11 for the Philippines and Japan respectively) to have membership in the 84 United Nations multilateral treaties related to peace and disarmament issues. However, it took around 10 to 50 years for the other Asian states to join United Nations treaties in peace. The slowest ones are Myanmar, Bhutan, and North Korea with a TPI of merely 0.02.

Let us go deeper to observe TPI in each sub-group, in terms of speed, almost all of Central Asia are cautious in the ratification of multilateral treaties related to global peace with a low score of TPI ranging from 0.03 to 0.07. Central Asia comprises Tajikistan and Turkmenistan, situated on the peripheries of the region. Meanwhile, Kazakhstan, Kyrgyzstan, and Uzbekistan considered pivotal nations in Central Asia, partly constitute the former Soviet Union. Their policy concerns about peace and disarmament are passive and sparse with the delay of ratification ranging from 20 to 30 years. Mongolia is the exception in Central Asia. This country was achieved in the United Nations the earliest, in 1956, and registers the as the highest score of TPI (TPI = 0.08) in global peace regime among Central Asian countries.

Southeast Asia also boasts of its diversity in the peace and disarmament domain, their TPI scores ranging widely from 0.03 to 0.14 (which means that the delay years range from 5 to 30 years). ASEAN was established in 1967 in response to the Cold War and the need for regional stability and aims to promote economic integration, social and cultural cooperation, and regional peace and stability. With a combined population of over 650 million and a GDP of \$3 trillion, ASEAN is a significant player in the global economy. Yet, their multilateral treaty participation is not exceedingly active.

South Asian countries have been relatively inactive in joining multilateral treaties related to peace and disarmament. While India is a nuclear power and a member of the Non-Aligned Movement, it has not signed the Comprehensive Nuclear Test Ban Treaty. Pakistan is also a nuclear power and has not signed the treaty. Both countries are also not signatories to the Treaty on the Prohibition of Nuclear Weapons. In addition, South Asian countries have been involved in ongoing territorial disputes and conflicts, which may contribute to their reluctance to join multilateral treaties related to peace and disarmament. However, there have been efforts at the regional level, such as the South Asian Association for Regional Cooperation, to promote peace and cooperation among member countries. Among the South Asian states, India, Pakistan, and Sri Lanka recorded the highest score (TPI from 0.09 to 0.16) because they all experienced pre-independence politics and diplomacy during the British colonial years. In contrast, Bhutan, Bangladesh, Nepal, and the Maldives register low figures of TPI of merely 0.04.

East Asia comprises a diverse array of states. The disparities between Japan, South Korea, and China, on the one hand, and North Korea, on the other, are very large in terms of treaty participation in the domain of peace and disarmament. In terms of speed, Japan is the fastest runner with a TPI score of 0.1. South Korea and China have a similar TPI of around 0.05, yet both are much slower than Japan. The Democratic People’s Republic of Korea (DPRK) has been cautious and reluctant in participating in global regimes related to peace and disarmament. The DPRK joined the United Nations in 1991, more than four decades after the UN was established. It has also been reluctant to sign and ratify major international treaties related to disarmament, such as

Trade, Commerce and Communication

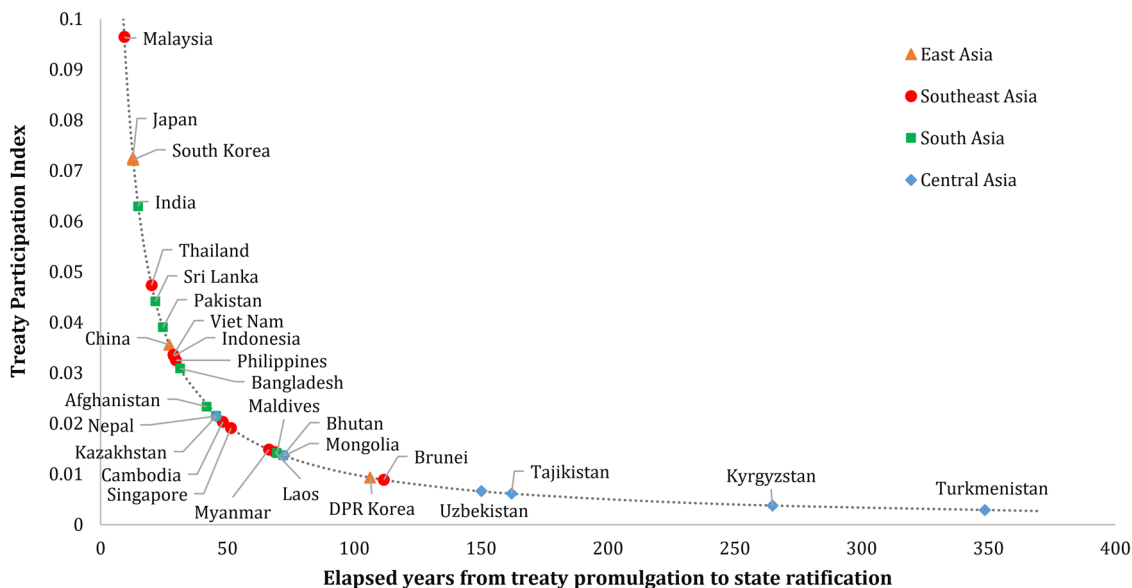


Fig. 2 TPI of Asian states in Trade, Commerce and Communication policy domain.

the Nuclear Non-Proliferation Treaty, and has conducted several nuclear tests in violation of UN Security Council resolutions. This has led to tensions and sanctions from the international community. However, there have been ongoing diplomatic efforts to denuclearize the Korean Peninsula and promote peace, including dialogue between the DPRK and the United States. It remains to be seen whether these efforts will lead to significant progress toward peace and disarmament in the region.

Trade, commerce, and communication. Asia remains the world's most dynamic and fastest-growing region with a rapid increase in international trade and financial flows and tremendous investment and technology transfer opportunities. Despite the dynamic economies, the TPI scores of Asian states in Fig. 2 show that their participation in the international trade, commerce, and communication regime is neither fast nor widespread. The analysis results show that although Malaysia, Japan, and South Korea show their active action in consolidating and facilitating the expansion of the global trade and communication system, their score of TPI is less than 0.1 (which means that their delay in joining the global regime in trade is nearly 10 years). Other Asian countries are reluctant to participate in trade, commerce, and communication agreements. That is depicted by the ratification delay of 20 to 60 years (Fig. 2).

East Asia is a region with a mix of rich and poor states. Japan, South Korea, and China are among the richer states, while North Korea is much poorer. Japan and South Korea have both been active in trade, commerce, and communications, registering positive scores (TPI of nearly 0.08) in this domain. This is in line with their high economic growth rates. China's participation in multilateral treaties related to trade was limited in the mid-twentieth century but has steadily increased since the 1970s, following a policy change. North Korea, on the other hand, is widely considered to be one of the least participatory countries in the world trade system (its TPI is around 0.01). Its economy is heavily controlled by the government and subject to international sanctions due to its nuclear program.

When shifting from East Asia to Central Asia, it is clear that the participation of Central Asian countries in multilateral treaties related to trade, commerce, and communication is much

lower. Kazakhstan is the only Central Asian country that has continuously registered its participation in the highest number of treaties in this policy domain, with a TPI score of 0.02. Other Central Asian countries have been less active in participating in these treaties. This may be due to several factors, including the relatively smaller size of their economies, limited infrastructure, and political instability. However, efforts to promote regional cooperation and integration have been made, such as the formation of the Eurasian Economic Union, which includes Kazakhstan and several other Central Asian countries.

As compared to other sub-regions, Southeast Asia has witnessed the widest disparities between nations in terms of speed in joining the global trade and commerce regime. Some countries with high scores of TPI, such as Malaysia, Thailand, and Singapore, have been quick to adopt policies that promote international trade and investment and have become major hubs for regional and global commerce. Others, such as Laos and Myanmar (TPI of nearly 0.02), have been slower to integrate into the global trade system due to factors such as weak infrastructure and political instability. Nonetheless, initiatives to encourage regional collaboration and to create a single market and production base among member countries have been made. Despite the disparities, Southeast Asia as a whole has become an increasingly important region for global trade and commerce.

South Asia has also seen significant differences among countries in terms of how quickly they embraced the rules of international trade, commerce, and communication. India, the largest economy in the region with the highest score of TPI among others (TPI of nearly 0.07), has been actively promoting international trade and investment and has become a major player in the global economy. Other countries, such as Bangladesh and Sri Lanka (TPI of nearly 0.04), have also been relatively quick to integrate into the global trade system. However, some countries in the region, such as Afghanistan and Nepal (TPI of around 0.02), have been slower to adopt policies that promote international trade and investment, due to factors such as political instability and weak infrastructure.

Overall, it can be explained that the willingness to join these multilateral treaties in trade and commerce among Asian states differs vastly depending on their current stages of economic

Intellectual Property

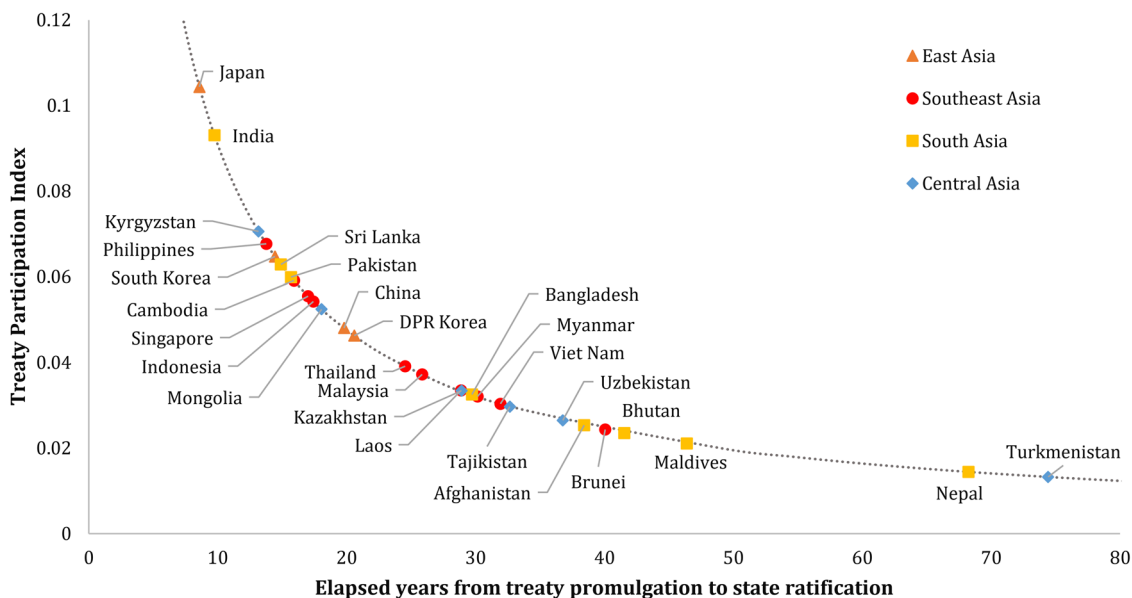


Fig. 3 TPI of Asian states in Intellectual Property policy domain.

growth and integration. Dynamic Asian economies are comprised of countries that can legitimately be classified as matured industrialized economies (such as Japan), emerging market economies, and developing economies at various stages of development. Apart from being the most prosperous region in terms of adopting export-led or trade-induced growth, Asia also contains some countries that do not see a liberalized and diverse multilateral trade regime as beneficial to their economies. As a result, they lag behind the rest of the world in terms of joining the international trade and commerce regulation system.

Intellectual property. Intellectual property is one of the domains most directly related to trade, investment, and technology transfer. Nonetheless, despite the transition in Asia from import-substituting to export-led expansion and the strong emphasis on attracting foreign direct investment, this region is perceived to have less recognition for intellectual property than Europe and the United States. Moreover, the relatively modest commitment in many treaties administered by WIPO and other IP-related treaties confirms that Asia countries have little enthusiasm and eagerness to support intellectual property regimes. Moreover, it illustrates that the delayed years for the Asian states to ratify these treaties vary from 10 to 50 years (Fig. 3).

Standing out from others in Asia, Japan bores the leading role in diffusing intellectual property-related multilateral treaties (TPI = 0.1). This Eastern Asian country is undoubtedly at the most sophisticated end of the spectrum among Asian countries in promoting the intellectual property rights protection regime. Other East Asian countries have also made progress in promoting the intellectual property rights protection regime. South Korea and China with their TPI score of 0.1, have implemented comprehensive legal frameworks and enforcement mechanisms to protect intellectual property. China, which has been criticized in the past for lax enforcement of intellectual property rights, has also taken steps to strengthen its legal framework and enforcement mechanisms in recent years. It is most surprising to see the high TPI score (0.05) of North Korea in this policy domain (also the highest score of North Korea among the six policy domains). Multilateral treaty participation in the intellectual property

domain of North Korea has been sporadic and has coincided with various political and economic developments in the country. North Korea has maintained a longstanding relationship with the World Intellectual Property Organization (WIPO) (Hong, 2020). Despite its isolation, North Korea regards WIPO as a highly respected international organization, and WIPO has provided capacity-building programs to assist with legislation and training. It is also notable that North Korea is one of a handful of socialist countries with which WIPO maintains a tradition of cooperation. However, it is unclear how much North Korea’s participation in these treaties has contributed to the protection of intellectual property rights within the country (International Treaties, North Korea in the World, 2023). Overall, the trend in East Asia is towards greater protection of intellectual property rights, although progress has been uneven across the region.

South Asia has indeed seen great differences across countries in terms of the speed of assimilation into the intellectual property regime when compared to other sub-regions. India has been relatively quick to adopt policies and legislation that promote and protect intellectual property rights and has been an active participant in international and multilateral agreements related to intellectual property (TPI of nearly 0.1). However, other countries in the region, such as Bangladesh and Sri Lanka, have been slower to adopt comprehensive legal frameworks and enforcement mechanisms for intellectual property protection (TPI from 0.03 to 0.06). Countries like Afghanistan, Nepal, Maldives, and Bhutan, on the other hand, have been slower to assimilate into the intellectual property regime (TPI from 0.01 to 0.02) due to factors such as political instability, weak institutions, and limited resources. The lack of uniformity in the speed of assimilation of intellectual property rights across the South Asian region has made it difficult to establish a coherent regional intellectual property rights framework.

South East Asia and Central Asia have experienced a modest score in the speed of joining multilateral treaties related to intellectual property rights (TPI ranging from 0.03 to 0.07). Countries in these regions, such as the Philippines and Singapore in Southeast Asia, and Kyrgyzstan and Mongolia in Central Asia, have made significant progress in adopting and implementing

Human Rights

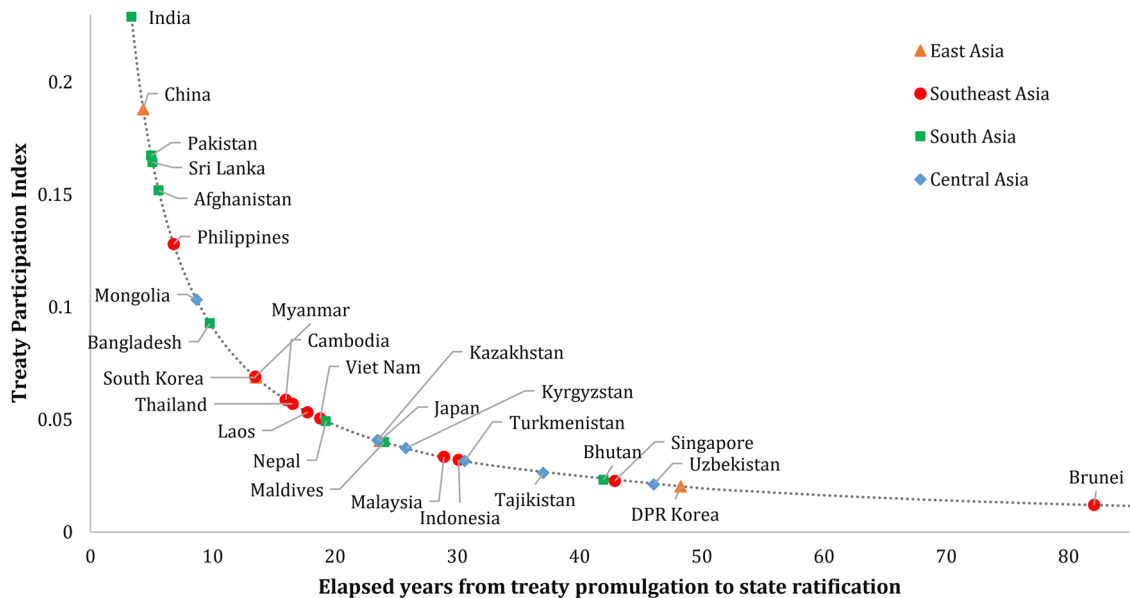


Fig. 4 TPI of Asian states in Human Rights policy domain.

legal frameworks for intellectual property protection. They have also been active participants in international and multilateral agreements related to intellectual property rights. However, there are still challenges in enforcing intellectual property laws in some countries in these regions, such as Vietnam, Laos, and Brunei in Southeast Asia, and Tajikistan and Uzbekistan in Central Asia (TPI = 0.03). Overall, while South East Asia and Central Asia have made progress in assimilating into the intellectual property regime, there is still room for improvement in terms of uniformity and enforcement of intellectual property laws across the regions.

Human rights. Many governments have worked more actively to improve human rights through multilateral treaties since the establishment of the United Nations. However, there are considerable obstacles to widely working to promote and spread human rights principles, particularly in Asia. There is a variation in how the Asia members join the human rights treaties. The delay of ratification for other Asian members converges in 10 to 30 years on average for the human rights treaties (Fig. 4).

This domain has received the most active action in the ratification of multilateral treaties from South Asian states, such as India, Pakistan, and Sri Lanka. South Asians are known for their passion and aspiration, and the TPI score of which in the human rights domain manifests itself very positively (TPI ranging from 0.17 to 0.23). On average, it took five years for those states to participate in these treaties.

East Asia region has made significant strides in the human rights domain in recent years. China has become an active participant in international and multilateral agreements related to human rights. China's TPI score has also increased significantly over the past few years (TPI = 0.2), indicating a greater level of participation in human rights-related multilateral treaties. While there are still concerns about enforcement issues, China's progress in this domain has been notable. It is worth noting that Japan, despite being a leader in other policy domains, has been relatively slow in ratifying human rights-related multilateral treaties, with an average delay of nearly 20 years (TPI = 0.04).

South East Asia and Central Asia have had mixed experiences in joining multilateral treaties related to human rights. Some countries in the region, such as the Philippines in Southeast Asia, and Mongolia in Central Asia, have been relatively active in participating in international and multilateral agreements related to human rights (TPI = 0.1). However, there are also countries in the region, such as Brunei in Southeast Asia, and Tajikistan, Uzbekistan, and Turkmenistan in Central Asia, that have been criticized for their poor human rights records and lack of participation in international human rights treaties (TPI from 0.01 to 0.03). Overall, the speed and level of participation in human rights-related multilateral treaties vary across the region. The TPI scores for the region also vary widely, reflecting the differences in human rights practices and treaty participation across the various countries in the region.

Environment. Asian countries have recently experienced rapid economic growth and population growth. However, many governments continue to prioritize economic growth over the environment and sustainability. As a result, environmental issues are pervasive and worsen on a yearly basis throughout this region. Global warming, urban excess, deforestation, endangered species conservation, water scarcity, overfishing, and air pollution have threatened to undermine Asia's future growth and regional stability.

It is widely known that the United Nations' multilateral environmental agreements adopted after 1945 aimed to strengthen environmental management in various areas, such as sustainable use of biodiversity, freshwater, and land resource management (UNEP, 1999). They have widespread support and prompt responses from the international community, including Asian societies. Our empirical investigation of UN multilateral treaties has shown that the TPI scores for international environment agreements of Asian states are the highest among the six policy domains we analyzed. Additionally, we found that the TPI scores for Asian states in this domain are relatively consistent, with most falling within the narrow range of 5 to 15 years. This suggests that many Asian countries are actively participating in international and multilateral agreements related

Environment

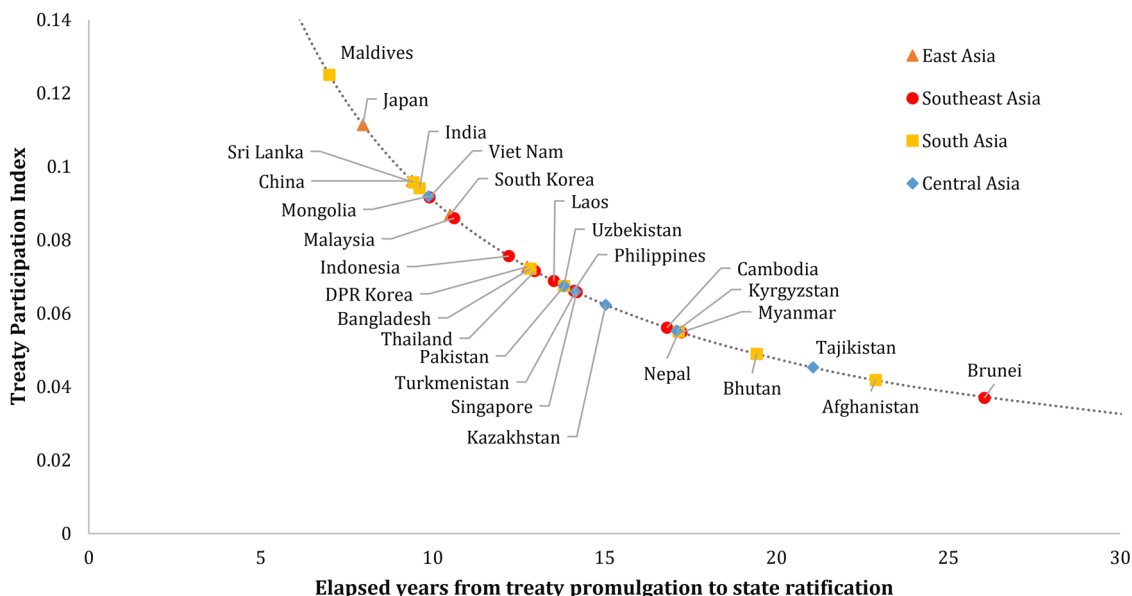


Fig. 5 TPI of Asian states in Environment policy domain.

to the environment and are making efforts to implement and enforce environmental policies and initiatives. Countries such as Japan, South Korea, and China of the East Asia sub-region have been leaders in the development and implementation of environmental policies and initiatives, and have been active participants in international and multilateral agreements related to the environment with a TPI of nearly 0.1 (Fig. 5).

While Asian countries have shown a strong commitment to environmental protection, there are still challenges in terms of the enforcement and implementation of environmental agreements in some countries in the region. Additionally, because Asia is made up of countries at various stages of economic development, their eagerness to take part in multilateral environmental agreements can vary greatly. There is a need for continued collaboration and cooperation among Asian countries to address pressing environmental issues such as climate change, pollution, and biodiversity loss, and to ensure effective implementation and enforcement of environmental policies and agreements. Additionally, there is an opportunity for international organizations and developed countries to provide support and resources to help less developed countries in the region to address environmental challenges and promote sustainable development.

Labor and health. Despite the relatively active attitude of the Asian community towards UN multilateral treaties in other domains such as peace and environment, the labor regime has not received as much consideration from countries in the region. There are several reasons behind this situation. Firstly, many labor standards are considered Western-made and are not necessarily resonant with Asian countries. They had primarily been designed by and for European interests, and some Asian countries may not see them as relevant to their labor practices and cultural norms. Secondly, attention paid to the issue of labor protection in Asia is still relatively limited. Many countries in the region are still grappling with issues such as poverty and economic development and may prioritize other policy domains over labor rights. Finally, there may be concerns about the impact of labor standards on trade and competitiveness, which could also factor into countries' decisions not to join multilateral labor

treaties. India and China are willing to join labor-related multilateral treaties with the highest TPI score of 0.12, but Asia is a slow actor in this domain, varying from 10 to 50 years of delay (Fig. 6).

According to our empirical investigation of the TPI index across the four Asian sub-regions, the most modest value for labor and health protection issues can indeed be observed in the countries of Central Asia (TPI of around 0.02 to 0.04). This could be due to several factors, including the region's history of Soviet-era labor practices and a lack of resources and infrastructure to effectively enforce labor and health protections. Additionally, many Central Asian countries are still in the process of transitioning to market-based economies, which can create challenges in terms of addressing labor protections and ensuring adequate access to healthcare.

Except for North Korea, East Asian countries have generally shown a relatively active role in participating in multilateral treaties related to labor and health. Countries such as China, Japan, and South Korea have implemented policies and initiatives to improve working conditions and protect labor rights, and have been active participants in international and multilateral agreements related to labor and health.

Overall, while there are certainly challenges to promoting labor standards in Asia through multilateral treaties, there are also opportunities for engagement and collaboration to improve working conditions and promote greater respect for labor rights in the region.

How have Asian states adapted to the UN's multilateral treaties over time?

By comparing Asian states' TPI at three different historical junctures—the Cold War, the post-Cold War era, and more recently following the global financial crisis in 2008—let's see how they have, on average, responded to the UN's multilateral treaties throughout time in comparison to the rest of the globe. Line graphs are created for each of the four sub-regions and the global average for each international regime category to show how their willingness toward UN multilateral agreements has changed over time in each of the four sub-regions. More precisely, treaty

Labor and Health

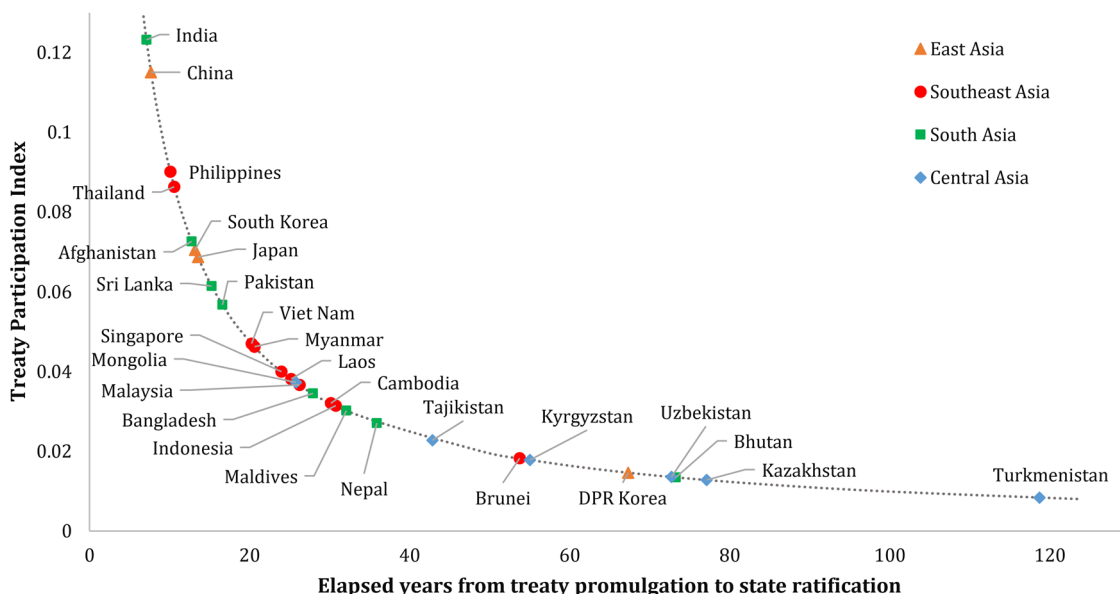


Fig. 6 TPI of Asian states in Labor and Health policy domain.

Peace and Disarmament

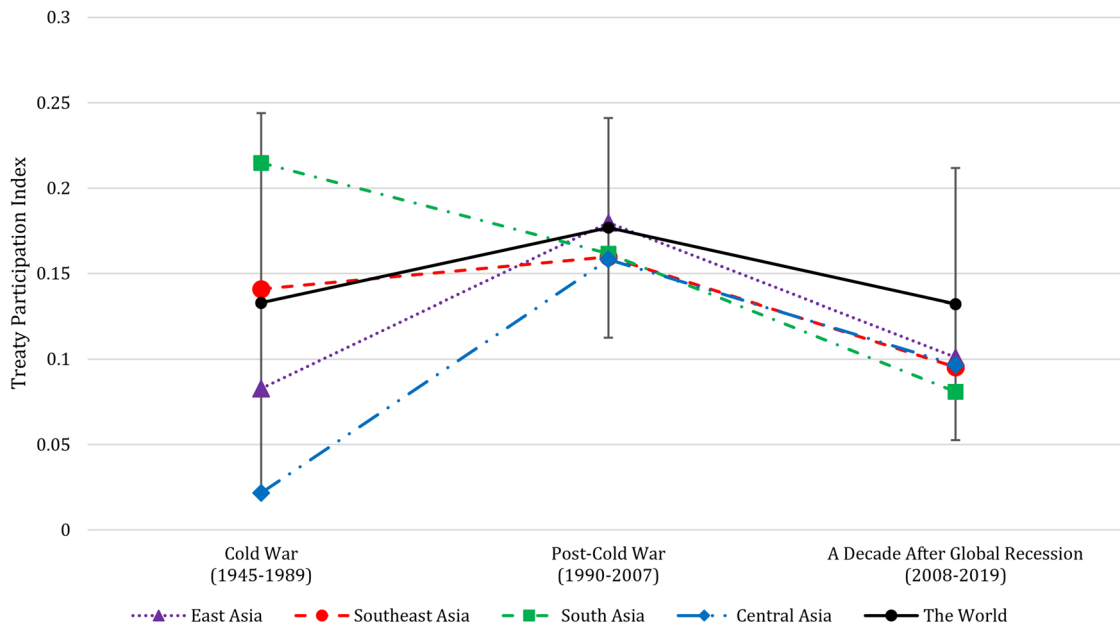


Fig. 7 Asian sub-regions versus the world in Peace and Disarmament domain.

participation scores for Asia’s East, Southeast, South, and Central sub-regions are calculated and compared to each policy domain’s global average. The following sections detail, regime by regime, and changes in TPI score. We first start our analysis with the Peace and disarmament norms category.

Peace and disarmament. The 1945–1989 period records the active participation of states in the areas of peace and disarmament. After World War II, civil and independence wars ended, and multilateral treaties on peace and disarmament were negotiated.

Figure 7 demonstrates the prominent participation of South Asian members in the subject areas of peace and disarmament during the Cold War years. While the average TPI of Southeast Asia members is only slightly higher than the global average, the score of South Asians is significantly higher than the worldwide average. The South Asian members took the initiative by quickly committing to the conventions representing this period. The post-Cold War period saw a marked decline in the South-Asian region’s TPI score and the rise of many East Asian members, such as China and South Korea. As a result, there was the typical behavior of four sub-groups of Asia in how they act toward global peace and disarmament issues compared to the rest of the world.

Human Rights

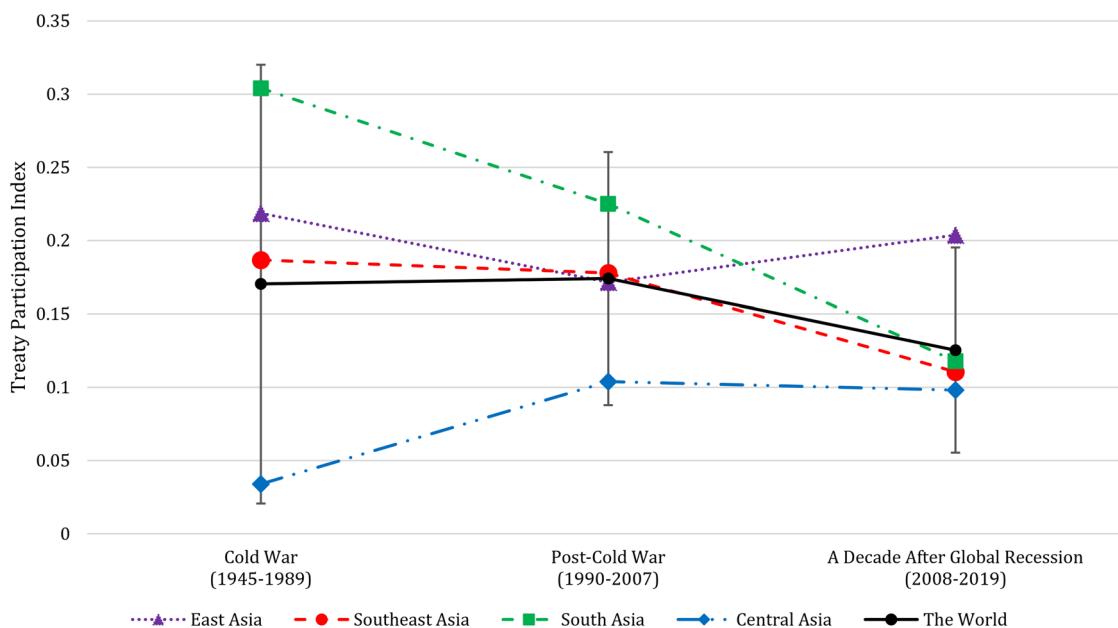


Fig. 8 Asian sub-regions versus the world in Human Rights domain.

The decade following the Lehman-caused global recession of 2008 saw a further decline in all Asian members. This period’s peace and disarmament treaty participation score is 0.10, while the worldwide average is 0.14. With no discernible score in UN treaty participation, it is clear that Asian states are not taking over the role of global peace.

Human rights. Following World War II, many independent Asian states joined the United Nations in the 1950s and 1970s. Since then, countries have taken steps more actively to improve human rights through a structural framework of UN multilateral treaties. According to our findings, while South and Southeast Asia had a higher TPI score during the Cold War era, they now have a score comparable to the global average in the later periods (Fig. 8).

On the contrary, international human rights instruments have increased for East Asian members during the most critical decade following the global recession. For Japan, China, South Korea, and North Korea, entering those multilateral treaties in the human rights arena has become a sharp and ongoing rise. Furthermore, their superior metric indicates that East Asian participants have taken the lead by quickly having to commit to international treaties during this period.

Labor and health. Following World War II, those multilateral labor and health agreements were quickly and continuously declared as workers’ lives progressed. As a result, members from East, Southeast, and South Asia have actively expressed the desire to promote and commit to fundamental rights and workplace safety. However, there was a shift after 1989. Our analysis reveals a steady decline in the commitment of Asian states to labor and health negotiation in the 1990s and later. As a result, East, Southeast, and South Asia each have a smaller value of TPI, a negligible accomplishment shortfall relative to the entire world (Fig. 9).

On the contrary, we observed a significant shift in Central Asian states’ behaviors and involvement in the labor regime. Nevertheless, they are in the same range and exhibit the same behavioral patterns as other Asia sub-groups. On average, all

Asian countries have almost experienced the same attitude as the rest of the world.

Trade, commerce, and communication. In the years following World War II, international trade entered at a rapid pace never experienced before (Le et al. 2014). As a result, global commerce and trade expanded at an unprecedented rate in post-World War II. Commercial policy and technical developments contribute to understanding the causes of this tremendously fast expansion. In the 1950s and 1960s, multilateral trade agreements were intended to hasten economic development by improving infrastructure and reducing conflicting international trade, financing, and technology acquisition with state actors. Those from the mid-1990s and beyond the late 2000s, on the other hand, were intended to mitigate the adverse effects of regional and international crises. As a result, South, East, and Southeast Asia have played an essential role in expanding the global trade system. The evidence we discovered is that those states have a high score above the global average (Fig. 10).

Many emerging economies, including China and South Korea, have risen since the Cold War. Because of their economic development and political clout, these developing countries have become more active global trade players. As a result, however, there is an upward shift in Central Asia’s commitment to the global trade regime. On the other hand, the South Asia sub-region has the opposite attitude.

Environment. During the globalization era in the middle of the twentieth century, the abrupt increase in the global exchange of knowledge, trade, and capital created a slew of environmental issues and concerns about intellectual property protection. As a result, the international environmental regime was on the rise in the 1980s and 1990s, and it has widespread support and prompt responses from the world community. The participation of Asian states in multilateral treaties has increased over time, particularly in the decade following the global recession. Excluding the Central Asia sub-region, all other Asian sub-regions are more active than the worldwide average in joining multilateral environmental treaties until 2019 (Fig. 11).

Labor and Health

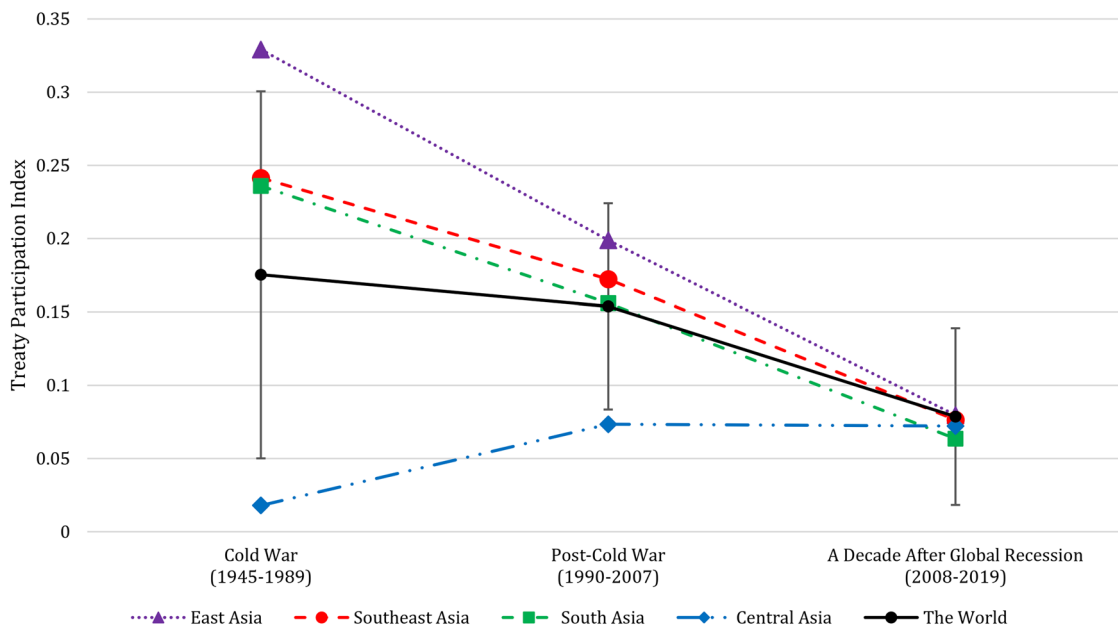


Fig. 9 Asian sub-regions versus the world in Labor and Health domain.

Trade, Commerce and Communication

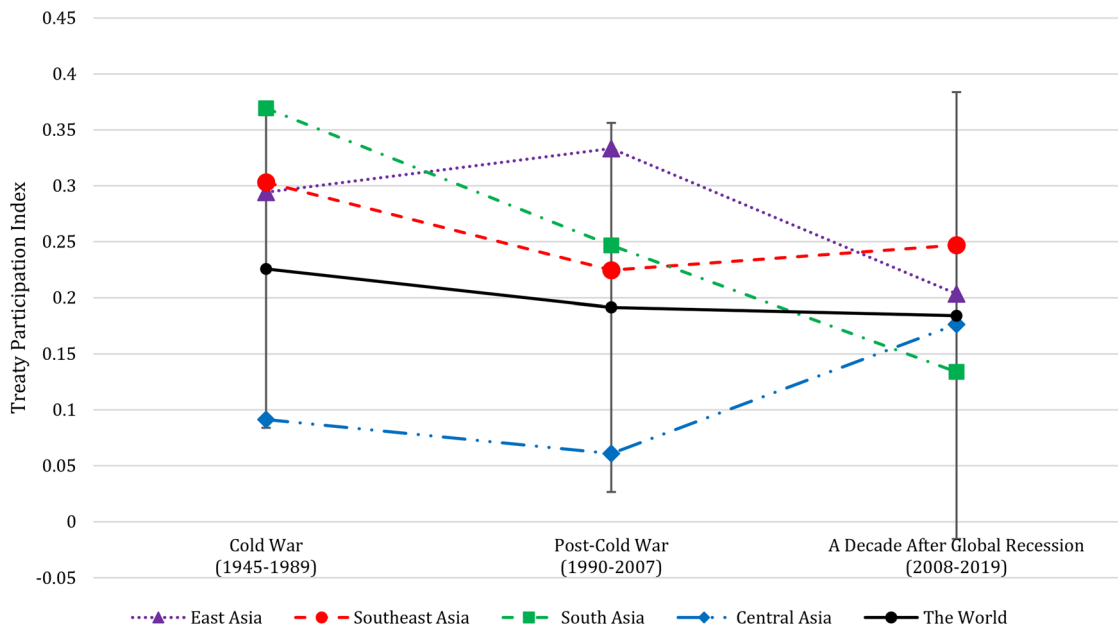


Fig. 10 Asian sub-regions versus the world in Trade, Commerce and Communication domain.

Intellectual property. Since the Cold War, intellectual property has fascinated more respondents, including Asian states. Many conventions were established between 1945 and 1989 to broaden the global reach of international property regulation. Southeast and South Asia were active participants in international laws in this domain. Until the post-Cold War era, their behavior and commitment to intellectual property treaties maintained a high score compared to the rest of the world. However, there was a shift following the Lehman-caused global recession of 2008. A super low TPI score from Southeast and South Asia than the rest of the world demonstrates those countries’ reluctance to implement IP laws. The decline

in the TPI index in this period in this area may be explained by precise legal regulation (Fig. 12).

On the opposite, after initially being slow to commit to the intellectual property regime, East and Central Asian members experienced a significant shift in their commitment to intellectual property regimes. East Asian countries, in particular, had a high TPI score of around 0.17, compared to the global average of 0.09.

Discussion of the feasibility of Asia’s four regionalisms

The paper next proceeds by examining the viability of what we refer to as “four regionalisms in Asia”: East Asia, Southeast Asia, South Asia, and Central Asia, within the framework of

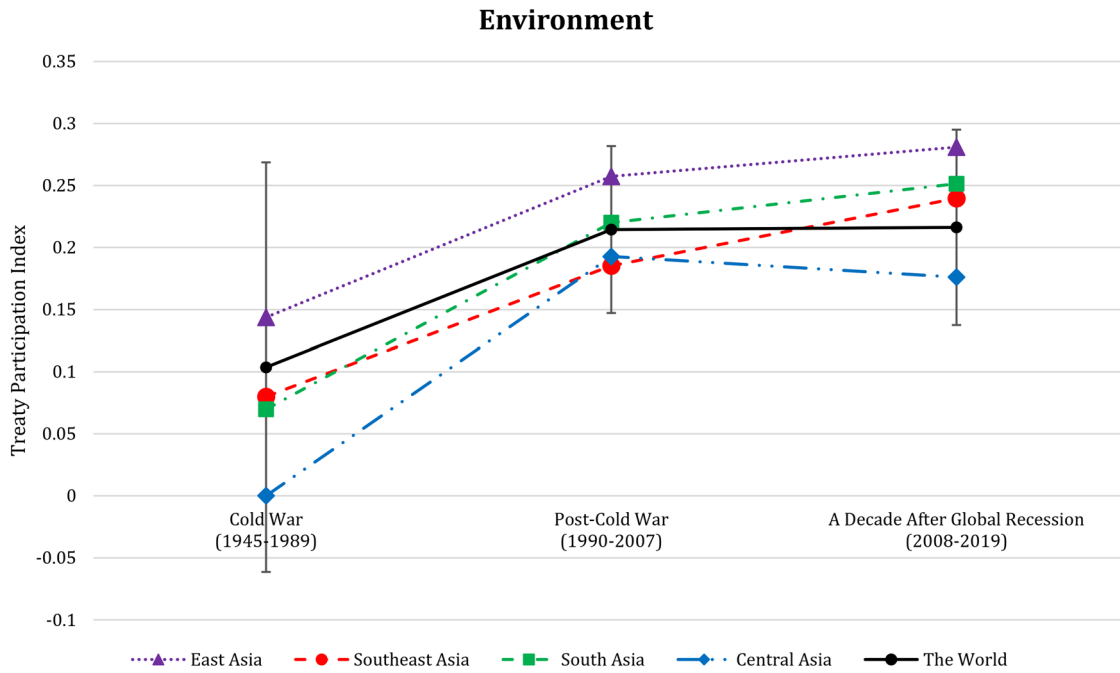


Fig. 11 Asian sub-regions versus the world in Environment domain.

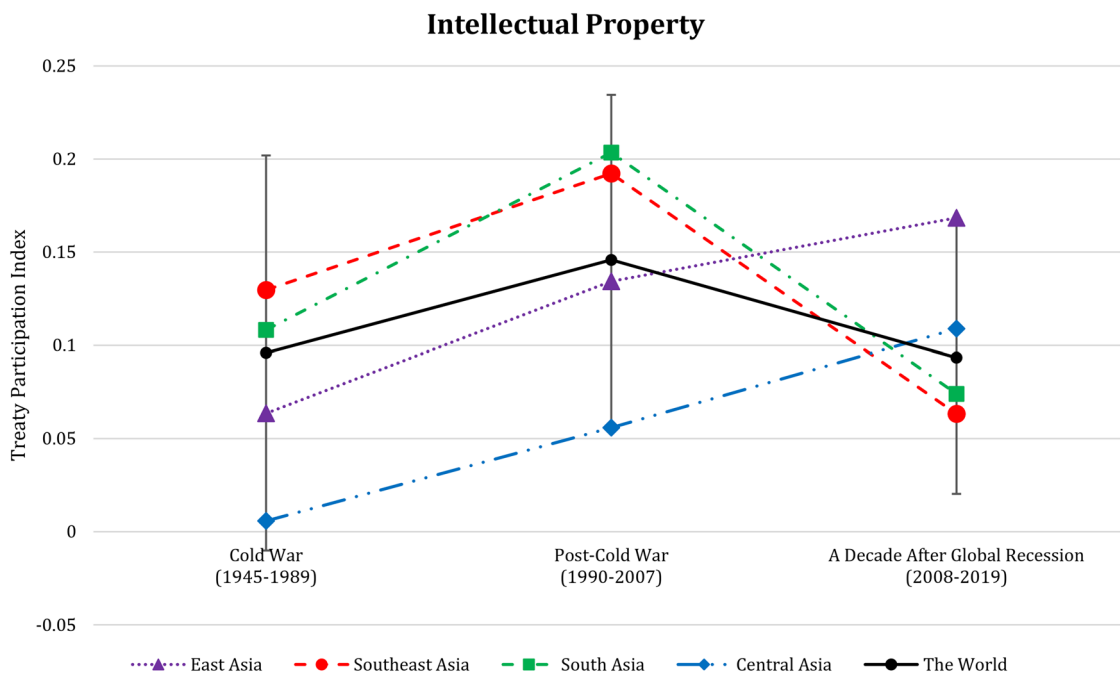


Fig. 12 Asian sub-regions versus the world in the Intellectual Property domain.

multilateral treaty participation. When discussing regionalism, it encompasses both the shared characteristics and differences among countries within the same geographical region. Initially, our selection of candidate members for the four Asian regionalisms is based on specific criteria such as geographic proximity, historical ties, cultural similarities, and economic interdependencies among states. These regionalisms consist of East Asia, encompassing China, North Korea, Japan, and South Korea; Southeast Asia, comprising Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam; South Asia, consisting of Afghanistan, Bangladesh, Bhutan, India, the Maldives, Nepal, Pakistan, and Sri Lanka; and

Central Asia, including Kazakhstan, Kyrgyzstan, Mongolia, Tajikistan, Turkmenistan, and Uzbekistan.

Geographically, all four regionalisms are located in close proximity to each other on the Asian continent. In terms of historical background, Central Asia was previously a community dominated by various tribes functioning as a republic within the former Union of Soviet Socialist Republics. Southeast Asia primarily experienced colonial rule by European and American powers, interrupted by Japan’s aggressive and brutal invasions. South Asia, on the other hand, was largely under the influence of the British East India Company, with British government oversight from 1857 to 1947. Lastly, East Asia was subjected to

Western (including American and Russian) as well as Japanese colonialism, with Japan's violent and aggressive actions fueling movements toward independence. Furthermore, each regionalism currently faces shared challenges such as climate change, transnational crime, terrorism, and regional security concerns.

Simultaneously, regionalism also acknowledges and embraces the diversity and disparities among nations within a region. When referring to the four regionalisms in Asia, the intention is not to homogenize or overlook these differences, but rather to recognize them as vital components of the region's identity and dynamics. The four regionalisms in Asia also exhibit distinctive cultures, languages, histories, political systems, economic structures, and levels of development. Regarding cultural and historical influences, the countries within each regionalism in Asia have been shaped by unique cultural and historical factors that have influenced their identities and development trajectories. For instance, East Asian countries have been significantly influenced by Confucianism, Buddhism, and various dynastic empires, while Southeast Asian countries possess a rich tapestry of indigenous cultures, alongside influences from Hindu-Buddhist traditions and Islamic practices. Notable economic disparities are also evident among the regionalisms. East Asia, with countries such as China, Japan, and South Korea, has emerged as a formidable economic powerhouse with advanced industrial sectors. Southeast Asia showcases a diverse mix of developing and emerging economies, while South Asia encompasses countries with varying degrees of economic development, including some with high poverty rates. Central Asia comprises resource-rich nations in transition from a Soviet-era economic system.

Within this context, we examine the potential clustering of the four Asian regionalisms in response to evolving global dynamics through their willingness to engage in and adapt to multilateral treaties. In the preceding sections, we have analyzed two indices, namely the Treaty Participation Index (TPI) and its changes over time compared to the global average to evaluate the viability of the four Asian regionalisms. The TPI measurements indicate the extent to which states demonstrate a willingness to participate in multilateral treaties, notwithstanding the constraints imposed by their global surroundings and the global policy domains of the treaties themselves. Meanwhile, the changes in TPI over time, when compared to the global average, provide insights into the regions' ability to adapt to global surroundings and contribute to global solutions.

Based on our research findings, it is intriguing to observe that regionalism in Asia recognizes and accommodates the diversity and differences among states concerning treaty adoption. In other words, the evidence-based trajectories of countries across the four Asian regions demonstrate their varying abilities to adapt to the challenges of globalization in the 21st century and beyond. While Central Asian countries display a noticeable clustering pattern, the figures for other sub-regions indicate a more dispersed distribution. In simpler terms, there is no clear sign of regional clustering among the East Asian, South Asian, and Southeast Asian states in multilateral treaty adoption.

Upon closer examination of the TPI scores for Central Asia, it becomes evident that they are consistently modest and below the world average, particularly in the six policy domains: labor and health, environment, trade and commerce, communications, intellectual property, human rights, and peace and disarmament. This signifies that the participation of Central Asian states in multilateral treaties is passive and limited, which aligns with the region's sparse populations, deserts, plains, and mountains.

In shifting from Central Asia to East Asia in terms of participation in multilateral treaties in a specific policy domain, it becomes evident that the TPI scores for Central Asian countries are relatively lower, whereas those for East Asian countries are

higher. Particularly, East Asia demonstrates high scores in the intellectual property, environment, trade, commerce, and communication domains. However, significant disparities in treaty participation exist within East Asian nations, with Japan and South Korea on one end of the spectrum and North Korea on the other.

In terms of South Asia, it is characterized by a large and demographically expanding population. The TPI figures also indicate a wide distribution across the region. South Asians are renowned for their passion and aspirations, as reflected in their positive TPI scores in the human rights domain. Conversely, the score is negative in the labor and health domain, suggesting that many populations have not fully benefited from multilateral treaties in these areas. India, Pakistan, and Sri Lanka, all former British colonies, participated in multilateral treaties more extensively than most states with similar levels of GNP, owing to their experience of pre-independence politics and diplomacy during the British colonial era. Consequently, these states exhibit positive TPI scores in the domains of labor and health, human rights, and peace and disarmament. In contrast, Bhutan, Nepal, and the Maldives display overall negative and low figures in TPI.

Southeast Asia, ranking second after East Asia in terms of GNP, does not exhibit highly active participation in multilateral treaties. Although ASEAN was established in 1968, it took time for the principle of ASEAN Centrality to gain prominence. Due to its diverse composition and its positioning among major powers, ASEAN emphasizes non-interference in domestic affairs and the concept of ASEAN Centrality. As a result, Southeast Asia displays a multitude of diversities in terms of participation in multilateral treaties.

Overall, this paper shows the four distinct regions of Asia, which bear the marks of World War II and exhibit developmental biases. These regions are delineated based on the inclination of states to join or abstain from multilateral treaties across six policy areas. While Asian states share a common goal of advancing prosperity through economic growth, scientific advancements, adherence to international law, and ethical principles throughout the 21st century, they exhibit significant diversity in their approaches to multilateral treaty systems. Our research findings indicate that the four Asian regionalisms exhibit varying degrees of sustainability in terms of treaty adoption. These similarities and dissimilarities contribute to the intricate dynamics and complexities of the four Asian regionalisms, shaping their interactions, cooperation, and efforts toward regional integration.

Furthermore, by constructing distinct sub-regions based on their inclination towards joining or abstaining from multilateral treaties in six policy areas, this paper provides an evidence-based assessment of the sustainability of these four Asian regionalisms, particularly within the context of the transition from international politics to the paradigm of global politics. Indeed, it acknowledges the increasing importance of multilateral treaties as instruments for transforming international politics into a global framework. It is in the early Cold War years J. David Singer's work (Singer, 1961) was a groundbreaking contribution to the study of international relations. He proposed a three-level analysis of international relations, which distinguishes individual, national, and international levels. At each level, Singer argued, certain distinct factors and processes shape international behavior. For example, at the individual level, personal interests, values, and beliefs are key determinants of action. At the national level, nation-states are motivated by power, wealth, and prestige. At the international level, international organizations and norms are key moderators of global affairs. This tripartite analysis has become the dominant framework for the study of international relations until the 1970s. Later, Robert Keohane and Joseph S. Nye published *Power and Interdependence* (Keohane and Nye,

1977), challenging the existing paradigms of international relations by introducing a complex disorder across three different levels of global politics. Global politics in this emerging complex disorder is played out at three levels, not at individual, national, and international but at societal, national, and global. The transformation from “international” politics into “global” politics has been driven by a range of factors, including increased trade and exchange of ideas, the rise of international organizations, and the emergence of a more interconnected world. Multilateral treaties have played an important role in this transformation, by providing a framework for states to cooperate and collaborate on a variety of issues. This has helped create a more unified legal framework and has allowed states to promote stability and peace through collective action. This paradigm shift is evident in the case of four Asian regionalisms represented in this study by their treaty participation in multilateral treaties between 1945 and 2020.

Conclusion and suggestions for further research

This study has established a quantitative framework to examine the speed of Asian states’ participation in multilateral treaties and their adaptation to these treaties within the United Nations system over time. We have developed the Treaty Participation Index as a quantitative measure of states’ engagement with multilateral treaties. This type of quantitative index holds potential for application in other research fields. The decision-making process of ratifying an international agreement spans several years and involves intertemporal decision-making. Intertemporal decision-making, a topic extensively investigated in the field of neuroeconomics, combines principles from economics and neuroscience to understand how individuals make decisions (Cajueiro and De Camargo, 2006; Takahashi, 2009). Impulsivity in intertemporal choice has been studied in neoclassical economics and behavioral economics, often explained through the concept of temporal discounting, which refers to people’s tendency to devalue delayed rewards (Frederick et al. 2002). Research also suggests that individuals’ time preferences may reverse over time, leading to time inconsistency in intertemporal choice. By studying intertemporal decision-making, neuroeconomics can provide insights that inform policymakers on how to make decisions that yield benefits in both the short and long term. This interdisciplinary approach offers valuable perspectives for understanding the complexities of decision-making processes related to international agreements.

Moreover, this paper has examined the response of Asian sub-regions to global issues through their participation in multilateral treaties across various policy areas. The results reveal valuable insights into the diversity among the four Asian regionalisms in terms of treaty participation. While Central Asia stands out as a distinct sub-region, the other sub-regions, namely East Asia, Southeast Asia, and South Asia, do not exhibit clear signs of regional clustering. This finding lays the foundation for further research on the potential trajectories of the four Asian regionalisms in light of evolving global dynamics, considering their willingness and adaptation to engage in multilateral treaties.

In our next research endeavor, we will continue employing a quantitative approach to identify clusters of multilateral treaty adoption among Asian states. Utilizing the available dataset encompassing 600 major multilateral treaties deposited in the United Nations system, covering diverse global issues, and featuring an array of information on the participating countries, we will focus on identifying relevant attributes or characteristics of the treaties, such as topics, levels of cooperation, or other significant factors. These selected features will be used to measure similarity or dissimilarity between pairs of countries, allowing us

to apply clustering algorithms for grouping countries based on their similarities. Commonly used clustering algorithms, including k-means clustering, hierarchical clustering, and density-based clustering, will be employed. Building upon these directions for further research, we will examine the potential shifts in regionalism’s membership and prepare to construct future scenarios for the four Asian regionalisms and the broader Asian context.

Moreover, there are additional suggestions for future research to delve deeper into the sustainability of these regionalisms in terms of treaty adoption. In addition to analyzing the commitment and participation of member states, further examination can be conducted on the effectiveness of regional cooperation mechanisms and their capacity to adapt to global dynamics. This comprehensive assessment will provide valuable insights into the long-term viability and prospects of these four Asian regionalisms in effectively addressing the challenges of globalization in the 21st century and beyond.

Data availability

The datasets analysed during the current study are available in the Dataverse repository: <https://doi.org/10.7910/DVN/LC7UDM>. These datasets were derived from the following public domain resources: Multilateral Treaties Deposited with the Secretary-General, United Nations, New York, as available on <https://treaties.un.org/Pages/ParticipationStatus.aspx>; NORMLEX - Information System on International Labour Standards as available on <https://www.ilo.org/dyn/normlex/en/?p=NORMLEXPUB:1:0>; WIPO-Administered Treaties as available on <https://www.wipo.int/treaties/en/>.

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Author contributions

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Competing interests

The authors declare no competing interests.

Ethical approval

This article does not contain any studies with human participants performed by any of the authors.

Informed consent

This article does not contain any studies with human participants performed by any of the authors.

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