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BEHAVIORAL ECONOMICS IN INTERNATIONAL INVESTMENT LAW: BOUNDED RATIONALITY AND THE CHOICE OF RESERVATION LIST MODALITY

*Tae Jung Park**

The RCEP (“Regional Comprehensive Economic Partnership”) is viewed as an alternative to the TPP (“Trans-Pacific Partnership”) agreement, which included the United States but excluded China. The RCEP was launched in November 2012, but failed to conclude in 2015, the original agreed-upon deadline. The investment chapter working group contributed to this delay. For the last four years, the member states have failed to agree on any of the terms in the investment agreement, instead debating over the modality of the reservation list of the main text. This reservation list is structured as either a positive or a negative list, however the two frameworks should yield the same legal consequences in principle. So why do member states have different preferences regarding the modality of the reservation list? This article employs behavioral economics to explain why member countries have different preferences regarding the framework.

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I. INTRODUCTION

The Regional Comprehensive Economic Partnership (“RCEP”)¹ is a proposed free trade agreement (“FTA”) between the ten member states of the Association of Southeast Asian Nations (“ASEAN”) (Brunei, Burma (Myanmar), Cambodia, Indonesia, Laos, Malaysia, the Philippines, Singapore, Thailand, and Vietnam) and the six states with which ASEAN has existing FTA’s (Australia, China, India, Japan, South Korea, and New Zealand). The RCEP negotiations were formally launched in November 2012 at the ASEAN Summit in Cambodia, and the 10th round of negotiations ended in South Korea around early October 2015.

RCEP members originally agreed to conclude all the negotiations by the end of 2015, but they failed to do so. As of May 2017, they are still in the process of negotiating. Among the many working groups involved in the negotiations, the investment working group has showed the slowest progress; its members simply debating over the framework that should be chosen for listing the reservations of the investment treaty. That is, for the last four years, they have done nothing but debate the framework of the reservation list² and have agreed on nothing in text.

This raises the question of why host nations (i.e. countries inviting and receiving foreign investment) pay so much attention to the framework of the reservation list? They probably do so because the reservation list is the most realistic and practical instrument that a

¹ Regional Comprehensive Economic Partnership, DEPARTMENT OF FOREIGN AFFAIRS AND TRADE (2017), <http://dfat.gov.au/trade/agreements/rcep/pages/regional-comprehensive-economic-partnership.aspx> (last visited May 23, 2017).

² There are two approaches for preparing a reservation list. One is the negative list approach (“top-down” approach), which lists exceptions to the general obligation of the main text of a treaty; the other is the positive list approach (“bottom-up” approach or “GATS” approach), which lists the specific sectors to which the general obligation applies. An advantage of the positive list approach is that it gives a greater level of discretion over what to include and when. Politically sensitive industries can be kept outside the scope of the agreement. The negative list approach can automatically include new types of investment, while the positive list approach cannot. *See* Preserving flexibility in IIA’s: The Use of Reservation, UNCTAD series on International Investment Policies for Development, 2006.

host nation can use to carve out regulatory power, given their tendency for less developed negotiation skills and unequal bargaining power. The host nations are usually developing nations which do not have a legal department sophisticated enough to fully analyze and examine the investment treaties. Moreover, they lack training programs and human resources to competently negotiate the treaties.³

The beauty of the International Investment Agreement (“IIA”) lies in the way it balances the regulatory power of host nations with investor protection. The host nations do their utmost to carve out maximum domestic sovereignty, and home nations do their best to protect their investors.⁴

³ Zeng Huaqun, *Balance, Sustainable Development, and Integration: Innovative Path for BIT Practice*, 17 J. INT’L ECON. L, 299, 302-304 (2014) (explains that BIT gives home states a negotiating advantage since the party who drafts the model controls the negotiation. On the contrary, most of the host nations are suffering from unequal bargaining power and low negotiation skills in a negotiation because they have not prepared model BITs. Therefore, their position is merely accepting or slightly modifying to a model BIT prepared by home states’ negotiating partner. Only a few host states have prepared their model BITs and these are heavily influenced by the model BIT of home nations); *see also* M. Sornarajah, *The International Law on Foreign Investment*, 207-208 (Cambridge University Press, 2004)(the book points out that it is hard to expect host nations to have a legal department sophisticated enough to understand and analyze the nuances in the variations of the terms used in IIA).

⁴ *See e.g.* Suzanne A. Spears, *The Quest for Policy Space in a New Generation of International Investment Agreements* 13 J. INT’L ECON. L, 1037, 1071 (2010)(Argues that general exceptions clauses and new preambular language provide flexibility. The article classifies three types of general exceptions clauses found in IIA’s. The new preambular languages could include some non-investment policy objectives such as labor or environment protection.); Zeng Huaqun, *Balance, Sustainable Development, and Integration: Innovative Path for BIT Practice*, 17 J. INT’L ECON. L, 299, 324 (2014) (Classifies three types of goals- 1) balance 2) sustainable development 3) integration- that IIA’s should pursue. The article introduces the idea that the Investment Policy Framework for Sustainable Development (hereinafter “IPFSD”) emphasizes the insertion of “special and differential treatment (SDT)”. It pointed out that SDT provisions could be an option where a negotiating party to an IIA has significantly different levels of development, especially when one of the parties is a less developed country); Joshua Boone, *How Countries Can Adapt Current Bilateral Investment Treaties to Provide Benefits to Their Domestic Economies* 187 GLOBAL BUS. L. REV.187, 196-7 (2011) (explains the importance of modifying the Performance-Based Requirement provisions. The article notes that Performance-based requirements such as technology transfers or limitations to technology licensing

However, there has been much criticism that many IIA's which are being ratified are biased towards investor protection. The claim is that these ratified IIA's are being drafted in favor of protecting investors rather than securing policy spaces in the host nations. This is due to home nations negotiating based on their model bilateral investment treaties ("BITs"), aiming for a high level of market opening and liberalization.⁵ They try their best to persuade host nations not to deviate from any terms in the Model BIT, and ask them to carve out as little as possible. The host nations lack the bargaining power and negotiation skills necessary to modify the Model BIT and, thus, accept most of the terms therein. It is well

fees are probably the most powerful regulation methods for host nations. These help to establish new markets, increase efficiency and production within new domestic markets because they allow for the host nation to use, acquire, produce and adapt the foreign technology. All these can be done by not prohibiting performance based requirements through modifying IIA); Markus Wagner, *Regulatory Space in International Trade Law and International Investment Law* 36 U. PA. J. INT'L L. 3, 35-53 (2014) (The article compares the WTO dispute settlement system in cases concerning human, animal or plant life, or health protection with international investment regimes. The article suggests that international trade and investment law can offer insights for one another. While international trade has been more adept at incorporating health or environmental concerns, changes in IIA's should close the gap. Particularly, the article argues that such policy space over health and environmental issues could be done through a provision of expropriation in IIA).

⁵ Lei Cai, *Where does China Stand: The Evolving National Treatment Standard in BITs?* 13 J. WORLD INVESTMENT & TRADE, 373 384 (2012)(addresses how host nations merely accept the terms in the Model BITs due to their low bargaining power. "Based on Guzman's "prisoner's dilemma" theory, the host nations compete with each other to attract foreign investment. As a result, they are frequently at a disadvantaged position with poor bargaining power in the negotiation process and thereby compelled to accept the model BIT proposed by the home states"); Amit M. Sachdeva, *International Investment: A Developing Country Perspective* 8 J. WORLD INVESTMENT & TRADE 533, 547 (2007)(Argues that IIA's result in a substantial reduction in regulatory power in host nations. The article points out that well regulated national policy is what they actually needed. Neo liberalism policy through IIA leads a reduction of infant indigenous industry and all of these issues are difficult to overcome by host nations because of their low bargaining power in IIA negotiation).

known that most ratified IIA's are extremely similar in appearance, and almost identical to the terms in the model BIT.⁶

On this basis, host nations believe that the reservation list framework is a practical and realistic solution to carve out and protect their regulatory powers. Host nations devote meticulous care to negotiating a reservation list,⁷ rather than the main text. In particular, their concerns focus on the framework or modality of the reservation list.

The framework is either a positive,⁸ or negative list.⁹ A positive list inserts domestic measures that conform to the main obligations of the treaty, while a negative list inserts non-conforming measures (i.e. exceptions to the main text), with all other unlisted measures automatically following the obligations of the main text. In principle, these two frameworks should yield the same legal consequences.

⁶ Huaqun, *Supra* note 3 at 324 (explains that most BITs follow either the Draft International Convention on Investments Abroad or OECD 1967 Draft Convention on the Protection of Foreign Property. Because of the common origins, the terms used in BITs look remarkably similar across countries. This similarity is due to the 'innate' priority of home nations and also reflects the historically weak and passive positions of host nations as contracting parties in IIA's); see also Jason Webb Yackee, *Conceptual Difficulties in the Empirical Study of Bilateral Investment Treaties* 33 BROOKLYN J. INT'L. L. 405, 415-416 (2008) (explains that home nations have long been preoccupied with persuading host nations to provide certain treatments such as MFN, National Treatment, Fair and Equitable Treatment, which all yield a high level of liberalization).

⁷ IIA's consist of two parts: the main text and the reservation list. While the main text in the IIA's determine the overall obligations (and rights) of both parties, the reservation list includes either conforming measures to the obligation of the main text (positive list) or non-conforming measures (negative list).

⁸ A positive list approach means the positive listing of sectors, sub-sectors and individual modes of supply in which countries voluntarily undertake liberalization commitments. The selective nature of liberalization under this approach implies that the treaties' obligations apply only to the activities listed in a country's schedule and solely on the terms described therein.

⁹ Under the negative list, countries agree on a set of obligations in the main text and list all domestic measures for which such obligations do not apply. That is, the measures that do not appear in reservation lists are automatically under the effect of obligations in the main treaty text. Thus, this approach is most appropriate in countries aiming for a high degree of liberalization.

To address why this is so, this article employs a behavioral approach. This article seeks to answer the question of why negotiators have different preferences regarding the two frameworks. Fortunately, a few scholars have taken initial steps in determining the methodological foundations of behavioral international law and economics,¹⁰ and thus have examined how behavioral law and economics can be applied to international law.¹¹

Using the theoretical foundation of behavioral international law and economics, this article primarily argues that host nations strongly prefer a positive list over a negative list as they know that they have limited cognitive capacities to fully collect and analyze the existing domestic measures and determine which ones to carve out. Simply put, they know they are suffering from bounded rationality in

¹⁰ Anne van Aaken, *Behavioral International Law and Economics* 55 HARV. INT'L L. J. 421,421-481 (2014); Tomer Broude, *Behavioral International Law*, 163 U. PENN. L. REV. 1099, 1099-1056 (2015).

¹¹ In fact, the rational choice approach to international law has been widely accepted and the rational approach was recently applied to the field of international investment law. However, while the rational choice paradigm has been thoroughly challenged in the field of economics since the 1970's and has changed a significant part of economics, challenges to the rational choice paradigm have not been systematically explored in the field of international law. . The literature of international law never responded to this challenges of the rational choice and thus, there is no systematic analysis of international law using behavioral economics. For more references in applying rational choice to the field of international law. *See generally* Robert E. Scott & Paul Stephan, *The Limits of Leviathan: Contract Theory and the Enforcement of International law* (2006); Joel P. Trachtman, *The Economic Structure of International Law*(2008); Eric Posner & Alan O. Sykes, *Economic Foundations of International law*(2013), Andrew Guzman, *How International Law works: A Rational Choice Theory*(2008); For more reference in applying rational choice to the field of international investment law, *See* Anne van Aaken, *International Investment Law Between Commitment and Flexibility: A Contract Theory* 12 J. INT'L ECON. L. 507, 507 (2009) (argues that Contract theory could be utilized in IIA's. The author points out that Contract theory has been applied to international trade law, but investment law has not yet been applied to IIA's. IIA's may be regarded as a mechanism for overcoming commitment problems between investors and host nations for mutual and reciprocal benefits. Contract theory deals with the uncertainty problem and could solve this issue); For more references on the literature of behavioral economics, *See generally*, Nick Wilkinson & Matthias Klaes, *An Introduction to Behavioral Economics* (2012); Matthew Rabin, *Psychology and Economics*, 36 J. Econ. Lit. 11 (1998).

the drafting of the negative list.¹² This article does not seek to present a normative argument regarding the framework that should be used in BITs, it simply seeks to indicate why negotiating partners show different preferences regarding frameworks, which in theory, yield the same legal consequences. In addition, the article does not pinpoint the types of bounded rationality from which the host nations are suffering, it merely argues that the negotiators are experiencing trouble processing the limited information available to maximize their profits by drafting the reservation list under the negative list.

II. THEORETICAL FOUNDATIONS

A. Reservation Lists in IIA's

A positive approach means there is a positive listing of sectors, sub-sectors, and individual modes of supply in which countries voluntarily undertake liberalization commitments. The selective nature of liberalization under this approach implies that a treaty's obligations apply only to the activities listed in a country's schedule and solely to the terms described therein.

Alternatively, negotiating partners may utilize a negative list approach. In this case, countries agree on a set of obligations in the main text and list all domestic measures for which such obligations do not apply. That is, the measures that do not appear in reservation lists are automatically subject to the obligations in the main treaty text. Thus, this approach is most appropriate for countries aiming for a high degree of liberalization.

¹² Christine Jolls & Cass R. Sunstein, *Debiasing Through Law*, 35 J. LEGAL STUD. 199 (2006); (Bounded rationality, an idea first introduced by Herbert Simon, refers to the obvious fact that human cognitive abilities are not infinite. We have limited computational skills and seriously flawed memories. People can respond sensibly to these failings; thus it might be said that people sometimes respond rationally to their own cognitive limitations, minimizing the sum of decision costs and error costs. To deal with our limited memories we make lists; to deal with our limited brain power and time we use mental shortcuts and rules of thumb; but even with these remedies, and in some cases because of these remedies, human behavior differs in systematic ways from that predicted by the standard economic model of unbounded rationality. Even when the use of mental shortcuts is rational, it can produce predictable mistakes).

In summary, in a positive list schedule, a party sets out the sectors it has agreed will be covered by the relevant rules in the main text and if a sector is not stated in the list, it is not subject to those rules. In a negative list schedule, a party sets out those sectors or measures that are not subject to the relevant rules in the main text and if a sector; activity; or measure is not listed, then it is automatically covered (unless it has been excluded in the text itself). In theory, both approaches yield the same result in terms of liberalization.

1. *Positive List Approach*

This approach recognizes four “modes” of trading in services: across the border (e.g. the Internet); consumption abroad (e.g. tourism); establishing a commercial presence (foreign direct investment (“FDI”)); and temporary presence of a natural person to deliver a service. Governments can make different levels of commitment for each mode in relation to market access and national treatment rules.

Sector or sub-sector	Limitations on market access	Limitations on national treatment	Additional commitments
8. HEALTH-RELATED SERVICES			
Hospital Services (9311)	(1) None (2) None (3) Unbound (4) None (Registration and Certification)	(1)None (2)None (3)None (4)None ¹³	

Different entries under numbers 1 to 4 indicate the approach the government is taking to each of the four “modes of supply” for each service. When a country does not wish to limit or restrict market

¹³ For a detailed explanation of drafting a positive list, see <http://wtocentre.iift.ac.in/CBP/GENERAL%20PRINCIPLES%20&%20GUIDE%20LINES%20ON%20SCHEDULING%20SERVICES%20COMMITMENTS.pdf> (accessed May 23 2017).

access or national treatment in a sector or subsector in any of the four modes of supply, it uses the word “None”, which indicates that there are “no limitations.” So, for instance, in the chart above, a full commitment using “None” means the country cannot restrict access to its market of foreign suppliers who want to supply any aspect of hospital services (9311) through modes 1 and 2 by using any of the market access measures that are specifically prohibited. If a country decides to restrict market access through Mode 3, thereby protecting the hospital services market, the word “Unbound”, meaning no bound commitments, is used in the column to block FDI by foreign investors looking to establish a hospital business.

If a country wants to commit to a sector, but only under certain circumstances or in a particular way, it needs to clearly spell out the limitations that it wants to maintain. For instance, if a country wanted to open the market only with respect to the registration and certification of the hospital services, it could stipulate that limitation in a column. In that way, foreign investors with temporary stay authority would have an opportunity to work in the area of registration and certification in hospitals. As noted above, the obligations of the main text apply to the measures that are listed in the column. If the country decided not to list the hospital services area, then the government would have no obligations to comply with the main text with respect to hospital services.

2. *Negative List Approach*

Under the negative listing approach, the main features of the non-conforming measures must be specified in detail. These measures include the following elements: the economic sector in which the reservation is taken; the specific industry in which the reservation is taken; the activity covered by the reservation; the substantial or procedural obligation to which the reservation is taken (e.g. MFN or national treatment); and a description of the specific law, regulation, or other measure for which the reservation is taken.

The following is an example of a reservation list in the Korea-India Comprehensive Economic Partnership Agreement (“CEPA”).¹⁴

Sector	Manufacture of Chemical Products
Sub-Sector	Manufacture of Biological Products
Industry Classification	KSIC 24212 Manufacture of Biological Products
Type of Reservation	Performance Requirements (Article 10.5)
Reservation Measure	Pharmaceutical Affairs Act (Law No. 8552, February. 29, 2008), Article 42 Enforcement Regulations of the Pharmaceutical Affairs Act (Ordinance of the Ministry of Health and Welfare No. 71, October. 16, 2008), Article 21
Description	A person who manufactures blood products must procure raw blood materials from a blood management body in Korea. ¹⁵

The above example shows that Korea reserves the right not to comply with the investment treaty obligations regarding performance requirements with respect to Indian investors’ manufacturing chemical products in Korea. Because of this reservation, foreign manufacturers of blood products in Korea must procure raw blood materials from a blood management body in Korea, .

¹⁴ The Comprehensive Economic Partnership Agreement (the CEPA) is a free trade agreement between India and South Korea. CEPA was signed on August 7, 2009. The signing ceremony took place in Seoul and the Agreement was signed by the Indian Commerce Minister, Sharma, and South Korean Commerce Minister, Kim Jong-Hoon. The negotiations took three-and-a-half years, with the first session being held in February 2006. The agreement was passed in the South Korean Parliament on 6 November 2009. Available at <http://commerce.nic.in/trade/INDIA%20KOREA%20CEPA%202009.pdf> (Last visited May 25, 2017).

¹⁵ Id.

The negative list may consist of several annexes and reservations for future measures.¹⁶ These may be listed in Annex II (reservations for future measures), in addition to the current domestic measures, which are usually listed in Annex I (reservations for existing measures). Annex II sets out the economic sector and the activities where new restrictive measures can be implemented in the future. For example, if a country believes that it may implement some laws within the steel industry in the future, they would list the sector, without having to provide any information about domestic measures in Annex II.

B. Behavioral International Law and Economics

Recent literature has reconciled international law with the field of behavioral economics to establish behavioral international law and economics (“BIntLE”). BIntLE is the study of “how states really behave.”¹⁷ It explains how behavioral assumptions may change the strategies of states and negotiators, as well as the outcomes of games. Some scholars employ three categories to explain the foundations of BIntLE: the economic analysis of international law, behavioral economics, and psychological approaches in international relations.¹⁸ The scholars believe that the three areas can complement each other and reveal new insights into the behavior of actors in international law. For instance, behavioral economics can enrich the economic analysis of international law.

¹⁶ In addition to Annex I (Reservation for Existing Measures) and Annex II (Reservation for Future Measures), there are more annexes that can be drafted, as agreed by negotiating partners. For instance, under NAFTA, Mexico has an Annex III (Activities reserved to the State) which reserves measures governing the regulations of activities reserved to the State as decreed in the Mexican Constitution (primarily in the oil and gas sector). The unique nature of Annex III is that it has no requirement to specify the exact nature of non-conforming measures maintained in sectors like Annex II. Another example is the Annex on Exceptions from MFN. This annex carves out a number of sectors from MFN treatment (as opposed to individual measures as per Annex I). Thus, this Annex gives greater flexibility of reservations, allowing host nations to secure whole industries (e.g. “steel”) without the level of specificity applied to Annex I. For more reference, see UNCDAD, *Supra* note 2.

¹⁷ Aaken, *Supra* note 9 at 439.

¹⁸ *Id.* at 424.

Some caveats with respect to applying individual decision theory to international law should be discussed as a preliminary matter because generally, the actor in international law is assumed to be the state.

The application of behavioral economics to international law depends on who the actor to be analyzed is. In other words, it is uncertain whether we could apply individual decision theory to the state and consider the factors in applying that theory to the international sphere. There is no clear answer to this problem in relevant literature since commentators are not sure who really acts in international law.¹⁹ Both international organizations and individuals contribute to the implementation of international law, but the direct applicability of individual decision-making is in question. Some argue that individual decision theory is directly applicable to international judges, arbitrators, and treaty negotiators since they are individuals.²⁰ However, others counter by saying that the behavior of elites in making decisions seems to be different from that of the normal population, where various types of biases are concerned. This is because elites tend to have higher levels of trust and cooperation skills.²¹ That is, the behavior of judges and treaty negotiators may differ from that of general participants in the experimental lab.

The application of BIntLE to IIA's is still at an early stage. Some analysts have begun research how the proliferation of IIA's can be interpreted in the field of behavioral economics. They argue that host nations' irrational decisions in signing IIA's arise from their "over-optimism" that IIA's will support their economic growth.²² They want to believe that signing IIA's will help attract FDI, which, in turn, will boost a country's economy. However, once they face an

¹⁹ *Id.* at 441.

²⁰ *Id.* at 443.

²¹ See Emily M. Hafner –Burton et al, *The Cognition and the Political Psychology of Elite Decision Making*, 11 *PERSP. ON POL.* 369 369 (2013) (Arguing that experienced policy elites differ from inexperienced subjects in how they make decisions, rooted in "sophistication," a learned skill that is derived from experience and tends to be greater in elite than non-elite populations).

²² Lauge N. Skovgaard Poulsen, *Bounded Rationality and the Diffusion of Modern Investment Treaties*, 58 *INT'L STUD. Q.* 1, 5 (2014)

investor-state dispute claim, they may realize that they made their decisions without any consideration of a cost-benefit analysis.²³

Historically, the literature for this subject has never touched on the application of the behavioral approach to the decision-making process of investment treaty negotiators. Investment treaty negotiators are imperfect, irrational human beings and behavioral economics would have many implications for the negotiations. This article is the first to raise the behavioral issue in the context of investment treaty negotiators. The following section will argue that the bounded rationality problem arises especially when host nations draft the reservation list in the form of a negative list.

III. APPLYING THE BEHAVIORAL APPROACH TO INTERNATIONAL INVESTMENT LAW

This section illustrates why home and host nations have different preferences regarding the reservation list framework. The first part argues that host nations prefer the positive list to the negative list because they know that preparing the negative list will result in self-suffering due to the bounded rationality problem. The second part of this section examines various real world examples of how host nations end up with incomplete and defective negative lists, and their negative consequences when attracting investments. These consequences explain why host nations avoid the negative approach.

A. Bounded Rationality in the Choice of Reservation List Framework

Bounded rationality, an idea introduced by Herbert Simon, refers to the finiteness of human cognitive abilities. People have limited computational skills and seriously flawed memories, but they can respond sensibly to these failings. Thus, it could be said that people sometimes respond rationally to their own cognitive limitations, minimizing the sum of decision costs and error costs. People deal with limited memories, they make lists, and to deal with

²³ *Id.* at 12.

limited brainpower and time, they use mental shortcuts and rules of thumb.²⁴

The point of bounded rationality is not that people might decide differently if they have more information or different information, or decide differently with different items in the utility function. Rather, the point is that they would not be able to process all of the information even if they had it. Thus, if we are to predict people's actions, it is not enough to know the amount or quality of available information, we must also know what the cognitive process entails for selecting information and choosing rules of thumb.

There are various types of bounded rationality. For instance, the framing effect²⁵ relates to situations where people favor option A when a question or problem is posed in one way but favor option B when the same problem is posed in a different way. The endowment effect²⁶ is another example of bounded rationality which leads

²⁴ Jolls & Sunstein, *Supra* note 12, 199.

²⁵ The framing effect is an example of cognitive bias in which people react to a particular choice in different ways depending on how it is presented; e.g. as a loss or as a gain. People tend to avoid risk when a positive frame is presented but seek risks when a negative frame is presented. Gain and loss are defined in the scenario as descriptions of outcomes (e.g. lives lost or saved, disease patients treated and not treated, lives saved and lost during accidents, etc.). See e.g. Tversky et al. *The Causes of Preference Reversal*, 80 AM. ECON. REV. 358-361 (1990); Wansink et al. *Mindless Eating and Healthy Heuristics for the Irrational*, 99 AM. ECON. REV. 165-9 (2009) (argues that people's eating habits including quantity consumed, can be affected by the size of plates, packages or serving bowl used); Amos Tversky & Daniel Kahneman, *The Framing of Decisions and the Psychology of Choice*, 211 SCIENCE 453, 455 (1981); Daniel Kahneman, *A Perspective on Judgment and Choice: Mapping Bounded Rationality* 58 AM. PSYCHOL. 697, 703 (2003).

²⁶ In a traditional sense, the endowment effect is described as one's preference to place a higher value on objects one owns relative to objects one does not own. This is evidenced by the experiment of Kahneman, Knetsch and Thaler. In other words, willingness to accept ("WTA") as a seller is higher than willingness to pay ("WTP") as a buyer. Many researchers have conducted experiments that support this finding using different goods such as wine, chocolates, and basketball tickets. The most common explanation for the endowment effect is loss aversion. Simply put, a disutility from losing something is greater than the utility from acquiring that same thing; therefore WTA is higher than WTP. See generally Kahneman, D. et al., *Experimental Tests of the Endowment Effect and the Coase Theorem* 98 J. Pol. Econ. 1325, 1325-1348 (1990); For reference on experiment with wine, See Van Dijk, E., & Van Knippenberg, D., *Trading Wine: On the Endowment Effect, Loss*

individuals to value goods differently depending on whether or not they possess them. If they already possess the goods, the individuals value them higher than they would if they were not in their possession. In other words, the people who have the goods at their disposal show greater willingness to pay for them than the people who do not have them at their disposal.

The “status quo bias” explains that individuals tend not to deviate from their original positions. Depending on how the default is set, people make different choices because they simply have a tendency to not change their decisions.²⁷ Organ donation, for instance, can be set up on an opt-in (no donation by default) or an opt-out (donation by default) basis. For example, an empirical study has shown that an opt-in default leads to fewer individuals making donations than an opt-out design.²⁸ Last but not least, “over-optimism”²⁹ shows that people are, on average, overconfident about their future and about their predictions for their future. This relates not only to their own situations and capacities, but also to their evaluations of their control over a given situation.

Host nations are well aware of their limited capacity to fully analyze domestic measures and prepare the optimal reservation list in the form of a negative list. In order to prepare a negative list, they should have the full capacity to examine all existing domestic measures in their nations and precisely determine which measures to

Aversion, and the Comparability of Consumer Goods 19 J. Econ. Psychol. 579, 579-597 (2009); For reference on experiment with chocolate, See Knetsch J.L., *The Endowment Effects and Evidence of Nonreversible Indifference Curves* 79 Am. Econ. Rev. 1277, 1277-1284 (1989); For reference on experiment with basketball tickets, See Carmon, Z. & Ariely, D., *Focusing on the Forgone: Why Value Can Appear so Different to Buyers and Sellers*, 27 J. Consumer Res. 360, 360-370 (2000).

²⁷ Richard H. Thaler & Cass R. Sunstein, *Nudge: Improving Decisions About Health, Wealth, and Happiness* (2008).

²⁸ Eric J. Johnson & Daniel Goldstein, *Do Defaults Save Lives?* 302 SCI. 1338, 1338 (2003).

²⁹ See generally Neil D. Weinstein, *Unrealistic Optimism about Future Life Events*, 39 J. PERS. SOC. PSYCHOL. 806 806 (1980) For more detail on studies of excess optimism, see Marie Helweg-Larsen & James A. Shepperd, *Do Moderators of the Optimistic Bias Affect Personal or Target Risk Estimates? A Review of the Literature*, 5 PERS. SOC. PSYCHOL. REV. 74 74 (2001).

list. In principle, under the rational choice model,³⁰ rational negotiators would easily achieve this maximized result. With their infinite cognitive ability, the rational negotiators would analyze all the data and information regarding the domestic measures perfectly, and distinguish the non-conforming measures without error. They could produce an optimal reservation list by perfectly examining the domestic measures without any errors and figure out which one should be carved out from the present IIA. This optimal reservation list would maximize the gains of host nations and indicate to foreign investors exactly which measures had been carved out from the treaty. The imposition of carve-outs and specificities on the reservation list would be optimal for attracting foreign investments.

However, host nations know they cannot produce the optimal reservation list under the negative approach. They fully recognize the variety of cognitive problems associated with processing the data and information. They know they have insufficient information available to create an optimal reservation list that would maximize domestic profits. The limited access of host nations to resources makes it difficult to collect all of the required data and fully predict what measures should be carved-out from the main text. For example, host nations may face extreme difficulties in obtaining cooperation from other line ministries.³¹ Of course, there

³⁰ The research of applying rational choice perspective under Contract theory to International law is accelerating. A classic definition of rationality by Gary Becker: "All human behavior can be viewed as involving participants who maximize their utility from a stable set of preferences and accumulate an optimal amount of information and other inputs in a variety of markets". The central principles of Rationality are thus, utility maximization, stable preferences, rational expectations and optimal processing of information. Applying Rational choice to international law is basically transferring these principles to collective actors such as states or international organizations. It is assumed that potential biases cancel each other out on the aggregate level or do not even occur within corporate actors) *See generally* Kenneth Abbott, *Modern International Relations Theory: A Prospectus for International Lawyers* (1989) 14 YALE J. INT'L L. 335, 348-54 (discussing methodology in international relations theory that is relevant for this paper); Jeffrey L. Dunoff & Joel P. Trachtman, *Economic Analysis of International Law* (1999) 24 YALE J. INT'L L. 1 ; Jack L. Goldsmith & Eric A. Posner, *The limits of International law* (2005); Anne van Aaken, *To Do Away with International Law? Some Limits to 'The Limits of International Law'* 17 EUR. J. INT'L L. 289 (2016).

³¹ People debate whether trade representatives should be placed under the Ministry of trade (or foreign affairs) or a part of the executive office of the

are exceptions when the negotiation team has strong political power and is prioritized, such as the United States Trade Representative (“USTR”),³² which is a part of the Executive Branch of the United States Government. However, almost all negotiators from host nations experience difficulties in cooperating with line ministries, especially with respect to collecting measures for the preparation of a reservation list. For instance, a negotiation team under a Ministry of Foreign Affairs or Trade may send a request to the Ministry of Land to prepare a reservation list, with respect to land measures, because it has no expertise in this area. However, in many cases, the Ministry of Land frequently postpones submitting the reservation list to the negotiation team because it is simply not one of its principal functions. Thus, even if the domestic measures are easily obtainable by line ministries, the administrative inefficiencies and lack of cooperation between ministries may become big hurdles to listing the measures in the reservation list.

Because of their incapacity to fully analyze and prepare the reservation list, negotiators frequently fail to insert the reserving sector that they would otherwise have to insert in the reservation list. They sometimes leave blank the domestic measures section of the reserving sector or stipulate unspecified domestic measures such as a law without specific article numbers.

President. Many suggest host developing countries conduct structure reform of the trade representative so that it becomes an independent entity under the executive office of the President see e.g. Kim, *supra* note 20, at 69 (argues that Korea’s current negotiation agency under Ministry of Trade lacks: the mechanism through which the opinions of the interested-party are transmitted to the agency; the mechanism of checks and balances between the parliament and the agency; the lack of a horizontal decision-making process. The article ultimately argues that Korea’s negotiation agency should follow the US model and establish a Korea trade representative).

³² The USTR is the United States Government agency responsible for developing and recommending United States trade policy to the President of the United States, conducting trade negotiations on bilateral and multilateral levels, and coordinating trade policy within the Government through the interagency Trade Policy Staff Committee (TPSC) and Trade Policy Review Group (TPRG). Established as the Office of the Special Trade Representative (STR) under the Trade Expansion Act of 1962, the USTR is part of the Executive Office of the President. With over 200 employees, the USTR has offices in Geneva, Switzerland, and Brussels, Belgium. The current U.S. Trade Representative is Michael Froman, who assumed the office on June 21, 2013.

These incomplete reservation lists represent a significant loss for host nations. The unlisted measures may be critical policy measures that should have been carved-out. The unspecified measures or blanks in the reservation lists make it difficult for foreign investors to draw permissible boundaries for their investments, which can reduce transparency and predictability for foreign investments.

In short, host nations are fully aware of their limited capacity to conclude a benefit-maximizing reservation list in the form of the negative list. They also recognize the negative consequences associated with an incomplete and defective reservation list in the form of the negative list.

In this regard, the positive list is less burdensome because host nations do not face any significant pressure in the analysis of their measures. If they fail to find a measure, the missed measure does not have to comply with the highly liberalized main text. Thus, it avoids a high level of liberalizations. There are also no unspecified or blank measures in the positive list since the positive list does not require the parties to specify the domestic measures. The positive list mainly requires the parties to stipulate whether they will open or close the market in a certain sector.

By contrast, home nations strongly prefer the negative list because they believe the benefits of such outweigh its costs. Home nations expect host nations to open more markets in various sectors of the economy so that their foreign investors can make informed investment decisions. Knowing that the host nations will fail to include many economic sectors in the reservation obligations list of the highly liberalized text, home nations will automatically bind all of those sectors. They expect all unexamined sectors or measures to conform to a main text that aims for high liberalization and market openings.

For instance, if a host nation forgets to list a biotechnology sector, this is clearly an advantage for the relevant home nations involved because they know that the sector will automatically conform to the main text of the treaty, thus achieving high liberalization and market openings in the host nations. Of course, the negative list has a downside for home nations being that the incomplete and defective domestic measures may potentially confuse

the investors. For example, if host nations successfully insert the biotechnology sector in the negative list, but fail to put the domestic measures of the biotechnology sector in the reservation list, foreign investors have difficulty finding out which exact local rules have been carved-out. However, home nations generally believe that this is a minor cost because they anticipate additional benefits from unexpected market openings within different sectors of the economy, which the host nations failed to take into account. Moreover, home nations believe that, to a certain extent, inserting a renegotiation clause could cure the incomplete and defective domestic measures in the reservation list. In fact, the home nations frequently include the renegotiation clause for the host nations to specify and update the reservation list.³³

In this respect, home nations do not prefer the positive list because their unlisted measures do not have to conform with the main text of the relevant treaty. Home nations can no longer anticipate the unexpected market opening from host nations' failure to carve-out certain terms that they would get under a negative list approach.

So far, this article has concluded that host nations prefer the positive list and avoid selecting the negative list because they suffer from the bounded rationality problem, which makes it difficult to examine and identify local domestic measures.

B. Issues with the Negative List – The Incomplete Reservation List

This section illustrates host nations' poor drafting tendencies with reservation lists and the negative consequences of such, which

³³ e.g. Trilateral Investment Agreement between ASEAN, Australia, and New Zealand:

Article 16 Work Program

1. The Parties shall enter into discussions of

(a) schedules of reservations to this Chapter; a

(b) treatment of investment in services which does not qualify as commercial presence in Chapter 8 (Trade in Services). *See also* Japan-India Economic Partnership Agreement: Article 90. Reservation and Exceptions. 5. Each Party shall endeavour, where appropriate, to reduce or eliminate the exceptions specified in its Schedules in Annexes 8 and 9 respectively.

in turn, explains why they prefer the positive list. The article will classify two types of incomplete reservation lists.

The first is the missing measures problem which comes in two forms, and involves a failure to insert domestic measures. One way this may occur is through a host nation's failure to carve out the economic sector itself, for instance, land acquisitions, so the number of reservations is less than intended. When this is the case, the host nation has no way to insert domestic measures with respect to land measures. The other way this occurs is when, even if they do successfully carve out a sector, host nations fail to insert domestic measures in the reservation list. That is, the domestic measures section of the reservation list is left blank. This type of incomplete reservation list is the unspecified measures problem. This is the case when host nations successfully carve out the economic sector and even insert the domestic measures, but the measures are not clear or specific enough to draw a clear boundary for permissible investments.

The third type of incomplete reservation list arises from the failure to continuously update treaties and their text to reflect any amendments. Even if host nations successfully carve out the sector and specify the measures, they frequently fail to reflect the specifications in the later treaty. This section illustrates these three types of problems through examples of IIA's that demonstrate how incomplete reservation lists negatively impact host nations' ability to attract foreign investment. Consequently, this illustration is best understood by considering why host nations avoid the negative list.

1. *Missing Measures*

The missing measures problem is the predominant reason why host nations choose to avoid using the negative list. The problem appears when countries leave a blank space in the domestic measures section for the reserved sector. The following is an example of missing measures in the Singapore-New Zealand Closer Economic Partnership ("CEP"):

Sector:

Printing & Publishing
Manufacture & Repair of

	Transport Equipment Power/Energy
Types of Limitation:	National treatment (Article 29)
Legal Citation:	
Description:	More favourable treatment may be accorded to Singapore nationals and the permanent residents in the above sectors. ³⁴

In this reservation list, Singapore tried to carve-out regulatory power in the area of Printing & Publishing, Manufacture & Repair of Transport, and Equipment Power/Energy. However, a legal citation section is missing indicating that Singapore failed to insert the domestic laws that reflect the reservation, creating many problems. For one, its absence reduces transparency and predictability for foreign investors, especially when these investors have no idea what domestic measures they should look at before making an investment. Also, the legal consequences of the missing measures are not clear.

Suppose Act A is the law that should be inserted in the above reservation list. Should this Act A be covered by the main text? The answer is unclear. One may even argue that Act A is not carved-out because it was not listed in the reservation list, so it should therefore conform with the main text. All these uncertainties make it difficult for host nations to attract foreign investment.

2. *Unspecified Measures*

Host nations sometimes insert domestic measures that are not clear or specific enough. For example in the CEP Singapore

³⁴ The CEP entered into force on 1 January 2001. It is the most comprehensive trading agreement, outside of the Closer Economic Relations with Australia, that New Zealand has negotiated. The CEP aims to build on the close historical ties between Singapore and New Zealand by improving opportunities for trade in goods, services and investment. The two governments announced their intention to negotiate an agreement in September 1999 and negotiations were completed within one year.

carved out their Companies Act with respect to the establishment, reporting, and filing of accounts. However, the legal citation is not clear as the article numbers are missing:

All Sectors

Type of Limitation: National treatment (Article 29)

Legal Citation: Companies Act, Cap 50(1994)

Description: Compliance by Foreign Companies with the Companies Act as in establishing, reporting and filing of accounts.³⁵

In the present example, the unspecified measures may have a negative effect for the Governments of both Singapore and New Zealand. For example the unspecified measures reduce transparency and predictability for investors from New Zealand, the main readers of the reservation lists, and thus, the Singapore Government may have difficulty attracting FDI from New Zealand.³⁶ New Zealand investors may have difficulty ascertaining legally permissible boundaries for investments in Singapore. The Companies Act of 1994 includes all sorts of laws and regulations about companies, which creates uncertainty in determining whether

³⁵ Id.

³⁶ See generally UNCTAD, Transparency (UNCTAD Series on Issues in International Investment Agreements II) (United Nations 2012) (The report has a comprehensive analysis of how IIA could enhance transparency and predictability for investors. The report examines: the way in which traditional transparency issues have been addressed in IIA's since 2004; the emergence of investor responsibilities as a consideration within transparency issues; and the introduction of a transparency dimension into investor-state dispute settlement (ISDS). In analyzing these issues, this report outlines possible sustainable development implications of the different transparency-related formulations used in IIA's and points to some of the most progressive provisions that are appearing more frequently in investment instruments. The report reviews transparency regarding investor conduct, transparency in ISDS, and other obligations that are related to transparency in IIA's. This report does not address transparency relating to reservation lists. This article is the first piece to argue the ways to enhance transparency and predictability in IIAs)

Singapore only carved-out measures related to establishing, reporting, and filing of accounts. Thus, the question remains: Did the Singapore Government reserve the right to adopt all of the provisions in the Companies Act, or just the provisions relating to establishing, reporting, and filing accounts?

IV. A HYBRID APPROACH AND A RENEGOTIATION CLAUSE

As home and host nations display dramatic differences in their preferences for reservation list frameworks, it can sometimes be very difficult to reach a consensus. To resolve the conflict, both parties often conclude the treaty with a combined approach for reservation lists: negative and positive. The Australia-Chile FTA is a good example of such.³⁷ The Agreement first grants market access for all investments, then adds a reservation list in the market access column. It is uncertain whether this complex structure really confers transparency to the measures, but its intent is to combine the best aspects of both frameworks.

Another method involves simply deciding to renegotiate the reservation list when host nations have prepared their measures.³⁸

³⁷ The Australia–Chile FTA is a trade agreement between the countries of Chile and Australia. It was signed on July 30, 2008 and went into effect in the 1st quarter of 2009. The FTA is available at <http://dfat.gov.au/trade/agreements/acfta/pages/australia-chile-fta.aspx> (accessed on Mar 6 2016).

³⁸ Some international agreements are renegotiated while others remain stable. Despite growing interest in agreement flexibility and design, the literature has not addressed this question in depth. Some provide a theoretical framework for explaining why some treaties contain limited duration and renegotiation provisions, while others are rigid. Others explore the more general question of why states design agreements with flexibility allowing obligations to be adjusted over time, temporarily or permanently. The issue of renegotiation in the field of IIA is still in an early stage. Some argue that the negotiating partners renegotiate when they have learned something new about the state of the world, for instance faced a investor-state dispute settlement. That is, a direct experience with investment disputes, which reveals new information about the consequences of the IIA, is associated with a greater propensity to renegotiate. However, the literature has not examined in depth why nations renegotiate after the ratification of the treaty. See Koremenos, Barbara, *Loosening the Ties that Bind: A Learning Model of Agreement Flexibility* 55 INT'L ORG. 289 289-325 (2001); Koremenos, Barbara, *Contracting around International Uncertainty*, 99 AM. POL. SCI. REV. 549, 549-565 (2005); Helfer, Lawrence R.

Singapore and New Zealand recognized the problems associated with unspecified measures in the reservation list, and as a result, put the following clause in the main text to renegotiate the narrowing-down of the measures:

Article 32 Limitations

2. As part of the reviews of this Agreement provided for in Article 68, the Parties undertake to review at least every two years the status of the limitations set out in Annex 3 with a view to reducing the limitations or removing them.

This allows Singapore to narrow-down the measures by specifying the relevant article numbers. If the stated measures do not reflect the “description,” then Singapore should reduce or eliminate such measures in the reservation list.

The following is the renegotiation clause of the trilateral investment agreement between ASEAN, Australia, and New Zealand (“AANZFTA”).

Article 16 Work Programme

The Parties shall enter into discussions on:

(a) schedules of reservations to this Chapter; and...]

3. The Parties shall conclude the discussions referred to in Paragraphs 1 and 2 within five years from the date of entry into force of this Agreement unless the Parties otherwise agree. These discussions shall be

Flexibility Mechanism in International Agreements in International law and International Relations (Jeffrey Dunoff & Mark A. Pollack eds., 2012); Kal Raustiala, *Form and Substance in International Agreement*, 99 AM. J. INT'L L. 581, 581-614 (2005); Yoram Z. Haftel & Alexander Thompson, *When Do States Renegotiate International Agreements? The Case of Bilateral Investment Treaties* (Univ. Of Maryland Presentation Working paper, 2013).

overseen by the Investment Committee established pursuant to Article 17 (Committee on Investment).³⁹

As can be seen above, this is a different renegotiation clause from the one found in the CEP in the sense that the three parties signed the treaty without including a reservation list. Australia and New Zealand successfully persuaded the 10 ASEAN host nations to choose the negative list, but they all agreed to draft the list after the ratification of the Treaty. Paragraph 2 states that the three parties decided to start drafting and to conclude the negotiations on the reservation list within five years of the ratification of the Treaty.

V. CONCLUSION

In reality, host nation negotiators are not rational agents because they are just normal human beings.⁴⁰ They do not have sufficient cognitive capacity to accurately examine the measures and determine which domestic measures should be protected from the highly liberalized text of a treaty. Because of this, host nations frequently fail to put domestic measures that should otherwise be inserted in the negative reservation list. They sometimes fail to insert the name of a certain domestic measure in the reservation list and frequently insert unspecified domestic measures (i.e. domestic laws without article numbering).

Host nations are fully aware that these incomplete and defective lists, which fall under the negative approach, will have

³⁹ The AANZFTA was executed on 27 February 2009 and entered into force on: 1 January 2010 – Brunei, Malaysia, Myanmar, the Philippines, Singapore, Vietnam, Australia and New Zealand; 12 March 2010 – Thailand; 1 January 2011 – Laos; 4 January 2011 – Cambodia; and 10 January 2012 – Indonesia. (accessed on Mar 6 2016, at <http://www.thaifta.com/engfta/Home/FTAbyCountry/tabid/53/ctl/detail/id/75/mid/480/usemastercontainer/true/Default.aspx>).

⁴⁰ Herbert Simon, *A Behavioral Model of Rational Choice*, 69 Q. J. ECON. 99, 99 (1955) (argues that individuals do not seek to maximize their benefit from a particular course of action because they have no capacity to digest all the information that would be needed to do such a thing. They do not have the capacity to access all the information required and even if they did, their mind would not be able to process it properly).

negative consequences. This awareness leads the parties to have different preferences over the modality of the framework of the reservation list.

This article is merely the beginning of the efforts to apply the behavioral approach to international investment law. This article examined the issues from the perspective of the bounded rationality, however there are many other issues in the international law regime that can be described from the behavioral economics viewpoint. For instance, bounded self-interest may explain the existence of a question and answer session during the negotiation phase.⁴¹ This would involve the negotiators from the home nations giving the negotiators from the host nations brief lectures about the terms of international investment agreements and answering the questions of the host nations' representatives. Why would negotiating partners cooperate each other, instead of compete each other? Why are the developed countries so altruistic that they would give a lecture to the host developing countries? This may be able to be explained from the perspective of bounded self-interest. More research should be done in reconciling behavioral economics with international investment law and international law in general.

⁴¹ Surprisingly, for most of the readers of this article, negotiators with expertise from home nations frequently hold question and answer (Q & A) sessions parallel to main investment negotiations in order to facilitate the negotiation. Apparently, this shows a dramatic inequality of bargaining power between negotiating parties. The Q&A sessions usually consist of discussions about the meanings of provisions or articles and the consequences of adopting them. The lecturers - negotiators from home nations- would have the maximum amount of bargaining power depending on how they shape their Q & A sessions.