Law and Finance —State of the Art

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0. Introduction

The importance of the institutional and legal environment for the behaviour of actors on financial markets, the development of these markets and economic growth only recently attracted attention of research in corporate finance, in particular the so-called '*law and finance*' literature. This new research area was initiated by the seminal papers of La Porta, Lopez-de-Silanes, Shleifer and Vishny (*hereafter: LLSV*). These papers investigated the relationship between a country's legal framework and its financial development. This new stand of literature shows that differences in the legal framework and in law enforcement (see section 1) affect ownership structure (section 1), the capital structure (availability of external finance—section 2), the asset structure (section 3), dividend policy (section 4) and corporate governance (section 5).

Since investor protection determines the readiness of investors to finance firms, it is of crucial importance that corporate finance turns on these legal rules and their enforcement. In their first paper LLSV (1996) examine whether laws on investor protection differ across countries and whether these differences matter for corporate finance. Investor protection rules are defined as rules that determine the ease with which investors can exercise their powers against management (and controlling shareholders), or put differently, how investors can extract the returns on their investment from these managers. Indeed, Johnson e.a. (2000) shows how tunnelling or the transfer of assets and profits out of the firm occur for the benefit of those who control them at the expense of minority shareholders. This can come a.o. in the form of transfer pricing, asset stripping or investor dilution. Johnson e.a. (2000) show that especially in French civil law countries such as France, Italy, and Belgium, much of the tunnelling is even legal compared to common law countries. This mainly because such transactions are assessed by courts in French civil law countries in light of their conformity with statutes and not on the ba-

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sis of their fairness to minority shareholders such as in common law countries.

Investors get cash only because they have power. Investors' rights, in LLSV (1996), are both shareholder rights as well as creditor rights. The different bundles of rights to which an investor is entitled are determined by laws and are not inherent in the securities themselves, implying that legal rules matter. Other rights include disclosure rules, accounting rules and securities regulation. LLSV (2000) point out that such rules are established to provide investors with information they need to exercise the other rights (see Engelen (2002) for a recent overview of the distribution of price-sensitive information and efficient solutions to asymmetric information in stock markets).

1. Legal families shape financial regulation

In line with comparative legal scholars², LLSV (1996) classify the national legal systems of 49 countries into four families of law. Historically speaking, common law is case law developed by precedents from judicial decisions. Common law countries include the U.K., the United States, Canada and British colonies. Civil law countries, on the contrary, are characterized by the codification of abstract rules and rely heavily on legal scholars. Civil law countries can be subdivided into three legal families: French³, German⁴ and Scandinavian⁵. Their results show that investor protection is determined by the legal family to which a country belongs. This is an important observation. LLSV (1999, p.9) conclude that "because financial legal families originated much before the financial markets have developed, it is unlikely that laws were written primarily in response to market pressures. Rather, the legal families appear to shape the legal rules, which in turn influence financial markets."

With regard to shareholders rights they examine voting powers (one-share-one-vote rules), the ease of participation in corporate voting (vote by mail, the necessity to deposit one's shares with a financial intermediary several days prior to a shareholder meeting, cumulative voting for directors) and legal protections against expropriation by management (minority shareholders legal mechanisms, percentage of share capital needed to call an extraordinary shareholders' meeting). Finally, the right to a mandatory dividend is examined. The analysis very clearly shows that common law countries offer the best legal protections to shareholders (see table 1). Shares are never

 $^{^2}$ See for instance Zweigert and Kotz (1987), Glendon, Gordon and Osakwe (1992) and Reynolds and Flores (1989).

³ This legal family includes a.o. France, Belgium, Spain, Portugal and several Latin American countries.

⁴ This legal family includes a.o. Germany, Austria, Czechoslovakia, Hungary and Switzerland.

⁵ This legal family includes Denmark, Finland, Norway and Sweden.

blocked before a shareholder meeting (0%), voting by mail is frequently allowed (39%), laws protecting oppressed minorities have a high incidence (92%), relatively few shares (9%) are required to call an extraordinary shareholder meeting. These countries therefore have an overall score of 3.39 with regard to anti-director rights.

In contrast, the French civil law countries offer the worst legal protection of shareholders: the lowest incidence of voting by mail (9%), a high incidence of blocking shares before the shareholder meeting (43%), a low incidence of laws protecting oppressed minorities (33%), the highest percentage of share capital (14%) required to call an extraordinary shareholder meeting and a score of 1.76 with regard to anti-director rights. Their results show that the differences between common law and French civil law countries are large and statistically significant. It is not surprising to see that the weak legal protection of shareholders in French civil law countries coincides with the existence of a mandatory dividend, such as in Greece or Portugal, to serve as a remedial legal protection. This does not exist in the other legal families.

Table 1.

Legal family (averages)	One share— one vote	Proxy by mail allowed	Shares blocked before meeting	Cumulative voting for directors	Oppressed minority	% of share capital to call an ESM	Antidirector rights index°	Mandatory dividend°°
Common law	22%—PS	39%—PS	0%—PS	17%—PS	92%—PS	9%—PS	3.39	0%
French civil law	24%—PS	9%—PM	43%—PM	19%—PS	33%—PM	14%—PM	1.76	14%
German civil law	33%—PS	17%—PM	67%—PM	17%—PS	33%—PM	5%—PS	2.00	0%
Scandinavian civil law	0%—PM	25%—PS	0%—PS	0%—PM	25%—PM	10%—PS	2.50	0%
Total	22%	22%	27%	16%	53%	11%	2.44	6%

Legend: Percentage are expressed as a fraction of one legal family

PS—pro-shareholder; laws; PM—pro-management laws ° ranging from one to five; °° as percentage of net income

For a precise definition of all variables, see table 1 in LLSV (1996). Source: LLSV (1996).

Furthermore, LLSV (1996) examine five creditor rights variables: automatic stay on assets⁶, secured creditors paid first, restrictions for going into reorganization, the stay of management pending the resolution of the reorganization and the existence of a legal reserve as a percentage of capital. Again, common law countries offer creditors better legal protection against manag-

⁶ Procedure to prevent secured creditors from getting possession of loan collateral. This rule protects managers and unsecured creditors against secured creditors and prevents automatic liquidation.

ers (e.g. they place restrictions on managers seeking court protection from creditors—71%, and the lowest incidence of allowing managers to stay on the job in reorganization proceedings—24%), while French civil law countries offer creditors the weakest protections against managers (e.g. allow automatic stay on assets—74%, and lowest guarantee that secured creditors are paid first—68%). Scandinavia and German civil law countries have some pro-management and some pro-creditor laws (see table 2). As was the case with mandatory dividends with respect to shareholders rights, the existence of a legal reserve serves as a remedial creditor right when other investor powers are insufficient to extract from management the returns on their investments. It is therefore not surprising to see that they do not exist in common law countries, with the exception of Thailand.

Table 2.

Legal family (averages)	Restrictions for going into reorganization	Automatic stay on assets	Secured creditors first paid	Management stays in reorganization	Legal reserve required as a % of capital
Common law	71%—PC	29%—PC	94%—PC	24%—PC	1%
French civil law	42%—PM	74%—PM	68%—PM	74%—PM	20%
German civil law	33%—PM	33%—PC	100%—PC	67%—PM	28%
Scandinavian civil law	75%—PC	75%—PM	100%— PC	100%—PM	16%
Total	54%	52%	85%	57%	13%

Creditor rights according to legal family

Legend: Percentage are expressed as a fraction of one legal family

PC—pro-creditor laws; PM—pro-management laws

For a precise definition of all variables, see table 1 in LLSV (1996). Source: LLSV (1996).

Table 3.

The rule of law and accounting standards

Legal family (averages)	Efficiency of judicial system°	Rule of law°	Corruption°	Risk of ex- propria- tion°	Risk of contract repudiation°	Rating on accounting standards [∞]
Common law	8.15	6.46	7.06	7.91	7.41	69.62
French civil law	6.56	6.05	5.84	7.46	6.84	51.17
German civil law	8.54	8.68	8.03	9.45	9.47	62.67
Scandinavian civil law	10.00	10.00	10.00	9.66	9.44	74.00
Total	7.67	6.85	6.90	8.05	7.58	60.93

Legend: Percentage are expressed as a fraction of one legal family ° ranging from one to ten (highest is best); °° as a score on 90 items For a precise definition of all variables, see table 1 in LLSV (1996).

Source: LLSV (1996).

Another important topic LLSV (1996) look into is the enforcement of the investor protection rules because a strong system of legal enforcement could even substitute for weak rules. Using five measures for the quality of enforcement (efficiency of the judicial system, rule of law, corruption, risk of expropriation, likelihood of contract repudiation by the government), once again, the analysis shows that law enforcement is strongest in Scandinavian countries, whereas it is the weakest in French civil law countries. It appears from the analysis in LLSV (1996) that the quality of law enforcement does not compensate for the lack of quality of laws.

Moreover, their empirical results show that good shareholder protection and enforcement are highly negatively related with the concentration of ownership. It appears that highly concentrated ownership is a response to poor investor protection. However, if small investors are not well protected, companies are unable to raise capital from them and entrepreneurs cannot diversify their holdings.

Besides the classification in legal families, Cassimon and Engelen (2002) examine legal and institutional barriers for developing countries. Their analysis shows that the level of development is another important factor for explaining the legal framework⁷. Table 4 gives an overview of several legal and institutional constraints in developing countries. The data presented here are mainly the result of firm-level surveys, i.e. the World Business Environment Survey conducted by the World Bank for eighty one countries. Variables e through l of table 4 examine the enforcement of legal rules in developing countries. Table four reports the general quality of courts, the fairness and impartialness of courts, the honesty and uncorruption of courts, the consistency of the court's decisions, the enforcement of court's decisions and the confidence in the legal system for upholding one's rights. This legal constraints can be summarized in column l which measures how problematic the functioning of the judiciary is for the operation and growth of one's business. This general legal constraint is higher for developing countries (ranging from 2.13 to 2.26 for developing countries compared to only 1.79 for developed countries). Next, table 4 analyzes whether the level of corruption is more problematic to obtain sufficient financial resources in developing countries. Columns m and n measure the level of corruption of bank officials and the general level of corruption of a given country. As can be seen corruption is increasingly problematic in developing countries (ranging from 2.36 for upper middle income countries to 2.89 for low income countries, compared to only 1.60 for high income countries).

⁷ A result also found to some extent in LLSV (1996) for a sample of 49 countries. However, Cassimon and Engelen (2002) use a larger sample of 81 countries, that includes much more low income developing countries.

0	Overview of legal and insti	and insti	itutional	constra	ints aco	tutional constraints according to region and development status	egion aı	nd devel	opments	status					
		[a]	[q]	[c]	[d]	[e]	[f]	[g]	[h]	E	(I)	[k]	Ξ	[m]	[n]
4	Panel I. Region	viol ^a	coll ^a	afs ^b	ias ^b	law_pred ^c	qcrt ^c	fi_crt ^c	hu_crt ^c	cst_crt⁰	enf_crt ^c	cf_crt ^c	juds ^a	gcorr ^a	corr ^a
1	Africa	1.92	2.52	1.84	1.86	4.30	3.19	3.00	3.18	3.48	3.18	3.16	na	2.83	1.81
2	Transition Europe & former USSR	2.49	2.48	1.59	1.68	4.20	3.77	3.86	4.00	4.04	3.73	3.53	2.12	2.46	1.82
3	Asia	2.48	2.36	1.39	1.52	3.64	3.23	3.18	3.38	3.36	3.40	2.83	2.04	2.67	2.06
4	Latin America	2.72	2.79	1.25	1.35	3.73	3.93	3.97	4.02	4.31	3.89	3.23	2.38	2.75	1.68
5	OECD	1.88	2.11	1.27	1.53	3.52	3.38	3.31	3.03	3.72	3.33	3.05	1.77	1.63	1.26
Ē.	Panel II. Income classification	Issificatio	E												
1	low income	2.28	2.63	1.65	1.70	4.22	3.58	3.67	3.95	4.05	3.68	3.47	2.13	2.89	2.02
7	lower middle income	2.61	2.51	1.49	1.60	3.97	3.56	3.74	3.85	3.93	3.78	3.37	2.26	2.72	1.90
n	upper middle income	2.44	2.50	1.43	1.51	3.82	3.67	3.39	3.42	3.76	3.40	2.94	2.17	2.36	1.57
4	high income	1.90	2.13	1.26	1.50	3.49	3.31	3.11	2.87	3.48	3.09	2.92	1.79	1.60	1.26
Le Le Ccc Le So Ba	Legend: viol (violation of patents), coll (collateral), afs (audited financial statements), ias (international accounting standards), corr (corruption of bank officials), law_pred (predictability of laws and regulations), qcrt (quality of courts), fi_crt (courts are fair and impartial), hu_crt (courts are honest and uncorrupt), cst_crt (courst are consistent), enf_crt (court decisions are enforced), cf_crt (confidence in legal system to uphold my rights), gcorr (corruption), juds (judiciary). See table 1 for the precise definition. ^a rating f 1 to 4 (lowest best), ^b rating from 1 to 2 (lowest best), ^c rating from 1 to 6 (lowest best); income classification as defined by the World Bank; sample of 81 countries included in WBES database Source: World Business Environmental Survey (WBES) of World Bank.	ttion of _I k officia (courts a al systen ^b rating l countri iness Er	atents), ls), law_l ure hone: 1 to uphc g from 1 1 les inclue ivironme	coll (col pred (pr st and ui bld my ri to 2 (low ded in W ded in W	lateral, edictab ncorrur ghts), g BES di /BES di rvey (W	atents), coll (collateral), afs (audited financial statements), ias (international accounting standards), corr (s), law_pred (predictability of laws and regulations), qcrt (quality of courts), fi_crt (courts are fair and re honest and uncorrupt), cst_crt (courst are consistent), enf_crt (court decisions are enforced), cf_crt (to uphold my rights), gcorr (corruption), juds (judiciary). See table 1 for the precise definition. ^a rating from from 1 to 2 (lowest best), ^c rating from 1 to 6 (lowest best); income classification as defined by the World es included in WBES database vironmental Survey (WBES) of World Bank.	ed finan s and reg courst a ption), j rom 1 tc rrld Ban	cial stat gulation re consii uds (jud o 6 (lowe k.	ements), s), qcrt ((stent), er iciary). S st best);	ias (inte quality o nf_crt (cc see table income o	ernationa f courts), ourt decis 1 for the classifica	ll accoun fi_crt (c sions are precise tion as d	ting star ourts ar enforce definiti efined b	idards), (e fair and d), cf_cr on. ^a rati y the Wo	corr A ng from orld

Table 4. Avarview of level and institutional constraints according

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2. Finance effect

LLSV (1997) show that the legal environment is highly relevant for the size and extent of a country's capital markets. An investor is only willing to surrender funds to a company in exchange for securities, if he is protected against expropriation by management. A good legal environment, as measured by both legal rules and the quality of enforcement, therefore, expands the ability of companies to raise external finance through either debt or equity. Using three equity measures (ratio of stock market capitalization to GNP, the number of listed domestic companies and the number of initial public offerings) their regression results show that low shareholder protection causes smaller equity markets as well as lower access of firms to external equity⁸. Similar results are found with regard to the debt market. Using two variables (the total bank debt of the private sector and the total face value of corporate bonds, relative to the GNP), their results show that debt finance is more accessible in common law than in French civil law countries. Examining the impact of the quality of enforcement, they also find that it has a significant impact on the ability of companies to raise external debt or equity finance⁹. To conclude, LLSV (1997) offer strong evidence that the legal framework has a large effect on the size and the breath of capital markets across countries. And, importantly, it has an effect on both equity and debt markets.

Several other papers confirm similar relations between the legal framework and financial development. Using a sustainable growth model, Demirgüç-Kunt and Maksimovic (1998) identify externally financed companies and link the availability of external finance to the legal framework. The access to long term external finance depending upon the origin and efficiency of a legal system is also demonstrated by Demirgüç-Kunt and Maksimovic (1999). Similar results are also reported by Rajan and Zingales (1998). Beck, Demirgüç-Kunt and Maksimovic (2002) show that firm growth is more affected by reported constraints in countries with underdeveloped financial and legal systems and higher corruption. This is especially true for small and medium sized companies (SMEs). As a policy recommendation they argue that improving financial and legal development and reducing corruption will promote firm growth, especially in the case of SMEs. Cassimon and Engelen (2002) also report the negative impact of legal constraints on the amount of long-term debt as well as short-term debt.

The finance effect shows the impact of the legal framework on the liabilities side of the balance sheet of companies. But, the legal environment can also have an impact on the assets side of the balance sheet (see figure 1). This so-called asset structure effect is explained in the next section.

 $^{^{\}rm 8}\,$ The means of common law and French civil law countries are statistically different from another.

 $^{^9\,}$ Using the same measures as with regard to investor protection rules as in LLSV (1996).

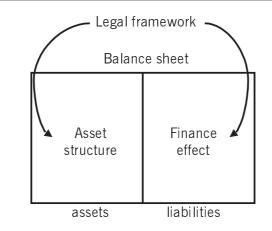


Figure 1.

The impact of the legal framework on the balance sheet of companies

3. Asset structure

Examining the impact of property rights and the enforcement of these laws using a sample of 51 countries¹⁰ Claessens and Laeven (2001) extend the existing law and finance literature. Their empirical results not only show that weaker legal frameworks diminish the availability of external resources, but also show an asset substitution effect, i.e. the investment in more fixed assets relative to intangible assets compared to firms operating in a strong legal environment, because of the weaker (intellectual) property rights. This is of crucial importance for firms that depend heavily on investments in intangible assets. An over-allocation of resources towards tangible assets will then impede the future growth opportunities of such firms. Especially for so-called new economy firms the asset substitution will be as important as the finance effect of a weak legal framework. Their overall results shows that weaker property rights are associated with lower firm growth because of these two effects: less financing and underinvestment in intangible assets. Again, this paper adds to the growing amount of evidence provided by the law and finance literature that the legal framework matters and that it is of crucial importance for explaining financial behavior of companies and investors. The combined effect of the finance and the asset substitution effect is also illustrated in figure 2 with respect to a sample of 28 countries.

Cassimon and Engelen (2002) also illustrate some barriers to the optimal amount of investment in intangible assets (columns a to d in table 4). The first variable measures the protection of intellectual property and analyzes whether copyrights, patents and trademarks are violated by competitors or not. It appears that the protection of these intellectual property rights is indeed more problematic in developing countries (2.28, 2.61 and 2.44) than in

¹⁰ The population consists of 23 developed countries and 28 developing countries.



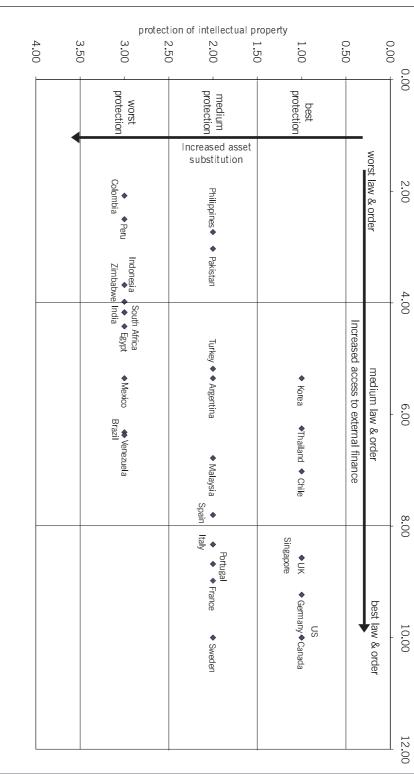


Figure 2. Combined finance and asset substitution effect Source: Based on numbers provided in Claessens and Laeven (2001). 126

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high income countries (1.90) (see column *a* of panel II of table 4). If banks and financial institutions demand collateral for providing financing, again, financing for new economy firms is problematic because of the intagible nature of such firms. As table 4 shows the provision of collateral becomes increasingly problematic for developing countries (ranging from 2.50 to 2.63, compared to 2.13 for high income countries). As firms invest heavily in intangible assets, adequate financial reporting becomes increasingly important to value investments in goodwill and other intangible assets. Hay, Shleifer and Vishny (1996) show that accounting standards are important for financial contracting when investor rights are weak. As can be seen from columns c and d of table 4, the quality of accounting standards decreases sharply with the level of income of a country, which can further impede the development of new economy firms in developing countries because shareholders and financial institutions face higher uncertainty about the fundamental value of such firms. Cassimon and Engelen (2002) report the negative impact of several institutional and legal constraints on the amount of intangible assets to total assets, such as collateral, corruption of bank officials and the functioning of the judiciary.

4. Dividend policy

In yet another paper LLSV (1998) focus on the dividend policy of companies from an agency perspective. Although Frank Easterbrook already published an article in 1984 on agency models explaining the dividend puzzle, little research has be done on dividend policies as a solution for agency problems between corporate insiders and outsider shareholders¹¹. The starting point is that the interests of corporate insiders and outside investors do not necessarily align (Jensen and Meckling, 1976). Jensen (1986) points out that insiders can use corporate assets to pursue investment strategies that are not in the interest of outside investors (e.g. diversification) or for their personal benefits. When a company pays out dividends, insiders are no longer capable of using the earnings in ways that do not benefit outside investors. In this view dividends are an outcome of an effective system of legal protection of shareholders. It is the very fact of existence of corporate laws that give outside investors the power to protect their investment against expropriation by insiders. LLSV (1998) point out that only because of these legal protections becoming a minority shareholder is a viable investment strategy at all. For, under an effective system, minority shareholders use their legal powers to force companies to distribute cash dividends.

Therefore, according to this model, the higher the shareholder protection, the higher the dividend payout ratios will be. Moreover, this model predicts that high growth companies should have significantly lower dividend payout

¹¹ An exception is Fluck (1999).

ratios than low growth companies in countries with good shareholder protection. For, shareholders that are protected by legal rules would accept lower payout ratios in case of high reinvestment rates. Their empirical result show indeed that common law countries have a significantly higher dividend payout ratio than civil law countries. The regression analysis shows that countries with better shareholder protection have higher dividend payout ratios. Moreover, only in common law countries high growth companies have significantly lower dividend payout ratios. Again, this empirical study clearly shows that the quality of legal protection of investors is important, in this case for understanding dividend policies around the world.

5. Corporate governance

LLSV (1999) elaborate their analysis to the corporate governance context. Instead of focusing on the traditional difference between bank-centered and market-centered corporate governance systems, they argue that the law and finance approach appears to be a more fruitful way to understand corporate governance. The legal approach to corporate governance holds that the key mechanism is the protection of outside investors. They observe that "Italy and Belgium have developed neither debt nor equity markets because no outside investors are protected there" (LLSV, 1999, p.23). They stress the importance of investor protection as an important factor contributing to the development of financial markets. Again, this is an important finding, because recent research shows a clear link between the development of financial markets and economic growth (see section 6).

Klapper and Love (2002) examine the relationship between the legal framework, corporate governance and operating performance and company valuation. Examining 374 firms in 14 emerging markets¹² they examine the impact of good (bad) corporate governance on Tobin's-Q as a measure of the market valuation of assets and ROA (return on assets) as a measure of operating performance. They confirm that firms in countries with a good legal environment have better market and operating performances. But, more importantly, their empirical results reveal that firm-level corporate governance matters more in countries with poor overall minority shareholder protection. It appears that even the smallest improvement of a company's corporate governance compared to country-average is very important to investors in countries with poor legal environment or with weaker investor protection from the courts. This study shows that a relative improvement through company charters of corporate governance compared to the country-average in countries with poor investor protection improves the valuation and operating performance of such companies and acts as a rough and partial replacement for the poor country-level legal environment. Therefore, Klapper and Love

¹² Brazil, Chile, Hong Kong, India, Indonesia, Korea, Malaysia, Pakistan, Philippines, Singapore, South Africa, Taiwan, Thailand and Turkey.

(2002) conclude, in line with the conceptual model of Shleifer and Wolfensohn (2002), that companies "cannot completely compensate for the absence of strong laws and good enforcement."

6. Impact on economic growth

The finding of the law and finance literature that the legal environment is a crucial factor contributing to the development of financial markets, is an important finding because recent research shows a clear link between the development of financial markets and economic growth. Several recent empirical studies find a link between financial development and economic growth. King and Levine (1993) find a relationship between indicators of financial development and indicators of economic growth. The empirical results in Levine and Zervos (1998) show a statistically significant relationship between initial stock market development and subsequent economic growth. Similar results are reported by Rousseau and Wachtel (1998) and Van Nieuwerburgh and Buelens (2000). Financial development can enhance subsequent economic growth in several ways (Levine, 1997 and Beck, Levine and Loayza, 2000): enhanced savings, capital accumulation, efficiency improvements and technological innovation. The link between legal framework and economic growth is clear: investor protection enhances financial development, which in turn accelerates economic growth (see figure 2). So, from a development point of view, the legal framework is an important element for creating economic growth.

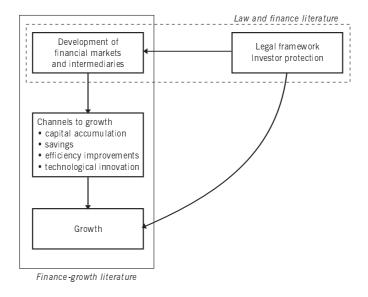


Figure 3.

A theoretical approach to law, finance and growth Source: Engelen (2002).

7. Conclusion

This article gives a state of the art of the so-called 'law and finance' literature which stresses the importance of the institutional and legal environment for the development of financial markets and economic growth. Investigating the relationship between a country's legal framework and its financial development, this new stand of literature shows that differences in the legal framework and in law enforcement affect ownership structure, the availability of external finance (capital structure), the asset structure, dividend policy and corporate governance of companies.

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