LAW, FINANCE, AND GROWTH DURING TRANSITION: A SURVEY

BY

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Summary

This paper surveys the literature on law, finance, and growth and assesses its relevance to transition economies. It describes the contribution, as well as the limitations of the legal view literature with regard to our understanding of the causality between financial development and economic growth. The legal view demonstrates that, through its impact on the financial system, an effective legal system indirectly promotes economic development. However, the particularities of the transition process – notably the existence of soft budget constraints – are such that the methodology and the results of the legal view cannot be applied to transition economies without provisos.

Key words: financial development, legal institutions, transition economies.

1 INTRODUCTION

Does financial development stimulate economic growth, or does causality run the other way, in the sense that the financial sector develops to meet the increasing demand for financial services in a growing economy? And what role does the legal system play in this finance-growth nexus? Such questions are particularly relevant for the formerly socialist countries in Central and Eastern Europe (CEE), as these are still in the process of shaping both their legal and financial systems. Therefore, this paper discusses the interlinkages between legal institutions, financial development, and economic growth with a focus on transition economies. It does so by surveying a more general strand of literature, termed the 'legal view', as well as the literature that specifically deals with the real effects of the legal and financial systems in transition countries.

The survey is organised as follows. Section 2 discusses the state of the art in the literature on law, finance, and growth. It first touches on the older literature in this field and then describes how the legal view has contributed to our understanding of the causality between finance and growth. The main shortcomings of

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this strand of literature are highlighted too. Subsequently, section 3 deals with the relevance of the legal view from the angle of the transition process. The concept of soft budget constraints (SBCs) is illustrated and SBC-theories are shown to provide an important link between law and finance in transition economies. Surveying the emerging empirical literature on law and finance during transition, it is argued that the idiosyncrasies of the transition process – such as widespread SBCs and its dynamic and international character – preclude the methodologies and results of the legal view from being applied to these countries without provisos. Section 4 concludes the survey.

2 THE LEGAL VIEW ON FINANCE AND GROWTH

2.1 The Debate on Finance and Growth

In the Wealth of Nations (1776, p. 394) Adam Smith noted that once the first banks had been established in Scotland, ‘trade and industry (...) increased very considerably’, and ‘that banks have contributed a good deal to this increase, cannot be doubted’. In this view, financial development tends to boost economic activity. In the 20th century, however, a fierce debate arose in the economic literature on the exact relationship between financial development and economic growth. Many early contributors acknowledged the existence of positive relationships between finance and growth, but differed on the causality issue.\footnote{Early contributions stressing a positive causal relationship are Schumpeter (1912), Garley and Shaw (1955), Hicks (1969), and Drake (1980). Patrick (1966) argues that in the early stages of economic development, finance indeed stimulates growth, but that in more developed economies finance tends to follow growth. Robinson (1979) is also of the opinion that finance follows growth. Finally, Goldsmith (1969) takes a more neutral stance by just pointing to the strong positive association between finance and growth.} Reviewing this early literature, Levine (1997) identifies five functions through which financial markets and intermediaries, by reducing information and transaction costs, can potentially influence economic growth. First, with a well-functioning financial system, more savings are mobilised, since it becomes attainable for households with relatively small financial surpluses to invest them. Second, more and better information leads to a better allocation of these savings. Third, managers can be better monitored, so that a smaller proportion of allocated savings is wasted due to inefficiencies. Fourth, it becomes easier to trade, hedge, diversify, and combine risks. And fifth, transactions concerning goods and services are facilitated. In this perception, a well-functioning financial system leads to an increasing propensity to both save and invest, which stimulates capital accumulation, as well as to technological progress, as more – and more efficient – investment projects are being financed. In the end, this will boost per capita economic growth. Still, the extent to which increased savings actually lead to higher
long-run economic growth, as Levine (1997) argues, is questionable. In a neoclassical growth model, for instance, economic growth turns out to be independent of the savings rate in the long-run. In endogenous growth models, however, a higher savings rate does influence long-run growth. All in all, economic theory provides several mechanisms through which a positive and causal link between financial development and economic growth may exist.

During the 1990s, empirical research provided new evidence on the positive association between finance and growth. A first group of studies is based on Barro-type (1991) cross-country growth regressions, in which proxies for financial development include for instance bank credit to the private sector, stock market capitalisation, or stock market turnover. They aim to demonstrate that the link between finance and growth also holds when economic and political control variables are taken into account. Still, these kind of cross-country studies are characterised by some important weaknesses.

First, they implicitly treat countries as homogeneous entities, meaning that all unknown (non-systematic) country-specific effects are supposed to be fully captured in the regression’s error term. However, if important country-specific characteristics are omitted, the explanatory power of such omitted variables may incorrectly be attributed to the ones which are included (such as financial development proxies). Also, the influence of financial development on economic growth may differ across country groups. In case of such parameter heterogeneity, cross-country estimates will be inconsistent. Durham (2002) shows, for instance, that the positive relation between stock market development and growth may mainly be driven by the inclusion of higher income countries in the cross-country samples.

Secondly, although many cross-country studies more or less explicitly hint at a causal relationship from finance to growth, they are vulnerable to endogeneity bias: wealthy nations may simply demand more financial services. Also, financial development and economic growth can be caused simultaneously by a third fac-

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2 Even then, the development of the financial system might just as well lead to lower precautionary savings (Jappelli and Pagano (1994)) or a shift in savings away from new capital investments towards secondary capital markets (Bencivenga et al. (1995)), thereby restricting economic growth. Other contributions integrating some form of financial system with endogenous growth theory are Greenwood and Jovanovic (1990), Bencivenga and Smith (1991), Saint-Paul (1992), King and Levine (1993a), Pagano (1993), Boyd and Smith (1996), Arnold and Walz (2000), Morales (2001), and Hung and Cohren (2002).

tor, such as the propensity of households to save. In addition, even if financial
development were to precede economic growth, it could merely be a leading in-
dicator instead of a causal factor (Rajan and Zingales (1998)). Partly as a result
of this critique some authors began to use time-series data as well as pooled cross-
section and time-series – i.e. panel – data (Islam (1995)).

A first advantage of panel data is that both the time-series and the cross-sec-
tional variation in the variables can be exploited. A second potential advantage is
that country-specific characteristics can be taken into account by using country-
fixed effects. In this way, all time-invariant country-specific information is swept
away and only variables that show within-country variance over time influence
the estimates.4 However, including country-fixed effects is not undisputed (Wach-
tel (2003)). It may lead to measurement errors and insignificant results in case of
explanatory variables with little within-country variation, though much between-
country variation (Temple (1999), Barro (2000)). Benhabib and Spiegel (2000)
use panel data to estimate the effect of financial development on economic
growth, both with fixed effects and without fixed effects. They find that indica-
tors of financial development are positively correlated with total factor product-
vity growth and, more robustly, rates of factor accumulation.5 However, their
results turn out to be very sensitive to the inclusion of fixed effects. The authors
conjecture that this may reflect the fact that indicators of financial development
are actually proxies for broader country characteristics (cf. footnote 9 for the
advantage of GMM in this regard). A third advantage of (also) using time-series
data concerns the causality issue. Time series studies and panel studies reveal
that the direction of the causality between banking and stock market development
on the one hand, and economic growth on the other, may differ between coun-
tries. In some countries and during some periods, two-way or reversed causalities
may have been more likely than a (pure) causality from finance to growth.6

Another strand of literature tries to shed more light on the causality issue by
using instrumental variables (IV) techniques to extract the exogenous component
of financial development. These contributions make up the so-called legal view
or 'law and finance' literature, which stresses the importance of (exogenous) le-

4 This still leaves the possibility of a bias in the financial development estimates due to omitted
country-specific, though time-variant variables.
5 In a later paper, Lopez and Spiegel (2002) – using new econometric panel data techniques – con-
clude that financial development influences long-term growth only through factor accumulation.
matis and Spyrou (2001), Al-Yousif (2002), Beck and Levine (2002b), Calderón and Liu (2003), and
Rousseau (2003) all use time series and / or panel methodologies and provide some more conclusive
inferences on the – country specific – direction of the (Granger) causality between finance and growth.
gal systems and institutions for financial, and ultimately economic, development. Let us now turn to this legal view.\textsuperscript{7}

2.2 The Legal View

According to the legal view, the effectiveness of the legal system determines the amount and quality of financial services provided by both banks and markets (important contributions are La Porta et al. (1997, 1998, 1999a, 1999b, 2000a, 2000b, 2002b)). La Porta et al. (1998) describe the underlying framework of the legal view. The main thesis is that small outside providers of funds will only be willing to put their money in firms — whether as shareholders or as creditors — if they can be relatively sure that the firm management and/or controlling shareholders (the ‘insiders’) use the money in their best interest. Shares give their owners for instance the right to vote a director off the board, whereas loan contracts entitle creditors to repossess collateral if a company fails to make the promised payments. These rights should ensure that providers of equity and debt have the power to extract the returns on their investments from the managers (see Hart (1995)). The risk of expropriation of minority shareholders and creditors by controlling shareholders and managers is thus directly related to the agency problem as described by Jensen and Meckling (1976).

The effectiveness of property rights strongly depends on a country’s legal system. In some countries outside investors have better legal protection from ‘bad’ managers — and existing laws are better enforced — than in others. An important distinction in this regard is the one between the common law system, present in England and many of its former colonies, and the civil law system, operative in France and several countries that were conquered by Napoleon. In general, the former system protects outside investors better than the latter.\textsuperscript{8} Since such legal protection determines investors’ readiness to finance firms, corporate finance may depend critically on legal rules and their enforcement. Indeed, Claessens et al. (2000b, 2002a) find for instance that better legal protection of (minority) shareholders is associated with a lower concentration of ownership and control as well as with a higher valuation of listed firms. The recognition in the late 1990’s that a country’s legal institutions may influence its financial system, also led to new empirical ‘finance-growth’ research, seeking to find out whether legal institutions do not only influence financial, but also real economic development. As these

\textsuperscript{7} Ahmed (1998) shows that using IV-techniques in cross-sectional studies cannot resolve the issue of causality in case the simultaneity problem arises purely from time-aggregation. Consequently, some recent studies combine IV-techniques with panel data, using lagged values of the explanatory variables as ‘internal’ instrumental variables (Beck et al. (2000), Levine et al. (2000), Beck and Levine (2002b)). Since this literature uses internal rather than legal instruments, it can identify simultaneity bias, but it cannot link the quality of the legal system to financial and economic growth.

\textsuperscript{8} Johnson et al. (2000) and La Porta et al. (2000a) give some judicial and historical explanations as to why these legal systems differ as regards investor protection.
studies—and the methodologies used in them—are quite typical of the empirical interpretation of the legal view, I will discuss the original study by Levine (1998, 1999) at somewhat greater length.

Levine focuses on the relationship between the legal environment, banks, and economic growth. Using pure cross-section data, he first demonstrates the existence of a statistically meaningful relationship between legal system indicators and banking development (proxied as bank credit to the private sector divided by GDP, averaged over 1976-1993). He finds that differences in creditor rights and their enforcement show significant correlations with banking sector development, also when controlling for the initial level of economic development. The second part of the analysis shows that the part of banking development explained by exogenous legal characteristics is positively and robustly associated with long-run economic development. Here, the basic regression is (Levine, 1998, p. 605):

\[ G_i = \alpha + \beta \cdot \text{BANK}_i + \gamma \cdot X_i + \epsilon_i \]  

(1)

where \( G_i \), the dependent variable, is either real per capita GDP growth, per capita capital stock growth, or productivity growth. \( \text{BANK}_i \) equals credit to the private sector divided by GDP. \( X_i \) represents a matrix of conditioning variables that control for other factors explaining economic growth. \( \epsilon_i \) is the error term, and subscript \( i \) denotes the country. This basic framework is already used by King and Levine (1993b). However, note that the legal view stresses that it is the exogenous part of banking development that will influence economic growth. Therefore, the innovation in the Levine (1998) paper is to use the legal determinants of banking development as IV for \( \text{BANK}_i \), using a Generalised Method of Moments (GMM) technique.\(^9\) The results confirm that there is a strong and positive association between the legally determined part of banking development and long-run economic growth, capital stock growth, and productivity growth. Insofar as legal characteristics can be thought of as exogenous—countries having typically obtained their legal system through occupation or colonisation (La Porta et al. (1998))—the relationship between legally determined banking development and economic growth can indeed be regarded as a causal one (however, see footnote 7).

Elaborating on this methodology, Levine et al. (2000) demonstrate that countries’ legal origins tend to determine their types of laws, regulations, enforcement mechanisms, and ultimately financial and economic development. In a subsequent article, Beck et al. (2000) go deeper into this relationship by examining the

\(^9\) In the presence of heteroscedasticity, GMM estimation is more efficient than two-stage least squares estimation. GMM estimation also allows testing for the validity of the instruments (Ferreira da Silva (2002)). Finally, country-specific effects can be eliminated by first-differencing (Arellano and Bond (1991)) or by using lagged differences of explanatory variables as instruments to control for such effects (Arellano and Bover (1995)).
(causal) link between financial development and the sources of growth. The authors conclude that financial intermediaries exert a large, positive influence on total factor productivity growth, which feeds through to overall GDP growth. Wurgler (2000) finds that the legal protection of minority investors is positively correlated with the efficiency of a country’s capital allocation. These conclusions are in line with work as early as that of Schumpeter (1912), who stressed the role of banks in improving the allocation of savings (as opposed to the rate of savings), thereby stimulating total factor productivity growth.10

A second important finding of the legal view literature is that there is no empirical support for either the market-based or the bank-based view, the opposite sides in the debate about the relative merits of bank-based versus market-based financial systems.11 Indeed, this debate becomes insignificant within a legal view framework, showing that it is the legal rights of both debt and equity providers that promote economic growth. Empirical studies in this field typically find that when explaining economic growth — whether at the country level, the industry level, or the firm level — financial structure in itself does not have significant explanatory power when included at the same time with proxies for the overall state of financial development.12 Banks and markets provide complementary financial services that both contribute to economic growth. It is the legal system that plays a leading role in determining the level and the quality of such growth-promoting financial services.

2.3 The Contribution of the Legal View: An Appraisal

Combining the legal view with traditional regressions on finance and growth — using exogenous legal characteristics as instrumental variables — has contributed to our understanding of the causality between financial development and economic growth. Some degree of consensus has emerged that there is often a positive and causal relationship between the development of the financial system and economic growth, although in many countries and during some periods a bi-directional causality cannot be ruled out.13

Notwithstanding these results, some important questions remain. At present two problems stand out. First, the narrow focus of the legal view on the legal system

10 These results thus contradict those of Benhabib and Spiegel (2000) and Lopez and Spiegel (2002) who find that finance leads to growth (mainly) through factor accumulation.
11 Arguments which are frequently used in this debate can be found in Allen (1993), Allen and Gale (2000), Stultz (2001), and Levine (2002).
13 Favara (2003) provides a note of discord. Using a one-step GMM estimator, he finds that the relationship between finance and growth is at best weak and argues that results such as those of Levine et al. (2000) are inaccurate since they are based on two-step GMM estimators, which have downward biased standard errors in finite samples.
as the single, or at least most important determinant of financial development can be questioned. Apart from legal institutions, corruption, geography (natural endowments), and supervision may also play important roles in stimulating (or inhibiting) financial development.\textsuperscript{14} Recently, Acemoglu et al. (2001) and Easterly and Levine (2002) have stressed the importance of initial natural endowments of colonies, such as the absence of deadly diseases, as determinants of colonisation strategies and the associated institutions. The resulting historical divergence in institutional structures proves to be persistent and to influence present-day differences in economic development. In this context, Beck et al. (2002) show that such natural resource endowments robustly influenced current levels of financial development, also when taking into account differences in legal origins.

In a similar vein, informal institutions, such as trust and social capital in a broader sense, may influence finance and growth. Informal institutions may very well be substitutes for (or determinants of) more formal legal rights.\textsuperscript{15} Allen et al. (2002) point for instance to China, a rapidly growing economy with neither a developed legal system nor a sophisticated financial system. They conjecture (p. 2) that this ‘(... counterexample to the findings of the existing literature on law, finance, and growth' is based on the existence of alternative – though informal – governance mechanisms, such as those based on reputation and relationships. Effective informal mechanisms appear to have been of special importance for the flourishing Chinese informal sector, where they substituted for formal, legal institutions and strengthened alternative financing channels such as self-fundraising.

Furthermore, Rajan and Zingales (2001) point to the fact that the level of financial development in developed countries has shown considerable volatility during the last hundred years. Such national fluctuations in financial development are hard to explain by an exogenous determinant as the legal system. The authors argue that shifting political coalitions, based on a dominant interest group in favour of, or opposed to, financial development, influence the expansion or contraction of a country’s financial system. Roe (2002) also contends that an effective legal system is an important, though not a sufficient condition for financial development. He argues that managerial agency costs are not only caused by majority shareholders or malevolent managers who want to divert value to themselves illegally – sometimes called ‘tunnelling' (Johnson et al. (2000)) – but also by simple mismanagement. And although the legal system is important in pro-

\textsuperscript{14} Empirical papers linking (non-legal) institutional quality to financial development are rare, an exception being Garibaldi et al. (2002). There is a broader empirical literature on the direct relationship between (non-legal) institutions and economic growth, e.g. Knack and Keefer (1995) and Mauro (1995). See also the citations supra note 30.

\textsuperscript{15} Institutions can be defined as the ‘rules of the game’ in an economy – both formal and informal – that influence microeconomic incentives (North (1990)). See on the link between informal institutions and financial development Guiso et al. (2000), Semenov (2000), Stultz and Williamson (2001), and Garretsen et al. (2003). On the link between informal institutions and investment and/or growth: Knack and Keefer (1997), Beugelsdijk and van Schaik (2001), and Zak and Knack (2001).
tecting minority shareholders from the former cause, corporate laws do not provide protection from the latter. The common message of all of these contributions is that even though the legal system is a determinant of financial development, other factors may play (more) significant roles too.

A second major weakness of the legal view relates to its lack of understanding as to how exactly legal institutions influence financial and economic development. Until now, the legal view literature has mainly consisted of broad cross-country empirical investigations at a high aggregation level, without much theoretical, microeconomic underpinning. As an example, Beck et al. (2002), using firm-level survey data, show that the growth of (small) firms is affected by financial and legal constraints and by corruption. Yet, the legal constraints as perceived by the firms themselves turn out not to be correlated with intuitive descriptors of an efficient legal system. As a result, the exact ways in which legal constraints influence the performance of firms remains for the greater part unclear (see also Demirgüç-Kunt and Maksimovic (1999) pp. 333-334). A first empirical contribution to clarify the mechanisms through which legal origin influences financial development is given by Beck et al. (2003). The authors assess the relevance of two channels through which the legal system may affect financial development: the political channel and the adaptability channel. The former poses that legal systems differ in the priority they give to private property rights relative to the rights of the state. The latter implies that legal systems differ in their ability to react to changes in the socio-economic environment. Using cross-country regressions, Beck et al. (2003) find that it is this last channel that matters most. Legal systems that are better able to adapt swiftly to changes in the contracting needs of an economy, will stimulate financial development more.

In sum, the legal view literature has more or less convincingly made the case that there is often a positive and causal empirical relationship between financial and economic development, which depends on the quality of the legal environment. However, the exact ways in which this empirical regularity is shaped at the microlevel is less clear. Also, the relative importance of legal versus other determinants of financial development is still largely unexplored.

3 A LEGAL VIEW ON TRANSITION?

The main shortcomings in our knowledge of the law-finance-growth nexus become even more pressing in light of the CEE transition process. In this region, the institutional and legal environment has been – and still is – in a process of

16 An important exception is Shleifer and Wolfenzon (2002) who present a market equilibrium model of countries with different levels of outside shareholder protection. The model is consistent with a number of empirical regularities that are at the core of the legal view literature. It shows for instance that more firms go public in countries with better investor protection and that these firms channel the funds they raise to projects with higher productivity.
change, implying that the legal system can only to a very limited extent be regarded as a stable and exogenous determinant of the financial system. Secondly, especially in the case of transition economies, clarifying the channels through which (changes in) the legal system affect financial development and economic growth will have important policy implications. As a result, much research into this region has tried to unravel the channels through which deficient legal institutions corrupt microeconomic incentive structures, resulting in lower quality financial intermediation. Here, soft budget constraints have received most attention.

3.1 Law and Finance during Transition: The Role of Soft Budget Constraints

The concept of soft budget constraints (SBCs) provides for an important channel through which deficient legal institutions may inhibit the development of a well-functioning financial system. The term SBC was first used by Komai (1980), when describing the bailing out of loss-making firms by socialist governments, but I use the following definition:

'A firm has a soft budget constraint if it has negative expected net present value but receives financing; or if a financial decision of a creditor or the government following default allows the firm to continue in operation although its assets would yield a greater return in an alternative use.' (Mitchell (2000)).

Berglöf and Roland (1998), elaborating on Dewatripont and Maskin (1995), provide a simple, yet elucidating formalisation of SBCs. The main point relevant to this paper is that they clarify how a deficient legal framework, through acting upon collateral values, may hinder the development of a high quality banking system. In their model, SBCs represent a dynamic commitment problem in which it is ex post optimal for a creditor to bail out a borrower (instead of liquidating it) because the funds that are already invested must be regarded as sunk costs. When creditors have a lack of credible commitment to liquidate, this will lead to moral hazard behaviour on the borrowers' side. The firm expects to be refinanced and therefore has a soft budget constraint.

To see this, suppose that in a two-period game, privatised and profit maximising banks in a transition economy lend to firms. There are firms with 'good' projects and firms with 'bad' projects, respectively in proportion $\alpha$ and $(1-\alpha)$. Ex ante a bank has no information about the quality of the projects and lends all firms the start-up costs of 1 monetary unit. At the end of period 1, the good projects will yield a return to the bank of $R_g$ and deliver private benefits of $B_g > 0$ to the firm's management. Poor projects can yield the same returns ($R_g$

17 Maskin and Xu (2001) provide an excellent survey on SBC-theories.
and \( B_g \), but only if the firm management exerts high effort (effort being a binary choice between ‘high’ and ‘low’).\(^{18}\) If the management exerts low effort, the yield will be zero. In that case, the bank will have to make a decision between liquidating the project, thereby receiving the liquidation value \( L \) (firm management receives nothing), or refinancing the loan with an additional monetary unit. The bank will then get a gross return equal to \( R_e \) (instead of \( R_o \)) at the end of period 2, while the firm gets a private benefit of \( B_p \) (instead of \( B_g \)). Now, when will firms have a SBC and thus exert low effort? This will be the case if:

\[
R_{e-1} > L \quad \text{and} \quad B_p > B_g
\]

(2)

If the first condition is met, it is *ex post* optimal for a bank to refinance rather than liquidate the project (this refinancing of poor projects is *ex post* inefficient when \( R_e + B_p < 2 \)). Although the project is (also) inefficient *ex ante*, it should be remembered that the initial costs of investment are already sunk when the bank has to make a decision about whether or not to refinance. Firms know this and will therefore exert low effort when their private benefits in case of refinancing exceed the benefits in case they had exerted high effort in period 1 (\( B_p > B_g \)). If the bank were able to credibly commit itself to liquidating poor projects, firms would always exert high effort. Berglöf and Roland (1997), using a similar model, show that SBCs and credit crunches can coexist when banks tend to refinance old projects and at the same time withhold finance from new firms. This will be the case where the proportion of good new projects is relatively low, and the difference in returns between good projects and the refinancing of poor projects is small. Banks will then favour the ‘sure’ investment of refinancing existing loans above the funding of risky new projects. In this way, a situation can arise in which *ex ante* inefficient projects keep receiving loans while at the same time new ‘good’ projects face a credit crunch.

In the above SBC-model the liquidation value \( L \) is of crucial importance. Commitment problems for banks in transition countries will remain severe where collateral values (and therefore \( L \)) are extremely small. In principle, banks could increase \( L \) by simply demanding more collateral when deciding whether to finance a particular project or not. Yet, even when collateral is available, \( L \) might be low because legally claiming it is costly and time-consuming, e.g. due to legal deficiencies such as inadequate investor protection. Banks may for instance have a subordinated position as a creditor. Moreover, in many transition countries legal enforcement by judges, specifically in the case of liquidation procedures, is extremely weak. In those cases, the net present value of the option to liquidate a bad project may turn out to be lower than the option to refinance. As a result, firms – often inefficient and state-owned – keep profiting from SBCs. At the same time, the credit supply to new and *ex ante* profitable firms may be cut off, further

\(^{18}\) Effort is (implicitly) assumed to be costless.
deteriorating the allocative efficiency of banks' activities. If L were higher, say due to improved liquidation procedures, banks could more credibly threaten to liquidate bad projects. Firms' management would then start to work harder or would stop seeking loans for bad projects altogether.

A deficient legal system will thus, by stimulating SBCs, have an ambiguous effect on quantitative banking development: credit to inefficient projects may increase, while at the same time credit to new and efficient projects may come under pressure. Scarce savings will be allocated inefficiently, so that finance cannot (fully) contribute to growth. In fact, SBC-theories provide a theoretical underpinning for a relationship between law and finance which is particularly relevant for transition economies (but may be of interest to a broader set of countries). Note that in the presence of SBCs, banks may actually grant large amounts of bank credit, leading to – at first sight – a 'highly developed' banking system. In a transition context, inadequate legal systems can thus, ceteris paribus, stimulate (some) banks to become larger. However, as a large proportion of the balance sheets of these banks consists of bad loans, the contribution of finance to growth will nonetheless be limited: qualitatively the banking system is still underdeveloped.

How will this affect the traditional legal view literature and the IV-techniques which are frequently used in it? The essence here is that a large-scale presence of SBCs will make rough, quantitative measures of financial development, such as 'total bank credit to GDP', very imperfect proxies for qualitative financial development. Since it is – almost by definition – only qualitative financial development that contributes to economic growth, the link between traditional quantitative measures of financial development and economic growth will become less strong or even absent. At the same time, the existence of SBCs causes improvements in the legal system to have an ambiguous effect on quantitative banking development. On the one hand, better legal institutions will stimulate banks to grant more credit as they now feel better protected by law. On the other hand, the improved legal system will increase collateral values, thus giving banks a stronger incentive not to refinance but to liquidate bad projects. Legal variables will then become much weaker instruments for financial development in IV-estimations, as the correlation between legal development and quantitative financial development may largely disappear.

Whereas in broad cross-country studies rather crude quantitative measures of financial development may proxy reasonably well for qualitative financial development, this will thus not be the case in a transition context. In order to transpose the legal view to transition countries, one would thus have to measure true

19 In the regular legal view literature insufficient legal protection would conversely lead to smaller banking systems.
20 Cf. Jayaratne and Strahan (1996) who show for the US that it is the quality of bank lending that is beneficial for economic growth, rather than the amount of financial intermediation.
financial development more adequately, for instance by measuring bank credit to the private sector excluding bad loans. Only then will legal indicators be correlated enough with financial development to be able to use them as instrumental variables when testing for the link between (exogenous) banking development and economic growth.

Whereas transition countries provide an obvious example of banking systems where quantitative development is not necessarily highly correlated with qualitative development, the same argument may apply to other countries as well (cf. Favara (2003)). It could even be argued that cross-country legal view studies – generally excluding transition countries – that find a significant influence of quantitative financial development on economic growth, may deliver these results exactly because of the fact that, in the particular country sample, quantitative measures are a good proxy for qualitative financial development. Still, it is likely to be the underlying improved quality of the financial system that truly matters. This is also in line with the empirical results which show that banking development does not so much increase the savings rate, as it does the allocation of savings and thereby total factor productivity growth. The importance of SBCs, and the sometimes simultaneous occurrence of credit rationing of other parts of the economy, has also been reflected in the empirical research into the financial system in transition economies. Many of these results confirm the distortional effects of SBCs as described in the theoretical literature. An exhaustive treatment of these studies is, however, beyond the scope of this paper.21

Although SBC-theories and the related empirical research have revealed a channel through which the legal system influences financial intermediaries at the microlevel, the empirical literature on law and finance during transition on a more aggregated level is still limited. Glaeser et al. (2001) compare the regulation of securities markets in Poland, the Czech Republic, and Hungary and conclude that where the judicial system is weak, government regulation of securities markets may be preferred above judicial enforcement of private contracts and laws. They note that weak securities market regulation in the Czech Republic was coupled with a very limited development of the national stock market (see also Pistor (2000) p. 15). In contrast, the Polish establishment of a highly motivated regulator to enforce rules stimulated a more rapid stock market development. Pagano and Volpin (2001) – in line with Rajan and Zingales’ (2001) analysis – conjecture that the diverging regulatory choices by the Czech and Polish authorities may have been caused by differences in dominant interest groups between the two countries. They point out that the Czech banks, fearing increasing competition, may have used their relatively large power to prevent the development of securities markets. This shows that in transition economies – or, for that matter, in

every country where the legal system is still developing and clearly not fully exogenous – the legal view and Rajan and Zingales’ political economy view need not be contradictory. Indeed, changes in political coalitions and incumbents’ power may influence a country’s legal and regulatory system and, through these systems, financial development.

Inefficient and sometimes even corrupt legal systems have also limited the willingness of entrepreneurs to reinvest internally generated profits. Johnson et al. (2002) even argue that a lack of secure property rights did not so much lower the supply of external funds, but rather limited the reinvestment of profits. They show that during the early stages of transition retained earnings were in principle high enough to finance the investments managers wanted to make. Yet, managers that were confronted with insecure property rights were not willing to reinvest these retained earnings – let alone attract additional external financing. They expected that their returns would likely be captured by bureaucrats or lost in commercial disputes. Apparently, when internal resources are available but property rights are insecure, it is not so much a lack of (additional) external finance that hinders investment. Rather, the insecure legal environment limits internal financing. External finance such as bank loans only becomes a constraint when entrepreneurs feel secure enough to reinvest internally generated profits and, moreover, start to need additional finance for further expansion.22

The existence of an ineffective judiciary has also been documented by Pistor et al. (2000) for a broad sample of transition economies. The authors pay explicit attention to the link between legal characteristics of transition economies and the development of their financial sectors. In their article they broaden the research methodology as first applied by La Porta et al. (1998) to include legal change in the protection of shareholders and creditors. The authors show that legal protection has improved considerably in recent years, leading to a situation in 1998 in which the protection of both creditors and shareholders in the average transition country was notably better than the world-wide average (see also Weder (2001)). Yet, the same research shows, in line with Glaeser et al. (2001), that the enforcement of new laws still leaves much to be desired. For instance, it can still take a considerable number of years for banks to liquidate collateral, even when formal bankruptcy laws have been updated and improved. The results of Pistor et al. (2000) show that law on the books is not associated with either stock market or banking development. Yet, legal enforcement has significantly contributed to the development of both financial markets and banks. However, in the case of the banking sector, statistical significance turns out to be greatly reduced if a measure of macroeconomic stability is included. These results demonstrate two things. First, law on the books can apparently not substitute for weak law enforcement.

22 Since the survey data that Johnson et al. (2002) use only cover already existing firms, their results cannot be used to make any inference about the importance of external finance for new firms in an environment with low property rights protection.
Simply copying Western-style financial laws, often under intense political pressure, is insufficient for developing a local financial sector. Second, the fact that Pistor et al. (2000) have used the 'standard' legal view framework in a transition context, without changing the measure of banking development, may have partly caused the insignificant (non-robust) relationship they find between formal creditor protection (law enforcement) on the one hand and credit market development on the other. Better creditor protection, either on the books or in practice, may have led to a decrease in SBCs and refinancing of inefficient firms, and a simultaneous increase in new financing of efficient firms. While better legal guarantees will then have an ambiguous effect on the amount of bank credit, the quality of this bank credit in terms of allocative efficiency will be higher. To capture the effect of the legal environment on banking development in transition economies, a measure of the qualitative development of the banking sector thus seems essential.

Pistor (2002) points out that transition countries have tried to 'catch up' in their legal development by importing foreign laws, stimulated by (foreign) legal advisers who stressed the possibility of transplanting legal best practices. This process, however, has led to enduring bad enforcement, since the laws did not meet the (national) 'demand for law', meaning that transplanted formal laws were not adapted to countries' specificities. Moreover, the question whether a country's population was, or was not, already familiar with certain types of law was not taken into account. As a result, voluntary compliance is very low, laws have not been internalised, and legal institutions do not reach their full potential for supporting economic development (Berkowitz et al. (2003)). The importance of legal enforcement is corroborated by Slavova (2000), using survey-based legal measures. For a cross-section of transition economies, she finds that both legal enforcement and law on the books (independently) stimulated stock market development (see also Claessens et al. (2000a)). However, these countries' banking sectors were mainly influenced by legal enforcement and not so much by the precise content of the relevant laws, confirming the results of Pistor et al. (2000). This may be partly explained by the fact that at first, new business and banking laws were not adequately tailored to the specific needs of the transition economies. In this context, Neyapti and Dincer (2001) measure the quality of bank regulation and supervision in a broad sample of transition countries. They find that the higher the quality of the regulatory and supervisory framework, the higher real GDP growth. Interestingly, this is especially true for those countries that have more than once adapted their banking laws since the beginning of the

23 Also, between country variation in CEE as regards law on the book is relatively small, as most of the countries have a civil law tradition or have adopted civil law legislation in the run up to EU accession (Berglöf and Bolton (2002)).
24 Unfortunately, the author does not estimate regression specifications in which both law on the books and its enforcement are used simultaneously as explanatory variables, so that it remains hard to judge to what extent these variables really influence financial development independently.
transition period. The authors interpret this result as showing that revised versions of banking laws better reflect the economic and political realities of transition economies. The original banking laws may have had too much of a 'one size fits all' character, as stressed by Pistor et al. (2000) and Pistor (2002).

3.2 Finance and Growth during Transition

Just like the literature on the link between law and finance in transition, the literature on the transition specific finance-growth relationship has recently started to emerge.\textsuperscript{25} Given the fact that domestic bond and stock markets have until now only played a very limited role in financing companies (Reininger et al. (2002)), the focus has mainly been on the importance of the local banking systems and the role of foreign financing. As regards the former, Drakos (2002) shows for a sample of transition economies that imperfect competition in the banking sector is associated with lower growth. However, this study takes the size of the banking sector as given, and does thus not go into the relationship between (quantitative) financial development and economic growth. In contrast, Koivu (2002) takes both quantitative and qualitative financial development into account. She also finds, using panel data for 25 transition economies over the period 1993-2000, that the qualitative development of the banking sector, measured as the (shrinking) margin between lending and deposit interest rates, has indeed contributed to higher economic growth. However, quantitative banking sector development, measured by the amount of bank credit to the private sector, has not contributed to economic development.\textsuperscript{26} As regards the insignificance of her quantitative measure, Koivu (2002) argues that the numerous banking crises, the relative importance of internal cash flows for financing investments, and the importance of foreign direct investment (FDI) have resulted in a situation in which domestic bank credit has not been very important in stimulating economic development. However, these arguments can only contribute to our understanding of why the quantity of bank credit in transition economies has generally remained relatively low. They do not explain why cross-country differences in the quantity of bank credit are not associated with differences in economic development, as one would expect on the basis of the finance-growth literature. A more suitable explanation may be that the large-scale presence of SBCs has resulted in bad

\textsuperscript{25} To my knowledge no studies have as yet estimated simultaneously the effect of law on finance and of finance on growth, in line with the legal view literature as described in section 2.2.

\textsuperscript{26} Whereas Koivu's qualitative measure of the banking system is an interesting complement to the quantitative measures of financial development that have been used to date, it should be noted that it is a proxy for banks' X-efficiency, rather than their allocative efficiency. As the latter may be more relevant for economic growth, developing measures of the allocative quality of different financial systems remains an important, though admittedly difficult task. In spite of this, Lucchetti et al. (2001) argue that microeconomic efficiency measures as the one used by Koivu, are still better proxies for allocative efficiency than the commonly used (quantitative) measures.
loan portfolios and the financing of projects with little, if any, value added. In that way, the expansion of domestic bank credit will not have been correlated much with the qualitative development of national banking sectors. In the words of Koivu (2002, p. 8): "(...) mere growth of the financial sector cannot be considered development". Such a large disparity between the quality and the quantity of bank financing has also been documented for China, a transition economy as well. Aziz and Duenwald (2002) show that the financial system in China has only very inefficiently channelled domestic savings to productive investments. As a result, total bank credit is not found to be a significant determinant of inter-provincial growth differences. However, once total bank credit is adjusted for lending to state-owned enterprises (mostly by state-owned banks), a statistically significant (though small) influence of this adapted credit measure on growth is found. These results are in line with more general findings of La Porta et al. (2002a), who for a sample of countries throughout the world show that government ownership of banks negatively impacts economic growth, as it leads to a misallocation of resources and a corresponding decrease in productivity.

A second strand of 'finance-growth' literature does not so much concentrate on the domestic banking sectors in CEE, but rather on the real effects of international financing and the integration of the CEE financial sectors with the global financial system. Financial globalisation refers to the process of increasing cross-border activities in the financial sector: bond and equity flows, bank loans, and FDI. Allowing the forces of financial globalisation to work – or: financial liberalisation – may stimulate economic growth through an increase in funding available for investment, as well as through enhancing the efficiency of the resource allocation. Such positive effects may nevertheless be partly or completely counterbalanced if cross-border capital flows turn out to be relatively volatile or easily reversible, potentially leading to output losses.\(^{27}\) The empirical evidence as regards the real economic effects of financial liberalisation and globalisation are mixed. Bekaert and Harvey (2003) summarise positive evidence as regards the liberalisation of stock markets, and argue that the development of (national) financial systems is an important channel through which liberalisation effects growth. Eschenbach et al. (2000) find that financial sector openness stimulates economic growth through increasing financial sector competition. Agénor (2001) concludes that especially FDI stimulates local investment and growth. On the negative side, Stiglitz (2000) points to the adverse effects of premature capital account liberalisation for the volatility of short-term capital. Singh (2003) even opposes liberalisation of FDI flows because of their inherent instability. Finally, Durham (2003), Edison et al. (2002), and Longueville (2003) take an intermediate position by providing evidence that international financial integration is simply not an important determinant of economic development.

\(^{27}\) Agénor (2001) offers an overview of the possible benefits and costs of international financial integration.
As regards the specific effects of financial liberalisation in CEE it should be taken into account that these countries had to build their financial systems virtually from scratch and therefore relied to a relatively large extent on foreign institutions for the development of their financial systems. This goes a fortiori for those CEE countries that have recently acceded the European Union and thus gradually had to comply with the requirements of the acquis communautaire, e.g. as regards capital account liberalisation. This process of opening up has led to increasing portfolio and FDI flows into the region, as well as to a substantial increase in foreign bank operations. As a result, the dividing lines between national financial systems have become blurred, which implies that the growth stimulating effect of financial development will no longer be limited to national boundaries. Consequently, researchers have paid quite a lot of attention to the international dimensions of the CEE financial systems.

Most attention has gone to the large-scale activities of foreign banks in CEE, both cross-border and through local branches and subsidiaries. De Haas and Van Lelyveld (2004) find for a number of transition countries that already in 1999 the sum of cross-border and local credit by foreign banks as a percentage of all credit granted in these countries ranged between 22% (Slovenia) and 72% (Hungary). Financial internationalisation has made the domestic banking systems thus potentially less important for economic development. More general studies, focussing on broad sets of emerging market economies, have found that foreign bank entry leads to greater efficiency of the domestic banking sector (Claessens et al. (2001)) and that in general credit may become more accessible and cheaper (Dages et al. (2000)). Yet, on the other hand, small and medium-sized enterprises may get less credit from (large) foreign banks and this credit may be relatively instable (Stiglitz (2002)). Results focussing specifically on transition economies are still scarce. De Haas and Van Lelyveld (2003) find that greenfield foreign banks were a stabilising force during crisis periods in CEE, as they did not contract their credit base whereas (former) domestic banks did do so. Kraft (2002) finds similar results for Croatia and shows that during crises foreign banks also acted as safe havens for depositors. Moreover, De Haas and Van Lelyveld (2003) find that credit growth by greenfield foreign banks in CEE is influenced by home country economic conditions. Credit growth by foreign banks – both greenfields and former domestic banks that were taken over – also turns out to be influenced by the health of the parent bank. Fries and Taci (2002) find that the share of foreign banks in the total assets of the CEE banking sectors has a positive effect on real credit expansion. Empirical results on the effects of foreign bank entry on allocative efficiency and on economic growth in CEE are not yet available.

As regards portfolio flows of corporate bonds and stocks, it should be noted that domestic stock and bond markets have been established in many CEE coun-

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28 See Bakker and Chapple (2003) for a detailed account of capital account liberalisation in transition economies.
tries at the beginning of the nineties. Although stock markets played an important role in mass privatisation schemes in some countries, such as the Czech Republic, they currently are still significantly less liquid and capitalised when compared with more developed economies. As yet, equity finance and the issuing of bonds only plays a very limited role in financing local companies. Foreign portfolio investment as a share of the total free-float market capitalisation is considerable: according to estimates by Reininger et al. (2002) even significantly above 50%. In addition, many shares of CEE companies are (also) traded on foreign stock exchanges, particularly in the form of depository receipts, thus increasing the pool of potential investors. According to the Corporation of London (2003), somewhat more than 35% of all listings, representing more than two-thirds of market capitalisation, in the new CEE EU-members are cross-listed, mostly in New York and London. While such cross-listings may have positive effects for the companies concerned, there may also be negative effects for the local markets. Levine and Schmukler (2003) find for instance that cross-listing decreases the liquidity of remaining local firms. Empirical evidence as regards the possible real economic effects of stock market internationalisation in CEE is not yet available.29

Besides foreign bank credit and portfolio capital flows, FDI has played an important role in financing CEE investments. The inflow of FDI has to a large extent been the result of the privatisation process in the region, although greenfield establishments have gradually become more important. In both cases, FDI not only means capital accumulation, but may also lead to technology transfers. The latter effect may be even more important for stimulating growth. Indeed, Campos and Kinoshita (2002) find that the technology transfer associated with FDI has had a positive impact on economic growth in a sample of 25 CEE and former Soviet Union countries. Evidence provided by Hunya (2000) confirms this by showing that FDI has led to higher allocative efficiency through faster restructuring of the CEE manufacturing sectors. Finally, Moers (2001) also finds that FDI matters for CEE growth, and adds that FDI is strongly correlated with local institutional quality.30

4 CONCLUSIONS

Recent empirical research has strengthened the view that the development of financial markets and intermediaries may causally stimulate economic develop-

29 See Claessens et al. (2002b) for a comprehensive survey of the literature on the internationalisation of equity markets.

30 Other research has focused on the direct link between institutions (such as the lack of corruption and quality of the bureaucracy) and economic growth in CEE, thus without taking into account the intermediary role of the financial system. Generally, the empirical results point to a positive relationship between (better) institutions and economic growth in CEE (e.g. Brunetti et al. (1997a), (1997b), (1997c), Campos (1999), Havrylyshyn and Van Rooden (2000), Grogan and Moers (2001), and Abed and Davoodi (2002)).
ment, especially where the financial system is rooted in a sound legal system. Conversely, a deficient legal system inhibits economic development by causing financial sector distortions or by simply inhibiting further growth of this sector. Most studies show that the positive effect of financial development results from higher factor productivity growth, although some authors find that factor accumulation also plays a role. In addition, several empirical studies do not rule out that in some countries and during some periods a bi-directional causality between finance and growth existed.

These results are of special relevance to transition economies, which are still in the process of (re)shaping their legal and financial systems. Until now, no empirical results are available that integrate the law-finance link with the finance-growth link in a transition context. Recent – but limited – empirical results suggest, however, that improvements in laws and especially their enforcement are important for the development of financial systems in transition countries. Separately, an empirical literature is emerging that quantifies the influence of different segments of the financial system on CEE economic growth. Such studies have produced tentative evidence of a positive growth effect of local banking development as well as of FDI. However, as yet no empirical studies exist that attempt to estimate the growth effect of local stock market development or CEE stock market internationalisation.

In this paper I have identified three areas in which the legal view would need adaptation or extension in order to be applicable to the transition process as well. First, the legal view treats the legal system as a historically determined, static fact of life and uses – more or less implicitly – a closed economy framework. In reality, the legal system in Central and Eastern Europe is still evolving and the local financial system has become increasingly intertwined with global financial markets and banking systems. These developments call for both a more dynamic and a more international approach towards law and finance in transition. Second, other (informal) institutional variables may be (more) important in determining financial and economic development in transition economies. This calls for broadening the legal view to an ‘institutional’ view on financial development. And third, the legal view still lacks a sound theoretical underpinning. This calls for theoretical (and empirical) studies aimed at disentangling the transmission mechanisms between law and finance and between finance and growth. More attention could for instance be paid to modelling the precise ways in which deficient legal systems hinder the development of financial intermediaries. Do depositors shy away from putting their money with banks? Do banks crunch their credit supply, and if so: which banks exactly? Or are firms simply too reluctant to demand credit?

As regards transition economies, I have argued that SBC-theories provide a good example of such theoretical foundations. Importantly, the theory of SBCs shows that a deficient legal environment may actually increase (some) banks’ credit supply, thus leading to higher ‘banking development’ in a narrow and quantitative sense. Empirical studies into the law and finance nexus in transition
economies should therefore take into account that bad legal protection of creditors may have a negative effect on qualitative banking development, but an ambiguous or even positive effect on quantitative banking development. This calls for developing empirical measures and proxies of banking development that more fully capture the quality -- i.e. the allocative efficiency -- rather than the quantity of the financial system. Finally, country-specific case studies would be a welcome complement to cross-country growth regressions. Such studies will not only contribute to a better understanding of the country-specific relationships between law, finance, and growth, but can also be a useful method of generating hypotheses on the precise mechanisms at work more generally.

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