

EU-Thailand FTA Negotiations

Competition clauses, human rights implications and the impact of environmental provisions

VA Partners. Dr. Pacharasut Sujarittanonta, Mr. Thunwar Phansatarn, Mr. Palot Julsukont, Ms. Nuttida Doungwirote, Ms. Apisara Kiatsirirojana

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Authors

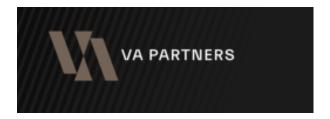
Dr. Pacharasut Sujarittanonta is a Partner at VA Partners Co. Ltd., a Law and Economics consulting firm based in Thailand. a former assistant professor at the Faculty of Economics, Chulalongkorn University. He has extensive experience in antitrust litigation and M&A practices in US and Thailand. He served as several subcommittees and provided trainings to TCCT and NBTC.

Mr. Thunwar Phansatarn is a Principal at VA Partners Co. Ltd. and a full-time lecturer at the Faculty of Economics, Ramkhamhaeng University. His research focuses on industrial organization, and economics of regulation. He has over five years of consulting experience on competition policy, spectrum redeployment, interconnection and access regulation and telecom license-fee reformation.

Mr. Palot Julsukont is an associate at VA Partners Co., Ltd. He is specialized in economic analyses, financial modeling, and industrial organization. He has worked on merger and acquisition, investment management, seed-stage venture funding, business data analytics and business development.

Ms. Nuttida Doungwirote is an associate of Nagashima Ohno & Tsunematsu (Thailand) Co., Ltd. Her areas of practice include personal data protection, corporate, and merger and acquisition matters.

Ms. Apisara Kiatsirirojana is an associate at Chandler MHM Limited (CMHM) in the Dispute Resolution and Litigation practice. Her experience is cross practice and includes conducting research on various topics. Winner of the moot arbitration competition at Thai Arbitration Institute (TAI).



Contact

Phone: +49 30 22 01 26 34 Fax: +49 30 69 08 81 02 Email: service@freiheit.org

Date

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Executive Summary

The resumption of trade negotiations between Thailand and the EU offers an opportunity to capitalize on their trade potential and deepen economic ties. As trade negotiations become more complex, focusing on issues like the environment, human rights, and competition, this report examines these topics' implications on the Thailand-EU FTA. It suggests that the competition chapter should emphasize human rights and comprehensive accountability, while the environmental chapter should be meaningful to avoid unnecessary trade barriers. By addressing these aspects, the report aims to provide policy recommendations for negotiators to promote sustainable and responsible trade relationships.

Chapter 1: Competition clause in trade agreements and human rights implications

Competition clauses in trade agreements, such as Free Trade Agreements (FTAs), have become more prevalent as countries recognize the interaction between trade and competition policies. The first generation of FTAs focused on trade-related issues, while recent FTAs have included non-traditional provisions related to social issues, environment, labor, data protection, and anti-corruption. The impact of competition-related provisions varies across countries and industries, and can benefit less developed countries by promoting fair practices and providing a mechanism for international cooperation. However, the relationship between competition and economic growth is complex and non-linear, with potential risks for less-advanced economies or negative consequences for social values, such as human rights. As a result, a broader understanding of competition is needed, with human rights playing a central role in shaping competition policy.

The study examines the impacts of competition on human rights across 151 countries using ordinary least squares regression (OLS) to estimate the relationship between competition and human rights. Three response variables (Human Freedom Index, Economic Freedom Index, and Personal Freedom Index) and various competition-related factors were analyzed. To avoid multicollinearity issues due to strong correlations between regressors, the researchers employed a strategy of removing highly correlated variables and repeating the process with the remaining variables, resulting in 36 different models.

The study's results reveal that the relationship between the Human Freedom Index and Domestic Competition Index is not statistically significant, while the relationships between the Human Freedom Index and other regressors, such as Democracy Index and Gender Development Index, are statistically significant. Similarly, the relationship between the Personal Freedom Index and Domestic Competition Index is not statistically significant, while relationships with Democracy Index and Gender Development Index are. In contrast, there is a strong relationship between domestic competition and economic freedom.

One possible explanation for these findings is that domestic competition can contribute to economic growth and development, but it does not necessarily ensure the protection of human rights if the government is not accountable to the people. Trade openness can increase a country's exposure to international human rights norms, and democratic governance can ensure government accountability and the protection of human rights through checks and balances. Ineffective domestic competition can lead to the concentration of economic power, further restricting freedom in the absence of democratic governance. Thus, to achieve higher human freedom levels, a nation must improve its trade openness and embrace democracy more significantly.

The negotiation of the Thailand-EU Free Trade Agreement (FTA) is expected to include competition-related provisions, as evidenced by Thailand's past FTAs and the EU's history of including such provisions in its own agreements. These provisions could potentially impact human rights in various ways. For instance, substantive competition-related provisions may help improve substantive rights, while the guarantee of fair enforcement may enhance procedural rights domestically. Generally, there are four main rationales for including competition-related provisions in FTAs: preserving the gains of trade liberalization, pursuing broader economic objectives, preventing selective enforcement of anti-trust laws for trade protectionism, and abolishing trade defenses. The impact of competition on human rights depends on the relevant market, the regulated conducts, and the existing institutional environment.

Competition law enforcement is expected to enhance the rule of law and the right to a fair trial, both of which are important aspects of human rights. However, competition disputes often involve sensitive commercial information, and the need to protect a country's economic interests may justify some limitations on certain procedural rights, such as the privilege against self-incrimination. As Thailand and the EU move forward with their FTA negotiations, it is crucial to consider how competition-related provisions may influence human rights, both substantively and procedurally. By understanding these linkages, negotiators can work towards utilizing the competition chapter in the FTA to achieve a broader set of objectives, including the promotion of human rights.

We then analyse how different human-rights-industries contingencies may be affected by competition provisions in the FTA. In Thailand, competition law enforcement has potential impacts on substantive rights, with the European Convention on Human Rights (ECHR) serving as a reference point for the FTA's competition chapter. Despite some progress in industries such as electricity, air transport, and television, the majority of industries have not experienced significant improvements in terms of competition. Thailand's human rights record has also declined, with a tight-knit relationship between competition laws and human rights necessitating consideration of related human rights aspects. Enhancing competition in industries like telecommunications, digital, and retail can potentially improve human rights such as the right to privacy, communication, food, and other living standards. The European Union has initiated movements to regulate digital platforms to protect these rights, and Thailand is in the process of legislating similar regulations.

In the pharmaceutical industry, competition enhancement can improve the right to health by providing consumers with more choices, reasonable pricing, and continuous innovation in healthcare. This is exemplified by the competition in vaccine development during the Covid-19 pandemic. FTAs can advance the industry by setting out mutual recognition to harmonize rules and regulations, thus increasing access to pharmaceuticals. Regarding cartels and collusion, it is crucial for FTA negotiators to consider the freedom of association of undertakings in the state parties to prevent disproportionate limitations on this freedom. The competition law in Thailand and the European Union should ensure that workers' rights to organize are not infringed upon by governing only business operators and undertakings engaged in economic activities

The study also attempts to quantify the impact of competition chapter in the FTA. In the context of a Free Trade Agreement (FTA), competition plays a crucial role in the capital adjustment process, allowing firms to adapt and innovate in response to market changes. An effective competition provision in the FTA can reduce transaction costs and enhance competition law enforcement, which can help optimize the post-FTA transition period. The potential economic impact of competition in enhancing trade benefits is significant, with conservative estimates suggesting a value of over 4.6 billion baht over a decade post-agreement. The inclusion of a competition chapter in the Thailand-EU FTA, with explicit provisions addressing human rightsrelated aspects, can promote sustainable and responsible business practices while protecting workers' rights, consumers' rights, and other vulnerable groups. To maximize the benefits of the FTA, Thailand should engage in substantive discussions on competition, invest in capacitybuilding and expertise, and foster greater collaboration with the EU on competition-related issues.

Chapter 2: The impact of environmental provisions in trade agreements implications for the EU-Thai FTA going forward

This section of the report empirically estimates the effects of environmental provisions in preferential trade agreements (PTAs) and implications for the EU-Thai FTAs. While PTAs aim to promote trade between member states by reducing barriers such as tariffs, the incorporation of environmental provisions in PTAs can increase or reduce trade by affecting firms' competitiveness from adhering to stricter environmental standards. Using Trade and Environment Database (TREND) by Morin et al. (2018), combined with bilateral exports between 2010-2018, the preliminary results show that environmental provisions in trade agreements in selected EU FTAs with ASEAN countries, namely Vietnam, Singapore, and Japan, do negatively affect exports to EU countries. This study provides evidence in support of the pressing need for Thailand to scale up its efforts to meet the ever more diverse and extensive environmental requirements potentially contained in the future cooperation between the EU and Thailand. A collaborative approach will be ideal for helping strengthen both the EU and Thailand's competitiveness to remain resilient as part of global value chains and, above all, to help the world fight against the climate crisis.

Bottom of Form

The relationship between international trade and the environment is crucial in the context of climate change and sustainable economic development. The debate over balancing economic growth and environmental protection has intensified with the inclusion of environmental provisions in preferential trade agreements (PTAs). These provisions can have confounding effects on trade flows between member countries, either promoting environmentally clean industries or justifying trade barriers for polluting industries. This report aims to examine the impact of environmental provisions in PTAs on the exports of signing countries, using the Trade and Environment Database (TREND) and bilateral trade flow data from 2010-2018. Preliminary results indicate that environmental provisions in PTAs negatively affect exports of countries with strict environmental standards, emphasizing the need for countries like Thailand to strengthen their efforts against climate change and maintain competitiveness in global value chains.

To study the effects of environmental provisions in trade agreements, this paper uses a panel dataset of bilateral merchandise exports from the UN Comtrade between 2010 and 2018, combined with PTA data from the Design of Trade Agreements (DESTA) dataset and the number of environmental-related provisions in PTAs from the TREND database. The paper focuses on selected EU FTAs with ASEAN countries, specifically Vietnam, Singapore, and Japan, and classifies these countries as green or brown based on their Environmental Performance Index (EPI). The methodology involves estimating a gravity equation using various fixed effects on panel bilateral trade data to account for endogeneity issues in estimating the PTA variable. The study controls for the general trade agreement effects and the effects of environmental provisions to analyze the impact of the latter on bilateral exports.

The empirical analysis of the impact of environmental provisions in PTAs on exports from selected ASEAN countries (Vietnam, Singapore, and Japan) that have signed FTAs with the EU reveals a negative effect on exports from these countries. The results suggest that while PTAs have a positive impact on exports, the inclusion of environmental provisions may counteract this effect. However, the study also highlights the importance of PTAs as a policy tool for promoting trade between member states more efficiently and productively.

These findings have significant policy implications for the EU-Thailand FTA. Despite the shortterm negative impact of incorporating environmental provisions in trade agreements, adhering to stricter environmental standards is necessary for fostering long-term competitiveness and resilience within global value chains. Thailand should work on harmonizing environmental regulations, promoting sustainable production and consumption, and engaging in comprehensive trade negotiations with the EU to address non-tariff barriers. Additionally, Thailand should invest in capacity-building in areas such as environmental trade policy, trade negotiations, and environmental law to ensure a proactive approach to trade negotiations and a sustainable, mutually beneficial relationship with the EU.

Chapter 1: Competition clauses in Trade Agreements and Human Rights Implications: Competition clauses in FTAs

1.1 Purposes of competition-related provisions

It has been a long debate about whether trade agreements should include nontrade clauses such as social clauses and labour clauses. Deep integration has been argued to have positive economic impacts.² During 1997-2003, the World Trade Organisation ("WTO") also had a working group to study the interaction between trade and competition policy. After decades of discussion, countries tend to admit that these two policies are inseparable yet tightly interact.3 In a nutshell, liberalised trade will not fulfil its potential if foreign businesses are exploited once they have crossed the border. Moreover, a dominant firm that overthrows its domestic market through illegitimate steps is usually not an optimal counterpart to materialise the full potential of comparative advantage through trade. Therefore, recent bilateral and plurilateral trade negotiations ubiquitously include competition-related provisions, albeit the provisions are still mostly absent at the multilateral level.

FTAs have been used to promote multilateral cooperation for global trade. The first generation of FTAs focused mainly on trade-related issues extended from WTO agreements such as tariffs, customs administration, and public procurement. The human rights impact of FTAs has drawn attention from both international and local levels.4 Many tried to use trade as a means to incentivise better practice in labour, environment and other social issues. However, the linkage between competition and human rights ignited through FTA has been largely overlooked in the literature. Some changes in competition triggered through FTA serve as a 'tool' by which human rights issues may potentially be addressed.

The non-traditional provisions that go beyond the WTO agreements, such as environmental issues, labour, data protection, and anti-corruption, have been included more in bilateral FTAs since the 1990s. ⁵ The degree of commitment ranges from simple general recognition to dedicated chapters or provisions, which increased in the 2000s.⁶ The various provisions can be categorized as follows:

Pacific%20PTAs.pdf.; Sanyal, Rajib. "The Social Clause in Trade Treaties: Implications for International Firms." Journal of Business Ethics 29, no. 4 (February 2001): 379-89.

3Working the (WGTCP), Group on Interaction between Trade Competition https://www.wto.org/english/tratop_e/comp_e/comp_e.htm

[&]quot;Labour Provisions in Asia-Pacific Free Trade Agreements - ESCAP." Accessed November 26, https://www.unescap.org/sites/default/files/Background%20Material%20-%20Labour%20provisions%20in%20Asia-https://www.unescap.org/sites/default/files/Background%20Material%20-%20Labour%20provisions%20in%20Asia-https://www.unescap.org/sites/default/files/Background%20Material%20-%20Labour%20provisions%20in%20Asia-https://www.unescap.org/sites/default/files/Background%20Material%20-%20Labour%20provisions%20in%20Asia-https://www.unescap.org/sites/default/files/Background%20Material%20-%20Labour%20provisions%20in%20Asia-https://www.unescap.org/sites/default/files/Background%20Material%20-%20Labour%20provisions%20in%20Asia-https://www.unescap.org/sites/default/files/Background%20Material%20-%20Labour%20provisions%20in%20Asia-https://www.unescap.org/sites/Background%20Material%20-%20Labour%20provisions%20in%20Asia-https://www.unescap.org/sites/Background%20Material%20-%20Labour%20provisions%20in%20-https://www.unescap.org/sites/Background%20Material%20-%20Labour%20provisions%20in%20-https://www.unescap.org/sites/Background%20Material%20-https://www.unescap.org/sites/Background%20-https://www.unescap.org/sites/Bac

² Legat et al (2018) OECD Presentation p. 9.

⁴ "Human Rights in EU Trade Agreements - European Parliament." Accessed November 2022. https://www.europarl.europa.eu/ReqData/etudes/BRIE/2019/637975/EPRS_BRI(2019)637975_EN.pdf.

⁵ François-Charles Laprévote, OECD Paper, 2019.

⁶ Anna Caroline MÜLLER, Presentation of "Competition provisions in trade agreements", December 2019 OECD discussion, p.12-13.

| (i) | Promote competition |
|-------|---|
| (ii) | Adopt or maintain competition laws |
| (iii) | Regulate designated monopolies, SoEs and enterprises entrusted with special or exclusive rights |
| (iv) | Regulate state aid and subsidies to provisions |
| (v) | Lay down competition-specific exemptions |
| (vi) | Abolish trade defenses |
| (vii) | Set forth cooperation and coordination mechanisms |
| (ix) | Principles governing the settlement of competition-related disputes |

Among these, types (i) and (ii) lay down a general understanding of the importance and establishment of competition laws. The impact of these two types of provisions may be large where the parties have no legislation or a weak system of competition law.

Types (iii) and (iv) aim to substantively limit state aid and enterprise, while type (v) provides its specific exemption. These provisions may have more impacts on the state parties with the government-led economy where state enterprises play significant roles.

Type (vi) provision places competition law instruments in a higher priority than the existing trade defenses such as anti-dumping. This is one of the rarest competitionrelated provisions found in FTAs.

Types (vii), (viii), and (ix) provisions focus on the enforcement of the competition law instruments. These provisions can be seen in United States FTAs. Therefore, these provisions are expected to be more impactful in countries with more specific investigations under competition law. The involvement of transnational enterprises in such investigations may trigger obligations under type (viii) and lead to interstate dispute settlement.

In fact, competition has not been solely raised in the EU's trade negotiation. Together with some newer issues, such as Sustainability and Digital trade, a Competition chapter has recently been included in an increasing number of trade negotiations, e.g., the Indo-Pacific Economic Framework (IPEF)⁷ initiated by the US. The Brussels effect⁸ of the competition chapter in trade agreements seems to bear fruit⁹.

1.2 Impacts of competition-related provisions

The impacts of these competition-related provisions on countries are different. They can benefit less developed countries, which are generally more vulnerable to anticompetitive practices 10. The enforcement by competition authorities in developed countries with more capacity may also spill over to their FTAs partners in the relevant industry. 11

The best practices in various countries may diffuse among the countries in the international cooperation network for competition policy and competition law enforcement. FTA with competition-related provisions is one of the mechanisms for weaving such a network. "Cross-jurisdictional spillovers", such as mergers or abuse of dominant positions that may impact various jurisdictions, are also expected. 12 The spillovers may affect the social and economic rights of people in State parties significantly in areas traded by multinational enterprises such as digital services, telecommunication, and pharmaceutical industries. More importantly, the EU is one of the most active jurisdictions enforcing competition laws on digital companies. The inclusion of competition-related provisions in EU's bilateral FTAs is seen as a strategy for competition law harmonization¹³

The main impact an FTA may have on domestic competition laws is to harmonize, at least put pressure towards domestic legislation or amendment. To a lesser degree, yet probably more important, an FTA may influence how competition is enforced or implemented. We will see in the subsequent sections that, due to the most recent amendment of competition law in Thailand, we have witnessed a convergence in the substance of the EU's TFEU and Thailand's Competition Act. This fact should facilitate the agreement on the Competition chapter, which in turn will affect human rights in the related areas. Figure X exhibits the scope of this report. Box 'A' represents the sub-domain of competition affected by FTA TH-EU, and box 'B' represents the domain of human rights affected by A.

⁷ Andreyka Natalegawa and Gregory B. Poling, 'The Indo-Pacific Economic Framework and Digital Trade in Southeast Asia', Center for Strategic and International Studies (May), 2022; Premesha Saha, 'The Indo-Pacific Economic Framework (IPEF): An Asean Perspective', 2022.

⁸ The Brussels Effect is a term used to describe the ability of European Union (EU) law to influence the domestic laws of EU member states and other countries worldwide. non-EU countries may adopt EU laws and regulations in order to facilitate trade or cooperation with the EU. For example, a non-EU country may adopt EU environmental regulations in order to export goods to the EU market. The Brussels Effect can therefore have a global impact, as EU law and regulation can influence the domestic laws and policies of countries outside of the EU.

⁹ Anu Bradford, 'The Brussels Effect', Nw. UL Rev. 107 (2012): 1.

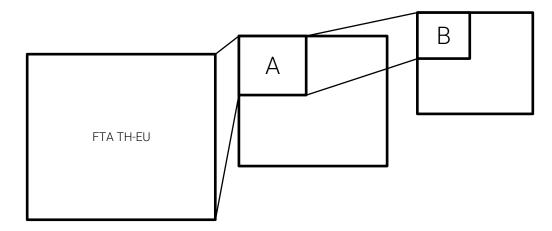
¹⁰ Robert D. Anderson and Anna Caroline Muller, "Competition Policy and Poverty Reduction: A Holistic Approach", 2012, p.5.

¹¹ Anna Caroline MÜLLER, Presentation of "Competition provisions in trade agreements", December 2019 OECD discussion, p.15.

¹² Anna Caroline MÜLLER, Presentation of "Competition provisions in trade agreements", December 2019 OECD discussion,

¹³ Peter Holmes et al, "Trade and Competition in RTAs: A missed opportunity?", in Philippe Brusick et al (eds), Competition Provisions in Regional Trade Agreements: How to Assure Development Gains (UN, 2002), p.73.

Figure 1 A graphic showing the impact of competition chapter on competition (A) and, as a consequence, on human rights (B)



Empirical works on the impact of competition on economic growth and development are vast and manifold^{14.} The literature reveals a substantial degree of diversity in conclusions subject to different presumed conditions. For example, even though most studies have found a positive relationship between competition and economic growth, some found that such direction applies to developed countries or countries closer to the technological frontier. On the contrary, countries further away from the technological frontier often finds competition harmful, which is in line with the Schumpeterian growth framework¹⁵. However, the conclusion also depends on which type of competition and innovation the data may capture. What is clear is that the relationship between competition and economic growth tends to be nonlinear¹⁶. At least a few 'points of failure' determine if competition will lead to prosperity.

- 1. Rectification and localisation of the FTA do not guarantee a perfect adoption or transition. Every so often, it has become just a mere transplantation rejection^{17.}
- 2. Even so, harmonisation of competition law is not always optimal, especially for the less-advanced economy^{18.}
- Moreover, optimal competition is extremely context-based. A degree of 3. competition in one place does not guarantee the same outcome

¹⁴ See, for example, Robert A. Blecker, 'International Competition, Income Distribution and Economic Growth', Cambridge Journal of Economics 13, no. 3 (1989): 395-412; Shelby D. Hunt, A General Theory of Competition: Resources, Competences, Productivity, Economic Growth (Sage publications, 1999); Pier Paolo Saviotti and Andreas Pyka, 'Product Variety, Competition and Economic Growth', Journal of Evolutionary Economics 18, no. 3 (2008): 323-47; Tay-Cheng Ma, 'The Effect of Competition Law Enforcement on Economic Growth', Journal of Competition Law and Economics 7, no. 2 (2011): 301-34.

¹⁵ Marwa W. Gomaa, 'Competition and Economic Growth: An Empirical Analysis with Special Reference to MENA Countries', Topics in Middle Eastern and North African Economies 16 (2014).

¹⁶ Philippe Aghion et al., 'Competition and Innovation: An Inverted-U Relationship', The Quarterly Journal of Economics 120, no. 2 (2005): 701-28.

¹⁷ Daniel Berkowitz, Katharina Pistor, and Jean-Francois Richard, 'The Transplant Effect', Am. J. Comp. L. 51 (2003): 163; Pierre Legrand, 'The Impossibility of "Legal Transplants"', Maastricht Journal of European and Comparative Law 4, no. 2 (1997): 111-24; Mindy Chen-Wishart, 'Legal Transplant and Undue Influence: Lost in Translation or a Working Misunderstanding?', International & Comparative Law Quarterly 62, no. 1 (2013): 1-30.

¹⁸ ROBERT IAN MCEWIN and Peerapat Chokesuwattanaskul, 'WHAT IS AN "EFFECTIVE" ASEAN COMPETITION LAW? A METHODOLOGICAL NOTE', The Singapore Economic Review 67, no. 05 (2022): 1565-1606.

- elsewhere. Quite the contrary, competition often manifests as a consequence of other incidents, such as economic growth 19.
- 4. Even so, competition does not automatically imply economic development, especially in the inclusive and sustainable senses^{20.} Competition under an unbounded mode could deteriorate social or public values such as environment and human rights²¹.

The points of failure above partly explain why the relationship between competition and development could be fuzzy. This fuzziness has led to several attempts to shed different lights on development, such as the concept of development as freedom coined by Amartya Sen²². Although all aspects of competition are debatably as important, one clarity is that competition must pursue a broader set of objectives, in which human rights play a large part.

¹⁹ Peerapat Chokesuwattanaskul, 'Export Cartels and Economic Development' (PhD Thesis, University of Cambridge, 2018). ²⁰ Amir Rubin and Dan Segal, 'The Effects of Economic Growth on Income Inequality in the US', Journal of Macroeconomics 45 (2015): 258-73; Khairul Amri, 'Is There Causality Relationship between Economic Growth and Income Inequality?: Panel Data Evidence from Indonesia', Eurasian Journal of Economics and Finance 6, no. 2 (2018): 8-20; Simon Kuznets, 'Economic Growth and Income Inequality', in The Gap between Rich and Poor (Routledge, 2019), 25-37.

²¹ Arianna Andreangeli, EU Competition Enforcement and Human Rights (Edward Elgar Publishing, 2008); Robert D. Anderson and Hannu Wager, 'Human Rights, Development, and the WTO: The Cases of Intellectual Property and Competition Policy', Journal of International Economic Law 9, no. 3 (2006): 707-47.

²² Amartya Sen, 'Development as Freedom (1999)', The Globalization and Development Reader: Perspectives on Development and Global Change 525 (2014). Christian Peukert et al., 'Regulatory Spillovers and Data Governance: Evidence from the GDPR', Marketing Science, 2022.

2. Analysis of the effects of competition on human rights

2.1 Models and variables

To further examine the impacts of competition on human rights, we conducted a preliminary study to quantify the magnitude of such effects across 151 countries by regressing proxies of human rights against various competition and other related variables. The factors²³ used in the regression and their descriptions are shown in the tables below.

Table 1: Variables Descriptions:

| Data | Variable | Variable Type | Source | Observatio n | Mean | Std. Dev. | Min | Max |
|--|---------------------|----------------------|-------------------------|-----------------|-------|--------------|-------|-------|
| Human Freedom Index | lhfi | Response Variable | CATO Institute | 129 | 1.98 | 0.16 | 1.51 | 2.21 |
| Economic Freedom Index | lefi | Response Variable | CATO Institute | 129 | 1.96 | 0.12 | 1.59 | 2.18 |
| Personal Freedom Index | lpfi | Response Variable | CATO Institute | 129 | 1.99 | 0.21 | 1.36 | 2.26 |
| Domestic Competition Index | lcompetition | Main Regressor | World Economic Forum | 129 | 3.95 | 0.20 | 3.28 | 4.30 |
| Domestic Competition and Trade Openness Index | lcompetitiont op | Main Regressor | World Economic Forum | 129 | 4.00 | 0.15 | 3.57 | 4.40 |
| Democracy Index | ldemocracy | Regressor | CATO Institute | 129 | 1.70 | 0.40 | 0.31 | 2.29 |
| Gender Development Index | lgdi | Regressor | UNDP | 129 | -0.04 | 0.05 | -0.26 | 0.03 |
| GDP per capita (PPP) (Constant 2017 international \$) | ledppc_ppp | Regressor | World Bank | 129 | 9.60 | 1.12 | 6.62 | 11.67 |
| Human Development Index | lbdi | Regressor | UNDP | 129 | -0.30 | 0.22 | -0.91 | -0.04 |
| ICT Adoption Index | lict | Regressor | World Economic Forum | 129 | 3.94 | 0.41 | 2.38 | 4.53 |

| Data | Variable | Variable Type | Source | Observatio n | Mean | Std. Dev. | Min | Max | |
|----------------------|----------|---------------|-------------------------|-----------------|------|--------------|------|------|--|
| Infrastructure Index | linf | Regressor | World Economic Forum | 129 | 4.15 | 0.28 | 3.29 | 4.56 | |

Table 2: Correlations between Response Variables

| Correlation | llafi | lefi | lpfi |
|-------------|--------|-------|------|
| llufi. | 1 | | |
| lefi | 0.8082 | 1 | |
| lpfi | 0.9622 | 0.619 | 1 |

²³ The most recent data available are from 2019. The data structure is cross-sectional by nation and covers 151 countries. Logarithmic transformation has been applied to all variables.

| Correlation | lcompetition | lcompetitiontop | ldemocracy | lgdi | lgdppc_ppp | lhdi | lict | linf |
|-----------------|--------------|-----------------|------------|--------|------------|--------|--------|------|
| lcompetition | 1 | | | | | | | |
| lcompetitiontop | 0.9005 | 1 | | | | | | |
| ldemocracy: | 0.3533 | 0.433 | 1 | | | | | |
| lgdi | 0.3139 | 0.4479 | 0.5057 | 1 | | | | |
| ledppc_ppp | 0.6309 | 0.7074 | 0.5146 | 0.5459 | 1 | | | |
| lbdi | 0.5914 | 0.6689 | 0.5511 | 0.6187 | 0.9575 | 1 | | |
| lict | 0.6313 | 0.6824 | 0.5209 | 0.6415 | 0.9039 | 0.9225 | 1 | |
| linf | 0.7331 | 0.7528 | 0.4752 | 0.5068 | 0.8925 | 0.9096 | 0.8613 | 1 |

Table 3: Correlations between regressors

We chose the ordinary least squares regression ("OLS") to estimate the coefficients of the linear equation, which describe the relationship between competition and human rights. The matrix notation of the OLS is presented below.

$$Y = X\beta + \varepsilon$$

Where:

Y and \mathcal{E} are $(n \times 1)$ vectors of the response variables and the errors of the n observations and;

X is an
$$(n \times p)$$
 matrix of regressors

From the factor description table above, there are three response variables, namely the Human Freedom Index, Economic Freedom Index, and Personal Freedom Index (the Human Freedom Index is comprised of the latter two indexes), and two main regressors of interest, Domestic Competition Index and Domestic Competition and Trade Openness Index. However, the correlation between these two main regressors is extremely strong (correlation > 0.9). Thus we decide not to include both regressors simultaneously, as this might lead to a multicollinearity issue. There are also five other regressors with a strong positive correlation: the Gender Development Index, the GDP per capita (PPP), the Human Development Index, the ICT Adoption Index, and the Infrastructure Index. If two or more of these correlated regressors are included simultaneously, the multicollinearity problem will also affect our models. Therefore, to address this issue, we simply employ a straightforward strategy by removing the four other highly correlated variables and leaving the most significant in the model; we then repeat this process with the remaining four variables, resulting in five additional models. The details of all model variations (a total of 36 models) are presented below

Table 4: Model variations.

| Response Variable | Main Regressor | ldemocracx | lgdi | lgdppc_ppp | lhdi | lict | linf |
|--------------------------|--|------------|----------|------------|----------|----------|----------|
| Human Freedom Index / | Domestic Competition Index (Icompetition) / | | | | | | |
| Economic Freedom Index / | Domestic Competition | Included | Included | Included | Included | Included | Included |
| Personal Freedom Index | and Trade Openness Index (Icompetitiontop) | | | | | | |
| Human Freedom Index / | Domestic Competition Index (Icompetition) / | | | | | | |
| Economic Freedom Index / | Domestic Competition | Included | Excluded | Included | Excluded | Excluded | Excluded |
| Personal Freedom Index | and Trade Openness Index ((competitiontop) | | | | | | |
| Human Freedom Index / | Domestic Competition Index (Icompetition) / | | | | | | |
| Economic Freedom Index / | Domestic Competition | Included | Excluded | Excluded | Included | Excluded | Excluded |
| Personal Freedom Index | and Trade Openness Index (lcompetitiontop) | | | | | | |
| Human Freedom Index / | Domestic Competition Index (Icompetition) / | | | | | | |
| Economic Freedom Index / | Domestic Competition | Included | Excluded | Excluded | Excluded | Included | Excluded |
| Personal Freedom Index | and Trade Openness Index (lcompetitiontop) | | | | | | |
| Human Freedom Index / | Domestic Competition Index (Icompetition) / | | | | | | |
| Economic Freedom Index / | Domestic Competition | Included | Excluded | Excluded | Excluded | Excluded | Included |
| Personal Freedom Index | and Trade Openness Index (Icompetitiontop) | | | | | | |
| Human Freedom Index / | Domestic Competition | | | | | | |
| | Index (lcompetition) / | | | | | | |
| Economic Freedom Index / | Domestic Competition | Included | Included | Excluded | Excluded | Excluded | Excluded |
| Personal Freedom Index | and Trade Openness Index (lcompetitiontop) | | | | | | |
| | (0.000000000000000000000000000000000000 | | | | | | |

Before we proceed to interpret the results, we must first identify whether or not our models have a heteroskedasticity issue which violates the Guass-Markov theorem²⁴ and thus means that our OLS estimators are not the Best Linear Unbiased Estimators (BLUE). In our case, all of our models do have the heteroskedasticity issue. To address this issue, we apply Heteroscedasticity-Consistent Standard Errors (HCSE)²⁵, which corrects for heteroscedasticity without modifying the coefficients.

²⁴ 'Gauss-Markov Theorem', in Wikipedia, 25 November 2022,

https://en.wikipedia.org/w/index.php?title=Gauss%E2%80%93Markov_theorem&oldid=1123747334.

²⁵ 'Heteroskedasticity-Consistent Standard Errors', in Wikipedia, 27 September 2022,

https://en.wikipedia.org/w/index.php?title=Heteroskedasticity-consistent_standard_errors&oldid=1112691390.

2.2 Results

2.2.1 Human Freedom (Dependent Variable) and Domestic Competition (Main Independent Variable)

The relationship between the Human Freedom Index and Domestic Competition Index is statistically no different from zero. However, the relationships between the Human Freedom Index and other regressors appear to be statistically different from zero.

| Table 1: Effect | of Domestic | Competition | on Human | Freedom |
|-----------------|---------------|-------------|----------|-------------|
| Table 1. Lifect | OI DOITIESTIC | COMPERIOR | oninuman | I I CCUOIII |

| | | 1 Boilleotto | Competiti | On On Hunn | 4111100001 | |
|--------------|----------|--------------|-----------|------------|------------|----------|
| Regressors | (1) | (2) | (3) | (4) | (5) | (6) |
| regressors | Model1 | Model2 | Model3 | Model4 | Model5 | Model6 |
| | | | | | | |
| Icompetition | 0.0306 | -0.0131 | 0.00616 | -0.00395 | 0.00989 | 0.0473 |
| | (0.0544) | (0.0507) | (0.0457) | (0.0454) | (0.0483) | (0.0377) |
| Idemocracy | 0.278*** | 0.295*** | 0.295*** | 0.298*** | 0.311*** | 0.287*** |
| | (0.0226) | (0.0239) | (0.0246) | (0.0224) | (0.0220) | (0.0189) |
| lgdi | 0.573** | | | | | 0.626*** |
| | (0.233) | | | | | (0.215) |
| lgdppc_ppp | 0.0491 | 0.0292*** | | | | |
| | (0.0298) | (0.00887) | | | | |
| lhdi | -0.0705 | | 0.133*** | | | |
| | (0.148) | | (0.0466) | | | |
| lict | -0.0123 | | | 0.0718*** | | |
| | (0.0521) | | | (0.0260) | | |
| linf | -0.0833 | | | | 0.0678** | |
| | (0.0620) | | | | (0.0334) | |
| Constant | 1.315*** | 1.250*** | 1.495*** | 1.207*** | 1.131*** | 1.333*** |
| | (0.338) | (0.169) | (0.213) | (0.168) | (0.161) | (0.155) |
| | | | | | | |
| Observations | 129 | 129 | 129 | 129 | 129 | 129 |
| R-squared | 0.789 | 0.766 | 0.761 | 0.762 | 0.750 | 0.774 |

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

2.2.2 Human Freedom (Dependent Variable) and Domestic Competition and Trade Openness (Main Independent Variable)

The relationship between the Human Freedom Index and Domestic Competition and Trade Openness Index is statistically different from zero. However, the relationships between the Human Freedom Index and other regressors, with the exception of the Democracy Index and Gender Development Index, appear not to be statistically different from zero.

Table 2: Effect of Domestic Competition and Trade Openness on Human Freedom

| Dogradora | (1) | (2) | (3) | (4) | (5) | (6) |
|-----------------|----------|-----------|----------|----------|----------|----------|
| Regressors | Model1 | Model2 | Model3 | Model4 | Model5 | Model6 |
| | | | | | | |
| Icompetitiontop | 0.199*** | 0.142* | 0.157** | 0.157** | 0.225*** | 0.160*** |
| | (0.0670) | (0.0725) | (0.0666) | (0.0609) | (0.0713) | (0.0436) |
| Idemocracy | 0.271*** | 0.290*** | 0.289*** | 0.291*** | 0.303*** | 0.276*** |
| | (0.0222) | (0.0240) | (0.0239) | (0.0216) | (0.0211) | (0.0195) |
| lgdi | 0.492** | | | | | 0.511** |
| | (0.208) | | | | | (0.211) |
| lgdppc_ppp | 0.0338 | 0.0151 | | | | |
| | (0.0289) | (0.00956) | | | | |
| lhdi | 0.0325 | | 0.0676 | | | |
| | (0.125) | | (0.0499) | | | |
| lict | -0.0188 | | | 0.0340 | | |
| | (0.0554) | | | (0.0274) | | |
| linf | -0.147** | | | | -0.0134 | |
| | (0.0596) | | | | (0.0392) | |
| Constant | 1.113*** | 0.775*** | 0.879*** | 0.724*** | 0.622*** | 0.893*** |
| | (0.339) | (0.248) | (0.297) | (0.213) | (0.211) | (0.176) |
| | | | | | | |
| Observations | 129 | 129 | 129 | 129 | 129 | 129 |
| R-squared | 0.802 | 0.775 | 0.774 | 0.774 | 0.770 | 0.789 |

2.2.3 Economic Freedom (Dependent Variable) and Domestic **Competition (Main Independent Variable)**

All of the relationships between the Economic Freedom Index and its regressors are statistically different from zero.

Table 3: Effect of Domestic Competition on Economic Freedom

| Regressors | (1) | (2) | (3) | (4) | (5) | (6) |
|--------------|-----------|-----------|----------|-----------|----------|----------|
| | Model1 | Model2 | Model3 | Model4 | Model5 | Model6 |
| | | | | | | |
| Icompetition | 0.144** | 0.145*** | 0.159*** | 0.149*** | 0.132** | 0.214*** |
| | (0.0561) | (0.0512) | (0.0507) | (0.0483) | (0.0570) | (0.0433) |
| Idemocracy | 0.0996*** | 0.116*** | 0.112*** | 0.116*** | 0.126*** | 0.111*** |
| | (0.0202) | (0.0192) | (0.0214) | (0.0207) | (0.0196) | (0.0193) |
| lgdi | 0.498** | | | | | 0.614*** |
| | (0.242) | | | | | (0.184) |
| lgdppc_ppp | 0.0331 | 0.0319*** | | | | |
| | (0.0306) | (0.00908) | | | | |
| lhdi | -0.0779 | | 0.159*** | | | |
| | (0.192) | | (0.0485) | | | |
| lict | 0.000316 | | | 0.0844*** | | |
| | (0.0486) | | | (0.0231) | | |
| linf | 0.0173 | | | | 0.116*** | |
| | (0.0747) | | | | (0.0379) | |
| Constant | 0.825* | 0.880*** | 1.184*** | 0.838*** | 0.741*** | 0.950*** |
| | (0.464) | (0.154) | (0.225) | (0.155) | (0.160) | (0.174) |
| | | | | | | |
| Observations | 129 | 129 | 129 | 129 | 129 | 129 |
| R-squared | 0.599 | 0.574 | 0.571 | 0.570 | 0.558 | 0.577 |

2.2.4 Economic Freedom (Dependent Variable) and Domestic **Competition and Trade Openness (Main Independent Variable)**

The relationship between the Economic Freedom Index and Domestic Competition and Trade Openness Index is statistically different from zero. However, the relationships between the Economic Freedom Index and other regressors, with the exception of the Democracy Index and Gender Development Index, appear not to be statistically different from zero.

Table 4: Effect of Domestic Competition and Trade Openness on Economic Freedom

| able 4. Lifect of L | ornestic cc | прешина | illu Illaue | Operiness | OH ECOHOL | riic i reedoi |
|---------------------|-------------|-----------|-------------|-----------|-----------|---------------|
| Regressors | (1) | (2) | (3) | (4) | (5) | (6) |
| | Model1 | Model2 | Model3 | Model4 | Model5 | Model6 |
| | | | | | | |
| Icompetitiontop | 0.411*** | 0.394*** | 0.395*** | 0.392*** | 0.421*** | 0.412*** |
| | (0.0714) | (0.0733) | (0.0726) | (0.0706) | (0.0748) | (0.0514) |
| Idemocracy | 0.0899*** | 0.105*** | 0.101*** | 0.103*** | 0.110*** | 0.0946*** |
| | (0.0169) | (0.0167) | (0.0176) | (0.0170) | (0.0166) | (0.0160) |
| lgdi | 0.324 | | | | | 0.385** |
| | (0.205) | | | | | (0.171) |
| lgdppc_ppp | 0.00748 | 0.0122 | | | | |
| | (0.0256) | (0.00940) | | | | |
| lhdi | 0.0518 | | 0.0696 | | | |
| | (0.145) | | (0.0520) | | | |
| lict | 0.00119 | | | 0.0367 | | |
| | (0.0492) | | | (0.0249) | | |
| linf | -0.0547 | | | | 0.0217 | |
| | (0.0607) | | | | (0.0405) | |
| Constant | 0.337 | 0.0844 | 0.222 | 0.0669 | - | 0.166 |
| | | | | | 0.00548 | |
| | (0.416) | (0.234) | (0.313) | (0.223) | (0.203) | (0.208) |
| | | | | | | |
| Observations | 129 | 129 | 129 | 129 | 129 | 129 |
| R-squared | 0.680 | 0.664 | 0.665 | 0.665 | 0.659 | 0.676 |
| | | | | | | |

2.2.5 Personal Freedom (Dependent Variable) and Domestic **Competition (Main Independent Variable)**

The relationship between the Personal Freedom Index and Domestic Competition Index is not statistically different difference from zero. However, the relationships between the Personal Freedom Index and Democracy Index as well as Gender Development Index and GDP per capita (PPP) appear to be statistically different from zero.

Table 5: Effect of Domestic Competition on Personal Freedom

| Regressors | (1) | (2) | (3) | (4) | (5) | (6) |
|--------------|----------|----------|----------|----------|----------|----------|
| | Model1 | Model2 | Model3 | Model4 | Model5 | Model6 |
| | | | | | | |
| Icompetition | -0.0558 | -0.129 | -0.107 | -0.115 | -0.0807 | -0.0815 |
| | (0.0842) | (0.0798) | (0.0706) | (0.0737) | (0.0722) | (0.0597) |
| Idemocracy | 0.417*** | 0.436*** | 0.438*** | 0.440*** | 0.454*** | 0.423*** |
| | (0.0343) | (0.0360) | (0.0357) | (0.0325) | (0.0316) | (0.0279) |
| lgdi | 0.645** | | | | | 0.620** |
| | (0.300) | | | | | (0.295) |
| lgdppc_ppp | 0.0602 | 0.0247* | | | | |
| | (0.0388) | (0.0135) | | | | |
| lhdi | -0.0781 | | 0.101 | | | |
| | (0.181) | | (0.0680) | | | |
| lict | -0.0274 | | | 0.0553 | | |
| | (0.0736) | | | (0.0384) | | |
| linf | -0.147 | | | | 0.0260 | |
| | (0.0922) | | | | (0.0471) | |
| Constant | 1.648*** | 1.524*** | 1.701*** | 1.483*** | 1.431*** | 1.622*** |
| | (0.418) | (0.267) | (0.313) | (0.260) | (0.249) | (0.236) |
| | | | | | | · |
| Observations | 129 | 129 | 129 | 129 | 129 | 129 |
| R-squared | 0.768 | 0.748 | 0.745 | 0.745 | 0.740 | 0.755 |

2.2.6 Personal Freedom (Dependent Variable) and Domestic **Competition and Trade Openness (Main Independent Variable)**

The relationship between the Personal Freedom Index and Domestic Competition Index is not statistically different from zero. However, the relationships between the Personal Freedom Index and Democracy Index as well as Gender Development Index appear to be statistically different from zero.

Table 6: Effect of Domestic Competition and Trade Openness on Personal Freedom

| Regressors | (1) | (2) | (3) | (4) | (5) | (6) |
|-----------------|----------|----------|----------|----------|----------|----------|
| | Model1 | Model2 | Model3 | Model4 | Model5 | Model6 |
| | | | | | | |
| Icompetitiontop | 0.0397 | -0.0427 | -0.0181 | -0.0157 | 0.0778 | -0.0340 |
| | (0.102) | (0.110) | (0.0983) | (0.0924) | (0.103) | (0.0730) |
| Idemocracy | 0.413*** | 0.435*** | 0.436*** | 0.438*** | 0.451*** | 0.416*** |
| | (0.0350) | (0.0370) | (0.0364) | (0.0333) | (0.0322) | (0.0303) |
| lgdi | 0.634** | | | | | 0.594* |
| | (0.285) | | | | | (0.305) |
| lgdppc_ppp | 0.0526 | 0.0147 | | | | |
| | (0.0391) | (0.0147) | | | | |
| lhdi | 0.00583 | | 0.0532 | | | |
| | (0.164) | | (0.0741) | | | |
| lict | -0.0396 | | | 0.0248 | | |
| | (0.0768) | | | (0.0399) | | |
| linf | -0.204** | | | | -0.0453 | |
| | (0.0949) | | | | (0.0547) | |
| Constant | 1.660*** | 1.283*** | 1.339*** | 1.212*** | 1.101*** | 1.446*** |
| | (0.479) | (0.374) | (0.426) | (0.322) | (0.320) | (0.285) |
| | | | · | | | |
| Observations | 129 | 129 | 129 | 129 | 129 | 129 |
| R-squared | 0.767 | 0.740 | 0.738 | 0.738 | 0.738 | 0.751 |

2.3 Summary

Despite the strong relationship between domestic competition and economic freedom, our preliminary research suggested that domestic competition alone cannot raise a nation's level of human freedom. To achieve this feat, a nation must also increase its level of trade openness and embrace democracy to a greater extent.

One possible explanation for the relationship between domestic competition, trade openness, and democratic governance on human rights is that domestic competition can lead to economic growth and development, but it does not necessarily ensure the protection of human rights if the government is not accountable to the people. On the other hand, trade openness can increase a country's exposure to international human rights norms and standards, with which it must comply, whereas democratic governance will ensure that the government is accountable to its people and that human rights are protected through checks and balances.

Additionally, ineffective domestic competition can lead to the concentration of economic power in the hands of a few individuals or organizations, which can further restrict the freedom of citizens in the absence of democratic governance. In addition, economic growth and progress alone do not guarantee human rights, as economic freedom can be exploited to restrict political freedom and human rights. To achieve a higher degree of human freedom, a nation must also improve its level of trade openness and embrace democracy to a more significant extent.

3. Expected competition-related provisions in the Thailand-EU FTA

From the most recent six bilateral FTAs that Thailand has concluded with other state parties, 4 FTAs include competition-related provisions. ²⁶ The Thai-India FTA (2003) and 2013 Thailand-Chile (2013) include only type (i), the general promotion provision. Still, Thai-Australia (2004), Thailand-New Zealand (2005) and Thailand-Japan (2007) FTAs include more substantive provisions on competition. However, so far, Thailand has never concluded FTAs that address type (iii) state enterprises or type (iv) state aid and subsidies.

It is expected that the negotiation for Thai-EU FTA will include competition-related provisions. In several FTAs that the EU concluded, the substantive provisions require measures, including regulating state aid and enterprises. ²⁷ Moreover, the enforcement and cooperation principle found in several other agreements may also be considered.

The chapter on Competition usually covers the standard conducts regulated by contemporary competition laws, especially Abuse of Dominance, Merger Control and Cartels. However, the extent of provisions is usually limited to the boundary of 'only those may affect trade'. The substance of current competition law in Thailand finds no particular disparity compared to those of the EU (TFEU). However, should there be any concerns in practice, two topics might need to be discussed:

- 1. The implementation of competition law amidst the newly-built ecosystem of competition law.
- 2. The competition between public entities (SOEs/public organisations/government agencies) and private entities^{28.}

The second topic, in particular, has been the issue since the earlier negotiations during which the previous Trade Competition Act (B.E. 2542) was still in effect and these two issues were not appropriately addressed, let alone the failure of enforcement of the Act in general. The new Competition Act have, at least in writing, addressed these two issues together with some other outstanding issues, such as the independence of the competition commission^{29.} Therefore, the advancement of the Act should facilitate the negotiations between Thailand and the EU on the Competition Chapter.

Although the issues of competition law and its enforcement are interesting, we instead focus on how the FTA may pave the 'external force' on them both directly and indirectly. Eventually, these competition consequences will make a spillover/diffusion effect on human rights issues through the competition pipeline.

²⁶ Data from Thailand Ministry of Foreign Affair website, https://treaties.mfa.go.th/กฎหมายระหว่างประเทศ/กฎหมายเศรษฐกิจระหว่างประเทศ/FTA-(Free-Trade-Area)

²⁷ François-Charles Laprévote, OECD Paper, 2019.

²⁸ The current trade competition law (B.E. 2560) states explicitly, in Section 4, that the conducts of these public entities that fall out of the scope of the trade competition act are limited to: "conduct their undertakings according to the law or resolution of the Cabinet which are necessary for the benefit of maintaining national security, public interest, the interests of society, or the provision of public utilities".

²⁹ Chapter 1 of the Trade Competition Act B.E. 2560 has established the Trade Competition Commission as an independent agency, detached from the Ministry of Commerce (as it previously did).

4. Impact of FTA competition-related provisions on human rights

4.1 Different rationales for including competition-related provisions

Human rights impact can be expected from all types of competition-related provisions. The provisions that contain substantive obligations may help improve substantive rights, and the guarantee of fairness enforcement may enhance procedural rights in domestic society. A well-functioning market is essential for economic development and the reduction of poverty, but it must come with governance mechanisms, including competition law which enhances consumer welfare.³⁰ In general, there are at least four rationales for including competition-related provisions in FTAs;

- a) competition provisions liberalisation measures to preserve the gains of trade liberalisation
- b) to pursue broader economic objectives, including economic efficiency and consumer welfare
- c) to prevent selective enforcement of anti-trust laws for trade protectionism
- d) to abolish trade defences

Among these, the first objective on broader economic objectives is directly related to developing social and economic rights. This kind of competition-related provision may increase the positive impacts on substantive human rights in State parties, especially in developing countries. However, this type of provision is rarely seen in FTAs.

Most existing competition-related provisions aim at the first liberalisation rationales that are directly related to trade liberalisation both in proactive and preventive ways. While the first is trade opportunity enhancing, the third is preventive. This may not be directly related to human rights, but the more open market and fair procedure resulting from these provisions may provide indirect positive impacts on the procedural aspect of the human rights situation.³¹

The most prominent question one may pose is, "what is the difference between competition caused by other mechanisms and that is led by FTA?". This is particularly relevant when it comes to the analysis of the impact of competition on human rights. In short, competition needs at least two success factors:

- 1. A clear and coherent set of objectives.
- 2. Effective enforcement through close monitoring and technical assistance.

These two factors are markedly different between competition in general and FTA-led competition. Thailand-EU FTA will be significantly influenced by the values and

³⁰ Robert D. Anderson and Anna Caroline Muller, "Competition Policy and Poverty Reduction: A Holistic Approach", 2012, p.5.

³¹ Robert D. Anderson, 'Making Law in 'New'WTO Subject Areas', 2015.

wisdom of the European Union, in which the set of objectives has been evolutionarily broadened in the past few decades. The importance of ECHR has been clearly incorporated into cases and law provisions^{32.} As we will discuss in the next section, we can see how more recent regulations in the EU have incorporated human rights values into its core values, i.e., the human-centric approach of the Digital Market Act (DMA) and the AI regulation^{33.} Moreover, technical assistance (type vii of provision) will create mutual benefits from the stakeholders' experience in the EU, which are relatively advanced compared with practitioners in Thailand.

However, there is no value judgment in the FTA-led competition, especially on the recipient state(s), which is likely to be Thailand under the Thailand-EU FTA. A clear set of objects and effective competition law enforcement also mean two lesser degrees of competition policy freedom. Considering this tradeoff, the convergence of competition laws, although they benefit certain entities through legal certainty and other aspects, may not be optimal regarding human rights. We discuss the contingency analytical framework in the subsequent section.

³² 'Promoting Competition, Protecting Human Rights - OECD', accessed 25 November 2022, https://www.oecd.org/daf/competition/promoting-competition-protecting-human-rights.htm.

³³ Natali Helberger and Nicholas Diakopoulos, 'The European Al Act and How It Matters for Research into Al in Media and Journalism', *Digital Journalism*, 2022, 1–10; Martina Seidl, 'Corporate Digital Responsibility: Stimulating Human-Centric Innovation and Building Trust in the Digital World', in *Liquid Legal–Humanization and the Law* (Springer, 2022), 55–81.

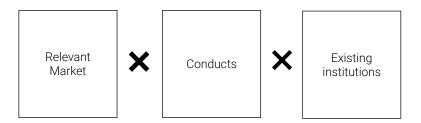
4.2 Impact of competition law on human rights in the Thailand-EU FTA

The most fundamental aspect of competition and human rights is that competition law is a mere limitation to business freedom. Therefore, like any free individuals, businesses subject to competition law possess both procedural and substantive human rights. At the same time, the limitations of business freedom have to be made just to ensure that at least a comparable degree of human rights of other businesses or individuals are enriched or secured in return. This section aims to show that mere agreements on competition may not be sufficient to address the broader set of objectives. Actually, we propose how the competition chapter can be elaborated by analysing that human rights goals are met. We analyse specific aspects of competition (i.e., industries and conducts) and derive how the competition chapter can touch upon human rights aspects.

The competition situation in Thailand has progressed slowly in the past few decades. However, the transition into human rights tentatively suffers even more. Therefore, we explore the underlying mechanisms in which the FTA negotiations could be more 'targeted' to ensure the enhancement of human rights when competition issues are discussed. In utilisation, the understanding of this linkage should help utilise the competition chapter in trade agreements to achieve a broader set of objectives, including human rights promotion.

The impact of competition on dimensions of human rights is multi-dimensional. To appreciate the impact of FTA-led competition on human rights, one needs to investigate at least three dimensions combined: relevant market, conducts, and existing institutions.

Figure 2 Analytical framework of the impact of competition on human rights



Human rights groomed by FTA-led competition will be different across market definitions³⁴ and conducts³⁵ being regulated, subject to the existing institutional environment, such as the cronyism or patronage systems in place³⁶. In order to achieve the framework, we discuss two main domains of the relationship between FTA-led

³⁴ Market definition is "a market defined as a collection of products and geographic locations, delineated as part of an inquiry aimed at making inferences about market power and anticompetitive effect" Jonathan B. Baker, 'Market Definition: An Analytical Overview', Antitrust LJ 74 (2007): 129; Patrick Massey, 'Market Definition and Market Power in Competition Analysis: Some Practical Issues', Economic and Social Review 31, no. 4 (2000): 309-28.

³⁵ For example, cartels will be more relevant to the Right to Associations than unilateral conducts such as most of abuse of dominance conducts e.g. predatory pricing.

³⁶ Arianna Andreangeli, '2. Competition Law and Human Rights: Striking a Balance Between Business Freedom and Regulatory Intervention', in *The Global Limits of Competition Law* (Stanford University Press, 2012), 22–36.

competition and human rights: Procedural and Substantive rights. After that, we explore the cases where the analytical framework above may apply, and the analysis allows us to derive the competition-human right contingency for the purpose of future negotiations.

• Procedural – enhancing the rule of law, right to a fair trial³⁷

From the perspective of procedural rights, it is expected that competition law enforcement will enhance the rule of law because the competition law in several jurisdictions, including the EU and Thailand, imposes criminal offences on the alleged. The principle of the right to a fair trial is underlying by several international conventions in relation to human rights³⁸, which provide that:

"Everyone is entitled in full equality to a fair and public hearing by an independent and impartial tribunal, in the determination of his rights and obligations and of any criminal charge against him" - and the courts also elaborate it on their decisions; for instance, in Orkem v Commission of the European Communities (1989), the ECJ mentioned that "the right not to give evidence against oneself is a general legal principle embodied in Community law, upheld by international conventions which are binding on the Member States and by their legal traditions."

In light of the independent and impartial tribunal, the role of the European Commission as an executive branch includes but is not limited to proposing new laws and enforcing EU laws. Regarding the competition aspect, the competition department of the European Commission will be responsible for authorised enforcing European Competition rules and also authorized to impose fines and periodic penalty payments^{39,} which can be implied that the European Commission also has a judicial function.

Contrary to the European Union, Thailand has amended its competition law. As a result, TCCT is neither a part of the government authority nor a state-owned enterprise; in other words, it is an independent authority that generates its income⁴⁰, and supposedly to be no interference from private or government officers⁴¹.

Nevertheless, despite the fact that the competition law enforcement is expected to enhance the right to fair trial, the following factors should also be taken into consideration:

³⁷ Donald Slater, Sebastien Thomas, Denis Waelbroeck, "Competition law proceedings before the European Commission and the right to a fair trial: no need for reform?"

³⁸ Article 6 of the European Convention on Human rights; Article 14 of the International Covenant on Civil and Political Rights; and Article 10 of the Universal Declaration of Human rights

³⁹ Article 23 and 24 of the Council Regulation (EC) No 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty

⁴⁰ Torsak Kumplang, "The New Beginning of the Competition in Thailand," The New Beginning of the Competition in Thailand (2018).

⁴¹ Section 10 of the Thai Competition Act B.E. 2560

Disputes on competition law are filled with commercially sensitive information

It is widely known that the decision of the competition commission derives from the analysis based on the parties' confidential information. The reason is that the market share is the first useful indication of the importance of each company in the market in comparison to the others⁴²; which in both Thailand and the EU have been following this approach as provided in the TCCT's Notification on Criteria for being an Undertaking with Dominant Position B.E. 2563 and United Brands v Commission of the European Communities (1978).

As mentioned in the Commission Staff Working Document Evaluation of the Commission Notice on the definition of the relevant market for the purposes of the Community competition law of 9 December 1997, the EU commission will usually ask each supplier in the relevant market to provide its own sales in order to calculate the total market size and market shares⁴³. Likewise, in Thailand, during the investigation of anti-competition agreement cases, the parties may also have to disclose such information, along with the agreements, lists of the manufacturer, cost price structure, or sales policy, to substantiate their argument in the case. TCCT will find actions based on the submitted evidence that led to a monopoly, reduction of competition, or restriction of competition in that market, then make the decision for the case⁴⁴.

Since all of the mentioned information is considered a part of a business plan which is commercially sensitive information, having such information exposed during the proceedings would harm the business 45 . Due to this reason, as of now, hearings in the competition disputes are conducted in private 46 .

⁴² The European Commission. "Article 102 Investigations." Competition Policy. The European Commission. Accessed November 26, 2022. https://competition-policy.ec.europa.eu/antitrust/procedures/article-102-investigations_en.

⁴³ The Commission Staff Working Document Evaluation of the Commission Notice on the definition of relevant market for the purposes of Community competition law of 9 December 1997 notes that "The total market size and market shares are often available from market sources, i.e., companies' estimates, studies commissioned from industry consultants and/or trade associations. When this is not the case, or when available estimates are not reliable, the Commission will usually ask each supplier in the relevant market to provide its own sales in order to calculate the total market size and market shares" and "Although the variables most often used to estimate market shares are the value or the volume of sales, in certain circumstances (depending on the specific product or industry), other elements such as reserves, or capacity will be complemented instead"

⁴⁴ TCCT's decision on the case of the prohibition on alcohol agents from local alcohol distribution (2021)

⁴⁵ AKZO Chemie BV and AKZO Chemie UK Ltd v Commission of the European Communities. 1986. 53/85 (European Court, June 24).; British-American Tobacco Company Ltd and R. J. Reynolds Industries Inc. v Commission of the European Communities. 1987. 142 and 156/84 (European Court, November 17).

⁴⁶ Article 14(6) of the Commission Regulation (EC) No 773/2004 of 7 April 2004 Relating to the conduct of proceedings by the Commission pursuant to Articles 81 and 82 of the EC Treaty, provides that "Oral hearings shall not be public. Each person may be heard separately or in the presence of other persons invited to attend, having regard to the legitimate interest of the undertakings in the protection of their business secrets and other confidential information."; Article 12(3) of the 2011/695 Decision of the President of the European Commission of 13 October 2011 on the function and terms of reference of the hearing officer in certain competition proceedings, provides that "...To the extent that, exceptionally, a question cannot be answered in whole or in part at the oral hearing, the Hearing Officer may allow the reply to be given in writing within a set time limit. Such written reply shall be distributed to all participants in the oral hearing, unless the Hearing Officer decides otherwise in order to protect the rights of the defence of an addressee of a statement of objections or the business secrets or other confidential information of any person"

Competition law has the purpose of protecting the country's economic interests

As the undertakings are required to supply the information requested by the competition commission (whether it would harm themselves or not), since certain information is confidential and owned by only the undertakings, it is undeniable that the rights of silence or the privilege against self-incrimination has interfered.

In some cases, it is necessary for the Commission to ask for internal information such as sales, copies of all the invitations, agendas, minutes, internal memoranda, records, exchange of correspondence, and facsimiles^{47,} or even request the respondent to produce documents containing some of the information needed by the Commission⁴⁸. If the competition commission cannot ask for further evidence, it may significantly affect the decision, which would potentially cause unfairness to the other parties. Without such information, it cannot be ensured that the investigation process in competition cases will be effective and that justice will be served.

Considering that competition law is not the only type of law that excludes this principle^{49,} it can be concluded that if the interference of the privilege against self-incrimination is necessary to protect the country's vital economic interests, this could justify the exclusion of the rights of silence or the privilege against self-incrimination⁵⁰; and this approach has been accepted across jurisdictions^{51.}

Substantive rights – relevant areas for Thailand

Many substantive rights can be affected by the enforcement of competition law. However, the EU has its substantive human rights basis written in the European Convention on Human Rights (ECHR). The ECHR's articles and protocols, especially Section I⁵², could serve as one of the landing domains for the FTA's competition Chapter.

Article 2 – life

Article 3 - torture

Article 4 – servitude

Article 5 - liberty and security

Article 6 – fair trial

Article 7 – retroactivity

Article 8 - privacy

Article 9 - conscience and religion

⁴⁷ Mannesmannröhren-Werke AG v Commission of the European Communities. 2004. T-44/00 (The Court of First Instance of the European Communities, July 8).; Maurice Guerrin, Georgios Kyriazis. 1992. "Cartels: Proof and Procedural Issues." Fordham International Law Journal, 226-334.; OECD. 2007. "Prosecuting Cartels without Direct Evidence of Agreement." ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT. June. Accessed May 28, 2022. https://www.oecd.org/competition/cartels/38704302.pdf.

⁴⁸ Mannesmannröhren-Werke AG v Commission of the European Communities (The Court of First Instance of the European Communities July 8, 2004).; Maurice Guerrin and Georgios Kyriazis, "Cartels: Proof and Procedural Issues," Fordham International Law Journal, 1992, pp. 226-334.; "Cartels and Anti-Competitive Agreements." OECD. Accessed November 26, 2022. https://www.oecd.org/competition/cartels/.

⁴⁹ Qualcomm, Inc. and Qualcomm Europe, Inc. v European Commission (Court of Justice of the European Union June 18, 2019) ⁵⁰Ashworth, Andrew. "Self-Incrimination in European Human Rights Law - A Pregnant Pragmatism." Cardozo Law Review 30, no. 3 (December 2008): 751–74..

⁵¹ Thanitcul, Sakda, Kanaphon Chanhom, Suphasit Taweejamsup, and Jutamat Thirawat. Working paper. Research on the Competition Law/ Monopoly Protection in ASEAN (The Competition Law in ASEAN). Bangkok: Thailand Science Research and Innovation (TSRI), 2017.

⁵² Section I, after the Protocol 11, is consisted of 18 articles (Article 1 to 18) as follows: Article 1 – respecting rights

The contingency between competition cases and human rights issues

The past few decades have seen some promising signs of progress in some industries, such as electricity, air transport, and television, in Thailand ⁵³. Moreover, the long-term impact should be improving as a consequence of the newly amended competition act. However, admittedly, most industries have not experienced any tangible progress in terms of competition. On the human rights side, we have seen a plummet in the ranking of Thailand in various dimensions, especially in the past decade. For example, the Freedom House index ⁵⁴ ranked and categorised Political rights and Civil liberties have classified Thailand as 'not free', scoring just 29 out of 100 ⁵⁵. In general, the development of human rights seems inconsistent with that of competition laws. The takeaway should be that, knowing the tight-knitted relationship between the two, we should not discuss the competition chapter without taking related human-rights aspects into account. In the following section, we pick some notable industries to discuss how competition enhancement may lead to improvement in human rights, especially when the enhancement is led by the FTA with the EU.

Telecommunication and digital industries - Right to privacy and Right to communication

The telecommunication industry serves as what Hermes does in Greek mythology: a messenger. The industry is regulated by the National Broadcasting and Telecommunication Commission (NBTC) in Thailand, while the EU governs it through the European Commission. The increasing-returns nature of the industry exhibits well how a country may strike a balance between competition and other objectives. In some European countries, the choice is to compromise efficient scale and introduce more intense competition to preserve other objectives, such as the right to communication. This approach explains why we have seen the use of behavioural remedies to a greater degree when compared with other industries in general⁵⁶.

Article 10 - expression

Article 11 - association

Article 12 - marriage

Article 13 - effective remedy

Article 14 - discrimination

Article 15 - derogations

Article 16 - foreign parties

Article 17 - abuse of rights

Article 18 – permitted restrictions

⁵³ Pacharasut Sujarittanonta and C. Kamseang, 'Competition: Missing Piece in Innovation Equation', in *Bank of Thailand Symposium*, 2017.

⁵⁴ 'Thailand: Freedom in the World 2022 Country Report', Freedom House, accessed 25 November 2022, https://freedomhouse.org/country/thailand/freedom-world/2022.

⁵⁵ The index has two dimensions: Political rights and Civil liberties. Political rights is measured by electoral process, political pluralism and participation, functioning of government. Civil liberties is measured by freedom of expression and belief, associational and organisational rights, rule of law, and personal autonomy and individual rights.

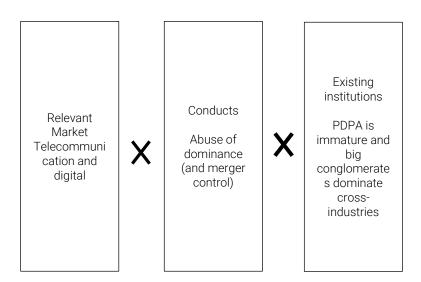
⁵⁶ Warren G. Lavey and Dennis W. Carlton, 'Economic Goals and Remedies of the AT&T Modified Final Judgment', *Geo. LJ* 71 (1982): 1497; Alexandre De Streel, 'Remedies in the European Electronic Communications Sector', *Remedies in Network*

The European Union has recently initiated a few movements to regulate digital platforms and related industries. These initiatives serve well to exhibit how enhancing competition can help protect some fundamental human rights, namely, the right to privacy and the right to communication. The European Union enacted the Digital Market Act⁵⁷, which entered into force on 1 November 2022. The following logic triggered the movement:

"Digital innovation has resulted in the emergence of new "winner-takes-all" dynamics. In particular, the emergence of tech giants such as Amazon, Alibaba and Google raises important potential concerns about market dominance. Many governments and regulatory authorities are turning to competition policy to address perceived excesses of market power and/or to ensure a level playing field for smaller firms." ⁵⁸

Judging from how Thailand's Personal Data Protection Law (PDPA) B.E. 2562 resembles the General Data Protection Regulation (GDPR) of the EU, Thailand is actually in the process of legislating a similar regulation to regulate digital platforms as well.

Figure 3 exhibits how the framework is adopted to analyse the telecommunication and digital industry



Industries: EC Competition Law vs Sector-Specific Regulation, Antwerp: Intersentia, 2004; Damien Geradin, Remedies in Network Industries: EC Competition Law vs. Sector-Specific Regulation (Intersentia nv, 2004).

⁵⁷ REGULATION (EU) 2022/1925 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 14 September 2022 on contestable and fair markets in the digital sector and amending Directives (EU) 2019/1937 and (EU) 2020/1828

⁵⁸ WTO, World Trade Report 2018: The future of world trade How digital technologies are transforming global commerce (2018), p. 141.

Retail - right to food⁵⁹ and other living standards⁶⁰

The adjustment of the prices in the retail industry certainly directly affects the consumer; therefore, regulation concerning allocative and productive efficiency, reduced prices, and increased output is necessary. As competition law was established for such purposes⁶¹, the enforcement of the competition law must be, in fact, functional to ensure a fair marketplace and the maintenance of the competition and the benefits of the individuals, including consumers⁶².

Both Thailand and European Union have a similar function in their competition law, aiming that the right to food and other living standards shall be protected by providing the provisions on the merger and acquisition reviews, the prevention of unfair trade practices, and abuse of dominance⁶³; which will be great assistance by monitoring the exercise of market power at different levels of the food value chain, that has led to higher prices, lower output, and restrictions on innovation⁶⁴. Although the application of such provisions may be different in detail, depending on the sub-regulations⁶⁵, the similarity in analyzing the competition in the retail industry between European Union and Thailand can be found as both of the competition commissions take certain factors such as the market concentration, entry and expansion, non-coordinated effects, coordinated effects into their consideration; and the approval of mergers may be done under the conditions to ensure that the consumer's rights to food and other living standards will be protected⁶⁶.

Considering the TCCT's Decision on the request for the merger between CP Retail Development Co., Ltd., and Tesco Stores (Thailand) Co., Ltd. in 2020, which brought massive controversies in Thailand. From the public's perspective, there is a high possibility that this merger would monopolize the market due to the fact that both CP

The Petitioner claimed that the Respondent unfairly set unreasonably high price for a taxi service by exploiting its dominant position in the market. The TCCT decided that the TCCT does not have jurisdiction over the case because the Petitioner is not considered an undertaking under Section 5 of the Trade Competition Act.

Case summer "Merger between CP and Tesco
 CP Retail Development Co., Ltd., and Tesco Stores (Thailand) Co., Ltd. jointly submitted a merger proposal for the TCCT's approval. The TCCT found that the merger will result in market dominance but will not create a monopoly over the relevant market. The TCCT approved the merger but imposed several conditions.

⁶¹ Herbert Hovenkamp, "Antitrust Policy after Chicago," Michigan Law Review 84, no. 2 (1985): p. 213, https://doi.org/10.2307/1289065.; B. Y. Orbach, "The Antitrust Consumer Welfare Paradox," Journal of Competition Law and Economics 7, no. 1 (January 2010): pp. 133-164, https://doi.org/10.1093/joclec/nhq019.

⁶² Alison Jones, Brenda Sufrin, and Niamh Dunne, Jones & Sufrin's EU Competition Law: Text, Cases, and Materials (Oxford: Oxford University Press, 2019).

63 Section 101 and 102 of TEFU; Section 50, 51, 54, 55, 57 of Thai Competition Act B.E. 2560

⁶⁴ Lianos, Ioannis, and Amber Darr. "Hunger Games." Global Food Value Chains and Competition Law, 2022, 420–477. https://doi.org/10.1017/9781108554947.018.

⁶⁵ For example: Council Regulation (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings (the EC Merger Regulation); The TCCT's Notification on Guideline for Considering Actions Causing Damage to Other Business Operators B.E. 2561 (2018); The TCCT's Notification on Guidelines for the Assessment of Collective Practices by Undertakings that are Monopolization, Competition Reduction, or Competition Restriction in Market B.E. 2561 (2018); The TCCT's Notification on the Criteria Methodology and Condition of the Merger B.E. 2561 (2018); The TCCT's Notification on the Criteria of the Dominant Business Operator B.E. 2561 (2018)

⁶⁶ The TCCT's Decision on the request for the merger between CP Retail Development Co., Ltd., and Tesco Stores (Thailand) Co., Ltd.; The European Commission Decision of M.8864 - VODAFONE/ CERTAIN LIBERTY GLOBAL ASSETS; The European Commission Decision of M.9449 VAG/ VARTA (CONSUMER BATTERY, CHARGERS AND PORTABLE POWER AND LIGHTING BUSINESS)

⁵⁹ Aravind R. Ganesh, "The right to food and the buyer power"; loannis Lianos and Amber Darr, "Hunger Games: Connecting the Right to Food and Competition Law"

⁶⁰ Case summary: Unfair reasonably high price for a taxi service

and Tesco operate in supermarkets and convenience stores⁶⁷. According to the NGO, the dominant player in the modern trade market in Thailand are (i) Makro (owned by CP) with a 37.4 per cent market share, (ii) Big C with a 24.2 per cent market share, and (iii) Tesco Lotus with a 38.4 per cent market share. As a result, this acquisition will create 75.8 per cent of the market share of the modern trade market owned by a sole entity⁶⁸. Therefore, the public has an opinion that the TCCT should not allow this acquisition.

As the TCCT defines market definition in 2 main aspects, which are a wholesaler and a retailer, and the retail market will be divided into three sub-markets which are: 1) hypermarket, 2) convenience stores, and 3) supermarket⁶⁹; it raises questions to the public's eyes since these channels provide similar products to consumers⁷⁰. Moreover, the NGOs expressed their views that Makro (which is in the wholesale market) and 7-eleven (which is in the convenience store market) should be in the same market called "Modern Food Retailer"⁷¹. Having TCCT determine the market definition separately causes concerns to the public since such an interpretation is too narrow. Several scholars raise the question whether Makro should be in the TCCT's consideration because it is considered a competitor of Tesco⁷². Since this was not the case, TCCT has granted the permission for this acquisition against the public's views that this decision would harm the country's economic interests.

Due to the reason mentioned above, the Consumer groups led by the Foundation for Consumers on March 15 filed a lawsuit against the TCCT to the Administrative $Court^{73}$.

Points that should be taken by the FTA's negotiator is how to negotiate the FTA resulting to comprehensive competition law and regulations. The FTA may provide the mechanisms that could guide the competition commission in determining the case, for example, the factors that the competition commission should consider. As a result, the competition commission will be dictated to apply the competition law according to its purpose.

⁶⁷ Wattanasukchai, Sirinya. "CP-Tesco Merger Spells Pain for Small Businesses." Bangkok Post, November 20, 2020. https://www.bangkokpost.com/opinion/opinion/2022575/cp-tesco-merger-spells-pain-for-small-businesses.; Janssen, Peter. "CP Group's Tesco Takeover Rings Monopoly Alarm." Asia Times. Asia Times, March 21, 2020. https://asiatimes.com/2020/03/cp-groups-tesco-takeover-rings-monopoly-alarm/.

⁶⁸ Wechsuwanarux, Nuanporn, Pranat Laohapairoj, and Chotiwut Sukpradub of Chandler MHM. "Scrutinising CP Group's Acquisition of Tesco - in-House Community." In-house Community . In-house Community . Accessed December 27, 2022. https://www.inhousecommunity.com/article/scrutinising-cp-groups-acquisition-tesco/.

⁶⁹ The TCCT's Decision on the request for the acquisition between CP Retail Development Ltd and Tesco Stores (Thailand) Ltd (December, 2020)

⁷⁰ Pananond, Pavida. "CP Group Takeover of Tesco's Thai Unit Raises Alarming Questions." Nikkei Asia. Nikkei Asia, November 25, 2020. https://asia.nikkei.com/Opinion/CP-Group-takeover-of-Tesco-s-Thai-unit-raises-alarming-questions.

⁷¹ Nithiveerawakul, Nithi. "What Does It Cost for the Merger between CP and Tesco in Thailand." Way Magazine, November 28, 2020. https://waymagazine.org/the-merger-of-cp-tesco/.;

⁷² The Editors . "The Acquisition of CP - Tesco: Which Lens Should We Use to Look at This Case?" The 101 World, February 10, 2021. https://www.the101.world/cp-tesco-deal-policy-forum-1/.

⁷³ "Debate on What Defines Market Monopoly Now Left up to Court." Thai PBS World. Thai PBS. Accessed December 27, 2022. https://www.thaipbsworld.com/debate-on-what-defines-market-monopoly-now-left-up-to-court/.

The pharmaceutical industry and the right to health⁷⁴

The right to health is recognized as fundamental human rights that everyone should have access to, regardless of race, age, ethnicity, or any other status. ⁷⁵ In Thailand, the pharmaceutical industry is regulated by the Food and Drug Administration, the Ministry of Public Health.

The significance of the right to health is especially seen during the Covid-19 pandemic when the pharmaceutical industry played a crucial role in ending the pandemic so the people's lives and the economy of the nations can continue as normal. As everyone should have access to healthcare, it is important that the industry is regulated so that it is not monopolised by only one or a few business operators, which may lead to the price of healthcare being unaffordable. Hence, the competition enhancement in this sector may improve human rights by providing consumers with more choices, reasonable pricing, and continuous innovation in healthcare. A clear example of this is during the Covid-19 pandemic when companies in the pharmaceutical industry were competing to develop vaccines. Without competition in the industry, it could have taken a long time to research and develop such vaccines, which were desperately needed by all nations. After the production of vaccines is successful, it is also important that the distribution is done by a competitive market and is not monopolised by only one or a few companies to ensure that the price is affordable to the public.

For the pharmaceutical industry, tariffs are not the main concern for the competition but rather non-tariff barriers, such as how clinical trials are conducted or how drugs are licensed, adding more trade costs between nations. In this regard, FTAs may advance the industry by setting out mutual recognition to harmonise rules and regulations of pharmaceuticals and medical devices. This harmonization would increase access to pharmaceuticals, and it is estimated that if rules and regulations are harmonized between the United States and the EU, it will generate yearly GDP growth of 0.5 per cent for the EU and 0.4 per cent for the US, up to the year 2027.⁷⁶

Cartels and collusion - freedom of association and worker rights⁷⁷

Cartels, especially hard-core cartels, are regarded as the most egregious violations of competition law⁷⁸ and are generally prohibited by the majority of the FTAs with competition-related provisions or a competition chapter. With the increase in the significance of competition clauses in FTAs, as discussed in the previous chapter, it may be concluded that cartels will be more stringently and widely prohibited in the future.

⁷⁴ Amber Darr, "Competition Law and Human Rights: A Complex Relationship"

⁷⁵ World Health Organisation (WHO) (1946) Constitution of the World Health Organisation. Basic Documents, Geneva: World Health Organisation.

⁷⁶ Peter Wrobel, "The EU-US Free Trade Agreement: What It Might Mean for Healthcare," Science, accessed November 26, 2022, https://sciencebusiness.net/news/76279/The-EU%E2%80%93US-Free-Trade-Agreement%3A-what-it-might-mean-for-healthcare

⁷⁷ Toh Han Li, "Competition Law, Freedom of Association and Fixing Salaries"

⁷⁸ "Fighting Hard-Core Cartels: Harm, Effective Sanctions and Leniency Programmes." OECD. Accessed November 26, 2022. https://www.oecd.org/competition/cartels/fightinghard-corecartelsharmeffectivesanctionsandleniencyprogrammes.htm.

With this possible increase in the control of cartels and collusion under FTAs, it is also important for the FTAs negotiators to consider the freedom of association of undertakings in the state parties when negotiating the competition clauses to prevent disproportionate limitation of freedom of association.

Moreover, especially for jurisdictions with no leniency program, such as Thailand, it is possible that freedom of association of the business undertaking would be at risk if competition clauses in FTAs are not well negotiated and drafted, which would be subject to the discretion of the authorities. This compromise may occur due to the inaccessibility of hard evidence in the absence of a leniency program, which has led to more reliance on circumstantial evidence. Rights to association of business could be threatened by the potential increase of cases due to the greater type-I error led by circumstantial evidence.

Although the competition law prohibits collusion and the agreement which forms the anti-competition effects, its scope does not cover beyond collusion or agreements to organise workers, which maintains the workers' rights to organize and eliminate competition among themselves. The definition of the entity which will be governed by the competition law enhances workers to pursue their interests as labour; as long as a non-labour entity is not involved in pursuing such interests, they will not be involved with the competition law⁷⁹.

At present, the competition law in Thailand provides a clear definition of a person or entity, which will be governed by the Competition Act B.E. 2560. According to the precedent by the TCCT⁸⁰, the misconduct governed by the Competition law in Thailand has to be conducted between the "business operators" as defined in Section 5 of the Competition Act B.E. 2560⁸¹. While in the European Union, the concept of "undertaking" is widely interpreted as "an entity engaged in economic activity"⁸². Despite the wide interpretation, the court deems that the employee cannot be an undertaking since the employee does not directly offer goods or services on the market or bear the financial risk from their performances. Therefore, having the employees agreed on the collective agreements to fix a rate or a price for the sale of their performances, it would not be considered as a price fixing which is a violation of the competition law, and the worker rights remain unharmed⁸³.

⁷⁹ Criminal proceedings against Jean Claude Becu, Annie Verweire, Smeg NV and Adia Interim NV (The European Court September 16, 1999).; Countouris, Nicola, Valerio De Stefano, and Ioannis Lianos. "The EU, Competition Law and Workers Rights." The Cambridge Handbook of Labor in Competition Law, 2022, 280–97. https://doi.org/10.1017/9781108909570.020. ⁸⁰ The TCCT's Decision on the unfair high price for a taxi service (January 23, 2020)

⁸¹ Section 5 of the Competition Act B.E. 2560: "Bussiness Operator" means a distributor, a producer for distribution, a person who orders or imports into the Kingdom for distribution, a person who purchases the goods for production or redistribution or a provider of services in the course bussiness

⁸² Klaus Höfner and Fritz Elser v Macrotron GmbH (The European Court April 23, 1991).; Countouris, Nicola, and Samuel Engblom. "'Protection or Protectionism?'" European Labour Law Journal 6, no. 1 (2015): 20–47. https://doi.org/10.1177/201395251500600103.

4.3 The upper bound of the competition impact on the FTA (The short- to long-run paradigm)

In the context of a Free Trade Agreement (FTA), competition can also play a role in the capital adjustment process. The FTA may reduce barriers to trade, allowing firms to access new markets and potentially increasing their demand for capital. Alternatively, the FTA may increase competition from foreign firms, which could pressure domestic firms to adapt and innovate to remain competitive. These changes in the economic environment may require firms to adjust their capital structures in order to respond to the new market conditions. A proper competition provision in the FTA can serve not only as an alignment of regulations across parties, resulting in a reduction in transaction costs, but also as an external source of pressure to enhance the enactment and enforcement of competition law in jurisdictions where competition law is less developed. The enhancement of competition through the FTA can help to smooth and optimise the post-FTA transition period through the capital adjustment process.

Free trade agreements (FTAs) typically include a transition period to allow for the adjustment of businesses and industries to the new trade rules. However, even during this transition period, the effects of an FTA on a country's economy can vary significantly. In some cases, the immediate impact of an FTA may be negative, particularly for certain industries, such as domestic farmers, who may struggle to compete with imported agricultural products. The realisation of potential gains from an FTA depends on several factors, including the effectiveness of domestic institutions in promoting competition. From this perspective, an essence of competition in the FTA lies in its capability to bridge the gap between the short-run and long-run impacts of the FTA. Therefore, this chapter will explore how much that large the gap may competition help bridge.

Competition plays a crucial role in the capital adjustment process, which refers to the process by which firms adjust their capital structures in response to changes in the economic environment. In a competitive market, firms that are able to effectively compete in the market are able to secure a greater share of capital, while those that are unable to effectively compete may struggle to attract capital. This can lead to a reallocation of capital away from less competitive firms and towards more competitive firms, which can help to improve the overall efficiency of the market. Competition can also influence the pricing of capital in the capital adjustment process. When there is intense competition for capital, the price of capital (such as the interest rate on a loan) may be driven down, making it more affordable for firms to access the capital they need. Conversely, when there is less competition for capital, the price of capital may be driven up, making it more difficult for firms to access the capital they need. The study conducted by the Institute of Future Studies for Development (IFD) for the Department of Trade Negotiations (DTN) has proposed the impact of the Thailand-EU FTA on GDP in three scenarios as follows:

Table 7 shows the percentage of GDP potentially enhanced by the Thailand-EU FTA in the short and long runs

| | Short Run | | Long Run | | | |
|-----------|--|----------------------------|----------------------------|--|----------------------------|----------------------------|
| Impact on | Scenario 1: All tariffs and NTBs are lifted 100% | Scenario 2: 50 % lifted | Scenario 3: 25 % lifted | Scenario 1: All tariffs and NTBs are lifted 100% | Scenario 2: 50 % lifted | Scenario 3: 25 % lifted |
| GDP (%) | 1.15% | 0.70% | 0.31% | 6.91% | 4.17% | 2.45% |

Table 8 shows the gap of growth in GDP potentially enhanced by the Thailand-EU FTA between the short and long runs

| | Gap between Short- and Long-run | | |
|-----------|--|----------------------------|----------------------------|
| Impact on | Scenario 1: All tariffs and NTBs are lifted 100% | Scenario 2: 50 % lifted | Scenario 3: 25 % lifted |
| GDP (%) | 5.76% | 3.47% | 2.14% |

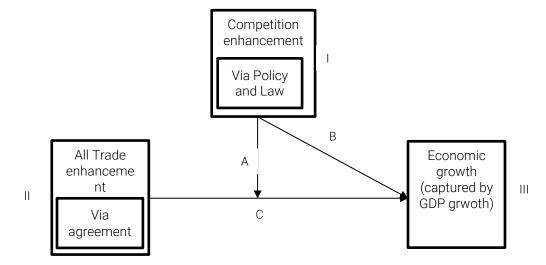
It is only fair to humble the role of competition in the adjustment process. Essentially, competition plays a role as an engine oil lubricating the process, not a silver bullet. Technically, an effective competition provision in the FTA 'moderately' affects the impact of the FTA on the economy (i.e., moderating variable). Therefore, it only makes sense to trim the magnitude of the impact of competition provision. We introduce ' β ' (beta) as the discount represents the absence of full benefit realisation due to the misalignment of competition policies and regulations between two countries^{84.} The multiplier will assume different values depending on the extent to which competition has been positively enhanced through the competition chapter. As the model (CGE model) estimated by the IFD assumed the existence of the competition chapter, we focus on the quality side of it.

⁸⁴ Some may argue that not every trading countries need that much to be written in their competition chapter. For example, competition laws in Thailand and the EU are already similar and that an agreement on knowledge-sharing and cooperation would suffice. However, it should be noted that the discount reflects the level of 'suboptimality' and is relative in nature. Therefore, the initial point (where the discount rate is 0) represents the necessary agreements needed for bilateral trade between the two countries.

Even though the direct measure of the impact of competition in FTA on GDP is not properly documented. Several studies have tried to explore the impact of competition on GDP. OECD estimates that a 1 per cent increase in competition leads to a 0.5 per cent increase in GDP. EC estimates that the impact could be up to 4 per cent of GDP. However, David Collard and Pradeep Kedia did a review paper on the relationship between competition and economic growth and found that the figure in 0.2 per cent increase in GDP.

It is important to note that these figures reflecting the magnitude of GDP enhancement through competition include 'all channels' (A + (B x C) in Figure 4). Moreover, competition policy and regulations are not identical to the competition itself (a subset smaller box inside the box I in the Figure). Other factors, such as cultural change and exogenous shocks, may affect the degree of competition as well. Therefore, the impact of competition through trade agreements must be (much) smaller than that (A x C in Figure 4). We, therefore, choose a conservative approach by using the lowest level of impact, which is 0.2 per cent of GDP growth, proposed by David Collard and Pradeep Kedia as the maximum level of the impact of competition enhancement via trade agreement on economic growth.

Figure 4 shows the 'fuzzy' relationship between competition enhancement through trade and its effects on the economic growth



Therefore, should the Competition Chapter fails to live up to its potential, the discount factor will reflect the degree of 'suboptimal' consequences as follows:

Table 9 shows the discounted impact and respective scenarios

| Value of discount factor (β) | The discounted impact (0.02 x (1-β)) | Coverage and design of competition chapter | Effectiveness of rectification and implementation | Remarks |
|------------------------------|---|--|--|---------------|
| 0.00 | 0.02 | High | High | |
| 0.10 | 0.018 | High | Medium | Or vice versa |
| 0.20 | 0.016 | Medium | Medium | |
| 0.30 | 0.014 | Medium | Low | Or vice versa |
| 0.40 | 0.012 | Low | Low | |

The GDP of Thailand in 2019 was 18,210,392,950,340 THB (or 18,000 Billion THB in approximation)85 Therefore, the potential impact of the competition chapter on the GDP will be as follows:

Table 10 shows the impacts of the competition chapter on bridging the gap between shortand long-run (unit: THB (per cent of GDP))

| | Impacts of competition chapter on bridging the gap | | | | |
|--------------------------------------|--|---|----------------------------|--|--|
| | between short- and | between short- and long-run (unit: THB (per cent of GDP)) | | | |
| The discounted impact (0.02 x (1-β)) | Scenario 1: All tariffs and NTBs are lifted 100% | Scenario 2: 50 % lifted | Scenario 3: 25 % lifted | | |
| 0.02 | 20,978,372,679 (0.115%) | | | | |
| 0.018 | 18,880,535,411 | 11,374,211,437 | 7,014,643,364 | | |
| | (0.104%) | (0.062%) | (0.039%) | | |
| 0.016 | 16,782,698,143 | 10,110,410,166 | 6,235,238,546 | | |
| | (0.092%) | (0.056%) | (0.034%) | | |
| 0.014 | 14,684,860,875 | 8,846,608,895 | 5,455,833,728 | | |
| | (0.081%) | (0.049%) | (0.030%) | | |
| 0.012 | 12,587,023,607 | 7,582,807,625 | 4,676,428,910 | | |
| | (0.069%) | (0.042%) | (0.026%) | | |

⁸⁵ World Bank

This section may have stated the obvious that the potential of competition in enhancing the benefit from trade is gigantic. Nevertheless, it also provides concrete figures of the magnitude where the minimum upper bound (lowest discounted impact of 1.2 per cent with 25 per cent market openness) could potentially contribute over 4 billion baht in value over the transition period (6-8 years). Therefore, the least that the effective and meaningful competition chapter could potentially deliver could be a value of up to over 4.6 billion baht over a decade post-agreement.

5. Conclusion

Competition policy has become an increasingly important issue in trade negotiations across various sectors. Including a competition chapter in the Thailand-EU Free Trade Agreement (FTAs) will be essential to clearly outline the obligations of the involved parties related to competition. This report has demonstrated the potential for addressing and conceptualizing the missing links between the competition chapter in FTAs and human rights. For competitionrelated provisions in FTAs to positively impact individuals' well-being, explicit provisions or details on human rights-related aspects must be included in future agreements.

While some FTAs already include competition chapters or competition-related provisions, negotiators need to strive for more substantive discussions regarding the direction of competition in order for the parties to understand their obligations under the agreements and implement national laws, regulations, or measures that will ultimately lead to enhanced competition and human rights development. For example, the competition chapter should be specified in such a manner that it promotes not only trade-promoting business conduct but also accountable and sustainable competition through the lens of human rights⁸⁶.

Based on the findings of this report, policy and negotiation recommendations for Thailand in the negotiation process with the EU are as follows:

Thailand should strive to include explicit provisions or details on human rights-related aspects in the competition chapter of the Thailand-EU FTA. This could include language that encourages sustainable and responsible business practices, as well as provisions that protect workers' rights, consumers' rights and the rights of other vulnerable groups.

Thailand should encourage more substantive discussions regarding the direction of competition in the negotiation process with the EU. This could include efforts to establish clear and enforceable rules for competition in the Thai market, such as measures to prevent anti-competitive practices and to promote greater transparency and accountability in business operations.

Thailand should invest in building capacity and expertise in areas such as trade policy, trade negotiations, and competition law. This could include training programs for government officials and support for the private sector to participate in trade negotiations and provide input into trade policy.

Thailand should seek to foster greater collaboration with the EU on competition-related issues. This could include joint research and development initiatives, as well as efforts to share best practices and expertise on competition policy and regulation.

Overall, by taking a proactive and comprehensive approach to the inclusion of a competition chapter in the Thailand-EU FTA and considering the human rights aspects, Thailand can ensure that the agreement promotes not only trade-promoting business conduct but also accountable and sustainable competition that results in human rights development.

⁸⁶ Raj Bhala, International Trade Law: Interdisciplinary Theory and Practice (LexisNexis, 2008).

Addendum87

Interviewed Stakeholders

Regulators: competition agencies (general and sectoral)

Competition Committee (กิขค.)

National Broadcast and Telecommunication Commission (NBTC - กสทช.)

Agencies who work on following up on the FTA compliance88

Ministry of Commerce

Ministry of Foreign Affairs

Human rights agencies

National Human Rights Commission (กสม.)

Other local and international NGOs

⁸⁷ Many of the interviewees respectfully declined to provide consent for the researchers to quote their opinions on specific information. As such, the authors take full responsibility for any claims and information presented and declare that the information provided by the interviewees primarily served as a framework for the ideas presented.

⁸⁸ Case summary: Vaccine import The Petitioner claimed that Association Aor. and a vaccine importer limited alternative vaccines to be less than the announced amount which were not sufficient for the public demands. The TCCT decided that the import of alternative vaccines less than the announced amount is not a termination, reduction, or limitation without reasonable ground which would constitute an offence under the Trade Competition Act.

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Chapter 2: The Impact of Environmental Provisions in Trade Agreements – Implications for the EU-Thai FTA Going Forward

This section of the report empirically estimates the effects of environmental provisions in preferential trade agreements (PTAs) and implications for the EU-Thai FTAs. While PTAs aim to promote trade between member states by reducing barriers such as tariffs, the incorporation of environmental provisions in PTAs can increase or reduce trade by affecting firms' competitiveness from adhering to stricter environmental standards. Using Trade and Environment Database (TREND) by Morin et al. (2018), combined with bilateral exports between 2010-2018, the preliminary results show that environmental provisions in trade agreements in selected EU FTAs with ASEAN countries, namely Vietnam, Singapore, and Japan, do negatively affect exports to EU countries. This study provides evidence in support of the pressing need for Thailand to scale up its efforts to meet the ever more diverse and extensive environmental requirements potentially contained in the future cooperation between the EU and Thailand. A collaborative approach will be ideal for helping strengthen both the EU and Thailand's competitiveness to remain resilient as part of global value chains and, above all, to help the world fight against the climate crisis.

1. Introduction

The relationship between international trade and the environment has never been more important than in the current decade, as the global community efforts are working towards tackling climate change and promoting a sustainable world economy. On the one hand, international trade is a mean to fostering economic development. On the other hand, international trade can increase the production and exports of polluting sectors in countries with less stringent environmental regulations. The debate over growing vs greening in light of trade and environment interface deserves careful consideration going forward in the carbon constraint world.

Previously, numerous research has been conducted on studying the effects of preferential trade agreements (PTAs)⁸⁹ on trade flows between partner countries (Baier & Bergstrand (2007, 2009), Egger et al. (2008, 2011)). Various papers have examined the impact at the sectoral level (Baggs and Brander (2006)), on the extensive vs intensive margins (Baier, Bergstrand, and Feng (2014)), at the firm level (Baccini, Pinto, and Weymouth (2017)), and at the product level (homogeneous vs heterogeneous products (Spilker et al. (2018)). However, recent negotiations have focused on more than just cross-border issues, such as tariff cuts, but also include behind-border issues such as intellectual property rights, labor rights and environmental protection.

In particular, environmental provisions in trade agreements recently expanded both in size and scope, encompassing a broad range of measures covering issues. In

⁸⁹ Preferential Trade Agreements (PTAs) cover a broad range of agreements in which countries agree to give preferences towards their counterparts. The term therefore encapsulates FTAs and other kind of agreements, at least under the context of this study.

2018, each new preferential trade agreement contained, on average, 73 different environmental provisions (Brandi et al. (2020)). Interestingly, environmental content in trade agreements can have confounding effects on trade flows between member countries. Environmental provisions in PTAs can work to reduce trade barriers for environmentally clean industries or to justify trade barriers for polluting industries. The main question is whether environmental protection can be simultaneously promoted alongside economic development through trade liberalization or rather counteract the primary purpose of trade agreements by impacting the firm's competitiveness from adhering to higher environmental standards.

This part of the report focuses on the trade and environment interface, attempting to examine how the inclusion of environmental provisions in PTAs could potentially affect exports of the signing countries. To analyses the effects of environmental provisions incorporated in PTAs, the current study uses Trade and Environment Database (TREND) by Morin et al. (2018), which cover a broad range of environmentally related measures embedded in PTAs, combining with bilateral trade flows between 2010-2018 (the latest year in which TREND data is available). The preliminary results show that environmental provisions in PTAs do negatively affect exports of countries facing with strict environmental standards. This study provides evidence supporting the pressing need for Thailand to scale up its efforts to fight against the climate crisis to secure opportunities and avoid falling behind. A collaborative approach will be ideal for helping strengthen Thailand's competitiveness and to remain resilient as part of global value chains.

The remainder of the report in this section of the analysis is organized as follows: Section 2 provides a description of the data and methodology used for the empirical analysis; Section 3 presents and discusses preliminary findings; Section 4 discusses policy implications; and Section 5 concludes.

2. Data description and methodology

To study the effects of environmental provisions in trade agreements in selected EU FTAs with ASEAN countries (Vietnam, Singapore, and Japan), the paper uses a panel dataset of bilateral merchandise exports from the UN Comtrade⁹⁰ between 2010 to 2018. The paper combines the trade data with information on PTAs from the Design of Trade Agreements (DESTA) dataset, and the number of environmental-related provisions in PTAs from the Trade and Environment Database (TREND) by Morin et al. (2018). TREND analytics is the most comprehensive dataset of environmental provisions in bilateral and regional trade agreements publicly available. It relies on the full texts of the PTA and tracks more than 300 different types of environments provisions in 730 trade agreements.

⁹⁰ We focus our analysis on merchandise trade and leave out services trade like the majority of studies in the literature. As such, trade agreements on services, for example, ASEAN-China or AEAN-Korean agreements on trade in services are not included.

To measure the environmental provisions contained in PTAs, we follow Brandi et al. (2020) and compute the overall number of environmental provisions included in the PTA. As for FTAs between the EU and selected Asian countries, EC-Singapore in 2018 contained 98 environmental provisions, EC-Japan in 2018 contains 112 environmental provisions, and EC-Vietnam in 2016 contains 123 environmental provisions (compared to 14.7 for PTAs signed by developing countries in general according to Brandi et al. (2020)) Table A1 provides a summary statistics of environmental provisions signed by the EU and selected ASEAN countries. Table A2 details trade agreements and environmental provisions signed by each of the ten ASEAN countries. The paper further divides the Vietnam, Japan and Singapore countries into green vs brown depending upon whether their Environmental Performance Index (EPI, Wendling et al., 2018) is above or below the median score.

After combining TREND data with data on bilateral exports obtained from UNComtrade, we obtain a sample of 14,743 exporter-importer relationships over the period between 2010-2018, of which 3,711 are under PTA relationship. When there are more than one PTAs between a specific country-pair, we use the highest number of environmental provisions to govern the stronger effects on trade flows.

Goods can be classified as "dirty" or high polluting such as steel, cement or chemicals or "green" environmental goods that can be used "to measure, prevent, limit, minimize or correct environmental damage", according to OECD and Eurostat (1999). The lists of environmental goods comprise 132 items. The Asia-Pacific Economic Cooperation (APEC) has endorsed the APEC list of environmental goods that contribute to green growth and sustainable development objectives, for which tariff rates are reduced to 5 percent or less.

Table 11: Summary statistics of APEC and OECD lists of environmental goods

| Statistic | Number or % |
|---|-------------|
| OECD list | |
| Total HS sub-headings | 164 |
| Unique HS sub-headings | 132 |
| APEC list | |
| Total HS sub-headings | 109 |
| Unique HS sub-headings | 104 |
| — of which qualified by ex-heading specification | 44 |
| Composite list | |
| Total HS sub-headings | 233 |
| Unique HS sub-headings | 198 |
| Tariff lines common to both the OECD and APEC lists | 54 |
| — of which qualified by ex-heading specification | 13 |
| Percentage overlap (54 out of 198) | 27 % |

We use the maximum number of environmental provisions in PTAs as our main independent variable and bilateral exports from ten ASEAN member countries as our main dependent variable. Following the method proposed by Baier&Bergstrand (2007), the paper estimate a gravity equation using various fixed effects on panel bilateral trade data to deal with the endogeneity problem surrounding estimating the PTA variable. We

explicitly control for the effect of PTA between country-pair using data on trade agreements from the Design of Trade Agreements (DESTA) dataset to separate out the general trade agreement effects and the effects coming from environmental provisions contain therein. Thus, our baseline regression equation is as follows:

$$ln(export)_{ijt} = \beta * Envi_prov_{ijt} + \gamma PTA_{ijt} + \alpha_i + \alpha_j + \alpha_t$$

$$ln(export)_{ijt} = \beta * Envi_prov_{ijt} + \gamma PTA_{ijt} + \alpha_{it} + \alpha_{jt}$$
(2)

where i denotes selected ASEAN countries, namely Vietnam, Singapore, and Japan, that have signed FTA with the EU; j denotes the EU as importing countries, and t for the year 2010-2018. The fixed effects incorporated included in equation (1) exporter fixed effects, importer fixed effects, time fixed effects, and equation (2) time-varying exporter and time-varying importer fixed effects. A variation of estimation equations with different fixed effects will be further explored and different estimation techniques to properly estimate the theoretically motivated gravity equation.

3. Empirical analysis and estimation results

The paper first tests how the inclusion of environmental provisions in PTAs affects exports from the selected ASEAN countries, namely Vietnam, Singapore, and Japan, that have signed FTAs with the EU, using the total number of environmental provisions contained in PTAs. This is meant to cover the breadth and stringency of environmental regulations in PTA. The results of the estimation using bilateral trade are reported in Table 12 and Table 13.

Table 12: The effect of environmental provisions on exports from selected ASEAN countries that have signed FTAs with the EU (2010 – 2018)

| | (1) | (2) |
|----------------------------|---------------------------------|----------------|
| VARIABLES | ln | In (exportijt) |
| | (exportijt) | |
| | | |
| Envo_prov | -0.002** | -0.004*** |
| | (0.001) | (0.001) |
| PTA | 0.803*** | 0.805*** |
| | (0.073) | (0.076) |
| Constant | 9.220*** | 10.14*** |
| | (0.245) | (0.718) |
| | | |
| Observations | 14,743 | 14,743 |
| R-squared | 0.798 | 0.819 |
| Exporter FE | yes | |
| Importer FE | yes | |
| Year FE | yes | |
| Exporter-year FE | | yes |
| Importer-year FE | | yes |
| Standard errors in parenth | neses. *** p<0.01, ** p<0.05, * | p<0.1 |

| Table 13: The effect of environmental provisions on exports from selected ASEAN countries |
|---|
| that have signed FTAs with the EU (2010-2018) (including country-pair) |

| VARIABLES | (3) | (4) | (5) | (6) |
|---------------------------------|----------------|----------------|----------------|----------------|
| VARIADELO | In (exportijt) | In (exportijt) | In (exportijt) | In (exportijt) |
| | | | | |
| Envo_prov | -0.005*** | -0.005*** | -0.003*** | -0.003** |
| | (0.001) | (0.001) | (0.001) | (0.001) |
| PTA | 0.502*** | 0.470*** | 0.296*** | 0.049 |
| | (0.047) | (0.048) | (0.078) | (0.096) |
| Constant | -9.553*** | 14.12 | 1.186 | 218.8 |
| | (0.179) | (58.88) | (1.917) | (149.5) |
| | | | | |
| Observations | 33,321 | 33,321 | 33,321 | 33,321 |
| R-squared | 0.818 | 0.831 | 0.899 | 0.913 |
| Exporter FE | yes | | | |
| Importer FE | yes | | | |
| Country-pair | | | yes | yes |
| Year FE | yes | | yes | |
| Exporter-year FE | | yes | | yes |
| Importer-year FE | | yes | | yes |
| Share of export flows under PTA | 0.22 - 0.56 | | | |

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

According to the results in Table 12, even though PTAs appear to have a positive effect on exports from the selected ASEAN countries that have signed FTAs with the EU, the inclusion of environmental provisions in EU FTAs, however, may well be the other way around. Table 13 (including country-pair in models (5) and (6)) shows the results with different combinations of fixed effects, i.e. country-pair and year. These fixed effects were introduced to ensure that the relationship between the variables of interests (environmental provision and PTA) and the export growth is not confoundly influenced by any specific confounding factors found only in certain pairs of countries or specific events that happen in certain years. However, the presence of the country-pair variable, although it does not substantially change the overall picture, seems to absorb the effect of PTAs on exports while the effect of environmental provisions in EU FTAs still persists.

4. Policy inferences and implications for the EU-Thailand FTA

From a policy standpoint, our preliminary results also indicate that the design of PTAs is crucial to the negotiations. We find that PTA provisions could play a major role as one of the policymakers' tools for promoting trade between member states in a more efficient and productive way. And despite the fact that preliminary results suggest that environmental provisions in selected EU FTAs with ASEAN countries, namely Vietnam, Singapore, and Japan, have a negative impact on exports from EU's partner countries,

it could also be evidence of the pressing need for Thailand to increase her efforts to meet the increasingly diverse and extensive environmental requirements that may be included in the future cooperation between the EU and Thailand.

In the short run, the cons of incorporating environmental provisions in trade agreements may outweigh its pros as the company or nation must adhere to stricter environmental standards in the near future. The growing demand in the higher environmental statndards will realize its full 'Brusels effect' shortly, by which a decrease in exports in the short run will deem neceesary to create the creative-destruction outcome in boosting trade in the medium and long term (Bradford, 2020). Therefore, such an act may prove to be ideal for helping strengthen both the EU and Thailand's competitiveness in the longer run and to remain resilient as part of the global value chain and, above all, to help achieve a more sustainable world.

Moreover, this concept is also in line with the Thai government's vision to promote the Bio-Circular-Green Economy (BCG model), a model which aims to capitalise on Thailand's strengths, notably its biodiversity and cultural richness, and leverages technology and innovation to transform Thailand's economy in ways that are more value-oriented and innovative. Thai government proposes that the BCG model will act as a new economic propellant for inclusive and sustainable growth, which is also align with UN Sustainable Development Goals (SDGs) "to leave no one behind". Moreover, according to the UN, the Country Team in Thailand and the Royal Thai Government signed the UN Sustainable Development Cooperation Framework 2022-2026 in January 2022. The framework reflects the UN's support for Thailand's strong determination to achieve Sustainable Development Goals by 2030 and its ambition to become a high-income, inclusive, sustainable, and resilient country. 91

As global trade becomes increasingly complex and competitive, it is crucial for Thailand to take proactive measures to lower non-tariff barriers and ensure that trade between Thailand and the EU remains robust, particularly in relation to the environmental chapter. One key strategy for achieving this goal would be for Thailand to engage in comprehensive trade negotiations with the EU in order to address and reduce non-tariff barriers in this area. This could include efforts to harmonize environmental regulations and standards, promote sustainable production and consumption, and remove other obstacles to trade in environmentally-friendly goods and services.

In addition, Thailand should also seek to build deeper and more comprehensive economic partnerships with the EU in the environmental chapter. This could include efforts to promote investment and technology transfer in clean energy, sustainable agriculture and forestry, as well as initiatives to foster greater collaboration in areas such as environmental research and development, and environmental education.

⁹¹ 'Sustainable Development Goals | United Nations in Thailand', accessed 3 December 2022, https://thailand.un.org/en/sdgs.

In order to effectively implement these strategies and achieve success in trade negotiations with the EU, Thailand should also invest in building capacity and expertise in areas such as environmental trade policy, trade negotiations, and environmental law. This could include training programs for government officials, as well as support for the private sector to participate in trade negotiations and provide input into environmental trade policy.

Overall, a proactive and comprehensive approach to trade negotiations and economic partnership building with the EU in the environmental chapter will be crucial for Thailand to capitalize on the significant trade opportunities that are likely to arise in the future, and ensure a sustainable and mutually beneficial trade relationship with EU in the foreseeable future.

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APPENDIX

Table A1: THAILAND - 14 Trade Agreements, 242 Environmental Provisions

| NO. | AGREEMENTS | PARTICIPANTS | NO. PROVISIONS* |
|-----|---|--|-----------------|
| 1 | New Zealand Thailand (2005) | NZ, TH | 58 |
| 2 | Association of Southeast Asian Nations Australia New Zealand FTA (AANZFTA) (2009) | AU, BN, ID, KH, LA, MM, MY, NZ, PH, SG, TH, VN | 45 |
| 3 | Japan Thailand (2007) | JP, TH | 40 |
| 4 | Chile Thailand (2013) | CL, TH | 37 |
| 5 | Association of Southeast Asian Nations Japan (2008) | BN, ID, JP, KH, LA, MM, MY, PH, SG, TH, VN | 15 |
| 6 | Association of Southeast Asian Nations India (2009) | BN, ID, IN, KH, LA, MM, MY, PH, SG, TH, VN | 13 |
| 7 | Australia Thailand (2004) | AU, TH | 12 |
| 8 | Association of Southeast Asian Nations Goods (2009) | BN, ID, KH, LA, MM, MY, PH, SG, TH, VN | 8 |
| 9 | Association of Southeast Asian Nations (ASEAN) FTA (1992) | BN, ID, MY, PH, SG, TH | 4 |
| 10 | Peru Thailand (2005) | PE, TH | 3 |
| 11 | Association of Southeast Asian Nations China (2004) | BN, CN, ID, KH, LA, MM, MY, PH, SG, TH, VN | 3 |
| 12 | Association of Southeast Asian Nations China Services (2007) | BN, CN, ID, KH, LA, MM, MY, PH, SG, TH, VN | 2 |
| 13 | Association of Southeast Asian Nations Services (1995) | BN, ID, MY, PH, SG, TH | 1 |
| 14 | Association of Southeast Asian Nations (ASEAN) Preferential Trading Arrangements (PTA) (1977) | ID, MY, PH, SG, TH | 1 |

Source: TREND Analytics. *No. of provisions refers to environmental provisions, further classified into coherence, level playing field, Multilateral Environmental Agreements (MEA), development, regulatory space, implementation, enforcement, and environment protection

Table A2: EU - 210 Trade Agreements, 3,567 Environmental Provisions

| NO. | AGREEMENTS | PARTICIPANTS | NO. PROVISIONS |
|-----|---------------------------|--|----------------|
| 1 | Central America EU (2012) | CR, EU, GT, HN, NI, PA, SV | 133 |
| 2 | Armenia EC (2013) | AM, EU | 122 |
| 3 | EU Vietnam (2016) | EU, VN | 122 |
| 4 | EU Moldova (2014) | EU, MD | 120 |
| 5 | EU Ukraine (2014) | EU, UA | 116 |
| 6 | Canada EU (CETA) | CA, EU | 115 |
| 7 | EC Japan (2018) | EU, JP | 112 |
| 8 | EU Georgia (2014) | EU, GE | 101 |
| 9 | EC Singapore (2018) | EU, SG | 98 |
| 10 | Colombia Peru EU (2012) | CO, EU, PE | 98 |
| 11 | EU Singapore (2015) | DZ, EU | 84 |
| 12 | CARIFORUM EU EPA (2008) | AG, BB, BS, BZ, DM, DO, EU, GD, GY, JM, KN, LC, SR, TT, VC | 84 |
| 13 | EU Korea (2010) | EU, KR | 82 |
| 14 | EC Kazakhstan (2015) | EU, KZ | 81 |
| 15 | Lomé IV (1989) | AG, AO, BB, BF, BI, BJ, BS, BW, BZ, CD, CF, CG, CI, CM, CV, DJ, DM, DO, ET, EU, FJ, GA, GD, GH, GM, GN, GQ, GW, GY, HT, JM, KE, KI, KM, KN, LC, LR, LS, MG, ML, MR, MU, MW, MZ, NE, NG, PG, RW, SB, SC, SD, SL, SN, SO, SR, ST, SZ, TD, TG, TO, TT, TV, TZ, UG, VC, VU, WS, ZM, ZW | 66 |

| 33 | Lomé III (1984) | AG, BB, BF, BI, BJ, BS, BW, BZ, CD, CF, CG, CI, CM, CV, DJ, DM, ET, EU, FJ, GA, GD, GH, GM, GN, GQ, GW, GY, JM, KE, KI, KM, KN, LC, LR, LS, MG, ML, MR, MU, MW, MZ, NE, NG, PG, RW, SB, SC, SD, SL, SN, SO, SR, ST, SZ, TD, TG, TO, TT, TV, TZ, UG, VC, VU, WS, ZM, ZW | 36 |
|----|--|--|----|
| 34 | EU Macedonia SAA (2001) | EU, MK | 36 |
| 35 | EC Montenegro SAA (2007) | EU, ME | 35 |
| 36 | Chile EU (2002) | CL, EU | 35 |
| 37 | EU Maastricht (15) Enlargement (1994) | EU | 34 |
| 38 | EU Serbia SAA (2008) | EU, RS | 32 |
| 39 | Bosnia and Herzegovina EU SAA (2008) | BA, EU | 30 |
| 40 | EC Maastricht (1992) | EU | 30 |
| 41 | EU Switzerland Bilaterals I (1999) | CH, EU | 26 |
| 42 | Algeria EU Euro-Med Association Agreement (2002) | DZ, EU | 25 |
| 43 | EU Lebanon Euro-Med Association Agreement (2002) | EU, LB | 25 |
| 44 | EC Single European Act (1986) | EU | 24 |
| 45 | Lomé II (1979) | BB, BF, BI, BJ, BS, BW, CD, CF, CG, CI, CM, CV, DJ, DM, ET, EU, FJ, GA, GD, GH, GM, GN, GQ, GW, GY, JM, KE, KI, KM, LC, LR, LS, MG, ML, MR, MU, MW, NE, NG, PG, RW, SB, SC, SD, SL, SN, SO, SR, ST, SZ, TD, TG, TO, TT, TV, TZ, UG, WS, ZM | 22 |
| 46 | EU Egypt Euro-Med Association Agreement (2001) | EG, EU | 20 |
| 47 | Cote d'Ivoire EU EPA (2009) | CI, EU | 18 |
| 48 | Czech Republic EC (1993) | EU | 17 |

| | | T | T |
|----|---|--------------------|----|
| 49 | EU Lisbon (2007) | EU | 17 |
| 50 | Albania EU SAA (2006) | AL, EU | 17 |
| 51 | EU Israel Euro-Med Association Agreement (1995) | EU, IL | 16 |
| 52 | EU Jordan Euro-Med Association Agreement (1997) | EU, JO | 16 |
| 53 | EFTA Latvia (1995) | CH, EU, IS, LI, NO | 14 |
| 54 | Colombia Peru Ecuador EC (2016) | CO, EC, EU, PE | 13 |
| 55 | EU Nice (27) Enlargement (2005) | EU | 13 |
| 56 | EU Morocco Euro-Med Association Agreement (1996) | EU, MA | 13 |
| 57 | EU Tunisia Euro-Med Association Agreement (1995) | EU, TN | 13 |
| 58 | EFTA Estonia (1995) | CH, EU, IS, LI, NO | 11 |
| 59 | Bulgaria Estonia (2001) | EU | 11 |
| 60 | EFTA Slovenia (1995) | CH, EU, IS, LI, NO | 11 |
| 61 | Romania Serbia (2003) | EU, RS | 11 |
| 62 | EFTA Hungary (1993) | CH, EU, IS, LI, NO | 11 |
| 63 | Albania Romania (2003) | AL, EU | 10 |
| 64 | Macedonia Romania (2003) | EU, MK | 10 |
| 65 | EFTA Poland (1992) | CH, EU, IS, LI, NO | 10 |
| 66 | Bulgaria Lithuania (2001) | EU | 10 |
| 67 | Bulgaria Moldova (2004) | EU, MD | 9 |
| 68 | Bulgaria Macedonia (1999) | EU, MK | 9 |
| 69 | Baltic Free Trade Area (BAFTA) Non Tariff Barriers (1997) | EU | 9 |
| 70 | Bulgaria EFTA (1993) | CH, EU, IS, LI, NO | 9 |
| 71 | Bosnia and Herzegovina Croatia (2000) | BA, EU | 8 |
| | | • | |

| 72 | Bosnia and Herzegovina Romania (2003) | BA, EU | 8 |
|----|--|--------------------------------|---|
| 73 | Bulgaria Serbia (2003) | EU, RS | 8 |
| 74 | Bulgaria Latvia (2002) | EU | 8 |
| 75 | Central European Free Trade Agreement (CEFTA) (2006) | AL, BA, EU, MD, ME, MK, RS, XK | 8 |
| 76 | Hungary Latvia (1999) | EU | 8 |
| 77 | Bosnia and Herzegovina Bulgaria (2003) | BA, EU | 8 |
| 78 | EFTA Lithuania (1995) | CH, EU, IS, LI, NO | 7 |
| 79 | Albania Bulgaria (2003) | AL, EU | 7 |
| 80 | Hungary Lithuania (1998) | EU | 7 |
| 81 | Estonia Slovenia (1996) | EU | 7 |
| 82 | EC San Marino (1991) | EU, SM | 7 |
| 83 | Albania Croatia (2002) | AL, EU | 7 |
| 84 | Croatia EFTA (2001) | CH, EU, IS, LI, NO | 7 |
| 85 | Bosnia and Herzegovina Slovenia (2001) | BA, EU | 7 |
| 86 | Bulgaria Israel (2001) | EU, IL | 7 |
| 87 | EFTA Turkey (1991) | CH, EU, IS, LI, NO, TR | 7 |
| 88 | Estonia Hungary (1998) | EU | 7 |
| 89 | Croatia Slovenia (1997) | EU | 6 |
| 90 | Poland Turkey (1999) | EU, TR | 6 |
| 91 | Lithuania Slovenia (1996) | EU | 6 |
| 92 | Croatia Lithuania (2002) | EU | 6 |
| 93 | Czech Republic Estonia (1996) | EU | 6 |
| 94 | EU Mexico (2000) | EU, MX | 6 |
| | | | |

| 95 | Israel Poland (1997) | EU, IL | 6 |
|-----|------------------------------------|------------------------|---|
| 96 | EC (10) Enlargement (1979) | EU | 6 |
| 97 | Czech Republic Latvia (1996) | EU | 6 |
| 98 | Bulgaria Turkey (1998) | EU, TR | 6 |
| 99 | Lithuania Norway (1992) | EU, NO | 6 |
| 100 | Faroe Islands Finland (1992) | EU, FO | 6 |
| 101 | Israel Romania (2001) | EU, IL | 6 |
| 102 | Israel Slovenia (1998) | EU, IL | 6 |
| 103 | EFTA (1960) | CH, EU, NO | 5 |
| 104 | Croatia Moldova (2004) | EU, MD | 5 |
| 105 | EFTA Israel (1992) | CH, EU, IL, IS, LI, NO | 5 |
| 106 | Latvia Slovakia (1996) | EU | 5 |
| 107 | Hungary Slovenia (1994) | EU | 5 |
| 108 | Croatia Macedonia (amended) (2002) | EU, MK | 5 |
| 109 | Croatia Macedonia (1997) | EU, MK | 5 |
| 110 | Finland Poland (1976) | EU | 5 |
| 111 | Lithuania Poland (1996) | EU | 5 |
| 112 | Czech Republic Turkey (1997) | EU, TR | 5 |
| 113 | EC (1957) | EU | 5 |
| 114 | Latvia Poland (1997) | EU | 5 |
| 115 | Macedonia Slovenia (1996) | EU, MK | 5 |
| 116 | Slovakia Turkey (1998) | EU, TR | 5 |
| 117 | EFTA Romania (1992) | CH, EU, IS, LI, NO | 5 |
| | | | |

| 118 | EC Yugoslavia (1980) | EU, RS | 5 |
|-----|--|--|---|
| 119 | Estonia Faroe Islands (1997) | EU, FO | 5 |
| 120 | Slovakia Turkey (1997) | EU, TR | 5 |
| 121 | Czech and Slovak Republic EFTA (1992) | CH, EU, IS, LI, NO | 5 |
| 122 | Croatia Turkey (2002) | EU, TR | 5 |
| 123 | Estonia Slovakia (1996) | EU | 5 |
| 124 | Israel Slovakia (1996) | EU, IL | 4 |
| 125 | Armenia Estonia (2002) | AM, EU | 4 |
| 126 | Moldova Romania (1994) | EU, MD | 4 |
| 127 | Latvia Sweden (1992) | EU | 4 |
| 128 | Latvia Switzerland (1992) | CH, EU | 4 |
| 129 | Central European Free Trade Agreement (CEFTA) (1992) | EU | 4 |
| 130 | Czech Republic Slovenia (1993) | EU | 4 |
| 131 | Latvia Norway (1992) | EU, NO | 4 |
| 132 | Yaoundé I (1963) | BF, BI, BJ, CD, CF, CG, CI, CM, EU, GA, MG, ML, MR, NE, RW, SN, SO, TD, TG | 4 |
| 133 | Lithuania Slovakia (1996) | EU | 4 |
| 134 | EC Tunisia (1976) | EU, TN | 4 |
| 135 | Baltic Free Trade Area (BAFTA) industrial (1993) | EU | 4 |
| 136 | Hungary Israel (1997) | EU, IL | 4 |
| 137 | Finland Latvia (1992) | EU | 4 |
| 138 | Estonia Switzerland (1992) | CH, EU | 4 |
| 139 | Bulgaria Slovakia (1995) | EU | 4 |
| | | | |

3

EU, JO

EC Jordan (1977)

| 162 | Latvia Turkey (1998) | EU, TR | 3 |
|-----|--------------------------------------|--|---|
| 163 | Lomé I (1975) | BB, BF, BI, BJ, BS, BW, CD, CF, CG, CI, CM, ET, EU, FJ, GA, GD, GH, GM, GN, GQ, GW, GY, JM, KE, LR, LS, MG, ML, MR, MU, MW, NE, NG, RW, SD, SL, SN, SO, SZ, TD, TG, TO, TT, TZ, UG, WS, ZM | 3 |
| 164 | Czech Republic Slovakia (1992) | EU | 3 |
| 165 | EU Turkey (1995) | EU, TR | 3 |
| 166 | EC Egypt (1977) | EG, EU | 3 |
| 167 | EC Morocco (1976) | EU, MA | 3 |
| 168 | EC Portugal (1972) | EU | 2 |
| 169 | EC Norway (1973) | EU, NO | 2 |
| 170 | Arusha Agreement II (1969) | EU, KE, TZ, UG | 2 |
| 171 | Finland Hungary (1974) | EU | 2 |
| 172 | EFTA Finland (1961) | CH, EU, NO | 2 |
| 173 | EU Latvia (1994) | EU | 2 |
| 174 | EC Lebanon (1977) | EU, LB | 2 |
| 175 | EC Turkey Additional Protocol (1970) | EU, TR | 2 |
| 176 | EU Lithuania (1994) | EU | 2 |
| 177 | Lithuania Turkey (1997) | EU, TR | 2 |
| 178 | Czechoslovakia Finland (1974) | EU | 2 |
| 179 | EC Finland (1972) | EU | 2 |
| 180 | EC Israel (1975) | EU, IL | 2 |
| 181 | EU Faroe Islands (1996) | EU, FO | 2 |

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|-----|--|----------------|-----|
| 182 | Finland Lithuania (1992) | EU | 2 |
| 183 | Canada Portugal (1954) | CA, EU | 2 |
| 184 | EFTA Spain (1979) | CH, EU, IS, NO | 2 |
| 185 | Estonia Finland (1992) | EU | 2 |
| 186 | EC Switzerland Liechtenstein (1972) | CH, EU, LI | 2 |
| 187 | Finland German Democratic Republic (1975) | EU | 2 |
| 188 | France Tunisia Customs Union Convention (1955) | EU, TN | 2 |
| 189 | EC Iceland (1972) | EU, IS | 2 |
| 190 | Bulgaria Finland (1974) | EU | 2 |
| 191 | EU Estonia (1994) | EU | 2 |
| 192 | EC Sweden (1972) | EU | 2 |
| 193 | EC Faroe Islands (1991) | EU, FO | 2 |
| 194 | EC Lebanon (1972) | EU, LB | 1 |
| 195 | EC Malta (1970) | EU | 1 |
| 196 | EC Greece Additional Protocol (1975) | EU | 1 |
| 197 | EC Israel (1970) | EU, IL | 1 |
| 198 | EC Spain (1970) | EU | 1 |
| 199 | EC Egypt Agreement (1972) | EG, EU | 1 |
| 200 | Hungary Turkey (1997) | EU, TR | 1 |
| 201 | EC Greece Association Agreement (1961) | EU | 1 |
| 202 | Lithuania Sweden (1991) | EU | 1 |
| 203 | Andorra EC (1990) | AD, EU | 1 |
| 204 | Arusha Agreement I (1968) | EU, KE, TZ, UG | 1 |

| 205 | EC Morocco Association Agreement (1969) | EU, MA | 1 |
|-----|---|--------|---|
| 206 | Cyprus EC (1972) | EU | 1 |
| 207 | Ireland UK Free Trade Area (1965) | EU | 1 |
| 208 | EC Tunisia Association Agreement (1969) | EU, TN | 1 |
| 209 | Austria EC (1972) | EU | 1 |

Source: TREND Analytics. *No. of provisions refers to environmental provisions, further classified into coherence, level playing field, Multilateral Environmental Agreements (MEA), development, regulatory space, implementation, enforcement, and environment protection

