

The Effects of Domestic Legal Institutions on International Trade Flows

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Abstract

The effects of institutions on international trade relations are of theoretical and practical interest. By following the research perspective that interprets institutions as the “rules of the game”, I suggest and study three domestic legal institutions---tenure system for judges, precedent law, and judicial review that supposedly have significant effects on international trade flows. My empirical tests show that both precedent law and judicial review have independent effects on bilateral trade volume while the proposed independent effect of tenured judge is unsupported. Moreover, my empirical evidences suggest that precedent law introduces its effect in a monadic fashion while judicial review (measured as the review of legislative legitimacy) introduces its effect in a dyadic way.

1. Instruction

The rediscovery of institutions by neo-institutionalists is probably the most important advancement of contemporary political economy.¹ The neo-institutionalism paradigm builds on the notion that institutions regulating human interactions ultimately affect economic outcomes by imposing transaction costs on economic activities.² Because rarely is transaction cost zero in the real world,³ today most political economists agree that to understand actual, rather than potential, economic outcomes requires institutional analysis. During the past decade, empirical efforts made by applied economists as well as political scientists have considerably improved our understanding of the usefulness of institutions on many academic fronts, such as economic growth (Knack and Keefer 1995; Olson 1996; Hall and Jones 1999; Acemoglu et al. 2001, 2002; Easterly and Levine 2002; Rodrik et al. 2004 to name a few) and financial well-being (Beck and Levine 2004; La Porta et al. 1998, 2000, 2004a, and the central bank independence literature by a variety of authors).

It is not hard to see that the development of neo-institutionalism can also contribute to the international trade literature because arguments concerning institutional impacts on economic performances are readily extendable to the study of international trade relations. Presumably, institutions can influence international trade flows through two channels. First, institutions help enhance the efficiency of domestic

¹ North (1990, 107): 'I wish to assert a much more fundamental role for institutions in societies; they are the underlying determinants for the long-run performance of economies.' In fact, economists' interest in institutions could even be traced back to Montesquieu (1748) and Smith (1776). It was also granted considerable attention by early institutionalists such as T. Veblen, J.R. Commons and W.C. Mitchell.

² And for many neo-institutionalists, the protection of property rights plays a pivotal role in this process. According to them, in any society where property rights are poorly protected private firms are reluctant to develop advanced technology, engage in market exchange, and pursue economy of scale, all of which are key instruments in promoting economic efficiency. In this situation, the poor protection of property rights raises transaction costs in various economic activities and in consequence leads to undesirable economic outcomes.

³ This is exactly the reason for the development of Coase Theorem.

economy.⁴ Then the domestic improvement in economic efficiency makes internationalized exchanges of productive factors and consumer goods more desirable. Second, institutions that are directly regulating international exchanges can come into this process by tilting transaction costs associated with such exchanges, which constitutes a nontrivial part of international traders' profitability calculation. In short, if institutions can determine the cost and benefit of cross-border trading activities, they are expected to explain a huge chunk of international trade flows. In fact, recent studies concerning unobserved costs and barriers in international trade relations have suggested the necessity to include more institutional analysis in the field (Anderson and Marcouiller 2000; Obstfeld and Rogoff 2000; Rauch 2001; Deardorff 2001; Anderson 2001; de Groot et al. 2004).

In this study, I am going to empirically investigate an uncharted territory concerning the institution-trade nexus---namely, what, why, and how domestic legal institutions determine international trade flows. For this purpose, I organize the remainder of this article as follows. Section 2 starts with clarifying my research perspective. Unlike many previous empirical works that treat institutions as aggregated institutional outcomes, the current study takes the angle that thinks of institutions as specified institutional designs and arrangements. Section 3 presents theories that are capable of proposing why, what, and how domestic legal institutions matter in determining international trade flows and derive testable hypotheses accordingly. In this process, the legal-origin literature works as the “giant's shoulders”

⁴ The neo-institutional growth literature have provided considerable evidences for this linkage, see Hall and Jones (1999) for an example.

for figuring out legal institutions as a productive research domain. And research works in a variety of academic fields such as history, politics, economics, and legal study, will be referred to for explaining what and how domestic legal institutions might influence international trade. Section 4 discusses my research methods, data sources, and variable operationalizations. Empirical results are presented and discussed in section 5. Section 6, the concluding part, summarizes the implications of my empirical findings, clarifies the limitations of the current study, and proposes possible directions for future researches.

2. Institutions as the “Rules of the Game”

For anyone who intends to empirically study institutional effects on economic performances, the first question arose is how to define and hence measure institutions in his or her research. Despite the sheer volume of the empirical literature on institutions, the exact meaning of institutions is often ambiguous and varies from one study to another. North (1990 p3), for example, provides the most frequently used definition of institutions as “Humanly devised constraints that shape human interactions”. However, the meaning of “constraints” is again ambiguous and hence relies on the interpretation of empirical researchers. Given these, I deem that a short deviation to clarify my position on this issue is necessary.

Conventionally, there are two major methods of empirically measuring institutions. The first method juxtaposes institutions with aggregated institutional outcomes. In other words, it intends to measure institutions by evaluating the overall functional effects of innumerable and hence unspecified institutional designs. And

data sets such as *International Country Risk Guide* (ICRG by Knack and Keefer 1995), *Governance Matters Program* (GMP by Kaufman et al. 2003) and the *Polity* program (by Marshall and Jaggers 2003) are good examples of applying this method to collect data about institutions. Despite the predominance of this method in the empirical literature on institutions, findings based on such a research method are often criticized for endogenous causality, practical irrelevance, and theoretical insignificance.⁵ As a result, many researchers argue that an effort to measure institutions as specified institutional designs (the “rules of the game”) rather than the functions of these designs is much more productive and hence desirable. For example, Przeworski (2004 p8) argues, “Securing property rights, coordinating investment, and rendering the rulers accountable are second-order features of complex institutional frameworks. As such, they constitute consequences of specific institutions, such as patterns of separation of powers, the independence of the judiciary or of central banks, procedures for electing rulers, and the like. Hence, the first question is which specific institutional arrangements promotes these second-order features...". Today more and more empirical studies of institutions begin to apply this method that treats institutions as the “rules of the game” in their measurement of institutions.

Although evaluating the relative advantages of the above two empirical methods of measuring institutions is of theoretical and practical importance, such a comparative evaluation is by no means the interest of the current study. However, it is worth to clarify at the beginning that this study founds itself on the understanding of

⁵ For comprehensive criticisms of this type of measurement, see Glaeser et al. (2004) and Przeworski (2004).

institutions as specified institutional designs rather than aggregated institutional outcomes.

3. Why Domestic Legal Institutions? What Domestic Legal Institutions? And How they Work?

Adopting the research perspective that interprets institutions as detailed institutional arrangements immediately raises the question of how to identify those institutions that might have significant effects on international trade relations. It is however a very hard question given the facts that there are innumerable social-political institutions in the real world and efficient institutions are extremely rare events (Eggertsson 2004). Suppose in the ideal situation, we have supercomputers that can do light-speed calculations and all information of all institutions have been stored in our data matrices. Then importing the data matrices into the supercomputers and doing exploratory statistics is probably the best way to find out those institutions that promote external trade. Nevertheless we as social scientists can hardly expect anything even approximating to this ideal situation. Thus, for any single article like the current one, the best thing we can do is to analyze a few institutions and expect that our accumulative efforts can finally sort out most (if not all) institutions considerably influencing international trade. However, even this limited ambition requires some guidance to follow. Do we have any in hand? Fortunately, the answer is “yes”.

If all research works are dwarfs standing on the shoulders of giant, recent advancements in the legal-origin literature provide strong shoulders for this study. The legal-origin literature starts with the sheer fact that all of the contemporary legal

systems across the world evolved themselves from three western legal origins---the Anglo-American common law, the Romano-Germanic civil law, and the socialist law. The Anglo-American common law first developed in England and then spread to the former British colonies throughout the world.⁶ The expansion of U.S. as a hegemonic power, especially in the post-WWII era, further consolidated the global influence of the common law. The tradition of Romano-Germanic civil law could be traced back to Roman law. However, the substantive and procedural meanings of the contemporary civil law were almost entirely defined by the modern efforts of two European countries---France and Germany. The French civil law with a clear mark of Napoleon rule was born in the Great Revolution. It was first transplanted to other countries on the European continent⁷ with Napoleon “*Weltgeist* on horseback” and henceforth extended globally through European colonization of the rest of the world.⁸ The Germany civil law grew up with Bismarck's unification of Germany and hence its judiciary. It was later on imitated by many countries of Middle Europe and East Asian.⁹ The creation of socialist law was seeded by the 1917 Russia revolution. With the fanfare of Red Army echoing on the European continent and the global expansion of the socialism, socialist law became globally influential. Even after the cold war and the collapse of Soviet Union, the socialist law kept its influence in countries such as China, Cuba, and Vietnam.¹⁰ Through a series of empirical studies, the legal origin

⁶ United States, Canada, Australia, India, Malaysia and Hong Kong.

⁷ Belgium, Luxembourg, Netherlands, Spain, and Portugal.

⁸ Sub-Saharan Africa, Indochina, and the entire South America.

⁹ Austria, Czechoslovakia, and Switzerland are examples in Middle Europe. Japan is the classic example in East Asia.

¹⁰ Despite the rhetoric hostility of socialistic jurists toward all capitalist laws, the strong connection between socialist law and civil law is hardly deniable. This could be partially attributed to the historical tie between them, where almost all socialist-law countries were previously under the rule of Romano-Germanic civil law and hence

literature as a whole shows that different legal origins account for considerable variations in cross-country economic performances such as economic growth and financial well-being(Beck and Levine 2004, La Porta et al. 1998, 2000, 2004a to name a few). In particular, the literature suggests that contemporary legal systems originated in the Anglo-American common law bring about significant advantages over those originated in the Romano-Germanic civil law and the socialist law in promoting financial and economic development.

It is obvious, however, that legal origins as a series of dummy variables can not theoretically explain the variations in economic performances. Instead, there must be some causal mechanisms behind it that are functionally serving economic well-beings. Because legal institutions are correlated with legal origins, they provide us a group of candidates for matching this gap. In the context of international trade relations, legal institutions seem to be reasonable candidates as well. On the one hand, legal institutions may influence external trade by directly imposing transaction costs on it. On the other hand, legal institutions may also usher in their effects on trade relations indirectly. For example, efficient legal arrangements can benefit economic productivity by protecting individual property rights that are seemingly irrelevant with external trade. The development of domestic economy then makes internationalized exchanges of goods and productive factors more profitable and desirable.

I argue that the preference of the political winners, who gained the control over the formation of the modern sovereign statehood in the mother countries of

the borrowing of civil-law concepts and practices by socialist-law countries as convenience is never uncommon. However, the more decisive reason lies in the common purpose of civil-law and socialist-law countries to strengthen state power, a point I am going to discuss in the coming-up sections.

contemporary legal systems, on the issue of containing state (or Crown) power is the key to explain the varied arrangements of legal institutions in these countries. Such variations in legal institutions later on brought about consequential, though probably unintentional, consequences on economic activities including external trade. To make this point clearer, a journey into the modern Western history is indispensable. The fate of common law was decisively determined by the process of 17th century English history that fraught with conflicts between the Crown who represents the interest of feudal totalitarianism and the parliament that represents the interest of aristocrats and estate holders. After a series of wars and dethrones, the parliament finally defeated the kings and gained the political control of the country including the power to shape the judiciary. As the final winner of the prolonged bloodshed, the parliament had the obvious incentive to perpetuate its dominance by containing Crown power. And institutional designs of the new judiciary provided viable means for doing so. United States, as another important exporter of the common law, also had a “pro-control” stance on the issue of containing state (Crown) power. Due to their early experiences under the British colonial rule, the establishers of the new country was fully aware of state’s potential to abuse its power and hence intended to build a political system on the basis of balanced power, in which the court would be empowered to the extent that it is capable of checking state power. The modern civil law was vitalized under the direct wish of great men---Napoleon and Bismarck as their instrument to serve the interest of a newly rising capitalistic class crying for nationalism and modern sovereign statehood. In the shadow of feudalistic resurgence, domestic turmoil, and

foreign militarized intervention, both Napoleon and Bismarck chose to strengthen the state (Crown) power in defending the new sovereign statehood. Finally, the creation of socialist law was arguably seeded by the 1917 Russian revolution that gives birth to the first socialist state in history. Like other survivors of bloody political fight, the Bolshevik party was desperate to consolidate its political dominance by strengthening the state power. This effort was further reinforced by the socialistic ideology that glorifies the socialist state as the embodiment of the wishes of the people to which all individuals and political branches including the judiciary should be subordinate.

To make court an effective instrument in containing state (or Crown) power, the endowment of three political functions to the court seems necessary. First, the court must be organizationally independent from state (or Crown) control. Second, the court should have its own channel through which its influence on social-political activities could be introduced. Finally, besides directly influencing state life, the court needs necessary means to restrain the political discretion of state (or Crown) that is intended to circumvent its checks and balances. I argue that these three functions that are conducive to the containment of state (or Crown) power has been historically transformed into three legal institutions---tenure system for judges, precedent law, and judicial review, which clearly vary over different legal traditions. Over time, cross-national variations in the three legal institutions have introduced considerable, though presumably unintentional, effects on a variety of economic activities including external trade.

(a) Tenured Judge

Both early political theorists and contemporary empirical scholars recognize the importance of life-time appointments for guaranteeing judicial independence. Alexander Hamilton for example argues, “nothing can contribute so much to the judiciary's firmness and independence as permanency in office” (federalist papers, no.78). Contemporary empirical studies on American courts and bureaucracy also provide considerable evidences for this stance. For example, the literature of American supreme court shows no systematic evidences for either presidential or congressional influence over the decisions made by supreme court judges who have life-time tenure; while Gordan and Huber (2004) find that without tenure position, American judges of local criminal courts behave strategically when reelection is approaching, which inevitably degrades their impartiality.

Historically, life-time appointments of judges in common-law systems could be traced back to the 1701 Act of settlement between the English king and the parliament (Dawson 1968; Hayek 1960). After that judges sitting on the royal common-law court can only be removed by the common decisions made by the two Houses of the parliament instead of the wish of the Crown. Such an arrangement was clearly due to the parliament's victory in the conflict over state control and its attempt to permanently smother the king's influence on the common-law court through his arbitrarily patronizing the Crown's followers and dismissing the Crown's dissents. The tenured judge of common-law court was then carried to many corners of the world with British overseas colonization. Despite the popularity of granting judges permanent positions in common-law judiciary, this institution is largely alien to most

countries that have either a civil or a socialist legal origins. In fact judges of the Soviet Russia and many people's republics are regularly elected namely for the sake of “people's democracy”. Such a difference is by no means surprising given the varied preference of political winners in the mother countries of contemporary legal systems on the issue of limiting state (Crown) power. The English parliament intended to contain the Crown power and hence granted the tenure privilege to its political ally---the common-law judges. Napoleon, Bismarck, and Bolshevik party alike were determined to defend their new sovereign states by strengthening state power. Granting judges a rigid position within the power structure is obviously contradictory to their purpose.

As we noted before, granting permanent positions for judges indisputably promotes the judicial independence. And an independent judiciary can presumably facilitate a better protection of property rights in terms of providing a credible commitment to dissuade the arbitrary use of power by the sovereign whether it is the king or the parliament itself (North and Weingast 1989). The safety of individual property rights might then influence international trade both directly and indirectly. On the one hand, judicial independence can promote international trade directly. When one party in a trading dispute is politically more powerful than the other (for instance, a dispute between a state-owned or state-affiliated company v.s. a private firm), a judicial system that is largely immune from political influence is invaluable for the protection of individual property rights. In this case, the better protection of individual property rights decreases the transaction costs associated with political

uncertainty and hence encourages the cross-border trading activities. On the other hand, independent judiciary helps promote international trade indirectly. The secured property rights in domestic economic activities such as public and private loans can promote the overall economic efficiency. Although such domestic economic activities are seemingly unrelated with international trade, the improved economic efficiency driven by them will ultimately make external trade more profitable and hence increase the trade volume.

In the context of bilateral trade flows, domestic legal institutions may introduce their effects in three distinct dynamics---commonality effect, dyadic effect, and monadic effect. And there are both theoretical and practical reasons for why we need to empirically differentiate these three dynamics. First, it is important to differentiate the effect of commonality from both a dyadic effect and a monadic effect because a significant effect of commonality is indeed a rejection of the causal mechanisms suggested in my theoretical reasoning. In other words, a significant effect of commonality shows that as long as the trading partners share the same institutional arrangements in their legal systems, such a similarity decreases the transaction cost and hence stimulates trading activities. Therefore, cross-national variations in domestic legal institutions themselves do not have any *independent* effect on bilateral trade flows. Second, it is important to differentiate between a dyadic effect from a monadic effect of domestic legal institutions on bilateral trade. A dyadic effect means that the effects of one country's legal institutions on its external trade are conditioned on its trading partner's domestic legal institutions. In contrast, a monadic effect rejects

such a conditionality and assumes that one country's legal institutions can introduce their effects unilaterally. Obviously, the difference between a dyadic effect and a monadic effect defines the effectiveness of any unilateral legal reform intending to promote foreign trade.

Given all these, I test the three distinct dynamics for each domestic legal institution that I am proposing. The similarity effect of tenure system for judges is summarized in hypothesis 1(a). Because my theory about legal institutions rejects the existence of commonality, an insignificance test result is expected if my theory is correct. Furthermore, because my theory can not differentiate between the potential dyadic effect and monadic effect of domestic legal institutions, I treat this as an empirical question and derive corresponding hypotheses. And the potential dyadic and monadic effects of tenured judges are summarized in hypothesis 1(b) and hypothesis 1(c).

Hypothesis 1(a) Commonality Effect: *When both sides within a trading dyad adopt tenure positions for judges or neither of them adopt it in their legal systems, a higher level of bilateral trade should be observed.*

Hypothesis 1(b) Dyadic Effect: *When both sides within a trading dyad adopt tenure positions for judges in their legal systems, a higher level of bilateral trade should be observed.*

Hypothesis 1(c) Monadic Effect: *When both sides within a trading dyad adopt tenure positions for judges in their legal systems, their bilateral trade level should be higher than that in the situation where only one side adopts it. The bilateral trade*

level in the situation where only one side adopts tenure positions for judges is in turn higher than that of the situation where neither sides adopt it.

(b) Precedent Law

To work as a functional instrument in containing state (or Crown) power, the court needs its own channel to introduce political influence. I argue that the practice of precedent law characterizing the Anglo-American common law is an important institutional arrangement for realizing this end. In a common-law country, judges are allowed and sometimes even encouraged to make laws in terms of establishing precedents on the basis of their logic reasoning and legal interpretation. This practice of empowering previous judge-made decisions binding effects on later similar cases, known as the doctrine of *stare decisis*, provides common-law court a considerable discretion to engrave its own political wishes on the society. Countries with civil or socialist legal traditions on the contrary block this channel by rejecting the idea of judge-made law and adopting legislative codification. Such a discrepancy in their judicial arrangements is quite understandable because the mother countries of contemporary civil and socialist laws intended to strengthen the state (or Crown) power in the process of forming their modern sovereign statehood.

As a source of law, the codified statute law originates in Roman law of the sixth century A.D. under the Emperor Justinian (Ehrmann 1976). However, it was the French Revolution resuscitated this archaic method in the modern practice of civil law (Merryman 1985, 1996). The fights between French kings and the revolutionists that climaxed in the Revolution and extended through Napoleon rule could be viewed as

conflict between the aristocratic class that benefiting from feudal secession and the rising capitalistic class crying for nationalism and modern sovereign state. The leaders of French revolution once controlled the country, began to form all political institutions in response to the demand of the capitalistic class. The notorious Bourbonian judges¹¹ who benefited from and served for the feudal secession now become the targets of revolutionists who intends, in Robespierre's rhetoric, to efface the word jurisprudence from French language (Dawson 1968, p387). For the purpose of strengthening state power, the archaic practice of statute law was now resuscitated in replacing the judge-made law. And it is indisputably Napoleon who brought this effort to a new pinnacle with the 1804 Code Napoleon shining on the top. As a fundamentalist of legal positivism, Napoleon looked for a code that is crafted so seamlessly that there is no chance of encountering the shoddy of statutes and no need for any learned effort in interpreting the meaning of its provisions. As a result, the role of post-revolution judges became highly mechanical---summarize the legal facts and find the according provision(s) in the Code. For the same token of strengthening state power, both Bismarck and the Bolshevik party following the steps of Napoleon denied the legitimacy of judge-made law in their judicial systems and used codified statute law instead. Intending to contain Crown power, English parliament on the contrary strengthened the royal common-law court that adjudicated cases primarily on the basis of judge-made law, on the expense of king's prerogative court (the famous Star Chamber) and the court of chancery, both of which ruled cases without the practice of

¹¹ The sales of judgeships should be especially blamed for the deterioration of judicial reputation.

case law (David and Brierley 1968; North and Weingast 1989).

A literature of comparative legal study that starts with Posner (1973) explored the positive effect of precedent law on economic efficiency. It argues that inefficient laws are more likely to be challenged in courts than efficient laws because they impose more transaction costs on the society. As long as previous judicial decisions have binding effects on later cases, litigants who are interested in the establishment of efficient precedents will repeatedly litigate until their demands are satisfied. Through this process, efficient laws replace inefficient laws and finally prevail in a common-law society. The dominance of efficient laws then reduces the overall transaction costs and helps the economy of a common-law society converge to its optimal (Rubin 1977; Priest 1977). The rejection of judge-made law makes civil-law and socialist-law societies unable to count on the judiciary to correct inefficient laws.¹² Instead, they have to primarily rely on the legislative process that is considerably slothful, costly, and inefficient (Bailey and Rubin 1994). However, the situation could be even more serious when it is the legislative body itself that is promulgating inefficient laws for some reasons.¹³ As before, I argue that the adoption of precedent law can influence international trade both directly and indirectly. On the one hand, through repeated litigation efficient laws replace inefficient laws in regulating trading activities. The prevalence of efficient trading laws hence directly reduces the transaction costs of external trade. On the other hand, efficient solutions

¹² Even if all laws in a legal system are efficient at the beginning, some of them may no longer be so as social-economic or technological conditions change.

¹³ For instance, the legislative body is captured by certain interest groups that benefit from socially inefficient statutes.

of domestic economic disputes promote the overall efficiency of domestic economy. Such a promotion in turn encourages external trading activities by increasing the benefits of internationalized exchanges. Given all these, I propose the second group of hypotheses as follows.

Hypothesis 2(a) Commonality Effect: *When both sides within a trading dyad adopt precedent law or neither of them adopt it in their legal systems, a higher level of bilateral trade should be observed.*

Hypothesis 2(b) Dyadic Effect: *When both sides within a trading dyad adopt precedent law in their legal systems, a higher level of bilateral trade should be observed.*

Hypothesis 2(c) Monadic Effect: *When both sides within a trading dyad adopt precedent law in their legal systems, their bilateral trade level should be higher than that in the situation where only one side adopts it. The bilateral trade level in the situation where only one side adopts precedent law is in turn higher than that of the situation where neither sides adopt it.*

(c) Judicial Review

Besides seeking to organizationally control judges or intrusively block the court's channel of introducing political influence, the state (or Crown) may also try to paralyze the independent function of judiciary by circumventing its checks and balances. For instance, the executive order widely adopted by modern states may serve for this purpose. For another, after the dethroning of kings the legislative body in many countries become the new master. The legislative body, just like their royal

predecessors, now may be attracted to abuse its power in terms of passing bills that are intruding individual property rights. In that case, the previous feudal autocracy of the Crown was simply replaced by a functionally equivalent legislative tyranny. Therefore, for a successful containment of the sovereign power, courts must have effective means to check the political discretion of the sovereign. And judicial review, a power given to judiciary to check the behaviors of the state against constitution, is designed for this end.

The formal establishment of judicial review as a legal institution should be credited to the eighteenth-century United States. Following the Marbury v.s. Madison decision, the U.S. supreme court was recognized the power to check the legitimacy of both legislative bills and executive actions against the constitution---a clear extension of the continued efforts to contain state power. The institutional arrangement of judicial review however is foreign to the civil and the socialist laws because the political winners in their mother countries have the uttermost interest to consolidate state power. And granting the power of constitutional review to judiciary is indeed nothing but the introduction of a veto player in their power structures. Keeping this in mind, it is not hard to understand why the civil-law and socialist-law countries commonly deny the power of constitutional review to their courts. As a result, the constitutions of socialist countries are never practically involved in judicial decisions and the power of constitutional review in France is given to the Constitutional Council whose constitutes and operational procedures demonstrate its nature as a subsystem of the executive branch rather than that of the judiciary (David and

Brierley 1968; Ehrmann 1976).

Since judicial review can be used to check the abuse of power by both the executive and the legislative bodies, it provides an important instrument for individuals, private firms, as well as other organizations to protect their property rights from the threat of state intrusion. Following the same logic I have used in explaining the effect of tenured judges on external trade, I suggest that the better protection of property rights due to the adoption of judicial review can encourage external trading activities both directly and indirectly. And such effects should be reflected and hence observed in bilateral trade volume. As before, I propose hypotheses for the potential commonality effect, dyadic effect, and monadic effect accordingly.

Hypothesis 3(a) Commonality Effect: *When both sides within a trading dyad adopt judicial review or neither of them adopt it in their legal systems, a higher level of bilateral trade should be observed.*

Hypothesis 3(b) Dyadic Effect: *When both sides within a trading dyad adopt judicial review in their legal systems, a higher level of bilateral trade should be observed.*

Hypothesis 3(c) Monadic Effect: *When both sides within a trading dyad adopt judicial review in their legal systems, their bilateral trade level should be higher than that in the situation where only one side adopts it. The bilateral trade level in the situation where only one side adopt constitutional review is in turn higher than that of the situation where neither sides adopt it.*

Through the above analysis, I intended to theoretically answer why legal institutions, what legal institutions, and how legal institutions matter in influencing international trade. With the guidance of the legal-origin literature, I specify domestic legal institutions as a domain that is likely to provide efficient institutions contributing to international trade. And my theoretical analysis plus historical evidences show what domestic legal institutions matter and how they matter. Historically, mother countries of contemporary legal systems due to the preference of their domestic political winners, had different positions concerning the containment of state (Crown) power in shaping their modern sovereign statehood. Mother countries of the contemporary common law (England and U.S.) intended to contain the state (Crown) power while mother countries of both civil (France and Germany) and socialist (Soviet Russia) laws are inclined to advance the state (Crown) power. As a result, legal arrangements that facilitate the containment of state (Crown) power flourished in mother countries of contemporary common-law systems while such legal arrangements were paralyzed in the mother countries of contemporary civil and socialist laws. Over time, these legal institutions were transplanted throughout the world with both militarized conquests and active imitations. Due to the variations in legal institutions, courts in common-law countries are more capable of checking the sovereign power whether it is a king, a dictator, or a legislative body, while courts in civil-law and socialist-law countries become subordinate to the sovereign. The variations in legal institutions hence introduce consequential effects on various economic activities that are directly or indirectly related with the cost and benefit of external trade. It turns out that

institutions originally designed for limiting the state (or Crown) power in the formation of modern sovereigns has unintentionally encouraged international trading activities, which should be reflected in bilateral trade volumes.

4. Methods, Data, and Variable Operationalizations

(a) Gravity Model

In order to identify the effects of domestic legal institutions on bilateral trade flows, I estimate a gravity model.¹⁴ The basic version of gravity model explains the logged aggregated trade volume between any two countries by three factors---the logged product of their populations, the logged product of their GDPs, and the logged distance between them.¹⁵

$$\text{Ln(Trade)}=\text{Ln(GDP1*GDP2)}+\text{Ln(POP1*POP2)}+\text{Ln(Distance)}+e \quad [\text{equation 1}]$$

For my research purpose, I estimate my gravity model as follows.

$$\text{Ln(Trade)}=\text{Ln(GDP1*GDP2)}+\text{Ln(POP1*POP2)}+\text{Ln(Distance)}+xb+e \quad [\text{equation 2}]$$

Where x is the data matrix indexing my covariates other than GDP, population, and distance; b is the coefficient vector for these covariates; and e is the error term.

(b) Sample, Variables, and Operationalizations

My research sample contains non-directed trading dyads of 70 countries in 1995. The variables of the basic gravity model---logged bilateral trade volume, logged product of GDPs, logged product of populations, and logged distance are derived from Rose (2004). According to the literature of gravity model, three general

¹⁴ During the past three decades, various theoretical justifications for this model have been offered (Anderson 1979; Helpman and Krugman 1985; Deardorff 1998) and the model has been practically doing well.

¹⁵ Population is included in the gravity model as a proxy for a country's market size; GDP here is the measurement of state's capacity to support export and to demand import; and distance is included as a proxy for transportation costs.

predictions could be made concerning the basic gravity effects of bilateral trade. First, the larger a country's GDP, the more likely it can sell and buy more internationally. Second, the greater is each state's population, the less they trade because trading takes the domestic form. Finally, the farther apart two states, the more transportation costs are imposed and hence the less their trade with each other. In short, the logged bilateral trade flows are expected to be positively related to the logged product of GDPs and negatively related to both the logged product of populations and the logged distance. And empirical findings that are inconsistent with these predictions are usually seen as indicators of model misspecification.

The measures of my principal variables---tenure system for judges, precedent law, and judicial review, are derived from La Porta et al.(2004b). The variable of tenured judge measures whether a country provides lifetime positions for its judges. The variable of precedent law measures whether previous court decisions are allowed to have binding effects on later courts' rulings. The variable of judicial review measures whether courts are empowered to review laws against a constitution or constitutional documents. It is worth noting however that this measure of judicial review is not satisfactory---it is a little different from the concept of judicial review in my theory, which requires the reviewed subject includes both rules (usually bills passed by a legislative body) and actions(usually executive orders and administrative actions delivered by bureaucratic agencies). Given the overwhelm of executive orders and bureaucratic actions in regulating modern societies, such a limitation on data quality may have considerable influences on empirical results. So we should keep this issue

in mind when interpreting findings about this variable.

In order to differentiate the potential commonality effect, dyadic effect, and monadic effect of domestic legal institutions, I first construct a commonality-effect variable for each legal institution. When the legal institutions on each side of a trading dyad match, that is when both sides adopt certain institutional design or neither sides adopt it, the value of 1 is given. Otherwise, the value of 0 is given. Following this rule, three dummy variables---*matched tenure*, *matched precedent law*, and *matched review* are constructed. Second, I construct a series of dummy variables for each legal institution---(1) *both tenure*, *both precedent law*, and *both review* measure whether both sides within a trading dyad have the same legal institutional design of tenured judge, precedent law, and judicial review; (2) *one tenure*, *one precedent law*, and *one review* measure whether only one side within a dyad has tenured judges, precedent law, and judicial review in its legal system; (3) *neither tenure*, *neither precedent law*, and *neither review* measure whether none of the two sides within a dyad have tenured judges, precedent law, and judicial review in their legal systems.

I also include another five variables as control. They are *common colony ever*, *common colony after 1945*, *common language*, *common regional trade agreement* (RTA), and *common currency union*, which measures whether the two sides within a trading dyad were ever under the same colonial rule in history, were under the same colonial rule after the WWII, had the same language, were in the same regional trade agreement (RTA), and were in the same currency union in 1995. Since all of these control variables work as proxies of decreased transaction costs for trade, they are

expected to be positively related with bilateral trade volume. The five control variables are again derived from the Rose data set (2004).

5. Empirical Results

In order to differentiate the potential commonality effect, dyadic effect, and monadic effect of domestic legal institutions, I run the following regressions with ordinary least square (OLS) estimation. I first run the basic gravity model by regressing logged bilateral trade volume on logged product of GDPs, logged product of populations, and logged distance. Second, I examine the potential commonality effect by adding the three dummies variables---*matched tenure*, *matched precedent law*, and *matched review* to the basic gravity model. Third, I evaluate the potential dyadic effect of domestic legal institutions by using another three dummies---*both tenure*, *both precedent law*, and *both review*. Finally, to test the potential monadic effect of legal institutions, I include another six dummies variables---*one tenure*, *one precedent law*, *one review*, *neither tenure*, *neither precedent law*, and *neither review* to the previous model testing dyadic effect. Since the three groups of dummies---“both”, “one”, and “neither” are mutually exclusive and jointly exhaustive, I constrain this model to drop the dummies starts with “neither”. In other words, I am choosing *neither tenure*, *neither precedent law*, and *neither review* as the benchmark lines for comparison.

[Table.1 here]

Table.1 reports the basic findings concerning the effects of domestic legal institutions on bilateral trade flow. A quick inspection of the three basic gravity factors shows that

my gravity model with OLS estimation behaves well. The logged product of GDPs is positively related with the logged bilateral trade volume while the logged product of populations and the logged distance are negatively related with it. Obviously, all of these are consistent with economic theories. The empirical tests for differentiating commonality effect, dyadic effect, and monadic effect yield some interesting results. First, the estimates of a dyadic model shows that tenure system for judges, precedent law, and judicial review all have significant effects on bilateral trade flow. However, combined with the information provided by the test of commonality effect and the test of monadic effect, we can see it is imprudent to claim that all these three variables really introduce their effects in a dyadic fashion. First, although tenure system for judges have a significant effect in the dyadic model, it also turns out to be significant in the test of commonality effect, which is reflected by the variable of *matched tenure* with a p-value smaller than 0.01. Therefore, it is likely to be the case that when neither sides adopt tenured judges in their legal systems, their bilateral trade is the same as (or even better than) that of the situation where both sides adopt such an institutional arrangement. And the estimates of dyadic model provide another piece of information that confirms this speculation. Compared with the situation where neither sides adopt tenured judges, the appearance of tenured judges on only one side of the trading dyad proves to be significantly worse for the promotion of bilateral trade (reflected in the coefficient of -0.37),¹⁶ while the variable of *both tenure* does not

¹⁶ The variable of *one tenure* is indeed the “non-matched” category in the model of commonality effect. However, the testing result is not the exact opposite because in the test of monadic effect, the previous *matched tenure* has been split into two categories---*both tenure* and *neither tenure*, and the *neither tenure* has been chosen as the benchmark.

make any significant effect. Given all these, the institutional design of providing judges lifetime positions seems to introduce an effect of commonality. However, as I have discussed before, such an effect is indeed a rejection of my proposition that tenure system for judges has its independent effect on bilateral trade.

Second, both precedent law and judicial review are highly significant in the test of dyadic effect while highly insignificant in the test of commonality effect. Such results rule out the possibility of commonality effect and hence confirms the existence of independent effects introduced by these legal institutions. However, the test for monadic effect shows some more delicate dynamics. Compared with the situation where neither sides adopt precedent in their court ruling, the adoption of precedent law on only one side significantly promotes the bilateral trade volume, which is shown by the coefficient of 0.41. Furthermore, the adoption of precedent law on both sides within a trading dyad also significantly increases the bilateral trade volume with a scale shown by the coefficient of 0.68 in comparison to the situation where neither sides adopt it. The considerable difference between 0.68 and 0.41, therefore, suggests that precedent law, as a legal institutional design, introduces its effect on bilateral trade flow in a monadic fashion. In the same model, the test result of judicial review, however, suggests a quite different dynamic. Although there is a huge difference in the effect magnitude between *both review* and *one review* (0.51 v.s. 0.046), only the coefficient for *both review* is statistically significant. That is, compared with the situation where neither sides adopt judicial review in their legal systems, only a switch to the situation in which both sides adopt judicial review can significantly

promote the bilateral trade volume. In other words, judicial review introduces a dyadic effect on bilateral trade. This is obviously a confirmation for a similar finding in the early test of dyadic effect.

Findings in Table.1 suggest that tenure system for judges, case law, and judicial review influence bilateral trade flow through three different dynamics---namely commonality effect, monadic effect, and dyadic effect. In order to check the robustness of such findings, I include five control variables---common colony ever, common colony post 1945, common language, common currency union, and common regional trade agreement (RTA), and report the empirical results in Table. 2.

[Table.2 here]

First of all, GDP, population, and distance together explain a huge chunk of bilateral trade flow with statistical significance in the predicted directions, which is again a proof of the validity of my modeling. Second, all my findings reported in Table. 1 holds. The proposed independent effect of lifetime position for judges is again rejected due to the significant test result of commonality effect. Both precedent law and judicial review show their robust independent effect on bilateral trade though they introduce their effects in two distinct dynamics. The adoption of precedent law introduces a monadic effect on trade while judicial review influences trade in a dyadic fashion. Finally, all the five control variables display apparent positive effects on bilateral trade. However, only three of them---common language, common colony in history, and common colony after 1945 are statistically significant. The insignificant effects of currency union and RTA are consistent with both Rose's empirical works

that questions the usefulness of international economic arrangements in promoting international trade and Eggertsson's argument (2004) that efficient institutions are extremely rare events when we treat institutions as specified designs or arrangements.

6. Concluding Remarks: Interpretations, Limitations, and Future Researches

In this research, I proposed and studied three legal institutions that presumably have significant effects on bilateral trade volume. And my empirical results show that they are indeed introducing their effects through three distinct dynamics. Here, I am going to highlight four points for interpreting my empirical findings. First, providing lifetime appointment for judges has proven to introduce no independent effect on external trade. The reason for that may lie in the difference between judicial independence and judicial accountability. Although lifetime positions help judges to be independent from the control of the state (Crown), judicial independence itself does not guarantee judges to behave in an accountable way. In fact, political independence also provides the chance to abuse power, which is a quite common phenomenon of political economy.¹⁷ Therefore, besides focusing on the institutional designs that guarantee the judicial independence, we probably need pay more attention to those institutions that are conducive to the accountability of judges in our course of searching for efficient legal institutions.

Second, precedent law has been shown to have monadic effect on trade, which means a country can stimulate its bilateral trade volumes through unilateral reform on this institution. This is indeed an important finding that has considerable policy

¹⁷ For example, an independent central bank is traditionally believed to be conducive to the realization of long-term monetary goals. Recent studies however have just shown the opposite---independent from political controls, central banks are more likely to pursue their own interests rather than that of the public (Mishkin 2003).

implications. Here I use one recent reform effort in China's legal system to show the policy value of this finding. In the late 1990's, China took a series of significant reforms in its legal system, which were largely in response to the demand of protecting foreign trade and investment. And one of these reform efforts was to introduce certain common law principles into China's socialist legal system. Although the idea of *stare decisis* has yet been fully embraced in China, the People's Supreme Court began to issue, on a yearly basis, "judicature explanations" based on its newly-ruled cases. And the *explanations* did have binding effect on local court judgements when either shoddy of law, conflict of laws, or uncertainties about article interpretation exists. As most other reform efforts, this reform in judicial system is far from uncontroversial. Therefore, a scientific policy evaluation is of great importance. According to my findings in the current study, the adoption of precedent law not only has an independent and positive effect on external trade but also introduces such an effect in a monadic way. Therefore, China's attempt to adopt precedent law domestically will probably benefit its external trade, the powerhouse of its economic development.

Third, I hope to make a point for how to interpret my finding about the effect of judicial review. This study shows that judicial review influences bilateral trade volume through a dyadic effect. However, it is worth noting that the measurement in use only includes the review of legislative legitimacy. Since the theory I am proposing refer the review subject to both bills passed by a legislative body and administrative actions delivered by bureaucratic agencies, we should be cautious in interpreting this

finding of dyadic effect. Presumably, there are two ways to do so. The first is to add a precondition to our claim---as long as there is no systematic difference between judicial review of legislative legitimacy and that of administrative actions, we can say that judicial review has an independent and dyadic effect on external trade. Or we can simply constrain the domain of our claim---judicial review of legislative legitimacy has an independent and dyadic effect on external trade.

Finally, I want to briefly discuss an unsatisfactory facet of the current reach, which at the same time suggests an interesting topic for future academic inquiries. Although the current study figures out that precedent law and judicial review (at least measured as the review of legislative legitimacy) do have monadic and dyadic effects on bilateral trade, it can not tell why they follow these observational rules. Therefore, future theoretical works that intend to explain the causal mechanisms for the monadic effect of precedent law and the dyadic effect of judicial review are of great importance.

Table.1 OLS Estimation: Domestic Legal Institutions and Bilateral Trade 1995

Model\Variables	Basic (Standard Error)	Commonality (Standard Error)	Dyadic (Standard Error)	Monadic (Standard Error)
Ln(GDP*GDP)	1.10** (0.018)	1.10** (0.018)	1.11** (0.018)	1.11** (0.018)
Ln(Pop*Pop)	-4.12** (0.157)	-4.12** (0.157)	-4.06** (0.155)	-4.06** (0.156)
Ln(Distance)	-1.14** (0.050)	-1.12** (0.050)	-1.16** (0.050)	-1.17** (0.050)
Matched Tenure		0.359** (0.082)		
Matched precedent law		0.096 (0.078)		
Matched Review		0.085 (0.079)		
Both Tenure			0.21** (0.083)	-0.15 (0.18)
One Tenure				-0.37* (0.18)
Both precedent law			0.33** (0.082)	0.68** (0.13)
One precedent law				0.41** (0.12)
Both Review			0.48** (0.14)	0.51** (0.15)
One Review				0.046 (0.084)
Constant	-21.56** (1.04)	-22.24** (1.05)	-22.47** (1.04)	-22.58** (1.05)
Num. of Obser.	1723	1723	1723	1723

* 0.05 level **0.01 level

**Table.2 OLS Estimation: Domestic Legal Institutions and Bilateral Trade 1995
with Robustness Check**

Model\Variables	Basic (Standard Error)	Commonality (Standard Error)	Dyadic (Standard Error)	Monadic (Standard Error)
Ln(GDP*GDP)	1.12** (0.018)	1.12** (0.018)	1.12** (0.018)	1.13** (0.018)
Ln(Pop*Pop)	-4.31** (0.159)	-4.31** (0.160)	-4.24** (0.160)	-4.23** (0.160)
Ln(Distance)	-1.04** (0.056)	-1.03** (0.056)	-1.07** (0.056)	-1.07** (0.056)
Matched Tenure		0.230** (0.081)		
Matched precedent law		-0.036 (0.077)		
Matched Review		0.027 (0.077)		
Both Tenure			0.13 (0.082)	-0.18 (0.18)
One Tenure				-0.30 (0.18)
Both precedent law			0.19* (0.082)	0.55** (0.13)
One precedent law				0.43** (0.12)
Both Review			0.48* (0.139)	0.39** (0.15)
One Review				0.07 (0.08)
Common Colony Ever	0.84** (0.21)	0.80** (0.21)	0.66** (0.22)	0.67** (0.22)
Common Colony Post45	0.52* (0.25)	0.50* (0.25)	0.55* (0.25)	0.61* (0.25)
Common Language	0.76** (0.10)	0.72** (0.11)	0.67** (0.11)	0.66** (0.11)
Common Currency Union	0.66 (1.56)	0.76 (1.56)	0.80 (1.55)	0.77 (1.55)
Common RTA	0.19 (0.19)	0.16 (0.19)	0.15 (0.19)	0.17 (0.19)
Constant	-23.10** (1.03)	-23.36** (1.04)	-23.40** (1.03)	-23.61** (1.05)
No. of Observ.	1723	1723	1723	1723

* 0.05 level **0.01 level

Reference

- [1] Acemoglu, Daron, Simon Johnson, and James Robinson. 2001. "The Colonial Origins of Comparative Development: An Empirical Investigation" *The American Economic Review*. Vol.91, No.5.
- [2] Acemoglu, Daron, Simon Johnson, and James Robinson. 2002. "Reversal of Fortune: Geography and Institutions in the Making of the Modern World Income Distribution" *The Quarterly Journal of Economics*. 117.
- [3] Anderson, James and Douglas Marcouiller. 2000. "Insecurity and the Pattern of Trade: An Empirical Investigation". NBER Working Paper No.7000.
- [4] Anderson, James. 1979. "A Theoretical Foundation for the Gravity Equation". *American Economic Review*. Vol.69, No.1.
- [5] Anderson, James. 2001. "Trade and Informal Institutions". Working Paper.
- [6] Bailey, Martin and Paul Rubin 1994. "A Positive Theory of Legal Change". *International Review of Law and Economics*. 14.
- [7] Beck, Thorsten and Ross Levine. 2004. "Legal Institutions and Financial Development". NBER working paper No. 10417.
- [8] Deardorff, A.V. 1998. "Determinant of Bilateral Trade: Does Gravity Work in a Neoclassical World?" in *Regionalization of the World Economy*. University of Chicago Press.
- [9] Deardorff, A.V. 2001. "Local Comparative Advantage: Trade Costs and the Pattern of Trade". Working Paper.
- [10] de Groot, Henri, Gert-Jan Linders, Piet Rietveld, and Uma Subramanian. 2004. "The Institutional Determinants of Bilateral Trade Patterns". *International Review for Social Sciences*. Vol.1.
- [11] Dawson, John. 1968. *The Oracles of The Law*. The University of Michigan Law School.
- [12] Easterly, William and Ross Levine. 2002. "Tropics, germs, and crops: how endowments influence economic development", NBER working paper No. 9106.
- [13] Eggertsson, Thrainn. 2005. *Imperfect Institutions: Possibilities and Limits of*

Reform. The University of Michigan Press.

- [14] Ehrmann, Henry W. 1976. *Comparative Legal Cultures*. Prentice-Hall, Inc.
- [15] Glaeser, Edward, Rafael La Porta, Florencio Lopez-de-Silanes, and Andrei Shleifer. 2004. "Do Institutions Causes Growth?" *Journal of Economic Growth*. 9.
- [16] Gordon, Sanford and Gregory Huber. 2004. "Accountability and Coercion: Is Justice Blind when It Runs for Office?" *American Journal of Political Science*. Vol.48 (2).
- [17] Hall, Robert and Charles Jones. 1999. "Why Do Some Countries Produces So Much More Output Per Worker Than Others?" *The Quarterly Journal of Economics*. Vol.114, No.1.
- [18] Hayek, Friedrich. 1960. *The Constitution of Liberty*. The University of Chicago Press.
- [19] Helpman, E. and P. Krugman. 1985. *Market Structure and Foreign Trade*, MIT press.
- [20] Marshall, Monty and Keith Jagers. 2003. "Polity IV Project Political Regime Characteristics and Transitions, 1800-2003".
<http://www.cidcm.umd.edu/inscr/polity/index.htm>
- [21] Kaufmann, D., A. Kraay, and M. Mastruzzi. 2003. "Governance Matters III: Governance Indicators for 1996--2002". World Bank Policy Research Working Paper 3106.
<http://www.worldbank.org/wbi/governance/pubs/govmatters3.html>
- [22] Knack, S. and P. Keefer. 1995. "Institutions and Economic Performance: Cross-Country Tests Using Alternative Institutional Measures" *Economics and Politics*. 7.
- [23] La Porta, Rafael, Florencio Lopez-de-Silanes, Andrei Shleifer, and Robert Vishny. 1998. "Law and Finance" *Journal of Political Economy*. Vol.106, No.6.
- [24] La Porta, Rafael, Florencio Lopez-de-Silanes, Andrei Shleifer, and Robert Vishny. 2000. "The Investor Protection and Coporate Governance" *Journal of Financial Economics*. Vol.58.
- [25] La Porta, Rafael, Florencio Lopez-de-Silanes, and Andrei Shleifer. 2004a. "What

Works in Securities Laws”. Working Paper.

[26] La Porta, Florencio Lopez-de-Silanes, Cristian Pop-Eleches, and Andrei Shleifer. 2004b. “Judicial Checks and Balances” *Journal of Political Economy*. Vol.112.

[27] Merryman, John. 1985. *The Civil Law Tradition: An Introduction to the Legal Systems of Western Europe and Latin America*. Stanford University Press.

[28] Merryman, John. 1996. “The French Deviation” *American Journal of Comparative Law*. No.44.

[29] Mishkin, Frederic. 2003. *Economics of Money, Banking, and Financial Markets*, Addison Wesley Publishing Company.

[30] Montesquieu 1748. Books XIV and XVII of *the Spirit of Laws*.

[31] North, Douglass 1990. *Institutions, Institutional Change, and Economic Performance*. Cambridge University Press.

[32] North, Douglass and Barry Weingast. 1989. “The Evolution of Institutions Governing Public Choice in 17th Century England” *Journal of Economic History*. No.49.

[33] Obstfeld, M. and K. Rogoff. 2000. “The Six Major Puzzles in International Macroeconomics: Is There a Common Cause?” *NBER Macroeconomics Annual 2000*.

[34] Olson, Mancur 1996. “Big Bills Left on the Sidewalk: Why Some Nations are Rich, and Others Poor” *Journal of Economic Perspectives*. Vol. 10.

[35] Posner, Richard 1973. *Economic Analysis of Law*. Aspen Law and Business.

[36] Priest, George 1977. “The Common Law Process and the Selection of Efficient Rules” *The Journal of Legal Studies*. Vol.6, No.1.

[37] Przeworski, Adam 2004. “Some Historical, Theoretical, and Methodological Issues in Identifying Effect of Political Institutions”. Working Paper.

[38] Rauch, J.E. 2001. “Business and Social Network in International Trade” *Journal of Economic Literature*. No.39.

[39] Rodrik, Dani, Arvind Subramanian, and Francesco Trebbi. 2004. “Institutions Rule: The Primacy of Institutions Over Geography and Integration in Economic Development” *Journal of Economic Growth*. Vol.9(2).

[40] Rose, Andrew. 2004. “Do We Really Know That the WTO Increases Trade?”

The American Economic Review. Vol.94, No.1.

[41] Rubin, Paul. 1977. "Why Is the Common Law Efficient?" *The Journal of Legal Studies*. Vol.6, No.1.

[42] Smith, Adam. 1776. *The Wealth of Nation*.