REFORM OF MINORITY SHAREHOLDER RIGHTS: AN INTERNATIONAL PERSPECTIVE

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Abstract

This research investigates recent international reforms of minority shareholder rights (MSRs), and the relationship between those reforms and national legal systems. No previous studies have investigated such changes and their underlying causes; nor have they viewed the phenomena concerned through a dynamic lens. The study uses secondary data from 142 countries over a five-year period (2006-2010). Using growth curve modelling and the panel data method, the study finds that legal systems and law enforcement affect reforms positively. On average, countries' MSRs are improving, but this is not consistent across nations. The findings contribute to the current debate on the relationship of law to minority shareholder protection and will assist policy-makers in the area of investor protection reforms. Future research directions are suggested at the end of the paper.

Keywords: Corporate Governance Reform, Minority Shareholder Rights, Legal System

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1.0 Introduction

Within the last decade many countries have paid attention to the rights of minority shareholders who are subjected to controlling shareholders' behaviour that is oppressive, prejudicial and discriminatory. Such behaviour may include the withholding of dividends, exclusion from management, and a range of other forms of self-interested dealings. Many countries have reformed their corporate sector to give better protection to minority shareholders through preventative mechanisms and various remedies. These developments raise a number of questions. For example, are these reforms achieving their intended purpose? Are countries initiating reforms at the same pace? If not, which countries are leading the reform process and what factors are precipitating those reforms? Answers to these and related questions are needed to inform country policy-makers, yet the issues concerned have not been subjected to rigorous investigation.

Reform that is well-informed, evidence-based and properly executed can lead to improvement in minority shareholder rights (MSRs). However, there is a paucity of research into MSR reforms. The few notable exceptions are those researchers (Johnson *et al.* 2000; La Porta *et al.* 2008; La Porta *et al.* 1998; La Porta *et al.* 1997, 2000b) who focus on the quality and enforcement of law as a means of enhancing minority shareholder protection. According to their research, countries with an English common law system and effective law enforcement have been found to have better quality minority shareholder protection than countries with civil law systems and poor enforcement of law. This group of researchers suggests that high judicial independence (La Porta *et al.* 2004) and a quality legal system (Johnson *et al.* 2000) are reasons for greater protection of minority shareholders in common law countries and recommend quality legal reform, reform sensitive to legal tradition and enforcement of those reforms as a means of minority rights improvement (La Porta *et al.* 2008; La Porta *et al.* 2000b).

Some scholars, however, find unpalatable the notion of a relationship between law and legal

enforcement, on the one hand, and minority shareholder protection on the other.[24] Pagano and Volpin (2005), for example, argue that the idea is not based on strong theoretical reasoning. In response to the claim that minority shareholder protection is superior in common law countries with effective law enforcement systems, Lamoreaux and Rosenthal (2004) and Rajan and Zingales (2003)[25] point out that in the nineteenth and twentieth centuries France and French civil law countries were much more investor-friendly than common law countries and that, in any event, differences between common law and civil law countries have changed over time. Roe (2006) argues that investor protection and capital market development are more to do with political attitude and ideology about the capital market than with the common or civil law system—civil law is as good as common law as far as investor protection is concerned; the correlation between legal origin and minority investors' protection found in past literature is mere coincidence.[26] According to Roe (2000), social democracies have weak minority shareholder protection.

Although the debate waxes on whether legal origin matters in protecting minority shareholders, there is no controversy about the importance of affording protection to this group. Lack of such protection can affect the economy of a country. Strict investor protection is associated with greater equity investment and financial market development (Djankov *et al.* 2008). A developed capital market enhances saving, turns savings into investment, and thus aids a country's economic development (Beck *et al.* 2000).

While some studies have investigated the relationship of MSRs to legal origin and other variables, no study to date has looked at the nature and the causes of reform and how these change over a period of time. The dynamic nature of the present study thus contributes uniquely to the current literature. Investigation of this issue can shed light on the assertion that there is a link between legal origin and minority shareholder protection. Thus this research has the potential to give direction to national policymakers on whether

the reform of its legal and law enforcement systems represents an appropriate avenue through which to protect minority shareholders

2.0 Minority shareholder rights reform around the world

In recent years, many countries have reformed their corporate governance systems in order to improve minority shareholder protection. Table 1 presents these reforms chronologically from 2005-6 to 2009-10.

The three broad categories of reform that took place during the 5-year period represented in Table 1 were: reform on disclosure of information; reform on related party transactions; and the right to sue directors and make them increasingly liable for their activities.

Securing information about their investment is a right of shareholders; greater disclosure should mean better-informed stakeholders, although this does not always follow. Over the past five years many countries have increased the disclosure requirement in general and particularly the disclosure of related party transactions. Moreover, some countries allow access to company books by minority shareholders.

Countries have also reformed the related party transaction (RPT) approval procedure. Some countries now require shareholder approval of RPTs while others have the requirement of pre-review of RPTs by an external independent party. In Australia, for example, a Regulatory Guide is due for release in 2011 following the issuance of Consultation Paper 142 by the Australian Securities and Investment Commission (ASIC 2010).

It has also been made easier for minority shareholders to sue directors for misconduct. An example of one such reform is the derivative action procedure. In many countries shareholders can sue directors or management on their own account. However, a derivative suit gives shareholders the right to sue directors and managers on behalf of the company concerned. In Australia the relevant legislation is Part 2F.1A of the Corporations Act 2001 (Cth). In England and Wales, the Civil Procedure Rules 1998 [SI 1998/3132] contain the relevant provision. Germany has lowered the shareholding requirement of derivative suits from 10% to 1%, Poland from 5% to 2%, and Greece from 33% to 10 per cent. In Tajikistan and Slovenia, aderivative suit can be brought by at least 10% of shareholders (World Bank 2007, 2008, 2009, 2010, 2011).

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[24] Some researchers have studied MSR without directly taking part in the debate but have evaluated specific reforms in a country. For example, Mukherjee-Reed (2002) investigates the effect of corporate governance reform on minority shareholders in India, Linciano (2003) and Mengoli *et al.* (2009) investigate the effect of corporate governance reform on improving MSRs in Italy.

[25] La Porta et al. (2008) demonstrate that the historical data provided by Rajan & Zingales (2003) are over estimated and inconsistent with other researchers data— for example, that of Bozio (2002) and Sylla (2006).

[26] La Porta et al. (2008) counterargue that Roe's findings are statistically flawed.

Table 1. Minority Shareholder Rights Reform around the World (2005-2010)

Minority Shareholder Rights Reform
2005-06
Mexico, Peru, Poland, Romania, Sweden, United Kingdom - increase disclosure requirement for companies.
Germany, India, Mexico, Tanzania – make it easier to sue directors.
China, Hong Kong and Tunisia - amend law to require companies to open books for shareholders inspection.
Israel and New Zealand – require approval by shareholders for related party transactions.
2006-07
Belarus, Colombia, Georgia, Iceland, Indonesia, Vietnam - increase disclosure requirement.
Georgia, Mozambique and Portugal - define duties for directors and controlling shareholders.
Norway and Slovenia - require approval of shareholders for related party transactions.
2007-08
Albania, Azerbaijan, Egypt, Saudi Arabia and Tajikistan – increase disclosure requirements.
Albania, Botswana, Greece, Slovenia, Kyrgyz Republic and Thailand - make it easier to sue directors by the shareholders.
Albania, Azerbaijan and Tajikistan - require approval of related party transactions by shareholders. Egypt introduces prior review of related party transaction by external party.
2008-2009
Dominican Republic, Indonesia, Macedonia, Rwanda, Sierra Leone, Tajikistan, Tunisia and Ukraine - increase disclosure requirement.
Dominican Republic, Macedonia, Rwanda, Sierra Leone, Tunisia and Ukraine - require shareholders' approval for related party transactions. Tajikistan and Tunisia - introduced prior review of related party transactions by external party.
Colombia, Dominican Republic, Macedonia, Rwanda and Tajikistan - make it easier to sue directors. Dominican Republic and Rwanda - allow access of company book by shareholders.
2009-10
Kazakhstan, Morocco, Swaziland and Tajikistan – reform for higher disclosure by companies.
Chile, Swaziland and Sweden - require approval of related party transaction by shareholders. Sweden - also requires prior review of related party transaction by external parties.
Georgia, Swaziland and Tajikistan – make it easier to access corporate information.

Source: World Bank (2007, 2008, 2009, 2010, 2011)

4.0 Ways of Appropriating Minority Shareholder Rights

Controlling shareholders of a company can appropriate minority shareholder rights in different ways.[27] This section describes the major means of deprivation of minority shareholders by the controlling owner group of a company.

### 4.1 Related party transactions

Many empirical studies have shown that RPTs are used mainly by controlling shareholders to tunnel out resources from companies (e.g. Atanasov 2005; Bertrand *et al.* 2000; Cheung *et al.* 2006; Dow and McGuire 2009; Gao and Kling 2008; Peng *et al.* 2011). Controlling shareholders can erode MSRs by selling assets at a reduced price, acquiring assets at inflated prices (Cheung *et al.* 2009a, 2009b), paying cash to related parties (Cheung *et al.* 2009a), borrowing at a higher interest rate (Weinstein and Yafeh 1998), using company assets as security for a loan from related parties and so on.[28] This is a legal way (in the extrinsic sense) of asset appropriation of a company. Controlling shareholders appropriate assets of minority shareholders by transactions with related firms or parties where the controlling shareholders have higher cash-flow rights.

Consider that a controlling shareholder, S has $CF_1\%$ cash flow right and $C_1\%$ control in firm F_1 and CF_2 cash flow right and C_2 control in firm F_2. S will be benefited from any favourable transaction between F_1 and F_2 if $CF_1>CF_2$. Therefore, S will be motivated to be involved in a transaction that favours firm F_2. Another, important factor that is required for giving F_2 a favourable deal is the control of S on F_1. S can control F_1 if it exceeds a certain threshold. Theoretically the threshold is more than 50%, but practically much less than that (see the next section). However, in general S is more likely to make a transaction more favourable to F_2 as C_1 increases. Therefore, C_1 has a direct and CF_1 has an inverse relationship with minority asset appropriation. This process is shown in Figure 1.

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[27] Theoretically, a 50.01% share of a company is required to control it. However, in reality, often a 20% (or even 10%) owner of a company controls it. The literature shows that a powerful shareholders' group retains control three ways: issuing dual class shares, via a pyramid structure, and cross shareholdings (Bebchuk *et al.* 2000)

[28] However, many RPTs arise for strategic or other fully legitimate reasons—such as buying from own subsidiary for strategic purposes, freducing tax and so on.

Figure 1. Conditions for asset appropriation by related party transactions

S

C_1, CF_1 C_2, CF_2

| F_1 | $CF_1 < CF_2$ and $C_1 >$ controlling threshold | F_2 |
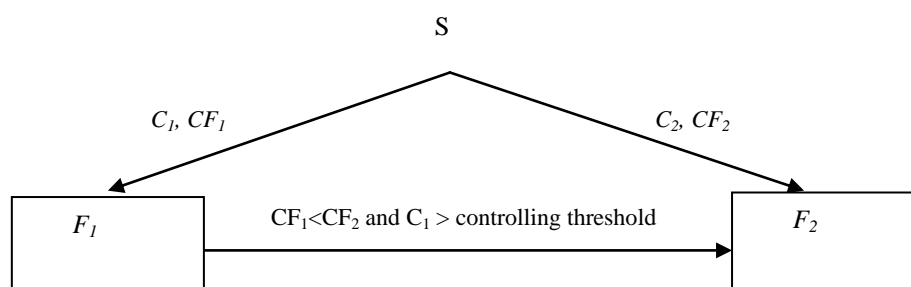
4.2 Dividend

The seminal Finance theory of Miller and Modigliani (1961) states that in a well functioning market and tax and transaction costless world, the dividend payout ratio has no effect on corporate value. In practice the dividend decision is made taking into consideration many factors, for example, the effect of the dividend rate on share price, the tax effects of paying dividends and so on. Of late, researchers have seen the dividend payout decision as a means of expropriating from minority shareholders (Faccio *et al.* 2001; LaPorta *et al.* 2000a). Majority shareholders (who are many cases the directors of a company or control the directors) keep the dividend payout ratio low to retain profit within the company. This retained profit can be used by controlling shareholders to invest in projects that yield private benefits, or to tunnel monies out to firms where they have higher ownership. This idea is supported by the empirical finding which shows that dividend rates are lower in countries where there are more controlling shareholders and more family firms—for example, in Asian countries (Faccio *et al.* 2001); on the other hand countries with higher legal protection for minority shareholders, such as common law countries, have higher dividend payout ratios than civil law countries (La Porta *et al.* 2000a).

4.3 IPO and Private Placement

The ownership of existing shareholders is diluted when a company issues new equity either by initial public offerings (IPOs) or by private placement.[29] In both cases minority shareholder rights may be violated. In the case of an IPO the shareholders' relative strengths may be changed without the consent of the minority shareholders. The controlling shareholders might sell shares at the highest possible price while concealing negative information about the company and diverting its cash flows and assets to themselves (La Porta *et al.*

2006). In the case of a private placement the controlling shareholders may sell shares to a related party at a lower price than the market (for listed companies) or the net asset value of the company (for private companies and non listed companies) which not only changes the ownership structure but also tunnels out resources at the expense of the minority shareholders. The controlling shareholders can use different mechanisms to retain their existing control (Högfeldt 2004).[30] The minority shareholders may not have any voice in this.

5.0 Legal origin view of minority right

The quality of the law and law enforcement are considered major protection mechanisms for minority shareholders. The legal systems of countries around the world can be classified into two families: English common law and civil law. The latter is subdivided into three categories: French civil law, German civil law and Scandinavian civil law. The spread of legal systems across the world was influenced by one or a combination of several factors: (1) the colonization of England and France spread English common law and French civil law to the colonies; (2) imitation and adaptation—for example, Japanese adaptation of the German legal system; and (3) regional influence—for example, Scandinavian countries have a similar legal system (La Porta *et al.* 2008).

A common law system is present in England, the United States of America, Australia, New Zealand and many former colonial countries of England. The French civil law system is present in France, Spain, Mexico, Argentina, Peru, Brazil and many formal colonial countries of France. Germany, Japan, Switzerland, South Korea and Taiwan have the German civil law system; and Scandinavian civil law is seen in Scandinavian countries.

Empirical research suggests that the English common law system affords a greater level of protection for minority shareholders than other systems (LaPorta *et al.* 1998; La Porta *et al.*

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[29] IPO is an offer to all investors willing to invest in a company; on the other hand, private placement is a share issued to a particular investor(s) generally chosen by the controlling shareholders of a company.

[30] For example, Swedish companies issue B class shares, a lower type voting right share, for IPOs and private placement of new issue.

2000b). This is so because of the nature of the system, (Johnson *et al.* 2000) which allows more freedom than in civil law countries (La Porta *et al.* 2004). In common law countries, the judiciary has the power to make decisions based on broad principles of law. However, in civil law countries, the legal system is based on comprehensive legal codes and judges are not permitted to go beyond those codes in making judgements. Therefore, it is more difficult to use legal loopholes in common law countries than in civil law countries to disadvantage minority shareholders.

Although many countries allow minority shareholders to sue directors (who are in many cases controlling shareholders) for tunnelling out assets through RPTs, these cases are treated differently in civil and common law countries. The courts in civil law countries will consider such actions legal if the RPT concerned conforms with the legal code—the focus is not on fairness and MSRs. In contrast, the main emphasis of a common law court is fairness to minority shareholders going beyond the code (Johnson *et al.* 2000).

Another factor that influences minority shareholder protection is implementation of the law. Having good quality law and a sound legal system is not enough; legal enforcement is also important. Empirical studies suggest that countries with a higher level of law enforcement provide better minority shareholder protection (La Porta *et al.* 1998; La Porta *et al.* 2000b). Referring to legal literature (Berman 1983; Damaska 1986; Merryman 1985; Schlesinger *et al.* 1988), Djankov *et al.* (2003) argue that civil law countries require more formalism for judgement in a lawsuit. They empirically show that civil law countries have higher expected duration of judicial proceedings, more corruption, less consistency, less honesty, less fairness in judicial decisions, and inferior access to justice than that of common law countries.

The purpose of this paper is consider reforms and changes in MSRs over time, and to test the Legal Origin theory (La Porta *et al* 2008), that the differences in legal systems matter in terms of effective minority shareholder rights. It does this using more sophisticated models than have been used previously, and a larger data set, notably covering five years data of 142 countries which enable dynamic elements to be included in the models., including consideration of the pace of reform The specific research questions are:

- How can reforms lead to greater protection of minority shareholder rights?
- Are improvements in MSRs related to the basic legal system of a country?
- Are improvements in MSRs homogeneous across legal systems?

6.0 Methodology

Data. This study uses data from 142 countries from 2006 to 2010. Data on MSRs are obtained from the World Bank's annual publication titled Doing Business; data on the implementation of law are extracted from annual publications of Transparency International; data on legal systems are obtained from the Central Intelligence Agency's World FactBook (2010) and websites of national governments; data on the economic condition of a country are taken from the World Economic Outlook Database of The International Monetary Fund. These databases and publications do not have data for all the variables for all countries of the world. After excluding countries with missing values, the study draws on five years' data for all the variables of 142 countries.

Variables. MSRs is the independent variable in the study. The variable is measured by the investor protection index. Details of the methodology of the Index can be found in Djankov et al. (2008). The index covers minority investor rights related to approval of RPTs, disclosure of RPTs, shareholder rights in the case of prejudicial RPTs by controlling shareholders, minority shareholder rights to sue directors, minority shareholder access to corporate documents and so on. The index value ranges from 0 to 10, with higher values indicating greater investor protection.

Independent and control variables of the study are as follows:

English common law country. This dummy variable is coded 1 if the legal system of a country is the English common law system and 0 otherwise.

French civil law country. This dummy variable is coded 1 if the legal system of a country is the French civil law system and 0 otherwise.

German civil law country. This dummy variable is coded 1 if the legal system of a country is the German civil law system and 0 otherwise.

Scandinavian civil law country. This dummy variable is coded 1 if the legal system of a country is the Scandinavian civil law system and 0 otherwise.

Enforcement of law. The Corruption perception index of Transparency International is used as a proxy measurement for this variable. This proxy has been used in past studies (LaPorta et al. 1998; LaPorta et al. 2000b) for measuring enforcement of law. The index ranges from 0 to 10. Higher scores on the index indicate lower corruption, therefore higher enforcement of law, and vice versa.

Time. This variable is used to measure change. The first year of data (year 2006) is considered as the base year and hence coded as 0, the next year is coded as 1 and in this way the last year, 2010 is coded as 4.

GDP per capita. Following previous studies, this study controls for the economic condition of a country. The natural log of per capita gross

domestic product in current prices (in US dollars) is used as a proxy variable for this.

Statistical Method Used

This study uses Growth curve modelling (GCM) for analysis of the data. GCM is a technique for the analysis of change over time. It has been used in medicine (Pan *et al.* 2008), organizational behaviour (Bliese and Ployhart 2002), sociology and psychology (Kashy *et al.* 2008; Schaeffer *et al.* 2006), for studying growth of different phenomena. This study uses GCM as this can analyse a

phenomenon over time and that is one of the primary foci of this research.

In GCM, time is included as an independent variable to trace change in the dependent variable over time; moreover interaction terms of time with other explanatory variables are used to trace change in the impacts of these other variables over time. The parameters of GCM are estimated using the maximum likelihood estimation method. In GCM both a fixed and a random part of the intercept and impacts of the independent variables are considered. Following is an example of GCM:

$$\text{y}_{it} = (\alpha_1 + \alpha_i) + (\beta_1 + \beta_{1i})time_i + (\beta_2 + \beta_{2i})X_{it2} + \ldots\ldots\ldots\ldots + (\beta_k + \beta_{ki})X_{itk} + u_{it} \quad (1)$$

In the above model α_1 is the fixed intercept and α_i is the random part of the intercept; β s with suffix roman numbers only are fixed parameters to be estimated and all $\beta._i$ s are the random part of each parameter.

GCM provides more information than traditional regression analysis where only the fixed part of the parameter is estimated. For example, α_1 indicates the mean of the model i.e initial situation at the beginning of time period and α_i indicates variation among each individual (in this analysis, country).

Along with GCM, panel data have been used in this study. Non-experimental data are often used in social science and business analysis. However, non experimental data have the drawback that they cannot control all the factors that affect the dependent variable. Therefore, causal conclusions are difficult using non experimental data as many factors remain uncontrolled. Panel data lessen this problem. Using panel data has the advantage over cross sectional and time series data that it can control unobserved heterogeneity in the observation (Wooldridge 2003). Two panel data methods are considered for this study: fixed effect estimation (FE) and the random effect estimation method (RE).[31] The FE method is used when unobserved effects are correlated with explanatory variables of the model, while the RE method is suitable when these are not correlated. Thus, the nature of the data dictates which method can be applied. Arbitrary assumptions about the correlation among unobserved heterogeneous effects and explanatory variables may lead to inconsistent estimation of parameters (Greene 2000).

Model Specification

Two models have been developed in this paper. The first one is a GCM model that has been developed for studying change in minority shareholder rights over time, for finding out the initial condition of minority rights in different countries of the world, the variability of the minority rights and effect of legal systems on minority shareholder protection. This model captures whether legal quality affects the MSRs in common law countries faster than in civil law countries. To test that, an interaction term between time and English common law country variables is included in the model. The model is as follows:

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[31] The first difference estimation method (FD) is not considered as the number of countries in this study is much higher than the number of time periods. In this case, FD would be unbiased and consistent, but less efficient than the FE method (Wooldridge 2003).

$$\text{Min\_Right}_{it} = (\alpha_1 + \alpha_i) + (\beta_1 + \beta_i)time_i + (\beta_2 + \beta_i)English_i + (\beta_3 + \beta_i)German_i$$
$$+ (\beta_4 + \beta_i)Scan_i + (\beta_5 + \beta_i)Enforce_{it} + (\beta_6 + \beta_i)LnGdp_{it}$$
$$+ (\beta_7 + \beta_i)Time_t XEnglish_i + \varepsilon_{it} \tag{2}$$

where,

Min_Right_{it} = minority shareholder rights of country i in year t.

Time = indicates time where first year is the base year.

$English_i$ = a dummy variable indicating English common law system of country i.

$Germna_i$ = a dummy variable indicating German civil law system of country i.

$Scan_i$ = a dummy variable indicating Scandinavian civil law system of country i.

$Enforce_{it}$ = enforcement of law in country i in year t.

Ln_Gdp_{it} = the natural logarithm of gross domestic product per capita of country i in year t.

$Time_i*English_i$ = interaction between time and English common law system.

The second model is a panel data regression model to investigate the effect of the legal system and law enforcement on minority shareholder protection in a country. This is similar to earlier studies, for example, La Porta *et al.* (1998). However, earlier studies used cross sectional regression models and much smaller data sets.[32]

$$\text{Min\_Right}_{it} = \alpha_0 + \beta_1 English_i + \beta_2 German_i + \beta_3 Scan_i + \beta_4 Enforce_{it} + \beta_5 LnGdp_{it} + \varepsilon_{it} \tag{3}$$

where,

Min_Right_{it} = minority shareholder rights of country i in year t.

$English_i$ = a dummy variable indicating English common law system of country i.

$German_i$ = a dummy variable indicating German civil law system of country i.

$Scan_i$ = a dummy variable indicating Scandinavian civil law system of country i.

$Enforce_{it}$ = enforcement of law of in country i in year t.

Ln_Gdp_{it} = the natural logarithm of gross domestic product per capita of country i in year t.

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[32] This study uses 710 country year observations.

7. Results

Table 3 presents the descriptive statistics regarding the variables of this study. In the descriptive statistics, the large standard deviation (1.57) for MSRs of all countries compared to the mean (5.01), minimum value (1.7) and maximum value (9.7) of MSRs indicates disparity of minority shareholders' rights among the sample countries.

Table 3. Descriptive Statistics

Variables	Mean	Standard Deviation	Minimum	Maximum
All countries (142)				
MSRs	5.01	1.57	1.7	9.7
Enforcement of law	4.01	2.12	1.3	9.6
GDP per capita	11213.28	16218.82	120.34	93235.22
Common law countries (37)				
MSRs	6.01	1.90	2	9.7
Enforcement of law	4.48	2.38	1.5	9.6
GDP per capita	12683.2	17486.68	270.01	59901.95
French civil law countries (83)				
MSRs	4.48	1.27	1.7	8.3
Enforcement of law	3.28	1.47	1.3	9
GDP per capita	6661.38	10305.40	120.34	53354.89
German civil law countries (18)				
MSRs	5.19	1.00	3	7
Enforcement of law	5.35	1.84	2.7	9.1
GDP per capita	18843.24	16426.64	1223.77	67074.31
Scandinavian civil law countries (4)				
MSRs	6.03	.59	4.3	6.7
Enforcement of law	9.09	.40	7.9	9.6
GDP per capita	57733.54	15786.68	39414.66	93235.22

Note: GDP per capita is in US dollar and other variables are index values; director's liability and ease of suit are three variables that are the sub indices of minority shareholder rights.

Among the countries Scandinavian civil law countries (6.03) and English common law countries (6.01) have the highest level of MSRs followed by German civil law countries (5.19). French civil law countries have the lowest level of MSRs (4.48). Figure 2 presents changes in the indicators of minority shareholder rights by countries with different legal systems.

To check for any multicollinearity among the independent variables of the study, the Variance Inflation Factors (VIF) of the variables are calculated. The highest VIF is 3.52 for enforcement of law indicating that the independent variables of the study are free from any multicollinearity problem.[33]

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[33] Though there is no precise VIF cut-off point for indication of multicollinearity, a VIF greater than 10 is often used as a rule of thumb for presence of multicollinearity among independent variables of a regression model.

Figure 2. Average Indices of Minority Shareholders' Rights (2006-2010)
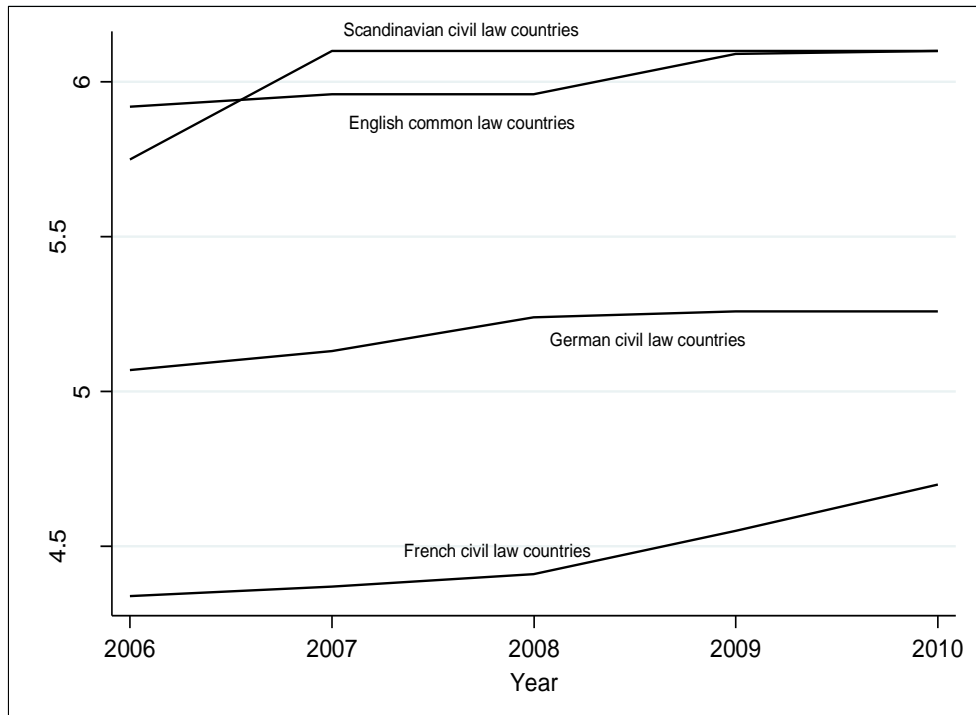
The results of the GCM modelling show (see Table 4) that the average MSRs in 2006 was 2.65 in the 142 sample countries; on average, reform improves MSRs about 0.07 per year or .35 in five years. However, the initial condition of MSRs and the reform is not homogenous in all countries. MSRs in 2006 vary by about 0.99 points (σ (Constant)) among countries. The improvement of MSRs also varies about 0.17 point (σ (Time)) per year. The result also shows that English common law countries have better minority shareholder rights than French civil law countries by about 0.23 points on average, but the variation among English common law countries compared to French civil law countries is about 0.88 points (σ (English common law)). The analysis also shows that enforcement of law significantly influences improvements of minority shareholders' rights in a country. A one point improvement in the enforcement of law improves minority shareholder rights by about 0.22 points. However, there is variation in this improvement among countries by about .11 points (σ (Enforcement of law)). This study also investigated whether the English common law countries and countries with better law enforcement reform their MSRs faster (see, Table 4: model 2) by incorporating two interaction terms with time. However, the results show no indication of that.

For the panel data analysis, the Hausman test (1978) is performed to identify which panel data method is suitable for the data set used in this

study.[34] The test finds that there is correlation between unobserved country specific heterogeneity and the independent variables ($\chi^2 = 4.38, p = .11$). Therefore, the FE method is more appropriate than the RE method. The FE method shows that the enforcement of law can increase MSRs of a country. The result shows that a one point increase of law enforcement increases point minority shareholder rights by 0.23 ($t = 2.27$) after controlling for per capita income of a country.[35] This result is very similar to the result found in the fixed effect part of GCM result above. The FE method has a drawback in that it cannot estimate any time invariant variable. As the legal system is time invariant, the time de-meaning

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[34] The Hausman test is used for detecting correlation between unobserved effects with explanatory variables of a panel data model. The test is based on the idea that if there is no correlation between the error term and explanatory variables then the parameter estimation method of FE and RE are both consistent, but FE is inefficient; however, if there is correlation then the FE is consistent but the RE estimation is not (Green 2000). Therefore, the test is based on the difference of the estimates of the two methods that are as follows:

$W = \chi^2[k-1] = (\hat{\beta}^{FE} - \hat{\beta}^{RE})^2 [\text{var}(\hat{\beta}^{FE}) - \text{var}(\hat{\beta}^{RE})]^{-1}$

where, W is the Housman test statistic distributed as chi-squared (χ^2) with (k-1) degree of freedom; k is number of parameters to be estimated.

[35] This result is based on heteroskedasticity robust standard errors

process of the fixed effect estimation method   excludes these variables.

Table 4. Growth Curve Models Result

	Model 1	Model 2
Fixed effects		
Constant	2.65***	2.68***
	(5.51)	(5.58)
Time	.07***	.10***
	(4.11)	(2.90)
English common law	1.23***	1.23***
	(4.58)	(4.60)
German civil law	.25	.26
	(.82)	(.82)
Scandinavian civil law	-.06	-.07
	(-.08)	(-.09)
Enforcement of law	.22***	.23***
	(4.70)	(4.81)
Ln GDP per capita	.11*	.11*
	(1.77)	(1.61)
Time * Enforcement of law	-	-.01
		(-.80)
Time * common law	-	-.03
		(-.90)
Random effects		
σ (Time)	.17***	.17***
	(13.51)	(13.33)
σ (English common law)	.88**	.88**
	(2.78)	(2.78)
σ (Enforcement of law)	.11**	.11**
	(2.73)	(2.75)
σ (Constant)	.99***	.99***
	(10.75)	(10.85)

Note: * <10%, ** <5%, *** <1%; values in the parenthesis are *t* statistics of the coefficient; σ indicates standard deviation.

8. Conclusion

This paper investigates changes in minority shareholder protection in recent years and whether these relate to the contested legal origin view of minority shareholder protection. The novelty of the study is that it has seen this phenomenon though a dynamic lens. It achieves this by analysing data of 142 developed and developing countries for five year. It shows that, on average, countries across the world have improved minority shareholder protection but that the improvement is not homogenous across countries. The study also finds that a legal system does not affect the pace of reform for minority shareholders. Therefore, the reforms are not connected with a country's legal

system – other efforts are needed to bring that about. This echoes the view of La Porta *et al.* (2008):

> Some accuse us of claiming that legal origin is destiny, so any reform of investor protection or of other regulations short of wholesale replacement of the legal system is futile. This is not what Legal Origin Theory says. The theory indeed holds that some aspects of the legal tradition are so hard-wired that changing them would be extremely costly and that reforms must be sensitive to legal traditions. Nonetheless, many legal and regulatory rules, such as entry regulations, disclosure requirements, or some procedural rules in

litigation, can be reformed without disturbing the fundamentals of the legal tradition. (p. 325)

Like many past studies the study finds that English common law countries have a greater level of MSRs than civil law countries and such rights are greater in countries with more effective law enforcement. The findings are robust controlling for richness of a country. This finding supports the legal origin view of investor protection. Findings of this study give direction to policymakers that legal reform is important for minority shareholder protection.

The main focus of this research was minority rights reform and whether reform should follow the legal reform route or not. However, one of the limitations of this study is that it does not investigate the political view of minority investor protection, which is another way of looking at this area (Roe 2006; Pagano and Volpin 2005; Roe 2000). Future research may consider the effect of political ideology of a country's ruler on minority shareholder rights reform.

A current debate related to this paper is how minority investors protection law is to be enforced. The key point of the debate is the relative importance of public and private enforcement of investor protection law. Private protection is done though higher disclosure requirements on companies and greater liability of directors for any wrong doing and information dissemination. Public enforcement, on the other hand, is done though government agencies, for example, the Securities and Exchange Commission. One view is that private enforcement is more important than public enforcement in protecting minority shareholder rights (Djankov *et al.* 2008; La Porta *et al.* 2006), whilst others group disagree (Jackson and Roe 2009). Future research can investigate this issue further.

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