International Judicial Cooperation in Game Theory

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ABSTRACT

This article utilizes the game theory to assess the feasibility and weaknesses of different methods to promote international judicial cooperation. It starts by justifying the game theory as a proper model to understand the pattern of interaction between states. It then applies typical games to analyse states' decision-making process. It suggests that states should not update their domestic laws to unilaterally offer judicial cooperation to other countries even if reciprocity is adopted to urge other states to cooperate. The only effective means is through an international judicial cooperation treaty, which encounters relatively small compliance and enforcement problems. The first-mover disadvantage at the ratification stage is not a fundamental barrier and may disappear over time. The battle-of-the-sexes game at the negotiation stage can be mitigated through the facilitation of a reputable institute, increasing cooperation interests and needs and reducing cooperation standards.

1. INTRODUCTION

International judicial cooperation refers to assistance and respect provided by the courts of one country to the judicial proceedings of another by staying or declining local proceedings in favour of a more appropriate foreign court, by assisting foreign courts to serve foreign proceedings on local residents or collect local evidence and by recognizing and enforcing foreign judgments.¹ In an increasingly interconnected world, a completely territorial judicial system proves ineffective and inefficient in adjudicating disputes with cross-border elements, which calls for assistance provided by relevant authorities in other countries. From the global perspective, international judicial cooperation could facilitate international transactions, provide certainty and predictability, and reduce unnecessary costs and risks arising out of international civil and commercial activities.

The current judicial cooperation worldwide is not satisfactory as a whole. The domestic laws of many countries are not cooperative enough to provide effective assistance to other countries.² International progress is relatively slow, although important

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1 HL Jones, 'International Judicial Assistance: Procedural Chaos and a Program for Reform' (1953) 62 Yale LJ 515.

2 According to a survey conducted by Allen and Overy in 2015, Bolivia, Columbia, Cuba, Eritrea, Nepal, Paraguay, Saudi Arabia, UAE, Uruguay, Vietnam, Zimbabwe, Indonesia, Brazil and Macedonia are still reluctant to apply any foreign law. Many countries, such as Indonesia, Thailand, Laos, Mongolia, Nepal,

progress has been made,³ and bilateral treaties remain an important form of cooperation irrespective of costs and limited effects at the international level.⁴ The EU is a special case for successful, intensive and comprehensive cooperation, but the EU model is unique and cannot represent the common practice.⁵ Furthermore, the EU judicial cooperation is regional, which has geographic limits and cannot extend to the rest of the world.

What is the best way to facilitate international judicial cooperation? Should states unilaterally reform their domestic laws by adopting more cooperative measures? Is international convention an effective means to improve the situation? Why is international progress difficult and slow and how the situation may be improved? Whilst recognizing traditional sovereignty and public policy consideration,⁶ this article answers these questions by utilizing game theory. Game theory studies the strategy of the decision-making of one actor on the basis of the actual or anticipated actions of other actors.⁷ Furthermore, it provides a strong framework to study the interaction among multiple states and to model the strategic decision-making in judicial cooperation. It starts with the assumption that every state is a rational actor. When making decisions to participate in judicial cooperation, states are driven by their own interests instead of international welfare. Maximizing self-interests requires states to anticipate the action of other states to determine the best option for their country.

Tajikistan, Thailand, Turkmenistan and Uzbekistan, refuse to enforce any foreign judgments without treaty obligations. Moreover, Scandinavian countries, UAE, Saudi Arabia and Serbia are reluctant to enforce foreign judgments even if it is possible in law. Several countries, such as China, Japan, Oman and Germany will not enforce foreign judgments without reciprocity. See Allen and Overy, 'Global Litigation Survey 2015', <<https://www.allenoverly.com/en-gb/global/news-and-insights/news/global-litigation-survey-2015-published>> accessed 23 August 2019.

- 3 At the international level, cooperation is mainly facilitated by the Hague Conference on Private International Law (HCCH). It is arguable that the situation is changing as the Hague Convention on the Recognition and Enforcement of Foreign Judgments in Civil or Commercial Matters was adopted on 2 July 2019 ('Hague Judgment Convention 2019') and as the Hague Convention on the Choice of Court 2005 ('Hague Choice of Court Convention') has been applied in 32 countries. However, it may take time for these conventions to take full effects at the international level.
- 4 Bilateral treaties have a limited global impact. A state may have to enter into a few bilateral treaties to receive adequate assistance from state partners, which may generate higher costs in contrast with a multilateral treaty. R Pol, 'Proposing an International Instrument to Address Issues Arising out of International Surrogacy Arrangements' (2017) 48 *Georgetown J Int L* 1309, 1331.
- 5 A few reasons contribute to the EU success in harmonising judicial cooperation, and the most important is the unique institutional infrastructure. For comments on EU judicial cooperation, see P Beaumont and M Danov, 'The EU Civil Justice Framework and Private Law' (2015) 22 *Maastricht J Eur Comp L* 706; R Geimer, 'The Brussels Convention—Successful Model and Old-Timer' (2002) 4 *Eur J L Reform* 19; H Heiss and A Supron-Heidel, 'EU Enlargement: Aspects of (International) Procedural Law' (2002) 4 *Eur J L Reform* 147.
- 6 The theory of sovereignty suggests that every state authority only has power within its own territory and that every state could fully exercise its power free from external interferences. A state thus would have power to hear disputes in relation to residents and assets in its territory and would not allow other states to affect its jurisdictional power. K Pham, 'Enforcement of Non-Monetary Foreign Judgments in Australia' (2008) 30 *Sydney L Rev* 663, 673; J Linarelli, 'Towards a Political Theory for Private International Law' (2016) 26 *Duke J Comp Int L* 299, 332.
- 7 Theodore L Turocy and Bernhard von Stengel, *Game Theory* (CDAM Research Report 2001) 4; DG Baird, RH Gertner and RC Ricker, *Game Theory and the Law* (Harvard University Press 1998) 1–4; RB Myerson, *Game Theory* (Harvard University Press 1997) 1–9.

Although applying game theory in international law is not new, it is very recent compared with other legal disciplines.⁸ In the field of private international law, where the actions of states are frequently examined, the adoption of the modern rational choice and game theory is even rarer and usually light-touched. Almost no literature applies game theory to analyse the full range of judicial cooperation methods from the unilateral domestic approach to international treaty-making and enforcement. This article argues that although game theory is imperfect, it helps in understanding the current judicial cooperation situation from an angle different from traditional doctrinal and jurisprudential analysis.⁹ This article then applies the game theoretical analysis to assess the feasibility and weaknesses of different judicial cooperation methods. Moreover, it suggests that states should not update their domestic laws to unilaterally offer judicial cooperation to other countries even if reciprocity is adopted to urge other states to cooperate. The only effective means is through an international judicial cooperation treaty, which encounters relatively small compliance and enforcement problems.

2. GAME THEORETICAL ANALYSIS IN INTERNATIONAL JUDICIAL COOPERATION: THE THEORETICAL FRAMEWORK

A. Assumption of Rationality

Before a thorough discussion of game theory in international judicial cooperation, the hypothesis for such analysis must be clarified. As a branch of rational choice theory, game theory is based on the assumption of rationality:¹⁰ rational actors make strategic decisions to maximize their own interests and preferences.¹¹ This general assumption includes three sub-assumptions: first, states are rational actors; secondly, states have stable preferences or interests, which are fixed and made known to other states¹² and thirdly, states act to maximize their own interests.¹³ All three assumptions may be subject to challenges.

(i) *Are states 'rational' actors?*

Firstly, behaviourists have argued that real people may not be truly rational due to cognitive limitations¹⁴ and bounded willpower.¹⁵ Arguably, these criticisms are

8 T Broude, 'Behavioral International Law' (2014) 163 U Pa L Rev 1099, 1105.

9 *ibid* 1105.

10 RA Posner, *Economic Analysis of Law* (6 edn, Aspen Publishers 2002); RA Posner, 'Rational Choice, Behavioral Economics, and the Law' (1997) 50 Stanford L Rev 1551.

11 KW Abbott, 'Enriching Rational Choice Institutionalism for the Study of International Law' (2008) U Ill L Rev 5, 6; JL Dunhoff and JP Trachtman, 'Economic Analysis of International Law' (1999) 24 Yale J Int L 1, 2; EA Posner and JL Goldsmith, 'A Theory of Customary International Law' (1999) 66 U Chicago L Rev 1113.

12 RO Keohane, 'Rational Choice Theory and International Law' (2002) 31 L Legal Stud S307, S308-9.

13 Abbott (n 11) 10.

14 C Jolls, CR Sunstein and R Thaler, 'A Behavioral Approach to Law and Economics' (1997) 50 Stan L Rev 1471, 1477; M Kelman, 'Behavioral Economics as Part of a Rhetorical Duet' (1997) 50 Stan L Rev 1557, 1581.

15 Rounded willpower refers to the fact that real people understand the choice that may maximize their personal interests but may still decide to act in a way contrary to their long-term interests, such as smoking. Jolls and others (n 14) 1479.

weakened when applied to states.¹⁶ States have far more resources than individuals to support decision-making.¹⁷ Although it does not mean perfect information and flawless decisions, access to resources and the decision-making process would reasonably reduce the chances of making unjustifiable errors.¹⁸ The above justification usually only applies to 'normal' states that are generally politically stable and have adopted a relatively effective bias-moderation decision-making system, excluding, for example, states in riot, chronic tension and violence and states with a weak and ineffective central government, where leaders are either indifferent to, or incapable to pursue, state interests.¹⁹ However, the economic analysis of international cooperation aims to explain and examine what happens in ordinary situations between ordinary actors for the long term. Most states may sometimes have bounded rationality, or some states are generally 'irrational', but they are not frequent, usual, or strong enough, from a long-term perspective, to influence the whole picture.²⁰

Furthermore, states, unlike individuals, would not usually suffer from self-indulgence or the weakness of will.²¹ It is true that states may equally opt for short-term gains in the cost of long-term loss.²² Particularly, some state leaders may have interests to satisfy the needs of citizens until the next election and are not normally concerned about the future. However, this does not suggest that states act 'irrationally'. Rationality does not mean that the actor should act to maximize the interests judged by anyone other than the actor itself. Some states decide to opt for short-term gains, which are deemed the optimal choice at the time of decision-making. In addition, states are not opting for short-term policy randomly. This decision is based on the available information and formal decision-making process, research, consultation and debate. Decisions regarded as 'short term' or 'wrong' by commentators may not necessarily suggest that the decision-makers are irrational. The rational choice is not tantamount to the 'right' choice.

(ii) *What are the preferences or interests of states?*

The assumption that states have known and stable preferences may generate criticism. First, it presumes that a state is a unitary actor because states aggregate all domestic interests and act as a single unit.²³ However, in practice, no pure aggregation of interests exists because the individuals of a state usually have different or

16 JL Goldsmith and ER Posner, *The Limits of International Law* (OUP 2007) 7–8; A van Aaken, 'Towards Behavioral International Law and Economics' (2008) U Ill L Rev 47, 58. See also B Tommer, 'Behavioral International Law' (2015) 163 U.P.L. Rev. 1099, 1108.

17 KW Abbott, 'Modern International Relations Theory' (1989) 14 Yale J Int'l L 335, 350; MD Rosen, 'Should Un-American Foreign Judgments be Enforced' (2004) 88 Minnesota L Rev 783, 802.

18 A van Aaken, 'Behavioral International Law and Economics' (2014) 55 Harv Int'l L J 421, 442, 446.

19 PH Huang, 'International Environmental Law and Emotional Rational Choice' (2002) 31 J Legal Stud S237, S242.

20 Posner, 'Rational Choice' (n 10) 1554.

21 Van Aaken (n 18) 431.

22 *ibid* 432.

23 A Thompson, 'Applying Rational Choice Theory to International Law: The Promise and Pitfalls' (2002) 31 J Legal Stud S285, S291; LR Helfer, 'Exiting Treaties' (2005) 91 Virginia L Rev 1579, 1612; F Kratochwil, 'Norms versus Numbers: Multilateralism and the Rationalist and Reflexivist Approaches to Institutions', in JG Ruggie (ed), *Multilateralism Matters: The Theory and Praxis of an Institutional Form* (1993) 443, 447.

conflicting interests. Arguing that the preference of a state is the preference of all its individuals, including leaders, governors, corporations and citizens, is unrealistic.²⁴ Furthermore, the decision-making of a state is influenced by various actors. Some may have a fundamental influence of the final decision, such as the state leader, whilst others may not have a substantive impact, such as individual citizens unless they form specific lobby groups. The state preference may be modified by public choice theory, which considers that the decision of a state is the accumulation of individual preferences and affected by the interaction between 'the distribution of individual preferences, the intensity of individual preferences, the costs of collective action to further shared preferences and the rules and institutions that govern collective choice in a given case'.²⁵ However, even public choice theory cannot explain decision-making in some states lacking certain collective choice institutions. Arguing that the preference that does count is not the 'preference of a state' is probably more realistic because such does not exist, but the preference of the decision-maker, as a constellation of government institutions,²⁶ an authoritarian leader or a leading party.

Secondly, does one really know the preferences of a particular state? Some commentators suggest that the interests of states are objective goals commonly shared by all states, including 'security, prosperity, environmental protection, freedom from disease and many other goals'.²⁷ However, others argue that the preferences of states are not determined by 'objective' standards,²⁸ but according to the subjective elements of individual states, including emotion, culture, history and ideology.²⁹ It is true that the preferences of a particular state would be influenced by objective and subjective elements, but the inclusion of subjective criteria would make the preferences of a particular state difficult to predict by outsiders. It would also make it difficult to generate a simplified model or theoretical framework to examine the overall interaction between states. The preferences of states, in this article, are assumed pursuant to the universal, objective and common standard.³⁰

Finally, arguing that the preferences of a state are stably prioritized and ranked is also hard. State decisions have a close connection with domestic politics.³¹ The decision to reform law, or join a treaty, would likely change after the election of a new leader or the reshape of parliament.³² Furthermore, the preferences of a state may also change when the situations are changing. For instance, a poor state may make prosperity and industrialization as its first priority, but after it becomes economically prosperous, it would pursue other interests, such as environmental and human rights protection.

24 Huang (n 19) S243.

25 RA Cass, 'Economics and International Law' (1997) 29 NYU J Int'l L & Pol 473, 516.

26 AM Slaughter, 'International Law in a World of Liberal States' (1995) 6 Eur J Int'l L 503, 522.

27 Abbott (n 11) 6.

28 Broude (n 8) 1109; Cass (n 25) 500–501 (decision-makers are not fully committed to efficiency in international law negotiation).

29 Broude (n 8) 1109; R Korobkin and J Zasloff, 'Roadblocks to the Road Map' (2005) 30 Yale J Int'l L 1, 10.

30 Broude (n 8) 1109–1110.

31 K Raustiala, 'Refining the Limits of International Law' (2006) 34 Ga J Int'l & Comp L 423, 436ff; D

Bodansky, 'International Law in Black and White' (2006) 34 Ga J Int'l & Comp L 285, 301.

32 Bodansky, *ibid* 301.

The response to the above criticisms is that rational choice theory is based on the assumed preferences of states.³³ In other words, the preference may not be the preference of all stakeholders, of the majority of citizens or even the true preference of a particular state in reality. Assumed preferences are relevant to show the common interests of most states most of the time, instead of the action of a particular country at a specific point of time.

(iii) *Are states always self-interest driven?*

The final criticism is that states may not always be motivated by self-interest. Commentators have suggested that individuals may be motivated by altruism or hatred/envy, which leads to a behaviour that does not serve self-interest.³⁴ States may do the same by providing aid to foreign countries or imposing sanctions against foreign countries conducting inhumane activities.³⁵ Therefore, a state may act to promote the interest of international society instead of its own. This criticism interprets 'self-interest' narrowly and equates it to economic interest. As it has been discussed in the previous section, the preferences of states are various. Besides purely economic interests, the interests of states also include reputation.³⁶ The reputation of a state may be one factor that influences the decision of other states when they interact and determines whether other states choose to be cooperative, collaborative, coercive or non-cooperative in response to the decision of this state,³⁷ which could indirectly affect the security and prosperity of the state. In addition to reputation, the decision to provide foreign aid or sanctions can be traced back to the self-interest of a state in that the turmoil and conflict of other states would result in unstable global economy, conflict and security challenges, mass migration and climate change, which would eventually influence this state.³⁸ The activity that appears motivated by altruism is actually generated by self-interests.

B. Game Theory

Game theory differs from other strands of rational choice theory in that it examines the interactive and strategic decision-making where the decision of one state depends on the action of others.³⁹ For game theory to apply, the actor should presume that other actors are also rational,⁴⁰ and it should be able to predict the preferences and

33 OA Hathaway and AN Lavinbuk, 'Rationalism and Revisionism in International Law' (2005) 119 Harv L Rev 1404, 1424.

34 Jolls and others (n 14) 1479. Also see Broude (n 8) 1099; van Aaken (n 8) 427–435.

35 Abbott (n 11) 11.

36 AT Guzman, *How International Law Works: A Rational Choice Theory* (OUP 2007) 73–97; A Geisinger and MA Stein, 'Rational Choice, Reputation, and Human Rights Treaties 2008' (2007) 106 Mich L Rev 1129, 1136ff; AT Guzman, 'Reputation and International Law' (2006) 34 Ga J Int'l & Comp L 379, 381.

37 See Posner and Goldsmith (n 11) 1122–1128.

38 GL Reuber, 'Why Canadian Foreign Aid' (1958) 14 Int'l J 11; BI Baker, 'Foreign Aid: History, Theories, and Facts' (2014) 137 Monthly Lab Rev 1.

39 J von Neumann and O Morgenstern, *Theory of Games and Economic Behavior* (2nd edn, 1947); M Hirsch, 'Game Theory, International Law, and Future Environmental Cooperation in the Middle East' (1999) 27 Denv J Int'l L & Pol'y 75, 79; C Roodt, 'Recognition and Enforcement of Foreign Judgments' (2005) 38 Comp & Int'l L J S Afr 15, 26;

40 Hirsch (n 39) 79; Keohane (n 12) S308–9.

interests of other actors. It then would make decisions depending on the possible actions of other actors.⁴¹

Game theory has been applied to international relations for a long time,⁴² but only recently entered the field of international law, including international judicial cooperation.⁴³ Applying game theory in international law is also subject to criticism. Besides the standard criticisms to general rational choice theory,⁴⁴ further criticism particularly targets game theory. Unlike general rational choice theory where the common interests of states are not too difficult to assume, which usually include security, prosperity, good environment and health, those common preferences may be changed when states interact. Realists believe that states prefer relative gains, where states focus more on distribution and whether they have gained more than other states.⁴⁵ Institutionalists or neo-liberalists assume that states favour absolute gains, which means that states would value the win-win situation to boost their interests, such as the cooperation to remove trade barriers and to reduce transactions costs, even if other states gain relatively more in the cooperation.⁴⁶ Absolute gain theory focuses on whether cross-border judicial cooperation would increase the welfare of one state in general, for example, improving the business environment and reducing the cost for cross-border trade, regardless of whether the other state has more proceedings to be assisted or more judgments to be enforced than its own. Whilst under the relative gains theory, the strategic decision-making focuses on whether the judicial cooperation makes other states receive competitive advantages versus itself, for example, by gaining more cases to the litigation market or by receiving more investment, instead of whether itself is better off than non-cooperation.

Unfortunately, conflict lawyers, when applying game theory, rarely examine which preference should be adopted although all unintentionally subject their analysis on one of the two theories.⁴⁷ This article adopts absolute gain theory for three reasons. First, the central interest of a rational state is to promote its own benefits and

41 B Chapman, 'Rational Choice and Reasonable Interactions' (2006) 81 Chi-Kent L Rev 75, 75.

42 JD Morrow, *Game Theory for Political Scientists* (1994); BB de Mesquita, *Principles of International Politics* (2000).

43 ME Solimine, 'Game Theory and Private International Law', in J Basedow, G Ruhl, F Farrari and P de Miguel Asensio (eds), *Encyclopaedia of Private International Law* (EEL 2017) 830; Rosen (n 17) 783; R Brand, 'Recognition of Foreign Judgments as a Trade Law Issue', in JS Bhandari, AO Sykes (eds), *Economic Dimensions in International Law* (1997); M Whincop, 'The Recognition Scene: Game Theoretic Issues in the Recognition of Foreign Judgments' (1999) 23 Melb U L Rev 416. Cf M Danov, 'Cross-border Litigation: Evaluating the Brexit impact – a Socio-Legal Model for Data Analysis' (2020) 27 Maastricht J Eur Comp Law 199 (applies the game theory to analyse litigants' strategies in private international law).

44 See section 2.A above.

45 Hathaway and Lavinbuk (n 33) 1429; J Grieco, 'The Relative Gains Problem for International Cooperation' (1993) 87 Am Pol Sci Rev 729; MD Vancea, 'Exporting U.S. Corporate Governance Standards through the Sarbanes-Oxley Act' (2003) 53 Duke L J 833, 871–872; D Snidal, 'Relative Gains and the Pattern of International Cooperation' (1991) 85 Am Pol Sci Rev 701.

46 Hathaway and Lavinbuk (n 33) 1430; SD Krasner, 'Global Communications and National Power: Life on the Pareto Frontier' (1991) 43 World Politics 336, 362–365; J Grieco, 'Understanding the Problem of International Cooperation', in DA Baldwin (ed), *Neorealism and Neoliberalism* (Columbia University Press 1993) 301, 320.

47 For instance, Cass impliedly applied absolute gains theory, see Cass (n 25) 516; whilst Brand and Whincop unintentionally relied on relative gains theory, see Brand (n 43) 512 and Whincop (n 43) 416.

prosperity rather than to worry about the prosperity of other states. Secondly, judicial cooperation works to improve the judicial efficiency of a state and to provide a certain legal environment to attract businesses and investments. It does not directly lead to comparative financial advantages versus other states. Thirdly, a state may reasonably worry about the relative gain if the great diversity and gaps with other states may harm its long-term interests and security. However, judicial cooperation only provides procedural efficacy. Even if other states receive more cases and demand more assistance, it can hardly bring significant imbalance and inequality that may harm the security of a state.

C. Conclusion

The above analysis suggests that game theory can initially be used to model the general pattern of interaction between common states on the basis of the presumption of rational states pursuing absolute gains. It is not a perfect model to predict how a particular state may act in a specific situation, but it could at least serve some purposes that an ordinary legal study cannot offer. First, it could explain what has happened in the past from a different angle. Secondly, it could help to point out a direction that a state may wish to consider when trying to reform or modernize its own law. For instance, where a state engages more frequently in international transactions, this state may wish to improve judicial cooperation status. Game theory, therefore, could suggest which methods, unilateral legislation, bilateral or multilateral approaches, may be the most efficient way by considering the consequences of interaction with other states. The proposals based on game theory may exclude strict legal theory and analysis, but they could offer considerations from the perspective of efficiency and strategy.

3. UNILATERAL APPROACH: PRISONERS' DILEMMA AND STAG HUNT

A. Prisoners' Dilemma and Stag Hunt

Most conflict scholars have suggested that states should be more 'open' by offering effective judicial assistance to foreign proceedings.⁴⁸ These arguments are justified by comity⁴⁹ and efficiency⁵⁰ without considering the strategic interaction between states. Since the 1990s, some conflict scholars have attempted to apply game theory to analyse practice in the recognition and enforcement of foreign judgments.⁵¹ These pieces of literature have usually focused on one particular game, the Prisoners'

48 NJ Calamita, 'Rethinking Comity' (2014) 27 Univ Pen J Int'l L 601; JJ Brown, *Judgment Enforcement* (3rd edn, Kluwer 2018) 1-14. *Hilton v Guyot* 159 US 113 (1895).

49 Pham (n 6) 669. *Hilton v Guyot*. A-M Slaughter, 'Court to Court' (1998) 92 Am J Int'l L 708, 809-10; JR Paul, 'Comity in International Law' (1991) 32 Harvard Int L J 1, 44.

50 Pham (n 6) 690; CH Peterson, 'Choice of Law and Forum Clauses and the Recognition of Foreign Country Judgments Revisited through the Lloyd's of London Cases' (2000) 60 Louisiana L Rev 1259, 1259.

51 Brand (n 43); Whincop (n 43) 422; AF Perez, 'The International Recognition and Judgments' (2001) 19 Berkeley J Int L 44, 69-72; Ballard, 'Turnabout is Fair Play' (2006) 28 Hous J Int'l L 199, 234ff.

Dilemma.⁵² Two prisoners (A and B) jointly committed a crime. Not enough evidence is available to convict both, and prosecution relies on the plea bargain. If both confess and choose to betray their partner, then each serves two years in prison; if both refuse to confess and decide to cooperate with their partner, then each serves one year in prison and if A confesses (defects) and B does not (cooperates), then A is set free, and B serves 3 years, and vice versa. A rational individual will choose to confess (defect), which is the best decision he could make, considering the best decision of the other player.

Applying the Prisoners' Dilemma in international judicial cooperation suggests that every country would have the incentive not to cooperate because neither trust the other, and more importantly, both want to receive the greatest advantage by refusing cooperation.⁵³

A smaller number of commentators apply the Stag Hunt game to the analysis.⁵⁴ In Stag Hunt, two hunters could hunt a stag if they cooperate. If they do not cooperate, then neither could hunt stag alone, but each could hunt a hare independently. Evidently, the optimal choice is for both to cooperate to hunt stag, and the suboptimal option is for each to go for hare. The worst scenario is one hunter tries to hunt stag, whilst the other decides to hunt hare, where the sole stag hunter will apparently receive nothing and have no food to survive. Each hunter will individually decide to hunt hare to avoid the worst situation.⁵⁵

Applying Stag Hunt in judicial cooperation also suggests that although Countries A and B will receive a few benefits when both choose not to cooperate (receive hare), they will receive much greater benefits when they choose to (receive a stag). Therefore, the optimal choice is for the countries to cooperate. However, without communication and trust, unilaterally adopting the cooperative strategy could risk receiving nothing (being the stag hunter alone). To avoid this risk, both countries would decide to be the hare hunter, the success of which does not depend on the cooperation of the other. Although Stag Hunt is different from the Prisoners' Dilemma, both lead to the same conclusion that individual states would have no incentive to cooperate.

B. International Judicial Cooperation: Prisoners' Dilemma versus Stag Hunt

Although private international lawyers have applied Prisoners' Dilemma and Stag Hunt to interpret and predict international judicial cooperation, Stag Hunt is a more suitable game to model international judicial cooperation. In the Prisoners' Dilemma, a state receives the optimal result if it defects whilst the other cooperates.

52 Whincop (n 43) 422; Perez (n 51) 69–72. See criticism in RH McAdams, 'Beyond the Prisons' Dilemma' (2009) 82 S Cal L Rev 209.

53 See Whincop (n 43) 421–429; Y Rotem, 'The Problem of Selective or Sporadic Recognition' (2010) 10 Chi J Int'l L 505, 513; Rosen (n 17) 801–806; Perez (n 51) 59; DJ Robinson, 'U.S. Enforcement of Foreign Judgments, Libel Tourism, and the Speech Act' (2013) 21 Transnat'l L & Contemp Probs 911, 919–921.

54 Perez (n 51) 59; R Brand (n 43) 622–623; Rosen, *ibid.*, 809–811; A Gardella and LGR di Brozolo, 'Civil Law, Common Law and Market Integration' (2003) 51 Am J Comp L 611, 630.

55 McAdams (n 52) 220.

In other words, it suggests that the best scenario for a player is to take advantage of the cooperation of the others, and it denies the potential of an even better win-win situation. This may not be true. For instance, State A unilaterally offers judicial assistance to State B by allowing State B to serve proceedings on residents in State A, assisting State B to collect evidence in the territory of State A and enforcing judgments rendered by the courts of State B, whilst State B does not provide the same reciprocal assistance to State A. If the defendant has assets located in State A, then the claimant would be free to decide whether to sue in State A or B, and if the defendant has assets located in State B, then the claimant would have no choice but to bring the action in State B. State B wins the competition in jurisdiction versus State A, and companies may wish to relocate their assets in State B bringing correlated benefits to State B, such as taxation and related business opportunities.⁵⁶ However, it does not suggest absolute gain for State B. Although State B may receive more litigations than State A and enable its citizens to be sued at home in most circumstances, the waste of public resources would be high because it may not be the appropriate and convenient forum.⁵⁷ It is also likely that the hostility towards foreign proceedings makes it a risk for doing businesses with residents in State B, reducing its attraction to foreign investors. Therefore, it is not straightforward that non-cooperation definitely would lead to the best result.

In fact, the optimal choice is not for a state to take advantage of the other, as in the Prisoners' Dilemma, but for both states to cooperate, as in Stag Hunt. In the absence of a barrier for foreign litigation, the parties could choose jurisdiction on the basis of other factors, such as the quality and reputation of the national judicial system, the cost and convenience of litigation, the familiarity with the system, the potential application of law and the likely more favourable decision. This is the most efficient scenario in that the cases are usually brought in the natural forum; both countries may have the incentives to improve the quality of their courts and the cost to relocate assets, to re-litigate to enforce judgments and to bring actions in an inappropriate court is also reduced. The collective benefits to the parties and states are also maximized. However, the optimal scenario requires both states to cooperate. Without the cooperation of the other, a state cannot receive the benefits it desires but may face uncertainty and loss that State A may face in the above example. Both states would decide not to cooperate to avoid the risk. The non-cooperative decision is not made to take advantage of the other but to avoid risk.

Although Stag Hunt is a better paradigm to model judicial cooperation, it arguably shares one similar weakness as the Prisoners' Dilemma. In both games, the players do not know the choice of each other, and the decision-making is based on the presumption of the potential action of the other. Uncertainty and the lack of trust lead to the suboptimal decision. However, a state may be able to predict the action of another state in international judicial cooperation, which is either provided in legislation or demonstrated in the past judicial decisions. Every country has its own private international law ready for other countries to consider. If State A has clear legislation to support the proceedings of State B, then State B does not need to opt

56 Whincop (n 43) 421–429.

57 Rotem (n 53) 510.

for the non-cooperation strategy but could provide the reciprocal treatment in response to the law of State A, which breaks the Stag Hunt dilemma.

However, this argument may be criticized as not being realistic. In reality, a state may face potential competition from all other states with different domestic laws and practices. No one state can strategically influence the decision of other states, and the strategic interdependence is reduced.⁵⁸ Suppose that all other countries have clear and predictable domestic private international law rules available to help State A to decide its action, State A will not have the resource to study the domestic laws of all countries to make its legislative decision. In practice, the law of some countries is unclear, and the judicial practice is inconsistent.⁵⁹ Moreover, the law of some countries may depend on discretionary 'standards' instead of 'rules', which makes the result hard to predict.⁶⁰ In these cases, to know the laws of other countries and predict their action would be unrealistic. Even if State A does not need to deal with all other countries but only its close trade partners, understanding the laws of multiple countries and accurately predicting their actions would be unrealistic.

4. JUDICIAL COOPERATION BASED ON RECIPROCITY: INFINITELY REPEATED GAME

A. Infinitely Repeated Game

The classic Stag Hunt game is a one-shot game. In practice, the cross-border judicial interaction among most countries would repeat indefinitely. Some commentators have argued that the infinitely repeated game is the more realistic model to analyse cross-border judicial cooperation.⁶¹ In infinitely repeated games, players tend to cooperate because the behaviour of one player in one round would signal its promise and concern for the next round, and other players would act accordingly.⁶² In other words, the cooperative action in one round would lead other players to cooperate, whilst one betrayal may lead to punishment by others, a typical tit-for-tat situation.⁶³ It may lead to the cooperation of players.

It is true that, in the long run, states must consider the stability of their strategies. If all states adopt the non-cooperation model, then the lack of cooperation would increase the cost of transnational businesses and harm the economic interest of states,

58 S Magen, 'Game Theory and Collective Goods', in EV Towfigh and N Petersen (eds), *Economic Methods for Lawyers* (EEL 2015) 61.

59 For instance, how reciprocity is proved in Russia is unclear, see Allen and Overy (n 2) 281; in UAE, the court practice sometimes is inconsistent with the law on foreign judgment enforcement, see N Bremer, 'Seeking Recognition and Enforcement of Foreign Court Judgments and Arbitral Awards in the GCC Countries' (2016) 37 *McGill Journal of Dispute Resolution* 37, 60; Allen and Overy, 333. In Saudi Arabia, it is unclear whether reciprocity is a condition to enforce foreign judgments. See Bremer, 57.

60 Some commentators have argued that foreign judgment enforcement is unpredictable in the common law countries. See CD Booth, 'Recognition of Foreign Bankruptcies' (1992) 66 *American Bankruptcy L J* 135; YT Min, 'Foreign Judgments: Fraud and Abuse of Process' (1997) 1 *Singapore J Int Comp L* 382, 385; RF Oppong, 'Canadian Courts Enforce Foreign Non-Money Judgments Cases' (2007) 70 *Modern L Rev* 670. Even if there is a 'rule', some concepts may be vague to interpret. LL Vest, 'Cross-Border Judgments and the Public Policy Exception' (2004) 153 *Univ Pennsylvania L Rev* 797.

61 Rotem (n 53) 509; Perez (n 51) 60.

62 Hirsch (n 39) 86–87.

63 Perez (n 51) 60; Whincop (n 43) 424.

especially those with export-oriented economy. The waste of judicial resources in deciding cases that are not closely connected with the local forum also generates concern of countries with active cross-border transactions. These states would have the incentive to change the *status quo* by being willing to cooperate. To encourage the cooperation of others to achieve the win-win situation, these countries will consider 'sanctions' to reduce the benefit a non-cooperator may otherwise receive. The most frequently used 'sanction' is the principle of reciprocity, according to which one state will only react in the same way the other acts.

B. Repeated Game Does Not Lead to Successful Cooperation

However, reciprocity does not work effectively to improve judicial cooperation in practice because it is not an effective award or sanction. First, reciprocity cannot be applied straightforwardly, and judicial cooperation is a complicated legal issue. Even if a country is willing to adopt a more liberal approach to enforce foreign judgments in general, this country will impose a few prerequisites. For instance, before a state recognizes and enforces foreign judgments, it usually examines whether the foreign court is competent, the defendant has opportunities to defend, the foreign proceedings do not infringe natural justice or due process and the enforcement of judgments is not contrary to the public policy of the enforcing country.⁶⁴ Different countries impose distinct conditions. Even if some conditions are similar, interpretations vary between countries. True reciprocity means that State A will only enforce the judgments of State B under the identical conditions as State B enforces the judgments of State A. Such reciprocity does not exist, and the enforcement of foreign judgments would always be subject to the different prerequisites even if reciprocity is adopted. Therefore, countries that impose less restrictive prerequisites may fear to be worse off, which may lead to a situation where although countries adopt reciprocity in general, they tend to increase other thresholds, hampering the efficacy of cooperation.

Secondly, doubt always occurs as to how reciprocity should be applied, ie how a country could decide if the other enforces its judgments. Three approaches are available in general: *de jure* reciprocity allows State A to provide judicial assistance to State B if the law of State B in practice makes providing the same treatment to State A possible;⁶⁵ *de facto* reciprocity requires evidence to prove that State B has indeed provided judicial assistance to State A in the past⁶⁶ and presumed reciprocity in principle allows State A to offer judicial assistance to State B unless evidence suggests that State B refused to cooperate in the past.⁶⁷ No matter which approach is adopted, examining the law of the foreign country (*de jure* reciprocity) or researching its practice record (*de facto* and presumed reciprocity) is inevitable. This task could be difficult, either too costly or impossible.⁶⁸ The law of some countries is ambiguous, either without a clear guide to enforce foreign judgments or inconsistent

64 For instance, see Art 45 of the Brussels I Recast; Art 7 of the Hague Judgment Convention 2019.

65 Eg Art 252 of the Bahrain Civil and Commercial Procedures Act. Bremer (n 59) 43–45.

66 Such as Chinese legal practice. See ZS Tang, YP Xiao and ZX Huo, *Conflict of Laws in the People's Republic of China* (EEL 2016).

67 Montenegro, Serbia. See Allan and Overy (n 2) 240, 290.

68 Rotem (n 53) 519–520. See discussion in section 3.B above.

inherently.⁶⁹ Other countries may have a clear, positive law, but the practice differs considerably by imposing more restrictive standards.⁷⁰ Before deciding whether to cooperate on the basis of reciprocity, a court must examine not only the law and practice, but also the hidden agenda behind the decision to determine whether and when reciprocity exists.⁷¹ The uncertainty reduces the efficiency of reciprocity as a 'sanction' or 'reward' to encourage cooperation from other states in practice in iterated interactions.

Thirdly, although repeated game theory suggests that most countries are better off in the future with a cooperation model, it requires countries to ignore short-term loss and play in the shadow of the future. However, many countries would not wish to be the one bearing the short-term loss. Reciprocity only works to boost cooperation if some countries make the first move to cooperate, irrespective of the fact that other countries refuse to cooperate in the past and that some may continue to refuse in the future. Countries that have made the first move may be worse off until other countries respond positively to cooperate. Therefore, many countries adopt the *de facto* reciprocity approach to avoid short-term losses. A typical example is the interaction between China and Japan. Although both countries have shown interests to cooperate and both expressly adopt reciprocity, they still reject enforcing the judgments of each other because they would wish the other to make the first move.⁷² In 1994, Chinese courts refused to enforce a Japanese judgment because Chinese courts adopt the *de facto* reciprocity principle and no positive precedent of enforcing Chinese judgments emerged in Japan.⁷³ It resulted in the Japanese court refusing to enforce Chinese judgments in 2003 due to the existence of negative precedents in China,⁷⁴ which re-generated the negative 'retaliation' position against Japanese judgments in China in 2004.⁷⁵ Therefore, reciprocity may not lead to cooperation but to non-cooperation and a vicious circle. Although the liberal implementation of reciprocity is an international trend and China has also relaxed its approach to find

69 Bremer (n 59) 60; Allen and Overy (n 2) 333.

70 For instance, in the UAE, although the law has made the enforcement possible, the Dubai Court of Cassation in practice provides very restrictive interpretation and makes enforcement only possible by treaty. Bremer (n 59) 60; Allen and Overy (n 2) 333. In Vietnam, foreign judgments, in theory, can be enforced, but practitioners are unaware of any successful cases. Allen and Overy, 341. In China, although *de facto* reciprocity is adopted, some earlier judgments suggested that a single positive judgment in the other country still could not prove reciprocity and a string of positive cases were needed. This strict position has been changed and a single positive case standard was applied in recent cases. See KF Tsang, 'Enforcement of Foreign Commercial Judgments in China' (2018) 14(2) J Private Int L 262–294; below (n 76).

71 Rotem (n 53) 520.

72 China refuses to enforce Japanese judgments in two cases: *Gomi Akira v Japanese-Chinese Products (Japan) Co, Ltd*, Intermediate People's Court of Dalian City, Liaoning Province (11 May 1994), SPC Gazette, Issue 1, 1996; *Tsuburaya Productions Co, Ltd v Beijing Yansha Youyi Shopping City Co, Ltd*, No 2 Intermediate People's Court of Beijing Municipality (2004) Er Zhong Min Chu Zi No 12687. Japanese courts have also refused enforcing Chinese judgments in Osaka High Court, Judgment, April 9, 2003, *Hanrei Jiho* No 1841, 111, *Hanrei Taimuzu* No 1141, 270.

73 *Gomi Akira v Japanese-Chinese Products (Japan) Co, Ltd*, Intermediate People's Court of Dalian City, Liaoning Province (11 May 1994), SPC Gazette, Issue 1, 1996.

74 Osaka High Court, Judgment, April 9, 2003, *Hanrei Jiho* No 1841, 111, *Hanrei Taimuzu* No 1141, 270.

75 *Tsuburaya Productions Co, Ltd v Beijing Yansha Youyi Shopping City Co, Ltd*.

reciprocity in more recent developments,⁷⁶ *de facto* reciprocity may still remain in many countries' judicial practice in the years to come.

Fourthly, some states may not positively respond to reciprocity anyway because they do not mind being in a double non-cooperation situation. These countries may not have strong needs to enforce their judgments in other countries than other countries in them, which has been explained in the asymmetric enforcement of judgments between the US and EU Member States. This situation occurs because US companies have relatively more investment in the EU than the interest of the EU in the USA. More judgments against US firms require enforcement in the EU than judgments against EU firms in the USA. Even if the US law made it relatively easy to enforce EU judgments in the USA and also adopted reciprocity to urge other countries to enforce the US judgments, it would not create the need for some EU countries to reform their domestic laws.⁷⁷ The negative response to reciprocity may also occur in countries with limited reliance on international trade,⁷⁸ countries with emerging markets that opt for local protectionism to protect their sunrise industry⁷⁹ and countries with an unattractive judicial system and legal market.⁸⁰

The above analysis suggests that simply relying on domestic laws and reciprocity would not be able to promote judicial cooperation and international trade. Facilitating communication and imposing international obligations to forge cooperation are crucial to remove judicial barriers for cross-border transactions.

- 76 Examples can be found in Tunisia, Spain, Germany, Korea, Taiwan and Japan. See B Elbalti, 'Reciprocity and the Recognition and Enforcement of Foreign Judgments: A Lot of Bark but not much Bite' (2017) 13 J Private Int L 184, 190–196. China has recognised the *de facto* reciprocal relationship with a few countries, such as Singapore (*Kolmar Group AG v Jiangsu Textile Industry (Group) Import & Export Co, Ltd (Sutex Group)*), Nanjing Intermediate People's Court, (2016) Su 01 Xie Wai Ren No. 3) and the USA (*Liu v Tao & Tong*, Wuhan Intermediate People's Court, (2015) E Wuhan Zhong Minshang Wai Chu Zi No 00026), based on the earlier successful enforcement of Chinese judgments in the latter jurisdictions. For detailed discussion of the gradual relaxation of Chinese approach on reciprocity, see Tsang (n 70). China's Supreme People's Court published two judicial interpretation to direct Chinese courts to adopt 'proactive measures' to enforce foreign judgments (Opinions of the Supreme People's Court Regarding Further Providing Judicial Services and Guarantees by the People's Courts for the Belt and Road Initiative, Fa Fa [2019] 29, para 19) and to consider being the first to recognize and enforce the judgments from a Belt-and-Road country (Several Opinions of the Supreme People's Court on Providing Judicial Services and Safeguards for the Construction of the 'Belt and Road' by People's Courts, Fa Fa [2015] 9, para 6).
- 77 Especially Nordic countries and Austria. See JF Coyle, 'Rethinking Judgments Reciprocity' (2014) 92 NCL Rev 1109, 1154–1166.
- 78 Some of these countries do not sign the New York Convention, such as Chad, Eritrea, Ethiopia, Gambia, Libya, Malawi, North Korea, Maldives, Namibia, Nauru, Niue, Palau, Saint Lucia, Samoa, Seychelles, Sierra Leone, Somalia, Timor-Leste, Togo, Tonga, Turkmenistan, Tuvalu, Vanuatu and Yemen.
- 79 Such as China and Saudi Arabia. Both make foreign judgment enforcement difficult. In China, there are cases where foreign arbitral awards against Chinese state-owned enterprises be refused enforcement due to public policy to protect state assets and industries. See *Dongfeng Garments Factory of Kaifeng City v Henan Garments Import and Export*, Zhengzhou Intermediate People's Ct, Sept 28, 1992; *GRD Minproc v Shanghai Flyingwheel*, [2009] Min Si Ta Zi No48; *Baosheng Environment v Hefei Environment Bureau*, [2005] Min Si Ta Zi No 45. However, this situation is changing due to the intention of China to assume a leadership role in the 'Belt and Road' initiative.
- 80 This is one of few reasons why Iraq had not joined the New York Convention for a long time, and Iraq eventually agreed to endorse the ratification of the New York Convention in Feb 2018.

5. JUDICIAL COOPERATION TREATIES

The key factors that cause the non-cooperation situation in unilateral approaches are self-interest driving, the lack of trust and the lack of obligation. Changing the self-interest driving nature of state actors is presumably difficult. However, the lack of trust and the lack of obligations can be tackled by international treaties.⁸¹ Treaty negotiation enables communication among states,⁸² and the ratification of international treaties makes a state assume obligation towards other contracting states. Trust and obligations break the Stag Hunt game.

A. Treaty Negotiation: Coordination or Battle-of-the-Sexes Game

Treaty negotiation requires states to reach consensus to provide mutual judicial cooperation on the common terms. Usually, when states take steps in the treaty negotiation, they have shown interest to enter into judicial cooperation. The question left is the terms of the treaties, to which compromise may be difficult to reach. Taking the judgment cooperation as an example, the key issues that a judgment treaty must establish include the following: the obligation of the state to recognize and enforce the judgments of each other, the scope and nature of the judgments that are eligible for recognition and enforcement,⁸³ the scope and nature of eligible claims⁸⁴ and the exceptional grounds to refuse recognition.⁸⁵ Treaty negotiation may be modelled by two games: coordination and battle-of-the-sexes.

(i) *Coordinate game*

In the coordination game, all players have the same goal achievable through several concurrent choices. Although players must make a selection, the interest of each player is maximized as far as all players make the same choice. A typical example is the traffic game, where two drivers are asked to choose which side of the road to drive. They can choose either the right hand or the left hand, but they must make the identical choice to avoid accidents, and their interests are maximized whatever that choice is.⁸⁶ This situation exists between states with a similar culture, legal tradition, quality of a judicial system, economic development, financial power and cross-border trade strategy. These two states have a similar level of interdependence with each other and would have a joint interest to establish bilateral cooperation. Different ways may emerge for such cooperation to build, but deciding which options to choose does not make a fundamental difference to the interests of both countries as far as both make congruent choices. For fostering cooperation in a

81 Goldsmith and Posner (n 16) 36.

82 Posner and Goldsmith (n 11) 1172.

83 For instance, whether judgments must be final, whether punitive and exemplary judgments can be recognized and whether non-monetary judgments can be enforced. Eg Hague Choice of Court Convention 2005, Art 8(3) and (4); Brussels I Recast, Art 38; Hague Judgment Convention 2019, Art 4(3) and (4).

84 For instance, whether special contracts, such as consumer and employment contracts, are involved. See the exclusion in Art 2 of the Hague Choice of Court Convention; Art 2 of the Hague Judgment Convention 2019.

85 Such as procedural irregularity, the infringement of public policy and incompetent original court. Art 45 of the Brussels I Recast; Art 9 of the Hague Choice of Court Convention; Art 7 of the Hague Judgment Convention 2019.

86 Magen (n 58) 73.

coordination game, communication is crucial, where one state would suggest an option and the other, realizing the importance of cooperation and the lack of fundamental diversity, would opt for the same option.⁸⁷

An example is the negotiation of the Australia–New Zealand Trans-Tasman Proceedings Agreement.⁸⁸ This agreement aims to ‘streamline the process for resolving civil proceedings with a trans-Tasman element to reduce costs, improve efficiency and minimize existing impediments to enforcing certain judgments and regulatory sanctions’.⁸⁹ This bilateral treaty facilitates the cross-border service of procedure, the efficient enforcement of judgments based on the *forum conveniens* principle for adjudicative jurisdiction, the regulatory enforcement of civil penalty orders and regulatory offences and the remote appearances of parties in civil proceedings. Judging from the content and coverage, this treaty is an ambitious project, and the scope and level of cooperation are rarely achievable in other international or regional treaties.⁹⁰ Regardless of its ambitious nature, this bilateral treaty was negotiated and adopted rather smoothly. The prime ministers of both countries agreed to establish a working group to work on this project in 2003, and the working group delivered the discussion paper in 2005⁹¹ and ten recommendations in 2006,⁹² on the basis of which the agreement was signed in 2008. This smooth and swift progress has been attributed to the same ‘common law heritage’, ‘very similar justice systems’ and ‘the confidence that both countries have in the judicial and regulatory institutions of each other’ that save many unnecessary safeguards and reservations.⁹³

(ii) *Battle-of-the-sexes game*

However, treaty negotiation close to a coordination game is very rare. The most frequently occurring game in treaty negotiation is the battle-of-the-sexes game, which mixes coordination and conflicts where the parties have the common intention to cooperate, but conflict exists on which option to choose.⁹⁴ A typical example is a couple wishing to go out together. Nonetheless, the husband wants to watch football,

87 Hirsch (n 39) 92.

88 Agreement between the Government of Australia and the Government of New Zealand on Trans-Tasman Court Proceedings and Regulatory Enforcement (Christchurch Agreement), 24/07/2008. For more on the history of the Christchurch Agreement, see R Mortensen, ‘A Trans-Tasman Judicial Area: Civil Jurisdiction and Judgments in the Single Economic Market’ (2010) 16 Canterbury L Rev 61; R Mortensen, ‘Together Alone: Integrating the Tasman World’, in A Dickinson, M Keyes and T John (eds), *Australian Private International Law for the 21st Century: Facing Outwards* (Hart 2013) 113; D Goddard, ‘Trans-Tasman Court Proceedings and Regulatory Enforcement’, in Dickinson, Keyes and John, 145.

89 Art 2.

90 Especially the regulatory enforcement of civil penalty and other civil offences and the remote appearance in civil proceedings.

91 Australia (Attorney-General’s Department) and New Zealand (Ministry of Justice), Trans-Tasman Court Proceedings and Regulatory Enforcement—A Public Discussion Paper by the Trans-Tasman Working Group (Commonwealth of Australia, 2006).

92 Australia (Attorney-General’s Department) and New Zealand (Ministry of Justice), Trans-Tasman Court Proceedings and Regulatory Enforcement—A Report by the Trans-Tasman Working Group (Commonwealth of Australia, 2006) (‘Trans-Tasman Working Group Report’).

93 Trans-Tasman Working Group Report, *ibid* 7.

94 Magen (n 58) 74; R Copper and others, ‘Communication in the Battle of the Sexes Game: Some Experimental Results’ (1989) 20 RAND J Economics 568.

whilst the wife prefers opera.⁹⁵ The battle-of-the-sexes game may end up in three results. First, one player persuades the other to accept the option favoured by the former. This player could provide convincing evidence proving that his favourite choice is more attractive than the other, or this player offers to trade off other preferences. This result usually is rare in practice. Secondly, both players give up their first choice and opt for the alternative, which is more common. The third is the negotiation failure.⁹⁶

An example is the negotiation of the Hague Judgment Convention. In 1992, the USA proposed a new judgment convention,⁹⁷ which received a favourable response from the Hague Conference on Private International Law (HCCH) Permanent Bureau.⁹⁸ The USA proposed for a mixed convention, which includes jurisdictional grounds that are permitted, prohibited and undefined (neither authorized nor prohibited),⁹⁹ believing such flexibility would be the only means to achieve global acceptance.¹⁰⁰ However, the European Commission and the Member States of the European Community preferred a Brussels-Lugano style double convention, wishing to export the successful regional model globally.¹⁰¹

Even after the strong political will for international cooperation led the EC to eventually compromise on a 'mixed convention' model, the result was largely unsatisfactory from the US perspective.¹⁰² In 1999, a preliminary draft convention was adopted,¹⁰³ which was a mixed convention but criticized as being 'essentially drafted as a double convention' due to the earlier EC push and 'the result of majoritarian rather than consensus thinking'.¹⁰⁴ Even if the Hague Conference later adopted the consensus system, consensus could not be reached in most jurisdictional grounds.¹⁰⁵ Particularly, the 1999 Preliminary Draft Convention and the later June 2001 Interim

95 F Munoz-Garcia and D Toro-Gonzalez, *Strategy and Game Theory* (Springer 2016) 29.

96 Magen (n 58) 74.

97 The letter from the USA to the Hague Permanent Bureau can be found at <<http://www.state.gov/documents/organization/65973.pdf>> accessed 28 June 2018.

98 HCCH, 'Some reflections of the Permanent Bureau on a general convention on enforcement of judgments', Prel Doc No 17 of May 1992 in proceedings of the Seventeenth Session (1993), Vol 1, 231.

99 AT von Mehren, 'Recognition and Enforcement of Foreign Judgments: A New Approach for the Hague Conference?' (1994) 57 L Contemp Problems 271; C Kessedjian, Synthesis of the Work of the Special Commission of June 1997 of International Jurisdiction and Effects of Foreign Judgments in Civil and Commercial Matters (Hague Conference on Private International Law, Preliminary Document No 8) (1997), n.1.

100 Sixty-fifth Plenary Meeting of the Special Commission, Report of Meeti tg No 65, 1.

101 The history and background of negotiation are discussed in P Beaumont, 'Hague Choice of Court Agreements Convention 2005: Background, Negotiations, Analysis, and Current Status' (2009) 5 J Private Int L 125, 127–134; AT von Mehren, 'Drafting a Convention on International Jurisdiction and the Effects of Foreign Judgments Acceptable World-wide: Can the Hague Conference Project Succeed' (2001) 49 Am J Comp L 191, 191–200; RA Brand and Paul Herrup, *The 2005 Hague Convention on Choice of Court Agreements* (CUP 2009) 6–10.

102 Beaumont (n 101) 133.

103 P Nygh and F Pocar, 'Preliminary draft Convention on jurisdiction and foreign judgments in civil and commercial matters', Prel Doc No 11 of 2000.

104 Von Mehren (n 101) 199–200.

105 Louise Ellen Teitz, 'Another Hague Judgments Convention?' (2019) 29 Duke J Comp & Int L 491, 494–495.

Text¹⁰⁶ were drafted in a way close to the EU jurisdiction rules,¹⁰⁷ which are rule- and classification-based, fundamentally different from US jurisdiction rules, which are discretion- and principle-based.¹⁰⁸ Specifically, the jurisdiction rules of the European style may be incompatible with the US constitutional principle of due process,¹⁰⁹ which prevents the US court from asserting jurisdiction over a defendant without minimum contact with the state to maintain the 'traditional notions of fair play and substantial justice'.¹¹⁰ The same philosophy does not exist in the EU law where any cases that meet the objective connecting factors automatically justify jurisdiction. Some compromises have been proposed to seek consensus. For instance, the proposed tort jurisdiction rule mixes the EU activity-based principle and the US intention-based philosophy, which provides that a state may have jurisdiction on tort if it is the place where the tort activity occurred or where the injury occurred unless the defendant 'could not reasonably foresee that the act or omission could result in an injury of the same nature in that state'.¹¹¹ However, this 'reasonable foreseeability' defence is not the same as the US minimum contact principle, and it also made some in the EU unhappy about its ambiguity.¹¹² Furthermore, consensus could not be reached on a number of difficult technical issues, including e-commerce, activity-based jurisdiction, consumer contracts, employment contracts, intellectual property, relationship with other instruments and bilateralization.¹¹³ In this battle-of-the-sexes game, neither player could persuade the other to alter its position as the USA could not circumvent its constitution, and the EU was happy with the outcome of the Brussels rules and did not prefer to change.¹¹⁴ The alternative was unsuccessful, and the battle-of-the-sexes game finally resulted in the negotiation failure.

However, although the original proposal of a comprehensive convention failed, another alternative was adopted. On the basis of the disagreements and consensus

106 Summary of the Outcome of the Discussion in Commission II of the First Part of the Diplomatic Conference 6–20 June 2001 Interim Text.

107 See, in particular, Arts 6 and 10 of the 1999 Preliminary Draft Convention. On the relationship and similarity between the Draft Convention and the Brussels Convention, see J Regan, 'Recognition and Enforcement of Foreign Judgments—A Second Attempt in the Hague?' (2015) 14 Richmond J Global L Business 63, 68.

108 See analysis by L Silberman, 'Comparative Jurisdiction in the International Context: Will the Proposed Hague Judgements Convention be Stalled' (2002) DePaul L Rev 319, 328–331; G-P Calliess, 'Value-Added Norms, Local Litigation, and Global Enforcement: Why the Brussels-Philosophy failed in the Hague' (2004) 5 German L J 1489; WE O'Brian Jr, 'The Hague Convention on Jurisdiction and Judgments: The Way Forward' (2003) 66 Modern L Rev 491, 493–498.

109 Von Mehren (n 101) 196; Silberman (n 108) 330; A Feldman, 'Rethinking Review of Foreign Court Jurisdiction in Light of the Hague Judgments Negotiations' (2014) 89 New York Univ L Rev 2190, 2192; RA Brand, 'Tort Jurisdiction in a Multilateral Convention' (1998) 24 Brook J Int'l L 125, 154–55.

110 US Constitution (Amendment XIV), Ch 1. *International Shoe Co v Washington*, 326 U.S. 310, 316 (1945).

111 Nygh and Pocar (n 103) 7, Art 10(1); 2001 Interim Text, Art 10(1).

112 Feldman (n 109) 2203; Silberman (n 108) 330; RA Brand, 'Due Process, Jurisdiction and a Hague Judgments Convention' (1999) Univ Pittsburgh L Rev 661, 661–706. There was no agreement to the proposed activity-based jurisdiction in Art 10(2) of the 2001 Interim Text.

113 'Some reflections on the present state of negotiations on the judgments project in the context of the future work programme of the Conference' (Prel Doc No 16 of February 2002), 5–8; Beaumont (n 101) 133.

114 Regan (n 43) 70; Beaumont (n 101) 132.

achieved in the first stage of negotiation, the working group proposed a smaller convention built on the consensus and common practice on the exclusive choice of court agreements in business-to-business cases.¹¹⁵ This alternative reflects the common interests of negotiators, and cooperation within the much narrower scope was achieved.¹¹⁶

The Hague Judgment Project example shows that, in practice, most multilateral negotiations on judicial cooperation would be a battle-of-the-sexes game, reflecting the common interest to cooperate and the different preferences on how to cooperate. Settling the different preferences and attempts is usually difficult to conclude that a multilateral international convention may end up in a negotiation failure. On the contrary, bilateral or mini-lateral negotiation between countries with close inter-connections and similar legal culture may be a coordination game, which has bigger chances of success. Finally, the only means to achieve an agreement that may work successfully in a voluntary opt-in system is through continuous negotiation based on consensus. Attempting to resolve negotiation difficulty through 'power' cannot produce a common good to attract a global support. For example, the majoritarian system based on vote in the early stage of the Hague Judgment Project was one of the reasons causing the negotiation failure.

(iii) *Enhance cooperation in the battle-of-the-sexes game*

However, it is not suggested that multilateral international negotiation does not work. The key to success is to shift conflicting interests to cooperation interests, which could be done through the following three means: improving communication, increasing cooperation interests and lowering cooperation costs. First, communication is most efficiently improved through a reputable institute, which could identify the main areas of conflicts; clarify different types of conflicts, ie conflicts in form, in function, in substance or in principle; exchange information to improve understanding and propose measures to mitigate conflicts. Consensus may be easier to achieve with the involvement of an institute that includes a treaty-negotiation project into its formal agenda rather than leaving states to negotiate at *ad hoc* basis. The HCCH has taken this role in most judicial cooperation negotiations. Although the Hague Judgment Project example proves negotiation difficult, this project does not fail and indeed has made progress. Besides replacing the full convention with a Choice of Court Convention, the HCCH decided to resume the whole project in 2012.¹¹⁷ Recognizing the reason for the partial failure of the original project, the resumed project proposes a new 'alternative' to seek settlement for the battle-of-the-sexes game. The new draft takes the form of a 'single convention', in that it only harmonizes rules

115 See the Report of three meetings (Prel Doc No 20 of 2002; Prel. Doc No 21 of 2003; Prel Doc No 22 of 2003) and preliminary result of the working group (Prel Doc No 8 of 2003), all available at <<https://www.hcch.net/en/instruments/conventions/specialised-sections/choice-of-court>> accessed 4 July 2018. Regan (n 43) 70–71. The whole project was resumed in 2012.

116 See the Hague Convention of 2005 on the Choice of Court Agreements. See, in general, Beaumont (n 101).

117 HCCH, 'Review of the Activities of the Conference in Regard to the Convention on Choice of Court Agreements', Prel Doc No 12 of 2011; Conclusions and Recommendations adopted by the Council, paras 16–19, <<https://assets.hcch.net/docs/8c32ee93-e150-4575-aad1-88ea8787f872.pdf>>.

on enforcing foreign judgments without unifying the jurisdiction rules of the original court. The only jurisdiction-related rules in the drafted new convention are ‘indirect’, which only enable the requested court to conduct a jurisdictional ‘filter’ when considering whether a foreign judgment should be recognized. Article 5(1) of the draft includes 13 alternative permissive jurisdiction grounds for the enforcement purposes;¹¹⁸ each makes a judgment eligible for recognition. Judgments falling out of these grounds may also be recognized pursuant to the domestic laws of each contracting state. Furthermore, some of these grounds are flexibly drafted to accommodate the different legal cultures of the EU and the USA. For instance, Article 5(1)(g) makes a judgment on contract obligations eligible for recognition if ‘it was given by a court of the State in which performance of that obligation took place, or should have taken place, in accordance with (i) the agreement of the parties, or (ii) the law applicable to the contract, in the absence of an agreed place of performance, unless the activities of the defendant in relation to the transaction clearly did not constitute a purposeful and substantial connection to that state’. It merges the wording of Article 7(1) of the Brussels I Recast and the language of US judgments interpreting the due process doctrine¹¹⁹ and the ‘real and substantial connection’ requests in Canada.¹²⁰ The ‘indirect jurisdiction’ design may circumvent the US constitutional restriction as the US Constitution does not set out clear principles to regulate the enforcement of foreign judgments.¹²¹ Even if the US Supreme Court eventually clarifies this issue by applying the same due process doctrine to the jurisdiction filter, the non-exclusive nature of the convention and the adoption of the US language may reduce the risk of the potential lack of compliance with the US system. The alternative has helped good progress of this project and led to a treaty conclusion.

Secondly, negotiation may less likely fall apart if parties have very strong interests to cooperate.¹²² In the battle-of-the sexes game, if the couple seriously wish to go out together and this desire oversees their different preferences, then they would be more willing to compromise to avoid negotiation failure. An example is the negotiation between EU Member States on EU judicial cooperation conventions and regulations. Prior to the negotiation between the original six EU Member States on the Brussels Convention on jurisdiction and recognition and the enforcement of judgments,¹²³ the domestic laws in these countries varied largely, and the multiple bilateral judicial cooperation treaties between these states also showed great diversity.¹²⁴ However, the background of the negotiation was to achieve the true internal market

118 Art 5(1) of the Hague Judgment Convention 2019.

119 *International Shoe Co v Washington*, 326 US 310, 316–317 (1945). See ‘Third Meeting of the Special Commission on the Recognition and Enforcement of Foreign Judgments 13–17 November 2017’, <<https://assets.hcch.net/docs/94caa6bc-ca61-45ce-8ddb-8f724174d1b1.pdf>>, para 7–16.

120 *Moran v Pyle National (Canada) Ltd*, [1975] 1 SCR 393. ‘Third Meeting’, *ibid* paras 17–27.

121 Feldman (n 109) 2193; HG Maier, ‘A Hague Conference Judgments Convention and United States Courts’ (1998) 61 *Alb L Rev* 1207, 1225.

122 Cooperative game exists where an external institute exists to facilitate negotiation or enforce the cooperative behaviour. Shared objectives and common interests exist between players to form coalition to achieve collective payoffs. Hirsch (n 39) 80.

123 Belgium, Germany, France, Italy, Luxembourg and Netherlands.

124 P Jenard, ‘Report on jurisdiction and the enforcement of judgments in interpretation by the Court of Justice’ (‘Jenard Report’), [1979] OJ C 59/1, 3–7.

of the European Economic Community pursuant to Article 220 of the Treaty of Rome.¹²⁵ Against this grander aim, states were more willing to make a compromise to achieve cooperation than to accept negotiation failure, and the negotiation process was more strongly facilitated and promoted through the committee, leading to the very successful Brussels Convention.¹²⁶ Although the EU experience can hardly be mirrored in the international context, it shows the importance to enhance the co-operation interests in negotiation. The strong political will to cooperate would encourage individual states to trade off non-crucial interests or to be more creative to achieve cooperation.

The third method is to reduce conflicts through granting greater leeway, narrowing the scope and lowering the threshold of a treaty. In the battle-of-the sexes game, the couple may not be able to persuade each other to give up their favourite activities but could agree that they go out together, and each pursues their own preference for a shorter time. Although the cooperation is achieved to a smaller extent, the cost of compromise is also small, and the Hague Judgment Project is a perfect example. The 2005 Choice of Court Convention narrows down the scope of judicial cooperation to only cover judgments made pursuant to the exclusive choice of court agreements, and it has been successful.¹²⁷ The most recent development of the resumed Judgment Convention no longer harmonizes direct jurisdiction rules and no longer intends to be 'exclusive', which allows contracting states to rely on their domestic laws to enforce judgments illegible to enforce under the convention.¹²⁸ Reduced quality, nevertheless, is practical to reduce states' obligations and mitigate the loss that states may suffer when their preferences are not fully met. It could help achieve cooperation.

B. Signing and Ratification of Judicial Cooperation Treaties: First-Mover Disadvantages

After an international convention is successfully adopted, it is open for signature and ratification. The state government negotiating the treaty and satisfied with its terms would have the power to sign it, and a signed treaty will go through a domestic ratification process to formally bind the signing state. However, many states are cautious

125 Jenard Report, *ibid*, 1.

126 Most commentators agree that the Brussels Convention and its successors, Brussels I Regulation, Brussels I Recast and the Lugano Convention and the Lugano II are successful. See, eg, European Commission, 'Proposal for a Regulation on jurisdiction and the recognition and enforcement of judgments in civil and commercial matters (Recast)', COM(2010) 748 final COD 2010/0383, 14 December 2010, 3; European Commission, 'Report from the Commission on the application of Council Regulation (EC) No 44/2001 on jurisdiction and the recognition and enforcement of judgments in civil and commercial matters', COM (2009) 174 final, 3; B Hess, 'The Brussels I Regulation: Recent Case Law of the Court of Justice and The Commission's Proposed Recast' (2012) 49 *Common Market L Rev* 1075, 1100; P Beaumont and others, 'Cross-border Litigation in Europe: Some Theoretical Issues and Some Practical Challenges', in P Beaumont and others (eds), *Cross-Border Litigation in Europe* (Bloomsbury 2017) 819–832; R Goode and others, *Transnational Commercial Law – Primary Materials* (OUP 2007) 793; FK Juenger, 'Some Comments on European Procedural Harmonization' (1997) 45 *Am J Comp L* 931, 934. The similar negotiation model occurred for the subsequent negotiations of EU private international law conventions and regulations, most are successful.

127 See above (n 115) and (n 116) and accompanying text.

128 See above (n 118–121) and accompanying text.

to take action to be bound by a treaty. The decision of a state to signal and ratify a treaty depends not only on its national interest but also on the action of other countries. The first few countries that ratify a convention may face the first-mover disadvantages, including risk, uncertainty and free ride of late-movers.¹²⁹

First, an early entry always means the uncertainty of the functioning of the new system.¹³⁰ The legal consequence and economic impact of the new scheme are not yet proven in practice and is still on test. A higher risk of failure exists at the early stage, and not many countries would like to take the risk to try the new system before it proves to work effectively.

Secondly, the first country that signs an international convention is also facing the uncertainty of the identity of its future partners. Not all states have equal interests to cooperate with one another. States have more frequent interactions with countries in their pack but not others; they trust the legal system and understand the legal culture of one another in their club more than outsiders. Being the first to join a treaty, however, cannot guarantee that their close trade partners will also become the contracting states. The first country cannot predict the exact consequences and benefits of being a contracting state of a convention. Some mechanisms may be adopted to address this problem, including restricted accession subject to explicit acceptance and unrestricted accession subject to 'veto'.¹³¹ These mechanisms, however, are rigid in that they are not working in a state-to-state basis. The 2019 Hague Judgment Convention has adopted a more flexible bilateralization mechanism in Article 29, which grants both existing and acceding contracting states the right of objection to establishing reciprocal relationship with a particular state. Existing contracting states could initiate this right within 12 months after receiving the notification of the accession of a new member,¹³² and acceding states may notify the depositary the objection to establishing relationship with any existing contracting states on the deposit of its instrument.¹³³ The bilateralism clause can be utilized easily by declaration.¹³⁴ This mechanism could effectively overcome the above obstacle and could maximize the acceptance of the Convention.¹³⁵

Thirdly, international judicial cooperation conventions usually allow contracting states to make reservations. Those states making early reservations suffer disadvantages by signalling non-cooperation or the willingness to depart from the final text of the negotiation, which causes considerable reputational costs and the disadvantages for disclosing positions too early without practically testing the real needs and responses from other states.¹³⁶

129 MB Lieberman and DB Montgomery, 'First-Mover Advantages' (1988) 9 *Strategic Manag J* 41, 47.

130 Lieberman and Montgomery (n 135) 47; B Wernerfelt, and A Karnani, 'Competitive Strategy under Uncertainty' (1987) 8 *Strategic Manag J* 187.

131 PA Nielsen, 'The Hague 2019 Judgments Convention - from Failure to Success?' (2020) *J Private Int L* (forthcoming) 38–40.

132 Art 29(2) of the Hague Judgment Convention 2019.

133 Art 29(3) of the Hague Judgment Convention 2019.

134 Art 29(1) of the Hague Judgment Convention 2019.

135 Draft Explanatory Report September 2019 to the Hague Judgment Convention 2019, 410.

136 LR Helfer, 'Not Fully Committed? Reservations, Risk, and Treaty Design' (2006) 31 *Yale J Int L* 367, 369–370.

In contrast, the late-movers will only join an international treaty if it works well and proves successful in promoting trade or non-trade benefits. The late-moving countries can avoid the waste of resources and the negative consequences of trying an unproved international legal scheme, and they leave the first-movers to test the scheme for them. They have information on the reaction and practice of the existing reservations of other states and could make decisions on a more objective and pragmatic way.¹³⁷ Therefore, although many countries understand the long-term benefits of being part of a cooperative international scheme, they are reluctant to be the first few to join. The true benefits of an international convention cannot be fully explored until it is received by several countries in the world.

Accordingly, a successful convention usually has a relatively small number of member states in the beginning, but more states will join as time goes by. For instance, the very successful New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards 1958 was only ratified by six countries in the first two years (1958–1960), and the membership gradually expanded to cover 159 countries by 2019.¹³⁸ The first-mover disadvantages also explain why bilateral or regional cooperation treaties may have a higher chance of being successful. The Member States of bilateral or regional treaties are usually pre-determined at the initiation of negotiation, and the participants usually have given the commitment to implement the final result at the beginning. These instruments usually enter into force at the same time in all member states,¹³⁹ eliminating the dilemma of the first-mover disadvantages.

However, it does not suggest that the first-mover disadvantages will make bilateral treaties the best choice in terms of ratification. In most countries, ratification requires the approval of the legislature, but the difficulty of approval varies. For instance, the UK only needs no-objection from the parliament for 21 sitting days;¹⁴⁰ the tacit approval also exists in the Netherlands;¹⁴¹ whilst in the USA, treaty ratification requires over 2/3 of the senate votes.¹⁴² Thus, the ratification of a treaty in the USA is expensive and difficult.¹⁴³ The difficulty in ratifying a treaty in the USA also determines that entering into many bilateral treaties is not economic for the USA, each requiring ratification. It is in the best interest of the USA to negotiate a multilateral treaty and ratify one treaty that could serve the international interests of the USA and cover most trade partners in one shot.

137 Helfer, *ibid* 370.

138 <http://www.uncitral.org/uncitral/en/uncitral_texts/arbitration/NYConvention_status.html> accessed 20 March 2019).

139 For instance, a bilateral treaty will usually set up a fixed date or event for it to enter into force. In the EU, all private international law regulations become legally binding in member states without the need for implementation into domestic laws and enter into force in all member states on the same date. Art 297 TFEU.

140 For the detailed procedure, see Part 2 of the Constitutional Reform and Governance Act 2010.

141 Art 61 and 62 of the Dutch Constitution (1983 revision). See also P van Duk and BG Tahzib, 'Parliamentary Participation in the Treaty Making Process of the Netherlands' (1991) 67 *Chi-Kent L Rev* 413, 426.

142 MJ Glennon, 'The Senate Role in Treaty Ratification' (1983) 77 *American J Int L* 257.

143 For many other countries, the ratification of a signed treaty requires legislature approval but usually is not difficult. See SA Riesenfeld and FM Abbott, 'Participation in the Making and Operation of Treaties' (1991) 67 *Chi-Kent L Rev* 293.

Fortunately, some states are always willing to be first-movers. Regardless of first-mover disadvantages, states that ratify early may receive other benefits. A state that has played a major role in negotiating an international treaty would have the interest to be the first-mover to demonstrate its confidence on this new system. This state also shows its respect to the work of the organizing institute and the work of other states involved in a negotiation. This gesture brings it an international reputation. For instance, although the USA has not yet ratified the Hague Choice of Court Convention due to the ratification difficulty, the USA is the second to sign this convention, which is the result of the US proposal in 1992.¹⁴⁴ In 2017, two years after the commencement of the Belt and Road Initiative, China has signed the Hague Choice of Court Convention, showing its interest to engage in international cooperation and play the leading role for other countries in Eurasia.¹⁴⁵ Other countries may prefer to be the early-movers because the new treaty is so close to their domestic laws, and they do not have much doubt as to how this new system would perform in practice, such as the EU, which is the third to sign the Hague Choice of Court Convention and the second to ratify this Convention.¹⁴⁶ Other countries also have a strong interest that may be boosted by a new treaty. In contrast, the small first-mover disadvantages are acceptable or negligible, such as Singapore, which has the incentive to become an Asian dispute resolution centre,¹⁴⁷ and it is the first Asian country to sign and ratify the Hague Choice of Court Convention.¹⁴⁸

Furthermore, international judicial cooperation treaties provide reciprocal rights and obligations. A late-mover may only benefit from the cost of testing the new system but no other substantive benefits. The mutual assistance will only be provided to other contracting states that have already ratified the convention, which is fundamentally different from public goods treaties, such as treaties tackling climate change, where late-movers may receive substantive benefits, ie environment protection, without commitment to cut the CO₂ emission.¹⁴⁹ Therefore, no very strong incentive discourages a state from ratifying a judicial cooperation treaty. Furthermore, the success of a treaty largely depends on the needs of countries and the quality of drafting instead of how long it takes for states to participate eventually.

144 The USA signed the Hague Choice of Court Convention on 19 January 2009.

145 China signed the Convention on 12 September 2017, which may have connections with the Belt and Road Initiative of China, which aimed at fostering peace, development, cooperation and mutual benefit amongst 69 Asian, European and African countries. SPC, 'Several Opinion on Providing Judicial Services and Safeguards for the Construction of the 'Belt and Road' by People's Courts' (SPC Belt and Road Opinions), [2015] Fa Fa No 9.

146 The EU signed the Convention on 1 April 2009 and ratified it on 11 June 2015. The content and functioning of the Hague Convention is similar to Art 25 of the Brussels I Recast (Art 23 of the Brussels I Regulation and Art 17 of the Brussels Convention), which has been in force between the EU member states for over four decades and proved effective.

147 See L Reed, N Lingard and R Kirkness, 'Singapore's Growing Arbitration Ambitions', *International Financial Law Rev* 1 October 2015, <<http://www.iflr.com/Article/3493551/Singapores-growing-arbitration-ambitions.html>> accessed 11 July 2018.

148 Singapore signed the Convention on 25 March 2015 and ratified on 2 June 2016.

149 J Peel, 'Divergent Responses to Climate Change in a Multipolar World' (2013) 107 *Am Soc'y Int'l L Proc* 76; G Parchomovsky and E Stavang, 'The Green Option' (2015) 99 *Minnesota L Rev* 967, 990.

C. Compliance and Enforcement of International Judicial Cooperation Treaties

The final stage of international treaty-making is enforcement/compliance, which has been argued by some commentators as one of the most difficult and intractable problems of international law.¹⁵⁰ However, compliance is usually not a serious problem for judicial cooperation treaties. A state will only decide to breach a ratified treaty if the benefit exceeds costs. Being a member of a judicial cooperation treaty signals the obligation to cooperate and brings the benefit of reduced trade barriers. If a country breaches its treaty obligations whilst being a member, it only causes uncertainty, which cannot attract businesses and litigants or earn any competitive advantage. The Stag Hunt analysis also shows that mutual cooperation would bring the optimal outcome and that unilateral defect would reduce payoffs for the defector.¹⁵¹

Therefore, if non-compliance indeed occurs, it is mainly unintentional due to the insufficient knowledge and capacity to interpret and implement the law, sometimes caused by the ambiguity of the law itself.¹⁵² These problems could be effectively managed by proactive compliance management, which requires a management institute, such as the HCCH or the European Commission, to provide assistance and guidance, scrutinize and prod the compliance of a treaty.¹⁵³ Effective measures include publishing interpretation guidance, publishing report and review, sharing information, providing training, generating and dissemination good practice, and raising public awareness.

A related problem is exiting international treaties. Although the compliance in international judicial cooperation treaties is generally good, states are still free to leave the international framework by choice. Most judicial cooperation treaties include a denunciation clause that allows a state to unilaterally and legally exit the treaty.¹⁵⁴

When would a state withdraw from a treaty? From the game theory perspective, withdrawal may occur in two occasions. The first is that a state would receive higher

150 BB Ferencz, *Enforcing International Law—A Way to World Peace* (1983) 1–2; T Yang, 'International Treaty Enforcement as a Public Good' (2006) 27 *Mich J Int'l L* 1131, 1132.

151 See discussion in section 3 above.

152 See European Parliament, 'Tools for Ensuring Implementation and Application of EU Law and Evaluation of their Effectiveness' (2013), <[http://www.europarl.europa.eu/RegData/etudes/etudes/join/2013/493014/IPOL-JURI_ET\(2013\)493014_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/etudes/join/2013/493014/IPOL-JURI_ET(2013)493014_EN.pdf)> accessed 19 June 2018, 17; Commission Communication, 'A Europe of results—Applying Community Law', COM (2007) 502 final; Commission Communication 'Implementing European Community Environmental Law', COM (2008) 773/4 final.

153 Yang (n 150) 1141. Compliance management is more efficient than post ante coercive measures to maximise treaty compliance. Yang, 1142; J Tallberg, 'Paths to Compliance: Enforcement, Management, and the European Union' (2002) 56 *Int'l Org* 609.

154 Such clauses can be found in most Hague Conference on Private International Law Conventions. See, eg, Art 32 of the Hague Choice of Court Convention 2005; Art 64 of the Hague Convention on the International Recovery of Child Support and other Forms of Family Maintenance 2007; Art 58 of the Hague Convention on the International Protection of Adults 2000; Art 62 of the Hague Child Abduction Convention. A denunciation clause also exists in the New York Convention, Art XIII. Vienna convention on the Law of Treaties 1969, Arts 42–45, 54–56, 65–68, 70–71. LR Helfer (n 23).

payoffs by withdrawal than cooperation, whilst other states remain cooperative,¹⁵⁵ which is explained by the Prisoners' Dilemma.¹⁵⁶ In other words, if all other states bound by the treaty are obliged to cooperate, the only state that defects may take a free ride by receiving higher payoffs. It may occur in public goods treaties, such as environmental treaties, where the defect state may still benefit from the collective goods whilst at the same time enjoy the lowered cost to its own industry.¹⁵⁷ In the international judicial cooperation field, however, such prisoners' dilemma may not exist. All international judicial cooperation treaties are based on reciprocity, and judicial assistance is only provided with the reciprocal obligations of other treaty members. Therefore, if a state leaves a judicial cooperation treaty, then it would lose the assistance from other member states established by the treaty. Conversely, a state that leaves a well-functioned judicial cooperation treaty may be worse off because it would lose certainty that this treaty has provided for its contracting parties. Its judgments may be more difficult to enforce, and insufficient assistance may emerge to smooth its international proceedings. Other contracting states, at the same time, may not mind too much of the decision of one state to leave because it may only create limited problems and uncertainty for them, unless they have significant trade relationships with the withdrawal state and have a strong interest to receive judicial assistance from the latter.

Secondly, if a state is unsatisfied of the payoffs provided by the cooperation, it may decide to exit, which is shown by the Stag Hunt game.¹⁵⁸ Players A and B cooperate to hunt a stag and share the stag between them. The problem of distribution, however, may occur. If Player A is a more skilful hunter than Player B, then it may want a larger share. If the term for cooperation is for the parties to have an equal share, then Player A may feel the distribution is unfair. Although both players have received a higher payoff than working alone, State A may pay attention to relative gains when the game repeats. Player A would wish to renegotiate the term, and if not successful, it may eventually decide to exit cooperation.¹⁵⁹ However, this situation is also rare in judicial cooperation. First, this decision is based on relative gain instead of absolute gain. In terms of absolute gain, State A would gain more by staying instead of leaving, which is what a rational state should do. Secondly, judicial cooperation treaties assist cross-border transactions by smoothing the redress process. They work as risk-control and cost-reduction, instead of profit-generation, instruments. The unfair distribution of benefits in judicial cooperation can hardly be a big problem nor cause great diversity between states. Some contracting states may be the home of more international defendants or assets and are providing more assistance

155 Helfer (n 23) 1644; JM Orbell and others, 'Do Cooperators Exit More Readily than Defectors?' (1984) 78 *Am Pol Sci Rev* 147.

156 See section 3 above for detailed discussion.

157 Helfer (n 23) 1631–1632; N Gunningham, 'Enforcing Environmental Regulation' (2011) 23 *J Environ L* 169; JK Setear, 'Ozone, Iteration, and International Law' (1999) 40 *Va J Int'l L* 193, 200; P Sands, 'Enforcing Environmental Security: the Challenges of Compliance with International Obligations' (1993) 46 *J Int Affairs* 367.

158 See section 3 above.

159 This may occur in trade cooperation. Although free trade would provide benefits to all states, some states may concern trade deficit with a particular partner state and wish to exit cooperation although it may receive reduced payoffs upon exit.

to other states. However, the costs in offering judicial cooperation are far less obvious than other fields and these states also save judicial resources and avoid inconvenient trials. Most states will not mind the relative loss in judicial cooperation, and the distribution problems are usually considerably small to raise any concerns.

6. CONCLUSION

Game theory suggests that states are not advised to update their domestic laws to offer judicial cooperation to other countries unilaterally. The unilateral approach cannot bring the cooperative state the benefits sought but leave a state at the risk of losing certainty that it could otherwise have. Although the state may adopt reciprocity to encourage cooperation from other states, reciprocity is not a strong enough tool to break the stag hunt dilemma and lead to cooperation. The only effective means is an international treaty instrument, which tackles the lack of communication and the lack of obligations in the Stag Hunt game. International treaties may suffer from the first-mover disadvantage at the ratification stage, which is not a fundamental barrier and may disappear over time. Once an international judicial cooperation treaty is adopted, the intention to breach or exit would be rare, and the relatively small compliance problems could be effectively managed by institutional compliance measures, which makes a multilateral treaty an effective tool to improve judicial cooperation.

The only difficulty of the multilateral treaty approach is the battle-of-the-sexes game at the negotiation stage, which makes negotiation difficult. Such difficulty may render bilateral more practical in the short term. However, if a state opts for globalization instead of being satisfied with having a smaller range of selected trade partners, a large number of bilateral treaties may lead to the conflict of treaties and be ineffective in terms of the cost of negotiation and ratification. The battle-of-the-sexes difficulty can be mitigated through the facilitation of a reputable institute, increasing cooperation interests and needs and reducing cooperation standards. These methods may result in compromise, reducing the quality and scope of cooperation. However, even the cooperation at a lower level may be better than non-cooperation. The conclusion of the Hague Judgment Project suggests that the multilateral treaty approach would still be the most effective method going forward. Ratifying both the Hague Choice of Court Convention and the 2019 Hague Judgment Convention would be the best way for a state to fully engage in, and benefit from, international judicial cooperation.