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Can the G20 serve as a launchpad for a multilateral investment agreement?

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Abstract

The international system for the governance of foreign investments is highly fragmented consisting mainly of bilateral agreements. With the adoption of nine guiding principles for global investment policy-making in 2016, some observers argue that the G20 can actually serve as a launchpad for negotiations of a multilateral investment agreement. This paper provides empirical evidence on the question of whether the contents of international investment agreements (IIAs) have gradually converged to facilitate the multilateralisation of investment rules. We find that IIAs negotiated among non-G20 countries are more similar to each other than those concluded by G20 countries in general and even more so since 2000 in particular. This result calls into question the premise that the G20 can serve as the most suitable forum to initiate multilateral negotiations on multilateral investment rules. Instead, an extended analysis using different country grouping criteria suggests that the Member States of the European Union may be a more suitable alternative in this regard. Here, the EU can jointly take a leading role in facilitating related negotiations on multilateral investment rules.

KEYWORDS

EU, G20, investment agreements, OECD, similarity

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1 | INTRODUCTION

The question of whether rules on foreign investments can be multilateralised is almost as old as the international investment regime itself. Similarly, considerable disagreement exists as to how and where such negotiations should take place. Several attempts to establish multilateral investment rules have been made: the International Trade Organization (ITO), negotiated immediately after the Second World War, included rules on investment but was never ratified; developing countries pushed unsuccessfully for a New International Economic Order in the United Nations during the 1970s; the Organization for Economic Co-operation and Development (OECD) initiated ill-fated negotiations for a Multilateral Agreement on Investment (MAI) during the 1990s; and the inclusion of a package on investment during the World Trade Organization's (WTO) Doha Development Round in the early 2000s was opposed by developing countries.¹ Instead, the international investment regime rests on currently about 3300 international investment agreements (IIAs) that have been signed since the late 1950s (UNCTAD, 2020b). While some legal scholars argue that a quasi-multilateral legal system already exists (e.g. Salacuse, 2010; Schill, 2009), scholars interested in the political foundations and economic effects of the international investment regime characterise the system as highly fragmented (e.g. Simmons, 2014).

The establishment of the G20 at the level of heads of states and governments in 2008 was one of the key global governance innovations in recent times. The G20 includes the 19 large economies plus the European Union (EU) and describes itself as the 'premier forum for [...] international economic cooperation' (G20, 2009). During the global financial crisis, the G20 played a crucial role (Cooper & Thakur, 2013; Drezner, 2016; Luckhurst, 2016). Since then, the G20's agenda has expanded beyond financial regulation, comprising also issues related to trade and investment (Berger & Evenett, 2018; Zhan, 2016). The fact that the G20 includes significant importers and exporters of foreign direct investment (FDI) has led to a renewed discussion about the multilateralisation of investment rules and the G20 as a potential forum to initiate such a process (e.g. Åslund, 2013; Graugnard, 2013; Lin, 2015).

In 2016, the G20 set up a dedicated working group on trade and investment-related issues that negotiated a set of guiding principles for global investment policy-making. These guiding principles were adopted by the G20 countries at the Hangzhou Summit later in the same year (G20, 2016). The guiding principles have been hailed by experts as a 'landmark event' of international investment governance that 'could lay the foundation for global consensus building on key issues in 21st century investment policy' (Zhan, 2016: 3). The guiding principles can be perceived as a normative convergence among G20 countries with regard to overarching principles for substantial reform of the international investment regime, potentially leading to the negotiation of multilateral investment rules. The G20 is a forum for international policy coordination and dialogue (Berger et al., 2020) and not a negotiation platform. The G20 could, however, forge a compromise that could form the basis of formal negotiations on investment in other fora such as in the World Trade Organization (WTO) or the United Nations (UN). In the WTO, a group of more than 100 countries is negotiating on a subset of investment facilitation rules (Calamita, 2020) and in the context of the United Nations Commission on International Trade Law countries are negotiating on a multilateral reform of investor–state dispute settlement (ISDS) (Roberts & St. John, 2019).

Past attempts to multilateralise investment rule-making failed due to different preferences of the countries involved, among other reasons. The MAI negotiations, for example, needed to deal not only with the fierce opposition of developing countries that were not part of the OECD but crucially also with the very different negotiation positions among the OECD countries (Berge & Hveem, 2018;

¹For an overview of multilateral investment negotiations see Berge and Hveem (2018), Newcombe and Paradell (2009) and Van Harten (2007).

Graham, 2000; Kelley, 2000). A key question is whether the G20 can help to make substantial progress in this regard. To assess the potential of the G20 as a forum to initiate negotiations on multilateral investment rules, it is necessary to analyse whether the actual policies adopted by the G20 countries have sufficiently converged to facilitate consensus within the G20, and whether the IIA approaches of G20 and non-G20 countries are similar enough for the negotiation of multilateral investment rules.

This article investigates these questions empirically. More specifically, we analyse how similar IIAs² concluded among G20 countries are, compared to those among non-G20 countries and those between these two groups. We assume that the commitments countries have made in the IIAs that they have concluded in the past reveal their material preferences, thus indicating a zone of agreement for multilateral rules for investment (see, for example, Mansbridge & Martin, 2013). In other words, we assume that the higher the similarity of IIAs, the higher the chance to agree on multilateral rules within the group of countries considered. In light of this, a finding that shows a higher level of similarity of IIAs among the G20 countries than that of IIAs among non-G20 countries and between these two groups would provide some support that the G20 may serve as a forum for encouraging the negotiation of multilateral rules for investment in the future.

This article with its analysis and findings can contribute to the literature analysing multilateralisation of investment rules and the future of the international investment regime, which is currently facing a legitimacy crisis (Langford & Behn, 2018; Waibel et al., 2010). Existing research is insufficient to determine the empirical basis for a multilateralisation of investment rules as it strongly focuses on IIA policies of single countries (e.g. Shan & Wang, 2015), merely takes converging FDI flows and outward FDI flows—particularly from emerging and developing countries—as a sufficient condition for the negotiations of an multilateral investment agreement (e.g. Åslund, 2013) or relies on the legal analysis of only a subset of treaties and practices (e.g. Cai, 2013; Leal-Arcas, 2009).

Our analysis shows that IIAs signed among non-G20 countries are more similar to each other than those with G20 involvement. This is particularly so for IIAs signed in the period since 2000. This central finding shows not only that the G20 given its composition may not be a suitable forum to initiate negotiations on multilateral investment rules but that such a process of multilateralisation has become more difficult recently. Our findings remain valid in a more disaggregated analysis considering two subsets of key provision elements covering traditional IIA core topics such as investment liberalisation, protection and ISDS as well as IIA issues related to the WTO's initiative on investment facilitation for development. An extended analysis that uses different country grouping criteria shows that, instead of G20, EU Member States within the OECD may serve as a more appropriate group nowadays in this regard.

This article is structured as follows. Section 2 provides a brief literature review. Section 3 offers an introduction of the data set used and the structure of the analysis. Section 4 presents calculation results obtained and their interpretations; and Section 5 gives a conclusion.

2 | LITERATURE REVIEW

The history of the international investment regime is a history of failed attempts to establish multilateral investment rules (Berge & Hveem, 2018). The regime does not have a central institutional core, comparable to the WTO in the world trading system. Instead, it is predominantly based on about 3300 IIAs (Bonnitcha et al., 2017; UNCTAD, 2020a, 2020b). These treaties contain substantive rules for

²The term “IIAs” encompasses standalone bilateral investment treaties (BITs) and investment chapters in preferential trade agreements (PTAs).



the protection of foreign investments and foreign investors, including in particular rules for investor-state dispute settlement (ISDS; Dolzer & Schreuer, 2012; Newcombe & Paradell, 2009).

The political science literature has been surprisingly quiet on the question of whether a multilateral regime on investment is feasible and desirable. By contrast, a strand of economic studies has already provided some key insights into whether multilateral investment rules would make sense economically (e.g. Ferrarini, 2003; Hoekman & Saggi, 1999; Nunnenkamp & Pant, 2003; Sanna-Randacio, 2000).

Previous literature tended to analyse the factors contributing to the failure of institutionalisation attempts of a multilateral investment regime (Berge & Hveem, 2018). Two processes are particularly noteworthy: the negotiations on an ITO after the Second World War and an MAI during the 1990s by OECD countries. The envisaged ITO included a modest set of rules on investment. The ratification of the agreement failed partly due to the opposition of the United States (US) and partly because of the divergent views between developed and developing countries about the scope of the agreement (Schill, 2009). Divergences of interests between developing and developed countries were also one of the key factors that contributed to the breakdown of the MAI negotiations at the end of the 1990s. Furthermore, a number of issues remained controversial, including among the OECD countries, such as substantive protection clauses or cultural exceptions (Graham, 2000). Last but not the least, a broad civil-society movement mobilised against the negotiations and argued that MAI would undermine labour and environmental standards (Kobrin, 1998; Walter, 2001).

More recently, debates about the multilateralisation of investment rule-making gained momentum again. This is, in part, a result of shifting powers in the global economy. A number of developing countries and the BRICS (Brazil, Russia, India, China and South Africa) in particular have accounted for increasing shares of outward FDI over time. Some observers, therefore, argue that developing countries have a growing interest in ensuring more legal protection for their companies' investments abroad (Sauvant, 2018). Their shifting attitude from granting protection to inward FDI towards ensuring protection from other countries for their own outward FDI may help lead to a convergence towards the approach taken by the traditional capital-exporting OECD countries (Berger, 2015). Some observers therefore argue that this convergence may facilitate the negotiation of multilateral investment rules (Åslund, 2013). In addition, the upgrading of the G20 from the level of finance ministers and central bank governors to the level of heads of states and governments induced some observers to suggest that the G20 could serve as a suitable forum to launch negotiations on a multilateral investment agreement (Graugnard, 2013; Lin, 2015).

The main deficiency of the current literature on the multilateralisation of investment rules is that it assumes a convergence of national interests on international investment governance as a result of shifts in global FDI flows (e.g. Åslund, 2013). These arguments are insufficient insofar as they neglect other drivers that may prompt countries to change their IIA approaches. Traditional capital-exporting countries and regions, such as the US and the EU, have for example been changing their IIA approaches as a result of increasing ISDS claims (Chaisse, 2012; Gagné & Morin, 2006). In addition, the above cited studies merely assume a relationship between actual economic transactions, interests and policy formulation without testing it empirically. Often these studies only focus on the capital-exporting countries—new and old—that are part of the G20 and neglect the capital-importing countries that are not part of the G20.

Against the literature background briefly introduced above, the current paper thus aims at gaining more insights into the question of whether a multilateral regime on investment with the G20 as the key forum of policy coordination and dialogue to initiate negotiations in other international organisations is feasible, taking the economic benefits of multilateral investment rules found in the economic literature as given. In an effort to do so, we consider both G20 and non-G20 countries for the analysis. We focus on the actual contents of IIAs signed by these countries and assume that the design of IIAs reveals information about their inclination to support a multilateral system for foreign investment. We transform

the contents of IIAs into quantitative terms for an empirical similarity analysis and assume that the more similar the treaties—or sets of provisions thereof—are, the more likely it is that actual multilateral negotiations would be successful.³ In so doing, we contribute to the existing literature on the feasibility of a multilateral investment regime and on the design of trade and investment treaties (e.g. Alschner & Skougarevskiy, 2016; Berge, 2018; Dür et al., 2014; Manger, 2012; Manger & Peinhardt, 2017).

3 | ANALYTICAL APPROACH

Our analysis is based on a UNCTAD data set that contains structured information about the content of IIAs.⁴ The data set is the outcome of a UNCTAD's initiative of mapping the content of IIAs. The mapping has been done based on a codebook predesigned by UNCTAD with a detailed set of descriptions regarding specific design features of IIAs. As a result, the data set contains 101 parameters describing the content of IIAs that are grouped in nine sections (Preamble, Scope and Definitions, Standards of Treatment, Other Clauses, Exceptions, State-State Dispute Settlement, Investor-State Dispute Settlement, Institutional Issues as well as Treaty Duration, Amendment and Termination).

This initiative and the data set of the mapped IIAs shall help academia, policymakers and other stakeholders to more easily compare the (mapped) IIAs with each other and thus to better explore the emerging trends in IIA drafting (UNCTAD, 2017). Since not all (ever existing) IIAs can be mapped at once, the mapped data set has been extended with more and more IIAs being mapped and included over time. The most updated version of the data set that was available on the UNCTAD's IIA Navigator Website from early December 2020 is used for the analysis in this paper.

The mapping method applied by UNCTAD as well as the mapped data set suit the data need for our research purpose well, since we are interested in the underlying concepts of the treaties' provisions⁵ but not in how IIAs are worded in detail, with the latter being focus of some recent legal studies that also investigate the similarity of IIAs (e.g. Alschner & Skougarevskiy, 2016). We assume that countries are interested in pursuing certain material interests vis-à-vis their negotiation partners, even though this might entail making a compromise with regard to the exact wording of the clause.⁶

In order to provide a systematic analysis of the bilateral similarity of as many mapped IIAs as possible, our analysis focuses on 53 of the 101 parameters, which describe more general features of IIAs.⁷ A list of these general elements with brief descriptions is provided in Table A1 in the appendix.

³We are aware that the mere similarity of IIAs is not a sufficient condition to determine the success of multilateral investment negotiations. Other factors such as negotiation strategies, geopolitical rivalries or priorities of (non-)governmental stakeholders are also key factors explaining the success or failure of such negotiations. Considering these factors would be beyond the scope of the current paper and is thus left for future research.

⁴IIAs in the data set include bilateral investment treaties and preferential trade agreements with investment chapters.

⁵Just to give an example, one IIA feature mapped in the data set is related to the type of 'National Treatment (NT)' clause included in the IIAs. The corresponding provisions were evaluated by the mapping organizations to determine whether the NT obligation indicated by the corresponding provisions in the IIA in concern 'is limited to pre-establishment phase of investment only', 'is limited to post-establishment phase of investment only', 'applies to both pre- and post-establishment phase of investment' or 'is not existent'. How exactly the related provisions are worded is less relevant for the mapping result. Descriptions of all 53 features considered in the analysis can be found in Table A1 in the appendix.

⁶Focusing on underlying concepts instead of exact treaty language enables us to avoid situations in which the similarity of IIA design is driven by similar but less relevant words.

⁷Considering more detailed parameters belonging to the sub-categories of the 53 general elements would further restrict the number of eligible IIAs for the analysis and thus limit the general relevance of the analysis and its findings.

TABLE 1 Distribution of IIAs by G20 involvement and by signing years.

	All years	By period according to signing years		
		Until 1989	1990–1999	Since 2000
GR0	1274 (56%)	61 (29%)	637 (55%)	576 (63%)
GR1	919 (40%)	140 (65%)	464 (40%)	315 (34%)
GR2	89 (4%)	13 (6%)	50 (4%)	26 (3%)
Total	2282 (100%)	214 (100%)	1151 (100%)	917 (100%)

Notes: GR0 comprises IIAs which were signed by non-G20 countries, GR1 by non-G20 and G20 countries, and GR2 by G20 countries.

Numbers in parentheses are group shares.

In total, 2282 of 2576 mapped IIAs (89%) are incorporated in the analysis, since they provide non-missing information for all the 53 general elements considered. Our sample of 2282 IIAs represents about 61% of the 3725 IIAs signed to date (UNCTAD, 2020b).⁸ More than a half of the 2282 IIAs in our sample (56%) were signed by contracting parties who are all not part of the G20 (Table 1). Only 89 IIAs were signed only by G20 countries, accounting for 4% of the whole IIA sample considered.⁹ The number of IIAs signed by non-G20 countries was, however, not always the highest over time. In the first time period considered (until 1989), most of the IIAs signed were IIAs between G20 countries on the one hand and non-G20 countries on the other, representing the traditional pattern of investment treaties signed by a developed country on the one side and a developing country on the other. The share of IIAs signed solely by non-G20 countries increased later, mainly as a result of a high number of South–South IIAs signed since the 1990s. Irrespective of the contracting parties, most of the IIAs considered here were signed in the second period, 1990–1999.

The bilateral similarity of the IIAs for our analysis is calculated by using a rescaled measure of the Euclidean distance (EU-measure) as follows:

$$EU_{ij} = 1 - \sqrt{\sum_{e=1}^E (f_{ie} - f_{je})^2} \quad (1)$$

where i and j refer to the i th and j th IIA considered, respectively and f_{ie} (f_{je}) is the agreement-specific values of the e th content element considered. E is the total number of the elements considered—53 elements in our general analysis. The maximum possible value for the EU-measure is one referring to the case that the two IIAs considered are the same regarding the content elements used in the analysis. The

⁸These (ever) existing 3725 IIAs are the mapping objects of the UNCTAD's mapping project. They also include IIAs that are now terminated or replaced. Thus, this number is larger than the number of current IIAs (3300) mentioned in Section 1. For the mapping and analysis purpose as ours, having this larger group of IIAs as mapping objects is useful. It provides a more comprehensive overview of the content of IIAs ever signed. This reduces possible selection bias for the analysis.

⁹The distribution of the 2282 IIAs by G20 involvement considered in the analysis is comparable to the distribution of all 2576 IIAs mapped and of all 3725 IIAs that are mapping objects of the UNCTAD's mapping project. In the former (latter) case, 55% (57%) of the IIAs were signed by non-G20 countries and 4% (4%) by G20 countries. The Kolmogorov–Smirnov tests cannot reject the hypothesis that the distribution by G20 involvement of the mapped IIAs that are used for the analysis here, that of all mapped IIAs (including the IIAs that are excluded from the analysis) and that of all IIAs (including unmapped IIAs) is the same. This suggests that the selection bias resulting from, for example, different probabilities of IIAs being mapped and/or being selected for the analysis according to their G20 involvement is rather insignificant.

value of the EU-measure decreases with falling bilateral similarity and negative values are possible. Its minimum value depends on the maximal possible differences in the agreement-specific values of the content elements considered. This measure belongs to a group of distance measures that are typically used in the literature measuring how close to each other firms are in their patenting or innovation success across different technology fields (Stellner, 2014).¹⁰

Our analysis first calculates the pair-wise similarity levels among the 2282 mapped IIAs. The calculation results are to be classified into six groups, depending on the intensity of the G20 country involvement as signing countries. This aims at helping gain insights into whether IIAs signed with more G20 country involvement are to a greater or lesser extent similar to each other, compared to those signed with less G20 country involvement.

As a second step, the time dimension is added into the analysis. Here, the IIAs are additionally grouped by the year in which the IIAs were signed. We select the years of 1989 and 1999 as critical years, and thus consider three periods for the analysis: until 1989, 1990–1999, and since 2000. Our decision to select these two critical years is supported by the idea that they can be considered as watersheds in the history of IIAs—with IIAs signed before and after these years following rather different formats (e.g. Jandhyala et al., 2011; Schill & Jacob, 2013).

The year 1989 is chosen because it distinguishes the end of the first phase of the IIA movement that started in the late 1950s, when a first treaty was signed between Germany and Pakistan. In the first phase, the number of signed IIAs was relatively small, these treaties were predominantly signed between developed and developing countries and, for the most part, they did not feature ISDS provisions that are critical for the enforcement of substantive protection standards.

In the second phase that started in 1990, the number of IIAs signed rose annually and ISDS provisions became a common feature of IIAs. Furthermore, more and more South–South IIAs were signed among developing countries, which differed from North–South IIAs with regard to some key characteristics (Skovgaard Poulsen, 2011).

The year of 2000 marks the start of a new phase in the evolution of the international investment regime as the number of newly signed treaties dropped significantly. As a result of the emergence of investor claims, launched on the basis of ISDS provisions of IIAs, a growing number of countries stopped signing new agreements or reformed their treaty templates. A small number of countries even decided to unilaterally terminate IIAs or withdrew from key institutions like the International Centre for the Settlement of Investment Disputes (ICSID).

As a third step, we repeat the exercises by calculating the pair-wise similarity levels among the 2282 IIAs but focus on two subsets of the provision elements. The first subset covers twelve elements, reflecting three core aspects of IIAs with long tradition: investment liberalisation, protection and ISDS. The second subset covers eight elements, reflecting the key features of investment environment that the WTO's initiative of investment facilitation for development aims for, namely transparency, efficiency and predictability (World Trade Organization, 2020).¹¹ This analysis helps to explore

¹⁰The EU-measure is more preferred than the other two also popularly used distance measures, namely angular separation (AN-measure) and min-complement (CT-measure). Different from the EU-measure, the calculation of the AN-measure easily faces mathematical problems and/or can be easily overestimated, when focusing on a small number of parameters/elements for the analysis. Since our analysis will also focus on two subsets of the 53 general parameters to consider some key IIA topics, such technical weaknesses make the AN-measure less suitable for our research purpose. Although such technical problems are not so relevant for the CT-measure, the EU-measure is still more preferred. The EU-measure has a higher variety of the calculated results that is advantageous for our comparison analysis across groups, over time and between different country grouping criteria (s. below).

¹¹Bernasconi-Osterwalder et al. (2020) provide an overview of the state of play of the negotiations on investment facilitation for development at the WTO as of September 2020.



whether focusing on traditional core provision elements or the features related to the new investment facilitation initiative of WTO would be easier for G20 countries to reach consensus while negotiating IIAs.

Last but not least, we repeat the subset analysis of the third step by considering different country grouping criteria. The additional country grouping criteria to be considered in the analysis are as follows: OECD membership, high-income country, G20 members with high income, net capital-exporting country, WTO membership and GATT membership.¹² This analysis is expected to help explore whether there might be another grouping alternative that is (even) more promising to act as a launchpad for multilateral investment rules.

4 | RESULTS

4.1 | Similarity by G20 involvement—general analysis

Based on our sample of 2282 IIAs, we first calculate the pair-wise similarity levels among all IIAs and move on considering the time dimension in addition. Since each IIA can be classified into one of the three exclusive groups according to whether and how G20 countries are involved as contracting parties (GR0: all contracting parties of the IIA in concern are non-G20 countries; GR1: some of them are non-G20 countries and others are G20 countries; GR2: all contracting parties are G20 countries; see Table 1), there are six groups of pair-wise similarity calculation results, with three for within-group comparisons (GR00, GR11 and GR22) and the other three for between-group comparisons (GR01, GR02 and GR12). The similarity result for the group GR02, for example, shows the calculated similarity between two IIAs, with one of them being signed by non-G20 countries only and the other one by G20 countries only. Results are presented in Table 2.

Focusing on the results for the whole period, it becomes clear that IIAs signed among non-G20 countries (GR00) enjoy the highest level of similarity with each other. This group's average similarity level is statistically significantly higher than the average similarity level found for the group of IIAs signed by non-G20 countries on the one hand and G20 countries on the other hand (GR11) and for the group of IIAs signed by G20 countries only (GR22). Considering the between-group comparisons, calculation and test results also suggest that the average similarity level decreases with increasing G20 involvement. This finding is further supported by the results obtained by comparing the average similarity level of IIAs signed by non-G20 countries only and the average similarity level of all three between-group comparisons, with the former found to be statistically significantly higher than the latter.¹³ The high level of similarity among non-G20 countries may be explained by previous research

¹²If being part of a specific country group may help achieve consensus among group members since they probably to a larger extent share common interests when negotiating IIAs, then whether countries belonging to a certain country group before signing the IIAs is decisive for our analysis. Given the fact that there were much more IIAs signed since the 1990s, we use the best possible years of the early 1990s as reference years for determining which countries are considered in our analysis as OECD member countries (1993), high-income countries (1993), G20 high-income countries (1993 for the income criterion), net capital exporting countries (1993), GATT member countries (1994 of GATT signature) or WTO member countries (January 01, 1995). While determining the reference years, we also take into account the fact that in the early 1990s, several countries have split up or have been unified.

¹³The two-sample t-tests are used to check whether the group means calculated were significantly different from each other or not. Since the distribution of the similarity levels may not satisfy the distribution assumption underlying the t-tests, we also conduct Wilcoxon rank-sum tests. The results of the rank-sum tests are generally consistent with the results of the t-tests.

TABLE 2 Pair-wise similarity levels in group means (based on the EU-measure; G20 involvement as country grouping criterion; general set of 53 elements).

	All years	By period according to signing years		
		Until 1989	1990–1999	Since 2000
Within-group comparison				
GR00	-2.23 (0.891)	-2.58 (0.847)	-2.08 (0.784)	-2.20 (0.926)
GR11	-2.59 (1.150)	-2.32 (0.941)	-2.42 (1.023)	-2.77 (1.334)
GR22	-2.78 (1.193)	-2.33 (0.895)	-2.19 (0.779)	-3.54 (1.229)
Between-group comparison				
GR01	-2.46 (1.041)	-2.71 (0.898)	-2.29 (0.921)	-2.57 (1.194)
GR02	-2.56 (1.092)	-2.53 (0.911)	-2.18 (0.785)	-3.14 (1.310)
GR12	-2.69 (1.173)	-2.44 (0.861)	-2.32 (0.905)	-3.24 (1.327)

Notes: Within-group comparison (GR00, GR11, GR22) refers to pair-wise comparison between two IIAs belonging to the same group (GR0, GR1 or GR2), while between-group comparison (GR01, GR02, GR12) refers to the corresponding comparison between two IIAs belonging to two different groups. For example: GR02 is based on pair-wise comparison between IIAs which were signed by non-G20 countries on the one hand and IIAs which were signed by G20 countries on the other.

Standard deviation in parentheses.

findings that suggest developing countries tend to use ready-made treaty templates without adapting them to their domestic context and preferences. Skovgaard Poulsen (2015) for example argues that developing countries, hoping to attract foreign investors, aligned their treaties to the models presented by developed countries without considering the political and legal risks involved. Moreover, Berger (2015) shows that even a significant developing country such as China aligned its treaty-making practice to the models presented by its partner countries.

The development of the average similarity levels for the six comparison groups considered over time is presented in Table 2 as well. The general finding above that the average similarity level of the IIAs signed by non-G20 countries is the highest is also valid for the two more recent periods, while it is not the case in the first period.¹⁴ The similarity level of the IIAs signed by non-G20 countries (GR00) is higher in the latest period than in the starting period, while that of all other groups (except for GR01) is clearly (much) lower recently than before.¹⁵ With such development, the fact that the similarity of the IIAs signed by non-G20 countries (GR00) was actually the second lowest in the first period is not relevant anymore. Instead, the difference between the similarity of GR00 and that of IIAs with G20 involvement (G22 in particular) became even more prominent in disfavour of G20 involvement since 2000. This finding considering the time dimension in the analysis suggests that the higher similarity of IIAs signed by non-G20 countries than IIAs signed with G20 involvement is rather a result of a more recent development.

The findings so far suggest that G20 countries seem to have increasingly different considerations and interests when negotiating and concluding IIAs with non-G20 counterparts and among themselves. Given the increasing dissimilarity of the contents of IIAs signed by G20 countries, which is

¹⁴The t-test results show that the average similarity level of the group GR00 was significantly higher than that of the other groups in both the second and third periods. In the first period, the similarity level of GR00 is found to be significantly higher than that of GR01 only. The corresponding Wilcoxon rank-sum tests are in line with the t-tests results.

¹⁵Results of both the t-tests and the Wilcoxon rank-sum tests support these findings over time.



assumed to be a proxy for their preferences towards the design of IIAs, it seems less reasonable that multilateral investment rules can be initiated by the G20.

The analysis so far is based on the general set of 53 provision elements. Considering the general data set of analysis might overemphasise the relevance of some less critical provision elements, for example, those from the preamble section, where IIAs of non-G20 countries may have more similar features than their G20 countries for the former's stronger willingness to sign up ready-made treaty templates without adapting them to their domestic context and preference. In order to better focus on some key selected features of IIAs, we repeat the exercises by calculating the pair-wise similarity levels among the 2282 IIAs but focus on subsets of the provision elements.

4.2 | Similarity by G20 involvement—subset analysis

We focus on two subsets with provision elements that are carefully selected from the general 53-element set. The first subset (subset-core) covers twelve elements, reflecting three core aspects of IIAs with a long tradition in international investment policy-making: investment liberalisation, protection and ISDS. The second subset (subset-if) covers eight elements, reflecting the key features that the WTO's initiative of investment facilitation for development aims for, namely transparency, efficiency and predictability of investment regimes.¹⁶ The provision elements considered in these two subsets and their descriptions are provided in Table A1 in the appendix.

The calculation results based on the two subsets of provision elements are presented in Table 3 (subset-core) and Table 4 (subset-if), respectively. Two main findings are particularly worth mentioning. First, compared to the similarity levels based on the general set of 53 elements (Table 2), the pair-wise similarity levels based on the subsets are significantly higher. This is particularly the case for the calculation results based on the subset of provision elements relevant for the WTO's investment facilitation initiative.¹⁷ The finding suggests that contracting parties seem to share more similar ideas and thoughts when focusing on the traditional core IIA topics or the topics related to the investment facilitation initiative. In other words, if the IIA negotiation would have a clear thematic focus, it shall be easier for countries involved to reach consensus both within non-G20 or G20 countries and between these two groups of countries.

Second, the key findings above (Table 2) that IIAs signed by non-G20 countries are more similar to each other than IIAs signed with G20 involvement in general and for the IIAs signed in most recent period since 2000 in particular remain valid in our subset analysis.¹⁸ This suggests that, also in key issues of IIAs, namely the traditional core IIA features related to investment liberalisation, protection and ISDS and the IIA features related to the transparency, efficiency, and predictability of the investment regimes considered by the WTO's investment facilitation initiative, non-G20 countries seem to share more common interests and preferences among themselves than with G20 countries and even more so than G20 countries do. The finding needs to be interpreted carefully, however. The higher similarity here suggests that non-G20 countries may share more common ideas and thoughts about the topics considered so that it might be easier for them to reach consensus while negotiating multilateral investment rules. But it does not mean that their

¹⁶The scope of the WTO negotiations on investment facilitation for development is more comprehensive than investment facilitation provisions typically found in IIAs. Polanco (2018) shows that IIAs contain certain elements that can be considered investment facilitation, for example provisions on the entry and sojourn of key personnel, transparency, capacity building and cooperation.

¹⁷These findings are supported by the test results of the corresponding t-tests and the Wilcoxon matched-pairs signed-ranks tests.

¹⁸Results of both the t-tests and the Wilcoxon rank-sum tests support these findings for the subset analyses.

TABLE 3 Pair-wise similarity levels in group means (based on the EU-measure; G20 involvement as country grouping criterion; subset-core).

	All years	By period according to signing years		
		Until 1989	1990–1999	Since 2000
Within-group comparison				
GR00	-1.03 (0.922)	-1.61 (0.928)	-1.10 (0.923)	-0.75 (0.797)
GR11	-1.11 (0.887)	-1.16 (0.925)	-1.20 (0.917)	-0.86 (0.789)
GR22	-1.14 (0.856)	-1.42 (0.786)	-0.89 (0.854)	-1.05 (0.835)
Between-group comparison				
GR01	-1.09 (0.899)	-1.70 (0.959)	-1.17 (0.907)	-0.85 (0.793)
GR02	-1.13 (0.857)	-1.54 (0.865)	-1.02 (0.893)	-1.07 (0.766)
GR12	-1.14 (0.853)	-1.43 (0.794)	-1.07 (0.863)	-1.01 (0.787)

Notes: Within-group comparison (GR00, GR11, GR22) refers to pair-wise comparison between two IIAs belonging to the same group (GR0, GR1 or GR2), while between-group comparison (GR01, GR02, GR12) refers to the corresponding comparison between two IIAs belonging to two different groups.

Standard deviation in parentheses.

Twelve of the originally used 53 elements that are related to investment liberalisation, protection and ISDS are considered in the subset-core.

TABLE 4 Pair-wise similarity levels in group means (based on the EU-measure; G20 involvement as country grouping criterion; subset-if).

	All years	By period according to signing years		
		Until 1989	1990–1999	Since 2000
Within-group comparison				
GR00	0.17 (0.651)	0.43 (0.589)	0.28 (0.623)	0.03 (0.655)
GR11	-0.01 (0.684)	0.29 (0.622)	0.07 (0.626)	-0.20 (0.734)
GR22	-0.25 (0.704)	0.33 (0.676)	-0.08 (0.579)	-0.68 (0.658)
Between-group comparison				
GR01	0.04 (0.667)	0.34 (0.617)	0.14 (0.632)	-0.14 (0.682)
GR02	-0.09 (0.697)	0.39 (0.647)	0.03 (0.600)	-0.45 (0.723)
GR12	-0.14 (0.704)	0.32 (0.640)	-0.01 (0.600)	-0.48 (0.742)

Notes: Within-group comparison (GR00, GR11, GR22) refers to pair-wise comparison between two IIAs belonging to the same group (GR0, GR1 or GR2), while between-group comparison (GR01, GR02, GR12) refers to the corresponding comparison between two IIAs belonging to two different groups.

Standard deviation in parentheses.

Eight of the originally used 53 elements that are rather related to some key aspects of WTO's investment facilitation initiative such as transparency, predictability and efficiency are considered in the subset-if.

common interests and preferences would automatically lead to the 'ideal' provision elements to improve, for example, the investment environment as aimed for by the WTO's investment facilitation initiative.¹⁹

¹⁹To determine the 'ideal' provision, elements require more research as to, for example, the feasibility of the related measures in different countries given different developing backgrounds and resource endowment, the impact of these measures on the investment environment and their spillover effect on other aspects of the economy and the society. This is beyond the scope of this paper and thus left for future research.

**TABLE 5** Pair-wise similarity levels in group means for the most recent period since 2000 (based on the EU-measure; different country grouping criteria).

	G20	OECD	HInc	G20HInc	CapEX	WTO	GATT
(a) Subset-core							
Within-group comparison							
GR00	-0.75	-0.88	-0.77	-1.29	-0.90	-0.79	-0.84
GR11	-0.86	-0.68	-0.83	-0.66	-0.65	-0.75	-0.75
GR22	-1.05	-0.61	-1.01	na ^a	-0.41	-1.03	-0.88
Between-group comparison							
GR01	-0.85	-0.83	-0.83	-1.06	-0.81	-0.79	-0.82
GR02	-1.07	-0.61	-0.94	-1.31	-0.81	-0.95	-0.89
GR12	-1.01	-0.52	-0.92	-0.63	-0.60	-0.90	-0.82
(b) subset-if							
Within-group comparison							
GR00	0.03	0.03	0.09	-0.54	-0.06	0.04	0.10
GR11	-0.20	-0.24	-0.23	-0.76	-0.13	-0.11	-0.06
GR22	-0.68	0.33	-0.55	na ^a	-0.27	-0.28	-0.19
Between-group comparison							
GR01	-0.14	-0.15	-0.11	-0.65	-0.11	-0.36	0.01
GR02	-0.45	-0.07	-0.35	-1.29	-0.19	-0.14	-0.06
GR12	-0.48	-0.13	-0.40	-1.02	-0.19	-0.20	-0.13

Notes: Within-group comparison (GR00, GR11, GR22) refers to pair-wise comparison between two IIAs belonging to the same group (GR0, GR1 or GR2), while between-group comparison (GR01, GR02, GR12) refers to the corresponding comparison between two IIAs belonging to two different groups. GR0/GR1/GR2 for cases using different country grouping criteria refer to IIAs signed by 'non-G20 countries/ non-G20 and G20 countries/ G20 countries (G20)', 'non-OECD countries/non-OECD and OECD countries/ OECD countries (OECD)', 'non-high-income countries/non-high-income and high-income countries/high-income countries (HInc)', 'non-high-income G20 countries/non-high-income and high-income G20 countries/high-income G20 countries (G20HInc)', 'net capital-importing countries/net capital-importing and net capital-exporting countries/net capital-exporting countries (CapEX)', 'non-WTO members/non-WTO member and WTO members/WTO members (WTO)', and 'non-GATT members/non-GATT and GATT members/GATT members (GATT)', respectively.

^aOnly one IIA (CETA) thus no pair-wise similarity level can be calculated.

4.3 | Similarity—using alternative country grouping criteria

The comparatively lower similarity levels of IIAs signed by G20 countries in the analysis based on the general set of provision elements and the two subsets with focus on key topics lead to the next question of whether there might be an alternative country grouping that can act as a more suitable launchpad than G20 for the initiation of multilateral investment rules. To examine this question, we consider six alternative country grouping criteria and repeat the analysis based on the subsets of the provision elements focusing on the IIAs signed in the most recent period since 2000. Results are shown in Table 5 (Table 5(a) for the subset-core and Table 5(b) for the subset-if).

Results in Table 5 show that IIAs signed by members of these alternative groups (except for G20 high-income countries) do achieve higher similarity levels than those signed by G20 countries in both

subsets considered for the analysis.²⁰ Among these alternative grouping criteria, only IIAs signed by OECD countries are more similar to each other compared to those signed by non-OECD countries in both subsets, while this is not the case for IIAs signed by members of the other alternative groups.²¹ However, given the encumbered past of the OECD, it is rather unlikely that it can provide the needed political support and legitimacy to serve as a platform to negotiate multilateral investment rules.

Having a closer look at the IIAs signed by OECD countries in the 2000s shows that the higher similarity here is a result of IIAs signed by the following countries: France, Greece, Portugal on the one hand and Turkey on the other hand. This implies that European countries may play an important role in joint movement towards multilateral investment rules. Since under the Lisbon Treaty the EU but not the individual EU Member States have the exclusive competence in IIA negotiation with third countries nowadays, our finding would further suggest that the EU may take a more decisive role in harmonising IIAs through their own efforts in IIA negotiation with non-EU countries in the future.

What lies ahead as a critical challenge for the EU is how it can on the one hand ensure that it can adequately incorporate forward-looking provisions and innovative treaty elements in its future IIAs with non-EU countries as it did in CETA (Comprehensive Economic and Trade Agreement (CETA) between Canada and the EU)²² and on the other hand persuade non-EU countries to accept these innovative elements that differ from the traditional provisions. This is enormously challenging as reflected in several IIA negotiations between the EU and other countries such as China that have lasted for years (e.g. Bickenbach & Liu, 2018). In other words, the EU will need to deal with the challenge as to how to follow its own interests for investment rules but at the same time help achieve a set of investment rules that can be multilateralised at a later stage. This would be no easy task, considering the fact that the lower similarity of the IIAs signed by G20 countries in the period since 2000 was mainly driven by their most recently signed IIAs since 2014, including CETA.²³ Thus, it remains to be seen whether and how the EU can indeed play a key role to facilitate the realisation of multilateral investment rules in the future.

²⁰Results of the corresponding t-tests and the Wilcoxon rank-sum tests support the finding that the similarity level of the IIAs signed by net capital exporting countries and by GATT member countries was larger than that of the IIAs signed by the G20 countries for both subsets of provision elements considered. Corresponding test results for the case comparing the similarity level of the IIAs signed by OECD countries and that of G20 countries can only be found for the subset-if but not for the subset-core, although the average similarity level of IIAs signed by OECD countries in the latter case is actually higher than that of IIAs signed by GATT member countries which in turn is found to be significantly higher than that of IIAs signed by G20 countries. This may be to some extent attributed to the relatively low number of IIAs signed by OECD countries in the most recent period.

²¹The same test difficulty related to IIAs signed by OECD countries as mentioned in Footnote 22 is relevant here as well.

²²CETA is considered as one of the most paradigmatic investment treaty texts nowadays (Henckels, 2016).

²³An analysis at the IIA level shows that the lowest 40 similarity levels (equal to or smaller than -5 based on the calculated EU-measure) of IIAs signed by G20 countries since 2000 are most frequently related to the Free Trade Agreement between China and the Republic of Korea, CETA, and the Free Trade Agreement between Canada and the Republic of Korea. In addition, IIAs signed by the following G20 countries are also found to be often related to the comparatively low similarity level among IIAs signed by G20 countries since 2000: Japan, India, Australia, Brazil, Mexico and Turkey. Most of these IIAs were signed since 2014. This finding suggests that it is probably not that a certain group of G20 countries has behaved fully differently thus reducing the similarity of IIAs signed by G20 countries but it may be the latest demand of G20 countries for more forward-looking and innovative provision elements that play a role in this regard. EU is one of the G20 members that as well shows its interest in integrating more forward-looking and innovative provision elements into its future IIAs. Against this background, it may also be challenging for the EU to help achieve multilateral investment rules in the future.



5 | CONCLUSION

In light of the fact that the international investment regime is characterised by a high level of institutional fragmentation, calls for a multilateral agreement on investment have been a recurring theme in academic and policy debates over the past decades. Recently, observers have pointed to the G20, an informal club of economically significant countries, as a potential forum to facilitate negotiations on a multilateral agreement on investment. These hopes are fuelled by the fact that in 2016, the G20 adopted nine guiding principles for global investment policy-making, which seem to indicate a normative convergence among G20 countries on international investment rules.

Our research that empirically investigated the similarity of IIA designs suggests that the G20 may not be the best forum to initiate multilateral negotiations on investment in general. We take the similarity of treaty designs as a proxy for countries' common interests and preferences that are advantageous for negotiating multilateral investment rules. The IIAs signed by G20 countries are less similar to each other than IIAs signed by non-G20 countries in general and for the IIAs signed in the period since 2000 in particular. These key findings remain valid in our subset analysis considering selected key IIA topics related to investment liberalisation, protection and ISDS on the one hand and investment facilitation provisions on the other. The subset analysis also suggests that it shall be easier for countries involved to reach consensus both within non-G20 or within G20 countries and between these two groups of countries, if the IIA negotiations would have a clear thematic focus.

In view of the fact that the G20 may not be a suitable launchpad for multilateral investment rule-making, our findings further suggest that the European countries may play an important role in this regard. Due to the exclusive competence of the EU in IIA negotiation with third countries nowadays, the EU may take a more decisive role in harmonising the international investment rules in the future. What lies ahead as a critical challenge for the EU is how it can on the one hand ensure that it can follow its own interests to incorporate forward-looking provisions and innovative treaty elements in its future IIAs with non-EU countries as it did in, for example, CETA and on the other hand persuade other countries to accept these innovative elements that differ (strongly) from the traditional provisions. This would be a challenging task, considering the EU's long-lasting IIA negotiations with other countries in the past. Thus, it remains to be seen whether and how the EU can indeed play a key role to negotiate with other countries to facilitate the realisation of a set of multilateral investment rules in the future.

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DATA AVAILABILITY STATEMENT

The data analysed in the paper were obtained from 'The International Investment Agreements Navigator' compiled by UNCTAD, <https://investmentpolicyhub.unctad.org/IIA>.

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APPENDIX

TABLE A1 List of parameters considered for the analysis.

Var	Short description	Mapping options
v1	Preamble: Reference to right to regulate	Yes/No
v2	Preamble: Reference to sustainable development	Yes/No
v3	Preamble: Reference to social investment aspects	Yes/No
v4	Preamble: Reference to environmental aspects	Yes/No
v5	Scope and Definitions: Type of investment definition	Asset-based/ Enterprise-based/No
v11	Scope and Definitions: Definition of investor included	Yes/No
v16	Scope and Definitions: Clause of 'Denial of Benefits' included	Yes/No
v20	Scope and Definitions: Taxation excluded from the scope of the treaty	Yes/No
v21	Scope and Definitions: Subsidies and grants excluded from the scope of the treaty	Yes/No
v22	Scope and Definitions: Government procurement excluded from the scope of the treaty	Yes/No
v23	Scope and Definitions: Other subject matter excluded from the scope of the treaty	Yes/No
v24	Scope and Definitions: Temporal scope of the treaty for investments covered	Applies to post-BIT investments only/both pre-existing and post-BIT investments/Not stipulated
v25	Scope and Definitions: Temporal scope of the treaty for disputes covered	Carves out pre-existing disputes/Not stipulated
v26	Standards of Treatment: Type of 'National Treatment (NT)' clause	Post-establishment/Pre- and post-establishment/ pre-establishment/None
v28	Standards of Treatment: Type of 'Most-favoured-nation treatment (MFN)' clause	Post-establishment/Pre- and post-establishment/ pre-establishment/None
v32	Standards of Treatment: Type of 'Fair and equitable treatment (FET)' clause	FET unqualified/FET qualified/None

(Continues)

**TABLE A1** (Continued)

Var	Short description	Mapping options
v36	Standards of Treatment: Full protection and security	Standard/With reference to domestic law/No clause
v37	Standards of Treatment: Prohibition on unreasonable, arbitrary or discriminatory measures	Yes/No
v38	Standards of Treatment: Scope of measures covered against expropriation	Indirect expropriation not mentioned/Indirect expropriation mentioned/No expropriation clause
v42	Standards of Treatment: Protection from strife with relative right to compensation	MFN only/NT only/MFN and NT/None
v43	Standards of Treatment: Protection from strife with absolute right to compensation in certain circumstances	Yes/No
v44	Standards of Treatment: Transfer of funds included	Yes/No
v47	Standards of Treatment: Prohibition of performance requirements (PR) included	Explicit PR clause/No explicit PR clause
v49	Standards of Treatment: Umbrella clause	Yes/No
v50	Standards of Treatment: Entry and sojourn of personnel (subject to local laws)	Yes/No
v51	Standards of Treatment: Senior management (nationality)	Yes/No
v52	Other Clauses: Transparency directed at States	Yes/No
v53	Other Clauses: Transparency directed at investors	Yes/No
v54	Other Clauses: Health and environment mentioned in the text	Yes/No
v55	Other Clauses: Labour standards mentioned in the text	Yes/No
v56	Other Clauses: Right to regulate mentioned in the text	Yes/No
v57	Other Clauses: Corporate social responsibility mentioned in the text	Yes/No
v58	Other Clauses: Corruption mentioned in the text	Yes/No
v59	Other Clauses: Not lowering of standards contained	Yes/No
v60	Other Clauses: Subrogation clause contained	Yes/No
v61	Other Clauses: Non-derogation clause contained	Yes/No
v62	Other Clauses: Reference to specific promotion activities in the text	Yes/No
v63	Exceptions: Essential security exception included	Yes/No
v66	Exceptions: Exception for public health and environment included	Yes/No
v67	Exceptions: Other public policy exceptions included	Yes/No
v68	Exceptions: Prudential carve-out	Yes/No
v69	Exceptions: Scheduling and reservations	Positive-list commitments/ Negative-list reservations/ Both/None
v70	State-State Dispute Settlement (SSDS): SSDS included	Yes/No
v71	Investor-State Dispute Settlement (ISDS): ISDS included	Yes/No
v93	Institutional Issues: Mechanism for consultations between State parties provided	Yes/No

(Continues)

TABLE A1 (Continued)

Var	Short description	Mapping options
v94	Institutional Issues: Institutional framework (committee) set	Yes/No
v95	Institutional Issues: Technical cooperation / capacity building provided	Yes/No
v96b	Treaty Duration: Years of initial treaty term	Fixed terms/Indefinite
v97c	Treaty Duration: Automatic renewal	None/Fixed terms/Indefinite
v98	Amendment and termination: Modalities for unilateral termination included	Yes/No
v99b	Amendment and termination: Length of notice period for unilateral termination	None/Fixed terms
v100	Amendment and termination: Modalities for amendment or renegotiation included	Yes/No
v101b	Amendment and termination: 'Survival'/'sunset' clause length	None/Fixed Terms

The general set for the analysis consists of all 53 provision elements listed here. The subset-core includes 12 elements, namely v26, v28, v32, v36, v37, v38, v42, v43, v44, v47, v49 and v71. The subset-if includes 8 elements, namely v50, v51, v52, v53, v57, v62, v94 and v95.

Source: UNCTAD (2017).