

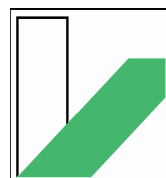
IFRS for European Small and Medium-Sized Entities?

A Theoretical and Empirical Analysis

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Humboldt-Universität zu Berlin

Research Report
commissioned by
DGRV – Deutscher Genossenschafts- und Raiffeisenverband e. V.



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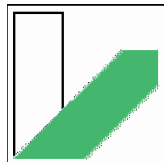
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IFRS for European Small and Medium-Sized Entities?

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April 2010

Disclaimer

This research report is based on existing literature, theoretical analyses and empirical data. It comprises a scientific assessment of certain theoretical and empirical aspects of SME accounting in general and of the adoption of IFRS for SMEs in particular. This assessment reflects the specific and long-lasting research experience of the authors on the field of international accounting. A dissenting opinion from third parties such as regulators, government agencies, courts of justice, lobby and professional groups or other scientists is not per se impossible. The authors assume no liability, especially no liability for any damage caused directly or indirectly by this research report.

Management Summary

After years of development and debate, the International Accounting Standards Board (IASB) has recently published an International Financial Reporting Standard for Small and Medium-sized Entities (IFRS for SMEs, IASB 2009). This standard provides an adoption of the “full” International Financial Reporting Standards (IFRS), which were designed with publicly traded entities in mind, to the environment of private firms. If the EU or its member states introduced the IFRS for SMEs, it would impose a major change of financial accounting regulation on millions of European firms.

This research report evaluates on a priori basis whether such a regulatory move would benefit European SME firms. We analyze the character and role of financial accounting in the SME setting theoretically and empirically in order to give an ex ante opinion on whether an adoption of a homogenous financial accounting regime across European SMEs can be expected to be beneficiary. We find that

- one of the central advantages of the IASB as a financial accounting standard setter is that, as a privately organized standard setting body, it is able to build on the high level of institutional expertise of its members. Currently, the IASB and other bodies of the International Accounting Standards Committee Foundation (IASCF, from March 1, 2010: IFRS Foundation) lack members which have an SME background. Also, the financing of the IASB and IASCF is heavily biased towards global corporations, Big Four auditing firms and capital market institutions. While this seems comprehensible from the perspective that the focus of the IASB used to be on publicly listed firms, it is doubtful whether the IASB is or will be able to develop and maintain high quality financial accounting and reporting standards for the private sector.
- Although legal issues are not the focus of this economic research report, it appears questionable whether the legislative authority of the European Union extends to delegating the standard setting authority for the financial accounting regulation of private firms to a private standard setter. The endorsement mechanism, which currently is in place for transforming IFRS for public firms into EU law, does not mitigate this concern, as this is an issue especially

of the subsidiarity principle. Also legal issues at the member state level might conflict with a voluntary or mandatory adoption of the IFRS for SMEs.

- Financial accounting of SME firms plays a crucial role for a myriad of contractual relations of these firms. These relations include but are not limited to such diverse topics as taxation, income distribution, credit contracts and negotiations, (other) regulatory issues and management compensation. Contractual usage varies across countries throughout Europe, depending on different regulatory settings and other national differences such as cultural diversity. Also, within each country, they vary by the type and environment of each firm.
- Public firms (the major target group of IASB standard setting so far) are working in a vastly different environment from private firms. As regulatory action and cross-country competition has increased the globalization of European capital markets over the last decades, European public firms are facing a different and arguably more harmonized setting than private European firms. Also, for publicly listed firms and their investors, financial accounting fulfills a valuation role which aims at providing information which is helpful for asset pricing at (supposedly) efficient capital markets. The contracting role of financial accounting becomes less important – in contrast to private firms, who have no access to organized capital markets.
- The objective of the IASB is to develop a single set of 'general purpose' high quality accounting standards. This focus on 'one size fits all' standards seems reasonable: If the IASB wants to succeed in developing a coherent set of standards, it has to identify a single objective. Multiple objectives are likely to require multiple sets of customized standards. Insofar, the IASB caters to the demand of publicly listed firms, globalized capital markets and their participants. As SME firms operate in other environments than internationally-oriented publicly-listed firms, research has clearly identified that the objectives for SME financial accounting differ from the objectives of public firms. In contrast, the IASB

seems to believe that concepts and pervasive principles shall not differ between IFRS for SMEs and full IFRS.

- However, it is a matter of open scientific debate whether these different accounting objectives really give rise to different financial accounting outcomes. If this were not be the case, then imposing the same set of coherent high-quality standards on a diverse group of firms would probably not do material harm. This is why we conduct an empirical study to test whether the regulatory infrastructure and the incentives of private firms across Europe can be linked to substantially different accounting outcomes.
- Using a sample that includes over 1.1 million European firms (and more than 7.7 million firm-year observations) – a sample more or less unparalleled in the scientific arena of empirical accounting research – we provide clear empirical evidence that as of now, the financial accounting outcome of private firms differs predictably across Europe and that this difference is driven by the accounting objectives of the respective firms.
- Looking at the time-series smoothness of earnings in comparison with cash flows from operations (a scientifically accepted measure of accounting outcome), we document that private firms cater to creditor as well as to owner incentives when preparing their financial accounts. Also, and this might be even more important, they take the country-level infrastructure into account: Private firms in countries which have a strong link between tax and financial accounting report significantly smoother earnings streams. In addition, firms seem to take the general governance infrastructure of their home-country into account when making financial accounting decisions.
- We conclude from our empirical analyses that different accounting objectives across Europe, which are shaped by the different incentives of the major contractual partners of the firms and by the country-level governance infrastructure, have a significant impact on financial accounting outcomes.

Taken together, our results suggest that the essential preconditions for successful SME financial accounting harmonization across Europe are - at least currently - not met.

- The EU governance infrastructure (including taxation and dividend distribution) is not harmonized to such an extent that its impact on the financial accounting objectives of private firms across Europe can be expected to be immaterial. An EU-wide adoption of IFRS for SMEs would especially require the harmonization of direct taxation – a challenge which has been on the EU agenda for more than five decades without substantial achievements so far.
- The IASB and its organizational infrastructure appear not to be qualified for SME accounting standard setting. SME financial accounting harmonization across Europe would require a standard setting process which has sufficient institutional expertise in developing high quality standards for SMEs. This implies that SME firms would need to have a significant say and influence in this process.
- The EU wide adoption of IFRS for SMEs provokes legal questions which remain unsolved. SME financial accounting harmonization across Europe has to obey the principle of subsidiarity and democratic requirements at the EU and member-state level.
- Even if all the above mentioned preconditions were met, this would not necessarily imply that SME financial accounting harmonization across Europe would be successful in economic terms. Apart from the inability to remove cultural and other cross-country differences that will continue to influence business practice across Europe in the foreseeable future and therefore most likely induce additional indirect costs of harmonization, SME accounting harmonization also causes direct costs by forcing millions of European firms to, e.g., adjust their accounting information systems and to train their accounting staff. An SME financial accounting harmonization can only be successful if the benefits of harmonization exceed the direct and indirect costs of harmonization.

In short: Financial accounting harmonization is the end of the harmonization process, not the beginning! As long as the regulatory infrastructure of private firms across Europe differs significantly, imposing harmonized financial reporting on them has the effect of a legal implant interfering with existing (legally regulated) contractual regulations that have been established (and proven successful) over centuries. The process of material international accounting harmonization across European public firms more or less originated from the firms themselves in the early 1990s. It can be expected that private firms will take the same action as soon as they feel that the benefits of harmonizing their accounting regimes will outweigh their costs.

Kurzdarstellung / Management Summary

Nach langjähriger, kontroverser Debatte hat das International Accounting Standards Board (IASB) im Juli 2009 einen International Financial Reporting Standard for Small and Medium-sized Entities (IFRS for SMEs, IASB 2009) verabschiedet. Mit diesem Standard überträgt das IASB die grundsätzliche Idee seiner bisherigen "full" IFRS auf nicht-kapitalmarktnotierte kleine und mittelgroße Unternehmen (KMU) – eine Idee, die geprägt ist von der Informationsversorgung anonymer Investoren auf organisierten Kapitalmärkten. Sollte der IFRS for SMEs in die bilanzrechtliche Regulierung der EU und/oder ihrer Mitgliedstaaten übernommen werden, wären Millionen von europäischen Unternehmen betroffen. Gravierende Veränderungen ihrer Rechnungslegung wären die unmittelbare Folge.

Aus einer Ex-ante Perspektive hinterfragt das vorliegende wissenschaftliche Gutachten den Nutzen dieser regulatorischen Veränderung für europäische KMU. Wir analysieren theoretisch und empirisch den Charakter und die Funktionsweise der Rechnungslegung im KMU-Zusammenhang, um ex ante beurteilen zu können, ob ein einheitliches Rechnungslegungsregime für europäische KMU tatsächlich Nutzen generieren könnte. Wir kommen insbesondere zu folgenden Ergebnissen:

- Ein zentraler Vorteil des IASB als privater Standard Setter im Bereich der Rechnungslegungsregulierung liegt wohl in der fachlichen und institutionellen Expertise seiner Mitglieder. Allerdings mangelt es dem IASB und sämtlichen sonstigen Organen der International Accounting Standards Committee Foundation (IASCF; seit dem 1. März 2010: IFRS Foundation) an Mitgliedern mit KMU-Erfahrung oder -Zugehörigkeit. Ähnliches gilt für die Finanzierung von IASB und IASCF. Hier dominieren global operierende Konzerne, große "Big Four"-Wirtschaftsprüfungsgesellschaften sowie wichtige nationale Aufsichtsbehörden und Kapitalmarktregulierer. So nachvollziehbar dies angesichts der bisherigen Ausrichtung auf kapitalmarktorientierte Unternehmen gewesen sein mag, so zweifelhaft ist dieser Fokus im KMU-Zusammenhang. Es ist insofern fraglich, ob das so organisierte und finanzierte IASB gegenwärtig oder künftig geeignete Rechnungslegungsregeln für nicht kapitalmarktorientierte KMU entwickeln kann.

- Obwohl rechtswissenschaftliche Aspekte nicht im Vordergrund dieser ökonomischen Begutachtung stehen, erscheint es doch fraglich, ob die EU überhaupt ermächtigt ist, den IFRS for SMEs in europäisches Recht zu übernehmen. Zweifel begründen sich nicht nur mit der privaten Natur des IASB und der IFRS, mit dessen kapitalmarktorientierter Ausrichtung, Struktur und Finanzierung, sondern auch mit der Nichtanwendbarkeit des bisherigen Endorsement-Verfahrens. Wesentliche Zweifel verbleiben insbesondere bei der Frage, ob die Regulierung der KMU-Rechnungslegung überhaupt im Sinne der Subsidiarität auf europäischer Ebene über das bisherige Maß hinaus harmonisiert werden kann. Zudem bedürfen weitere Rechtsfragen der Klärung. Diese können sich aus möglichen Konflikten zwischen einer europäischen KMU-Regulierung und nationalen Verfassungs- und Rechtssystemen entstehen.
- Die Rechnungslegung der KMU nimmt eine zentrale Rolle in den wichtigen Vertragsbeziehungen dieser Unternehmen ein. Dies betrifft insbesondere auch die Kernbereiche unternehmerischen Wirkens wie z.B. die Besteuerung, Gewinnverwendung, Kreditverträge oder Managemententlohnung. In Abhängigkeit von den unterschiedlichen regulatorischen Rahmenbedingungen und anderen z.B. auch kulturellen Differenzen können diese Vertrags- und die damit einhergehenden Anreizstrukturen allerdings erheblich variieren. Diese Variation ist sowohl auf Länderebene als auch innerhalb eines Landes denkbar, wo sich Rechtsformen und individuelle Unternehmensumgebungen ebenfalls unterscheiden.
- Die kapitalmarktorientierten Unternehmen (als bisherige Zielgruppe der IASB-Regeln) agieren im Vergleich zu den nicht kapitalmarktorientierten KMU unter völlig anderen rechtlichen und betriebswirtschaftlichen Bedingungen. So haben hier insbesondere die globalisierten europäischen Kapitalmärkte in den letzten Jahrzehnten zu einer stärker harmonisierten Rechtsumgebung in den jeweiligen Mitgliedstaaten geführt. Etwas Vergleichbares ist für die KMU nicht zu beobachten. Zudem erfüllt die Rechnungslegung der kapitalmarktorientierten Unternehmen auch eine zusätzliche Funktion, die KMU nicht benötigen: Die Bereitstellung bewertungsrelevanter Informationen zur effizienteren Abschätzung

von Unternehmens- und Anteilswerten auf organisierten und funktionsfähigen Kapitalmärkten. Die vertragsorientierte Rolle der Rechnungslegung wird insofern – anders als bei KMU – weniger wichtig.

- Das IASB gibt sich das klare Ziel, ein einziges, qualitativ hochwertiges Rechnungslegungssystem zu entwickeln, dass universell einsetzbar sein solle ('general purpose'). Hierbei konzentriert sich das IASB allerdings auf die Idee der bewertungsrelevanten, kapitalmarktorientierten Rechnungslegung. Dieser Fokus auf 'one size fits all' dürfte aus Sicht des IASB sogar vernünftig sein. Nur mit einer klaren Ausrichtung auf ein Ziel scheint die Entwicklung konsistenter Rechnungslegungsregeln überhaupt nur möglich zu sein. Im Vergleich zu großen, kapitalmarktorientierten und international aufgestellten Unternehmen agieren nicht kapitalmarktorientierte KMU allerdings unter völlig anderen Bedingungen, so dass die Rechnungslegungsforschung auch andere Ziele erkennt. Das IASB scheint jedoch anzunehmen, dass die konzeptionelle Ausrichtung und Zielsetzung des IFRS for SMEs derjenigen der kapitalmarktorientierten Rechnungslegung (full IFRS) entspräche.
- In der Rechnungslegungsforschung ist es eine kontrovers diskutierte und bisher noch offene Frage, ob diese unterschiedlichen Ziele tatsächlich auch zu einer unterschiedlichen Rechnungslegung führen. Wäre dem nicht so, wäre ein einziges konsistentes Rechnungslegungssystem wohl in der Lage, unterschiedlichen Unternehmensgruppen innerhalb eines Landes und über die Landesgrenzen hinweg zu dienen. An dieser Stelle leisten wir einen Forschungsbeitrag, in dem wir genau diese Frage empirisch untersuchen. Wir wollen herausfinden, ob das jeweilige regulatorische Umfeld und die jeweiligen Vertrags- und Anreizstrukturen nicht kapitalmarktorientierter KMU zu wesentlich unterschiedlicher Rechnungslegung in Europa führen.
- Auf der Basis einer Auswahl von über 1,1 Millionen Unternehmen (und mehr als 7,7 Millionen Unternehmensjahr-Beobachtungen) – eine in der empirischen Rechnungslegungsforschung kaum erreichte Dimension – belegen wir empirisch die Heterogenität der Rechnungslegung nicht kapitalmarktorientierter KMU in Europa.

Diese Heterogenität wird, wie vermutet, getrieben von den unterschiedlichen Zielen, die die jeweiligen Unternehmen mit der Rechnungslegung verbinden.

- Wir können nachweisen, dass nicht kapitalmarktorientierte KMU ihre Rechnungslegung in Abhängigkeit von ihrer Finanzierungsstruktur auf Gläubiger- und auf Eigentümerbedürfnisse ausrichten. Technisch stellen wir hierbei auf die im Verhältnis zu den Cashflows ermittelte Gewinnglättung ab (ein wissenschaftlich anerkanntes Messverfahren), deren Ausprägung mit stärkerer Fremdfinanzierung ansteigt und eine stärker gläubigerorientierte Rechnungslegung induziert. Wir können auch den zuvor unterstellten Einfluss der landesspezifischen Infrastruktur auf die Rechnungslegung nachweisen: In den Ländern, in denen die Handelsbilanz auch für die steuerliche Gewinnermittlung herangezogen wird, zeigen sich deutlich stärkere Gewinnglättungen. Zudem scheint es, dass nicht kapitalmarktorientierte KMU mit ihrer Rechnungslegung auf die landesspezifische Governance-Struktur reagieren.
- Wir schließen aus unseren empirischen Ergebnissen, dass sich unterschiedliche Rechnungslegungsziele nicht kapitalmarktorientierter KMU in Europa in unterschiedlicher Rechnungslegung manifestieren. Diese Unterschiede werden von den unterschiedlichen Vertrags- und Anreizstrukturen der jeweiligen Hauptvertragspartner und von den landesspezifischen regulatorischen Umfeldbedingungen getrieben.

Wir halten als Schlussfolgerung fest: Unsere Ergebnisse zeigen, dass zentrale Voraussetzungen für eine erfolgreiche Harmonisierung der KMU-Rechnungslegung in Europa – zumindest gegenwärtig – nicht erfüllt sind.

- Die gesamte Governance- und Regulierungsstruktur in der EU (einschließlich Besteuerung und Gewinnverwendung) ist nicht in dem Maße harmonisiert, dass ihr heterogener Einfluss auf die Rechnungslegung nicht kapitalmarktorientierter KMU zu vernachlässigen wäre. Eine EU-weite Übernahme des IFRS for SMEs würde insbesondere die Harmonisierung der direkten Unternehmensbesteuerung voraussetzen – eine Herausforderung, die

schon seit mehr als fünf Jahrzehnten auf der Agenda der EU steht, ohne dass bisher nennenswerte Erfolge zu verzeichnen sind.

- Der organisatorische Rahmen des IASB scheint für die Entwicklung von KMU-Rechnungslegungsregeln wenig geeignet. Die Harmonisierung der KMU-Rechnungslegung in Europa würde u.a. einen Regelentstehungsprozess voraussetzen, der die notwendige institutionelle Expertise zur Entwicklung qualitativ hochwertige KMU-Standards bereit stellt. Dies impliziert, dass die notwendige Einflussnahme nicht kapitalmarktorientierter KMU in diesem Prozess und auf die verantwortliche Institution gegeben wäre.
- Die EU-weite Übernahme des IFRS for SMEs wirft rechtliche Fragen auf, die bisher unbeantwortet scheinen. Jede Harmonisierung der KMU-Rechnungslegung müsste dem europäischen Gedanken des Subsidiaritätsprinzips entsprechen und verfassungsrechtlich-demokratischen Geboten auf EU- wie auch Mitgliedstaaten-Ebene genügen.
- Selbst wenn alle genannten Voraussetzungen erfüllt sein sollten, wäre ein Harmonisierungserfolg bei der KMU-Rechnungslegung aus ökonomischer Perspektive keineswegs zwingend. Abgesehen davon, dass kulturelle und andere Länderunterschiede das unternehmerische Gebaren in Europa weiterhin beeinflussen und damit indirekte Harmonisierungskosten erzeugten, wären auch direkte Kosten zu berücksichtigen. Direkte Harmonisierungskosten entstünden insbesondere dadurch, dass Millionen europäischer Unternehmen z.B. gezwungen würden, ihre Buchhaltungs- und Bilanzierungssysteme anzupassen und ihre Mitarbeiter neu zu schulen. Die Harmonisierung der KMU-Rechnungslegung in Europa wäre nur dann ökonomisch erfolgreich, wenn der Nutzen der Harmonisierung tatsächlich alle direkten und indirekten Harmonisierungskosten überstiege.

Kurz gefasst: Die Harmonisierung der Rechnungslegung steht am Ende eines Harmonisierungsprozesses, nicht am Anfang! Solange sich die regulatorische Infrastruktur für nicht kapitalmarktorientierte KMU in Europa wesentlich unterscheidet, solange erzeugt eine oktroyierte, einheitliche Rechnungslegung ökonomisch bedenklich Friktionen. Eine derarti-

ge Rechnungslegung wirkt schließlich Vertrags- und Anreizstrukturen dieser Unternehmen entgegen, die über Jahrhunderte gewachsen sind, sich damit bewährt und in Teilen auch Eingang in gesetzliche Standardverträge gefunden haben. Man bedenke: Der Prozess einer wirklichen internationalen Harmonisierung von Rechnungslegungsregeln für kapitalmarktorientierte Unternehmen ist letztlich erst von diesen Unternehmen selbst seit den frühen 1990er Jahren betrieben worden. Insofern können wir nur vermuten, dass sich nicht kapitalmarktorientierte KMU in Europa zu einer analogen Harmonisierungsanstrengung erst dann motiviert sehen, wenn ihr individueller Nutzen aus der einheitlichen Rechnungslegung die damit einhergehenden Kosten übersteigt.

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1. Introduction

1.1. Research objective and outline of the report

The IASB has developed a single accounting standard for SMEs (*International Financial Reporting Standard for Small and Medium-sized Entities (IFRS for SMEs)*) which was finally approved in July 2009 (IASB 2009). So far, it is an open question whether and how this accounting standard will be adopted by supranational and national regulations in Europe. However, an optional or mandatory European adoption of the IFRS for SMEs would impose one single accounting standard on a wide array of different types of firms which are all subsumed under the broad notion of SMEs and which operate in different countries with heterogeneous regulatory environments.

This research report will document that heterogeneity on firm- as well as country-level is reflected in the demand for financial accounting information and in the financial accounting outcomes. Heterogeneity in financial accounting between different firms and countries results from heterogeneous environments and can, therefore, be expected to be economically efficient. Especially the contractual situation and regulatory infrastructure of private SMEs varies widely. In contrast, companies publicly traded on organized capital markets (public companies from now on) are embedded in a much more homogeneous setting, driven primarily by converging securities regulations and reporting requirements on globalized capital markets.

We analyze the character and role of financial accounting in the SME setting both theoretically and empirically in order to give an ex ante opinion of whether an adoption of a homogenous financial accounting regime across European SME can be expected to be beneficiary. In order to address this objective we continue as follows: First we analyze the firm structure of private firms (SMEs) theoretically and expose the specific contracting role of financial accounting in this particular setting (chapter 2). In a next step, we focus on the institutional aspects of IFRS for SMEs and identify possible problems and open question with regard to its development and its transfer into supranational and national law in Europe (chapter 3). Finally, in chapter 4, we empirically document the alternative objectives of SME financial accounting and their impact on financial accounting outcomes, the distinction between private and public firms in terms of their accounting behavior and the accounting heterogeneity in divergent regulatory settings based on cross-country

analyses. Chapter 5 concludes by repeating the main findings of our study.

1.2. Focus and epistemological constraints

The IFRS for SMEs contains a lot of regulation details in the fields of recognition, measurement and disclosure. With respect to the epistemological reasoning below we abstain from assessing these details. Instead, we concentrate on providing theoretical and institutional insights into the SME setting, the SME accounting objectives and the standard setting process (chapter 2 and 3), as well as empirical evidence to the question whether diverging firm-level incentives and regulatory infrastructures affect SME accounting in different national settings of EU member states (chapter 4).

Setting accounting standards is an act of regulation, which invariably involves value judgments about the objectives and other high-level principles of financial accounting (see for the following esp. Fülbier, Hitz and Sellhorn 2009). Accounting standards affect the constituents of financial accounting in different ways: Mandatory accounting standards have economic consequences by influencing individuals' wealth as well as production and consumption decisions. Thus, while some constituents favour one accounting solution, e.g. fair value measurement of financial assets, others will prefer a different approach, e.g. measurement based on historical costs. Given such diversity of irreconcilable interests, the role of accounting standard setters is to carefully assess the impact of accounting alternatives in the light of the objectives of financial accounting, and to perform value judgments as to how far each party's interests ought to be recognized (Beaver 1998, 35; Barth et al. 2001, 88). The International Accounting Standards Board (IASB) makes such judgements on its mission to create accounting standards that produce decision-useful information (valuation) and show the results of management's stewardship (Framework, para. 12-14; IASB 2001).

The judgemental nature of (accounting) regulation raises the epistemological question of whether and how academic research can help regulators and others make value judgements. The question is closely linked to the extensively discussed distinction between positive/descriptive and normative/prescriptive approaches to (accounting) research (e.g., Watts and Zimmerman 1986; Christenson 1983; Whit-

tington 1987; Hines 1988; Mouck 1990; Mattessich 1995; Fülbier and Weller 2009). This fundamental distinction can be traced back to Hume's (1739) differentiation between observations about what 'is' and conclusions that contain an 'ought', which separates fact-based descriptive statements from value-based prescriptive ones (fiercely discussed for example in Germany at the beginning of the last century; see the *Werturteilsstreit*, e.g., Weber 1904; Schmoller 1911). Setting accounting standards as a regulatory activity ultimately represents value driven prescriptions. Although there is no clear consensus regarding the scope of value judgements or norms (e.g., Schneider 2001, 306-317; Sterling 1990, 112-116; in the context of accounting e.g., Tinker, Merino and Neimark 1982; Christenson 1983) and although the existence of an entire value-free science is fallacious (Fülbier and Weller 2009), accounting research has difficulties to recommend and deduce detailed accounting standards. Even when superior values are developed in a political process (e.g. due process) and explicitly expressed in high level principles (e.g., conceptual framework) the deduction of subordinate rules remains difficult since the principles at the framework level are not always clearly defined or easily operationalized, as the debate surrounding value-relevance research shows (Holthausen and Watts 2001; Barth et al. 2001). Also, the framework criteria are not intended as a strict yardstick against which to judge individual standards. Rather, Christensen and Demski (2003, 429) characterize them as a 'rhetorical guide to the policy business', a constitution signaling a commitment to adhere to some particular, albeit vague and partly inconsistent, guidelines.

The debate on the 'impossibility' of normative accounting standards is also set within the domain of welfare economics. In essence, the 'impossibility result' refers to Arrow's paradox which holds that since individual utility functions cannot be aggregated to derive a societal welfare function – specifically a welfare function for the constituents of financial accounting – no single criterion exists that ranks accounting alternatives in accordance with all constituents' preferences (Demski 1973, 1976; Cushing 1977; Chambers 1976).

The difficulty to deduce detailed accountings standards also implies the difficulty to evaluate their content. However, accounting research, empirical or theoretical, tries to support the political process of standard development and assessment by identifying and explaining

causal relationships and economic consequences. While it is not within the domain of research to make ultimate policy recommendations, its task is to inform standard setters about the (potential) implications of accounting alternatives in terms of criteria and economic theory that standard setters may consider (Barth, 2000, 8). That is exactly the purpose of this research report: To identify *ex ante* certain causal relationships between the typical SME setting and the demand for financial accounting. Although we are not able to derive accounting regulations for SMEs normatively, we provide some insights into the SME setting and its consequences for financial accounting with regard to its typical orientation (contracting) and its dependence on the regulatory infrastructure.

2. Theoretical background: Financial accounting in the SME setting

2.1. Financial accounting and contract theory of the firm

2.1.1. Governance role of financial accounting

Financial accounting and financial accounting regulation are usually explained with reference to the microeconomic theory of the firm. A firm is an organization where human beings pool their resources on a contractual basis (Alchian and Demsetz 1972). A firm is, therefore, often called a “nexus of contracts” (Jensen and Meckling 1976) designed to minimize contracting and transaction costs (Coase 1937). Human beings interact with each other and contribute their resources to achieve a common purpose, the realization of firm profits. In the end, profit realization is necessary to satisfy the individual goals, e.g. wages for the employees, compensation for the responsible managers, profit for the owners, interest and amortization for the creditors or taxes for the fiscal authorities. Moreover, it guarantees stable contractual relationships, particularly job security for employees and managers, supply of products and services for customers or demand for suppliers etc. (Barnard 1938; Cyert and March 1963). The real nexus of relevant contracts is either the individual entrepreneur or, in more complex economic environments and organizations, the firm as a legal entity (“legal fiction”, Jensen and Meckling 1976). This nexus reduces transaction costs by diminishing the multilateral contractual relationships to bilateral ones.

Financial accounting plays a crucial role in this contractual setting. It is a direct consequence of economic reality which is characterized by uncertain expectations about future developments and ensuing

information asymmetries between contract partners. It is an important part of the corporate governance system governing the individual contracts, the incentives (goals) of different individuals and groups of individuals (e.g., receiving cash from the firm, benefiting from job security) and their contributions (e.g., providing capital funds, providing work input). Financial accounting in this respect comprises the generation and validation of corporate financial history information. The financial reporting disclosure process reduces information asymmetries between corporate insiders (management) and its external firm contract partners such as owners, capital market investors, creditors and also fiscal authorities (e.g., Christensen and Demski 2003). Despite the distinction between accounting (the process of data generation) and reporting (the process of data disclosure) both terms are often used synonymously. In this research report we use the accounting term exclusively and subsume both aspects (data generation and disclosure).

All parties contracting with the firm demand information about the firm's ability to satisfy the contractual terms and the firm's compliance with its contractual obligations (Bushman and Smith 2003). Against this background, neo-institutional principle-agent theory explains why contract partners (principals) with a lack of information protect their resources through certain safeguards and guarantees. An important principal-agent relationship can be identified for example between creditors (principal) who provide financing and the entrepreneur (agent) who runs the business and has insider information. To protect their capital stake the creditors offer credit contracts to the entrepreneur that include for example incentive-compatible compensation schemes and/or credit renegotiation rules to provoke management compliance and to reduce agency costs. An essential safeguard is financial accounting. Financial accounting provides information to creditors about the profitability of the enterprise and, therefore, about entrepreneurial performance. More generally speaking, this information reduces the information asymmetries between all individuals who contribute resources (principals) and the entity, either the entrepreneur or, with reference to corporations, the representative of the legal entity: the management (agent) (e.g., Jensen and Meckling 1976). This basic set of principle-agent relations is often extended by an external validation authority, like an independent auditor and other enforcement elements.

Without financial accounting and without alternative safeguards, the individual contract partners fear a lack of information and, strongly connected to this, an impairment of their contractual claims. Most probably, they will impose a risk premium or withdraw from the contractual relationship. Effective organization building and corporate governance are therefore built on financial accounting (see Bushman and Smith 2003 with an overview about the governance role of financial accounting).

2.1.2. *Standardization and regulation of financial accounting and accounting systems*

While the previous section provides a rationale for the reason why financial accounting exists it is unclear why it should be a *standardized* information process. Assuming that an entrepreneurial firm in a young economy is characterized by individual contracts: As the number of those contracts increases designing and using standardized contracts becomes more efficient. Transaction costs can be reduced by replacing individual contracts – they induce idiosyncratic bargaining and governance costs – with standardized contracts. A financial accounting system embedded in a corporation or security law system is nothing else than a standard contract. The standardization does not necessarily need to be a public exercise (Pellens and Gassen 1998), although regulation by law or at least administration by public authorities seems a widespread fact in economic reality. In the end, it is a question of economic efficiency and political values and priorities whether accounting systems are publicly regulated or privately developed (e.g., Feldhoff 1992; Fülbier 1998).

Standardized financial accounting systems differ. They are either extremely specialized on one or a few firm contract partner groups or they serve as a standard contract for a wider range of groups. The former is represented for example by a tax accounting system which exclusively regulates the information process between firms and fiscal authorities. The focus on one specific relationship with only one single addressee and, strongly connected, one specific objective (tax base calculation) alleviates the development of the respective accounting system. In contrast, it is a much more complex task to develop a standardized accounting system for a wider range of contractual relationships, addressees and, therefore, objectives. One typical example for the latter is

the German financial accounting system codified in the third book of the German commercial code (*Handelsgesetzbuch*, HGB) which can be characterized as a multi-purpose accounting system. Again: Focusing on different contract partner groups with their specific information needs and claims presumably provokes different objectives or at least a different weighting of objectives. In consequence, financial accounting systems differ in reality.

The differentiation of standardized financial accounting systems is not only driven by the focus on relevant contract partner groups. Standard contracts are enmeshed in the contractual and legal environment of the firm and its contract partners. Therefore, different national settings which provide different contractual and legal (regulatory) environments for entrepreneurial activity may justify different financial accountings systems. This holds true for other environmental and institutional differences in general. Legal, governmental, socio-economic and even cultural heterogeneity yields financial accounting system heterogeneity between national or supranational jurisdictions, economic and cultural areas (e.g., Gray 1988). Thus, accounting harmonization rests also upon the harmonization of material environmental conditions. Otherwise, it bears the danger of being inefficient.

- **We conclude that financial accounting describes a standardized information process. Its outcome (financial reporting) is used to reduce information asymmetries between corporate insiders (entrepreneurs or management) and its contractual partners.**
- **As such, financial accounting is an essential element of the corporate governance system.**
- **Financial accounting does not provide a homogeneous information system even if accounting rules are standardized. Differences in financial accounting information arise because of differences in the incentive-structure and relative importance of contractual partners, and in the informational and regulatory infrastructure.**

2.2. Peculiarities of small and medium sized entities (SMEs)

2.2.1. SME characteristics

Small and medium sized entities (SMEs) differ in at least one material aspect from other enterprises: The relevant number of their contract partners is low(er) compared to the contract partners of public firms.

To clarify this point we distinguish two exemplary types of enterprises. On the one hand we have a publicly traded corporation with a considerable market capitalization. This public corporation (in Germany, for example, a DAX listed *Aktiengesellschaft*, AG) represents a legal entity which is involved in a multitude of contracts. This applies for employees, customers and suppliers but especially for owners. With regard to the latter, the public corporation may interact with hundreds of thousands of shareholders. Apart from institutional investors, individual capital market participants trade anonymously and maintain a distant relationship to the corporation. Ownership and management is separated and this induces owner-related agency conflicts.

On the other hand we take a sole proprietor (*Einzelunternehmer* in Germany), a single entrepreneur who bundles all individual contracts personally. In normal cases such firms are characterized by a manageable number of contract partners. This applies especially for the owner sphere. The entrepreneur is the exclusive owner and simultaneously the responsible manager of his firm. There is no owner-related agency conflict.

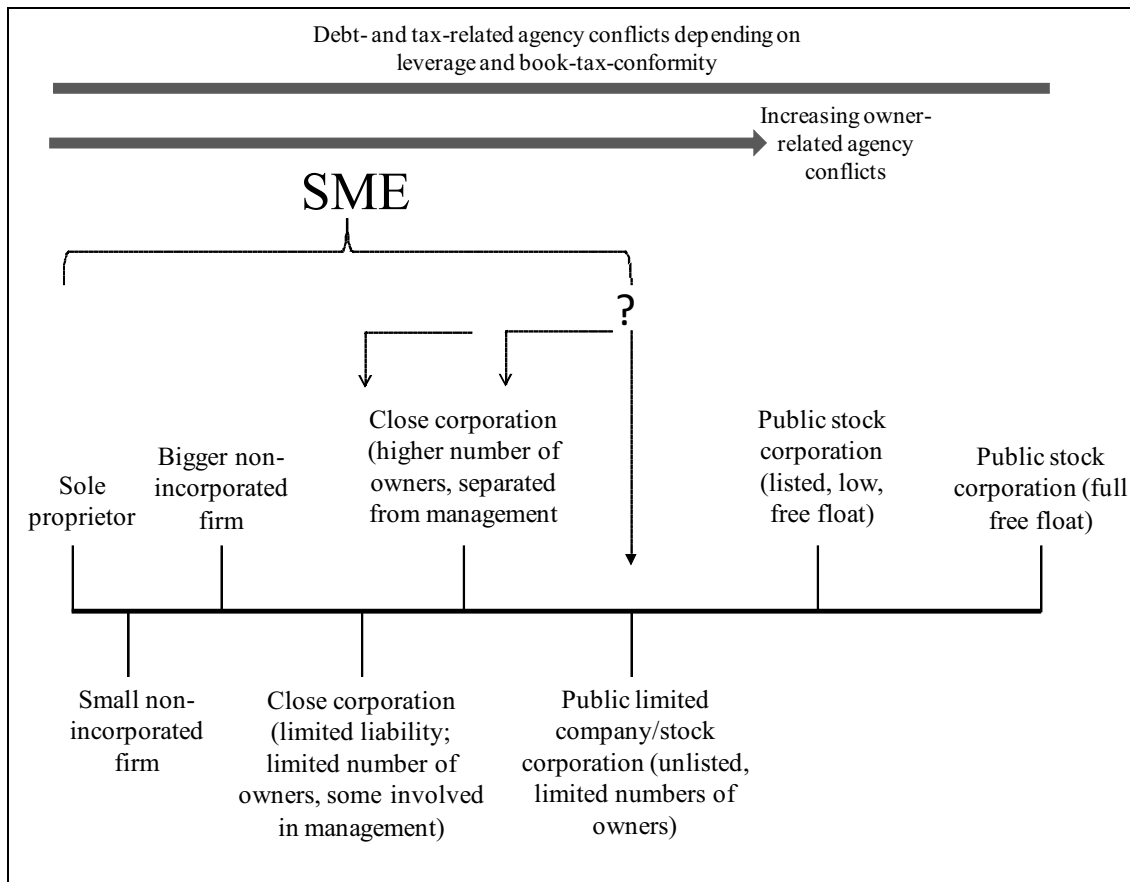


Figure 1: SMEs in the context of legal structures for economic organizations

These two examples describe the opposite extremes on a continuum of economic organizations (see figure 1). One side of the continuum with the sole proprietor at its very end represents the SME characteristics in extenso. Admittedly, SMEs span over a wide range of possible enterprise sizes and legal forms. Moreover, SME is not a precise term, making it difficult to define it accurately (see, for example, the literature overview provided by Marwede 1983; in figure 1 we use the question mark to express this difficulty and to document possible alternatives of SME ranges). However, almost all attempts to define SMEs incorporate the element of size which can directly be deduced from the SME term itself. This is documented internationally by the German institute for SME research in Bonn (*Institut für Mittelstandsforschung, IfM*) which provides an overview of SME-definitions used in various countries and supranational organizations, especially in connection with governmental grant programs. All of these rely on quantitative size criteria such as total assets, number of employees or sales/turnover (Günterberg and Wolter 2002, another overview of national SME definitions in various

countries is provided by Sian and Roberts 2006). One distinct example is provided by the EU recommendations on the size criteria for micro, small and medium enterprises (Table 1).

	Employers	Turnover	Balance sheet (total assets)
Medium	250	50m €	43m €
Small	50	10m €	10m €
Micro	10	2m €	2m €

Table 1: EU recommendations on the size criteria for micro, small and medium enterprises (OJEU 2003/361/EC, Sian and Roberts 2006, 25)

Although concrete size criteria seem arbitrary and do not reflect industry specific characteristics (e.g., in contrast to the manufacturing business, total assets of financial institutions are much higher), they represent a simple and applicable idea: Size criteria depend directly (e.g., number of employees) or indirectly on the number of firm contracts involved. The larger the firm size, the higher the number of contracts and contract partners involved. It can also be assumed that the ownership structure correlates with firm size at least: Larger firms with more complex organizations tend to lead to complex ownership claims and/or higher number of owners in a more distant relationship.

One typical example for an SME firm is a non-incorporated firm, a commercial partnership, like for example a *Komanditgesellschaft* (KG) in Germany. Apart from the fact that this enterprise lacks the ability of being a full-fledged legal party to individual contracts (no “*juristische Person*”, at the most a “*quasi juristische Person*”), it can be assumed that the sheer number of contract partners is again considerably small(er) in comparison with public companies. This applies especially for owners. Due to their limited number and their accentuated corporate position under German company law for example, the management of a KG is regularly not separated from ownership. Especially the partners with unlimited liability (*Komplementäre*) are personally involved in management duties or at least come close to being so. Owner-related agency conflicts are likely to be non-existent for these partners. However, owner-related agency conflicts arise from the coexistence of part-

ners with limited liability (*Kommanditisten*) as these have less direct control over management decisions.

Besides partnerships firms with other legal forms also belong to the SME sphere. Close corporations, incorporated cooperatives and small unlisted stock corporations, often with only regional focus and frequently with a rather limited number of owners, some of them involved in management (e.g., “*geschäftsführende Gesellschafter*” in a close corporation firm), can be subsumed under the SME size criteria. Although strong (personal) ties between ownership and management still seem likely for this group of firms, owner-related agency conflicts can be expected to increase with the number and heterogeneity of owners and the distance between ownership and control.

The most appropriate and selective definition criterion for SMEs, used also in this research report, is a qualitative one: The private character of a firm through non-access to organized capital markets. Thus, publicly listed stock corporations are clearly located outside the SME range. Public firms have a different corporate governance structure that needs to address owner-related agency conflicts. The organized capital market plays a major role in mitigating and governing these conflicts. At efficient markets, which are fueled by valuation-relevant financial accounting information, outside owners are able to price protect themselves against (at least some) agency problems. Against this background, important attributes of the SME settings are comparably low owner-related agency conflicts. SME are regularly characterized by the close alliance of ownership and management. Other agency conflicts are not necessarily excluded, although the number of firm contracts in the SME setting is lower. Since owner-related agency conflicts are less severe, other agency conflicts inflict a greater impact on the corporate governance of SMEs. The two most relevant conflicts in the SME setting are debt- and tax-related ones. Both of them may affect every firm setting (as indicated in figure 1) but come to the fore especially in the absence of owner-related agency conflicts. The more debt financing is economically required in a firm (the higher the leverage), the more accentuated is the related agency conflict between owner-managers and creditors. The tax-driven situation is quite similar. The stronger the tax constraints, the stronger is the tax-related agency conflict between owner-managers and fiscal authorities, if taxes play a decisive role.

2.2.2. Implications for financial accounting

What are the implications for financial accounting? The characterization of SMEs as smaller firms also in terms of contract numbers is essential for the governance structure. Let us consider again the small sole proprietor as one SME extreme: There is no principal-agent conflict between owner and manager due to the very same person being in both positions. Obviously, no information asymmetry can exist between owner and manager. From the owner-oriented information perspective there is no need for financial accounting, let alone for standardized and regulated financial accounting. The entrepreneur is himself responsible for generating some sort of managerial (internal) accounting for self information which is only a matter of his individual way to manage his business.

External financial accounting can only be justified with regard to other contractual relationships to other stakeholders. However, the limited number of these relationships, the presumed contiguousness between contract partners and entrepreneur and the accentuated corporate position of the latter have to be considered. In addition, there are safeguards even without financial accounting. Creditors (e.g., suppliers or banks), for example, are secured by the personal unlimited liability of the sole proprietor. Employees are regularly quite closely located to the sole proprietor and maintain a more personal relationship. Against this background, trust and (positive) personal assessment may also serve as efficient safeguards. Anyhow, principle-agent conflicts may be attenuated, although not dissolved. Especially one contract partner, the fiscal authority, remains in the position to require tax accounting information. If financial accounting and tax accounting information is tied together (book-tax-conformity), the financial accounting can be expected to reflect on tax-related agency conflicts. Moreover, depending on the financing situation the claims and influence of creditors will become more important for the SME setting. This is not necessarily connected to the firm size. However, increasing size may indicate the increasing need for more financial funds and, therefore, the rise of more significant creditor-oriented agency conflicts. These two agency relationships (tax and creditor) can be expected to affect the objectives and outcomes of financial accounting in the SME setting. The relative importance of these two clienteles might shift the objective from SME financial accounting

from an owner orientation to a more debt- and tax-related financial accounting regime.

As SME firms become more dispersed in ownership both agency conflicts remain but interfere with arising owner-related conflicts. Information asymmetry between owners and managers emerge in the SME setting, if legal forms allow for multiple (non-managing) owners. But even these “legal fictions” (Jensen and Meckling 1976) can be characterized by close relationships between owners and managers, particularly when owners are still personally involved in management. This applies especially for close corporations, small and non-public stock corporations and cooperatives – as long as the number of owners (respectively members of the cooperative society) is small and their stake big enough to maintain a close relationship to management. In such settings, the impact of owner-related agency conflicts are likely to be immaterial. These conflicts can probably be solved more efficiently on a bilateral level than by standardized financial accounting because every owner is an influential contract partner of the firm with a strong bargaining position and, therefore, able to require individual information. Again, the relevance of creditor-related agency relationships remains and these are likely to be influential for the standardization of respective financial accounting systems. Not surprisingly, accounting research – also in the Anglo-American hemisphere – has long emphasized the necessity of differential accounting standards based on size and/or ownership characteristics (e.g., for a literature overview Campbell 1984; for an historical analysis of differential accounting in Germany see Eierle 2005).

This line of reasoning changes dramatically for firms outside the SME area. Public firms are different. Here, the nexus of contracts is dominated by external (current and potential) shareholders in anonymous relationships even if registered name shares are issued. These shareholders are neither able to negotiate an individual bilateral contract nor are they influential. There is a delegation of control from ownership to management (Berle and Means 1932). Therefore, the multitude of those anonymous (individual) shareholders – institutional ones might be different and more capable of protecting themselves – are protected by standard contracts often codified in corporation and/or securities regulations with a standardized financial accounting system as one integral part of it. These systems try to provide decision useful information for

current and potential shareholders who have to decide whether they invest or disinvest in that particular share. However, the weighting between the owner and creditor focus of financial accounting information is not automatically changed for the benefit of owners. Organized capital markets provide additional opportunities to finance firms by issuing debt securities which again increase the demand for creditor-oriented accounting information. Consequently, the weighting is up to the individual financing situation of the publicly traded firm.

- **We conclude that although SME definitions differ, we assume SMEs to be smaller on average and, especially, not to be publicly listed.**
- **The contractual SME system is to a lesser extent characterized by principal agent conflicts between owners and managers.**
- **The role of debt-related agency conflicts persists, but might be mitigated by relationship-based lending arrangements.**
- **Tax-related conflicts influence financial accounting in case of book-tax-conformity.**
- **Taken together, tax and creditor-related agency conflicts can be expected to interplay with owner incentives, shaping the objectives and outcomes of financial accounting in the SME setting.**
- **Access to organized capital markets and the separation of ownership and control changes the objectives of financial accounting towards providing information which helps market participants in pricing their assets efficiently at capital markets.**

2.3. Weighting of accounting objectives in the SME setting

2.3.1. Objectives of financial accounting in general

The microeconomic motivation for financial accounting as one integral part of the corporate governance system corresponds to the problem of identifying the right financial accounting objective. Adhering to the objective of one particular contract group (the main users) will shape the

financial accounting system. In consequence, a specialized accounting system arises which fits the information needs and claims of that particular group. This orientation of the system is expressed in the objective. As explained before, specialization depends also on the environmental and institutional conditions, especially on the regulatory infrastructure. These drivers are regularly embodied in the objective of the respective financial accounting system.

When we discuss objectives of financial accounting systems we identify a common meta-objective in line with the original definition of financial accounting : the reduction of information asymmetries between the firm – or more precisely: the firm managers – and the users (outside contract partners). Every financial accounting system does serve this purpose (e.g., Pellens et al. 2008). Ranking under this meta-objective, subordinate objectives can be identified. These subordinate objectives depend on the particular information needs of the users. Whereas, for example, the fiscal authority uses financial accounting information to determine their tax base, participators or shareholders might need financial accounting information also for profit distribution purposes. If management and ownership is separated, the latter needs additional and reliable information about management performance (e.g., about the return on investments financed with their funds) to decide whether they continue working with these managers. Accounting information facilitates owner monitoring and the effective exercise of their contractual or legal ownership rights. Additionally, (potential) owners and creditors might be interested in prospective information to assess the future development of the firm and the fair value of their own investment.

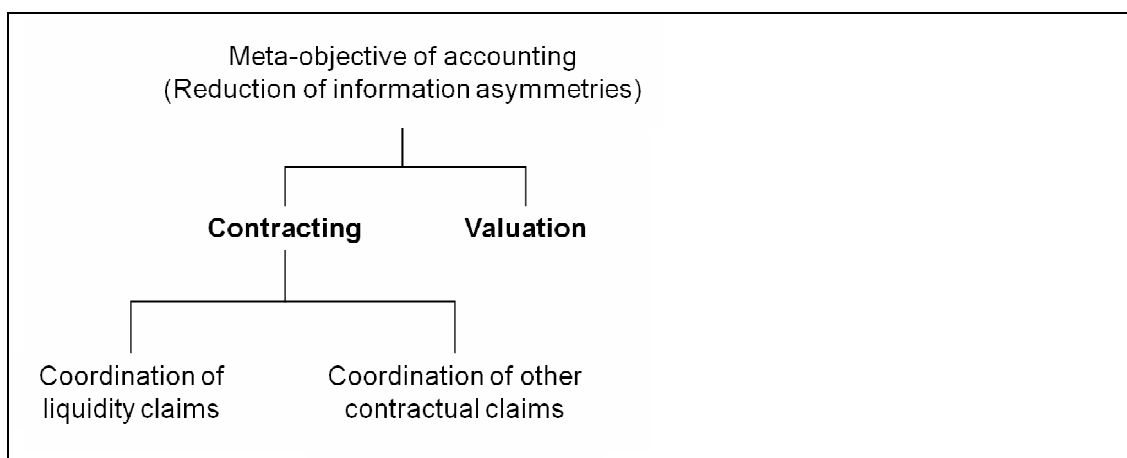


Figure 2: Objectives of financial accounting

Against this background, we distinguish two subordinate objectives beneath the meta-objective (Figure 2): Contracting and valuation (Fülbier and Gassen 2008). The former is associated in literature with stewardship and serves primarily contract coordination purposes. Our understanding of the contracting objective comprises all kinds of contractual claims which refer directly or indirectly to financial accounting information. Liquidity claims with regard to owners (e.g., dividend distribution), to managers (compensation), to fiscal authorities (taxes) or other contract partners are also included – without arguing that all contractual claims are connected with payout consequences. In order to control the efficient use of firm resources the principal has the incentive to monitor management (agent) action (Gjesdal 1981; Watts and Zimmerman 1986, both with respect to stewardship and often a focus on owner-management relationships; more recently Christensen and Demski 2003; Christensen et al. 2005). It does not matter that some of these claims are regulated by law (e.g., tax calculation, or, in Germany, dividend distribution) and some others are not. Again, this is a question of economic efficiency and political values and priorities how to implement a standard contract.

Valuation describes the other subordinate objective. It represents the demand for valuation relevant information and has a clear prospective focus – in contrast to the contracting objective. Shareholders evaluate their investment continuously for divestment or (additional) investment considerations and need, therefore, decision useful information. This can be achieved theoretically by information about the firm value on a timely basis or the respective value of the individual ownership claim (share value).

Of course, our dichotomy of two separate accounting objectives, contracting and valuation, is a simplification. Theoretically, there are as many objectives as users of financial statements exist. Every single contract partner of a firm has individual information needs, individual risk attitudes and preferences. However, to reduce complexity we assume that some of the information needs are alike and can be classified roughly in two classes. This classification goes along with the assumption that contract groups behave to some extent homogeneously.

Two objectives, contracting and valuation, bear the risk of being partly or completely non complementary or incompatible. Appropriate information for contracting purposes is not necessarily qualified for

valuation et vice versa (see the seminal paper of Gjesdal 1981 who uses an analytical approach; a research overview is provided by Wagenhofer and Ewert 2007). Against this background, prioritization makes sense. From a positive perspective, the respective weighting of the objectives is the result of demand and supply processes initiated by the diverse contractual settings which depend also, as explained, on the environmental and institutional conditions, especially on the regulatory infrastructure. For example, in Germany, institutional factors like the financing (traditionally more debt financing, long time underdeveloped organized capital markets) and regulatory situation (traditional preference for legal forms and settings with a strong alliance between ownership and management) have determined the structure and the objective of commercial law accounting (HGB). The resulting focus on debt-related principal agent conflicts – not on supposedly less relevant equity-oriented ones – has driven HGB accounting for decades into a more prudent direction with a clear focus on reliability, realization principle and creditor protection (e.g., Leffson 1987; Moxter 1966, 2003). The latter can be understood as a dominant contracting orientation which seems an efficient corporate governance instrument to counteract owner managers who have – in a simplified rationale – the incentive to overinvest in high-risk projects (actual investments above the economically reasonable level) and to underinvest in low-risk projects (actual investments under the economically reasonable level) and, corresponding, to exaggerate profit payouts to owners in profitable enterprises.

2.3.2. Contracting objective and financial accounting system design

Although accounting research analytically separates the different characters of contracting (stewardship) and valuation demand (Gjesdal 1981; also Christensen and Demski 2003; Christensen et al. 2005), it has neither identified in detail the consequences for the regulator nor the precise characteristics about how financial accounting should be shaped to meet contracting purposes. However, some general conditions can be cautiously identified. Due to the need to govern and enforce firm contracts Ijiri (1975, 36) suggests that contracting information should be “hard” and “difficult for people to disagree”. This is mirrored in different parts of the literature which postulate the prominence of reliability under the contracting perspective (e.g., Leuz 1996; Kirchner

1997; Bushman and Smith 2003, 66; Wüstemann and Kierzek 2007, 363). Gjesdal (1981) has analyzed Ijiri's claim in more depth and shows that soft information is less valuable in stewardship settings. He clarifies the negative correlation between verification costs with "hardness" and, therefore, with the stewardship value. This may justify more reliable information for stewardship/contracting purposes whatever that means. Moreover, some earnings attributes connected with the income recording process such as income smoothing ("dampening of fluctuations about some level of earnings that is currently considered to be normal for a firm", Beidleman 1973, 653) or conditional conservatism (asymmetric verifiability requirements for gains and losses; see Basu 1997) can also be explained with respect to contracting purposes (e.g., Lambert 1984; Watts 2003; Gassen et al. 2006; Fülbier et al. 2008; Gassen 2009).

It seems difficult to derive more specific statements about recognition and measurement under the contracting orientation. Some (practitioner) papers and comment letters (in the 'IFRS for SMEs' due process) argue that contracting ranks historical cost information higher than fair values (see for a similar impression AAA FASC 2006). The respective reasoning seems vulnerable especially with respect to the above mentioned objectivity and reliability. Based on active markets also fair values can be derived reliably. Therefore, other arguments seem necessary, for example the problematic character of unrealized gains in the context of the coordination of liquidity claims at not-perfectly liquid markets (see for example with respect to tax accounting Fülbier and Gassen 1999).

However, as explained in chapter 1.2, in this research report we abstain from developing specific assessments of recognition and measurement rules with regard to the impossibility theorem described above. Instead, we focus on providing theoretical insights and empirical evidence about the SME setting, the primarily SME accounting objectives, their weighting and, especially, the question that and how diverging regulatory infrastructures affect SME accounting in different national settings of EU member states.

2.3.3. Weighting alternative objectives in the SME setting

The described German traditional HGB setting is interesting due to its strong parallels to the typical SME setting: Minor impact of equity-

oriented owner manager conflict and stronger focus on the contracting objective of financial accounting especially with respect to debt-related agency conflicts. This implies a different weighting of financial accounting objectives. Contracting purposes and creditor-oriented information tend to dominate the SME setting.

If separation of ownership and management takes place the situation will change and the typical SME setting will disappear, especially in the context of organized stock markets. Organized and, therefore, transaction cost efficient capital markets provide the opportunity to diversify the unsystematic risk and to price protect against governance related risk. The higher the market efficiency, the lower is the protection premium shareholders require for high-risk investments. In this setting, the contracting purpose of financial accounting becomes less important. Instead, there is a tendency to demand decision useful financial accounting for investment purposes. The valuation objective gains in relevance.

The HGB can be characterized as a multiple objective system (e.g., Leffson 1987). It represents both aspects, contracting and valuation, although the latter is not really explicated in the HGB (or in the GoB – Grundsätze ordnungsmäßiger Buchführung). In contrast, IFRS and US-GAAP reveal a clear valuation orientation (see in comparison §§ 264, 297 HGB versus IFRS Framework para. 10, 12-21 (IASB 2001); see also the Trueblood Report (AICPA 1973) that clearly indicated the shift from contracting/stewardship to valuation in the U.S.). In Germany, contracting dominates (especially Moxter 1966, 2003) even if a recent HGB reforms (*Bilanzrechtsmodernisierungsgesetz* 2009, BilMoG) strengthens the valuation objective slightly. Last but not least, the multiple objective character of the HGB and its contracting orientation is supported by the book-tax-conformity and the relevance of HGB information for tax accounting purposes (e.g., Schmidt 1994; Moxter 2007). Again, the weighting of the HGB objectives reflects the institutional and environmental infrastructure in Germany over decades.

It seems interesting to note that the just described cause-effect-chain (infrastructure determines system objectives) can be utilized from the opposite perspective: Under the already proven condition that both objectives are no complements (Gjesdal 1981), it seems justifiable to suppose that visible system objectives may inform about the much more complex and partly hidden infrastructure of economic characteristics, for

example in one particular country. This applies also in respect to individual accounting and reporting entities. If the practical accounting behavior differs between entities it may indicate different contractual settings. This rests upon the assumption that different accounting behavior is possible even within one system. Accounting choice and earnings management procedures justify this hypothesis. Against this background, empirical accounting research documents cross sectional accounting differences for example in the US: US enterprises with stronger stakeholder positions seem to account more conservatively and disclose quarterly information with comparatively lower valuation relevance. This highlights also and again the missing complementarity of the two objectives contracting and valuation (Gassen 2009). Regardless of that result, it is still a matter of open debate to what extent different accounting objectives, esp. contracting and valuation result in different accounting outcome (e.g. Bushman et al. 2006; O'Connell 2006; LaFond and Watts 2008; Banker et al. 2009; Drymiotes and Hemmer 2009).

- **Underlying the meta-objective of financial accounting, the reduction of information asymmetries, two alternative subordinate objectives can be distinguished: contracting and valuation, which are partly or completely non complementary.**
- **The contracting orientation allows for some cautious considerations with regard to the content of accounting information: Due to the need to govern and enforce firm contracts, contracting information needs to be more objective and verifiable. Literature postulates the prominence of reliability from a contracting perspective.**
- **Financial accounting systems vary in terms of their objective(s) and the weighting of their objectives in order to reflect the specific situation of the contractual settings and the regulatory infrastructure in their application area.**
- **The contractual setting of SMEs is less prone to agency conflicts especially between owners and managers.**

- In contrast to public firms at organized and, therefore, transaction cost efficient capital markets, SME's contractual partners do not have the opportunity to diversify their unsystematic risk and to price protect themselves against governance related risk. The higher the transaction costs, the more relevant are alternative contractual safeguards and, finally, the contracting objective.
- The HGB can be characterized as a multiple objective system which represents both aspects, contracting and valuation. However, in contrast to the clear valuation orientation of IFRS or US-GAAP contracting dominates even if more recent reforms (BilMoG 2009) strengthen the valuation objective slightly. Again, the weighting of the HGB objectives reflects the regulatory infrastructure in Germany.

3. Institutional analysis of the IFRS for SMEs

3.1. Objective of the IFRS for SMEs

Theoretical (chapter 2) and empirical accounting research (chapter 4) predicts and documents that the contractual infrastructure of SMEs has an impact on their financial accounting information. Moreover, the specific design of the contracting objective, its focus on specific contract partners (e.g., tax authorities, creditors etc.) and its accordance with the valuation objective is influenced by nationally diverging regulatory infrastructures.

However, the International Accounting Standards Board (IASB) developed and approved a single accounting standard for SMEs, the IFRS for SMEs (IASB 2009) in July 2009. In tradition of all other International Financial Reporting Standards (IFRS) this standard has a clear focus on "general purpose financial statements" (IFRS for SMEs, P7-9, IASB 2009). Although the IASB argues that "general purpose financial statements are directed towards the common information needs of a wide range of users, for example, shareholders, creditors, employees and the public at large" (IFRS for SMEs, P7, IASB 2009), there is an implicit orientation towards valuation. On the one hand, the IASB expresses that "the objective of financial statements is to provide information about the financial position, performance and cash flows of an entity that is useful to those users in making economic decisions" (IFRS for SMEs, P7, 2.2, IASB 2009). This phrase is almost identical with the

conceptual framework for “full” IFRS (Framework, Par.12, IASB 2001; see also Bertoni and de Rosa 2010) which undisputedly has a dominant valuation orientation and investor focus (e.g., Framework, Par.10, IASB 2001). The IASB seems to believe that concepts and pervasive principles shall not differ between IFRS for SMEs and full IFRS. Consistently, it opposes the introduction of an accounting element which might be material for many contracting settings: The determination of a distributable income (Bertoni and de Rosa 2010). While this opposition challenges the notion of general purpose financial statements, it is in line with the role of the IASB as supranational institution: The IASB, because of its own objective, cannot (and most likely should not) cater to alternative legal infrastructures and their alternative objectives of financial accounting.

The implicit orientation towards valuation is also indicated by the IASB’s allusion to contracting (stewardship) in the IFRS for SMEs with a clear subordinating character: “Financial statements *also* show the results of the stewardship of management – the accountability of management for the resources entrusted to it” (IFRS for SMEs, 2.3, IASB 2009). On the other hand, the IASB itself emphasizes the distinction between general purpose accounting and the specific accounting often identified as primarily relevant for the SME setting: “SMEs often produce financial statements only for the use of owner-managers or only for the use of tax authorities or other governmental authorities. Financial statements produced solely for those purposes are not necessarily general purpose financial statements” (IFRS for SMEs, P12, IASB 2009; see also Son et al. 2006, 220).

The general purpose character of the IFRS for SMEs seems to indicate that the IASB assumes this accounting standard to work efficiently in all possible institutional environments where financial accounting is addressed to an array of users. The global focus of the IFRS for SMEs is explicitly stated (e.g., IFRS for SMEs, P9-10, P13, IASB 2009) and foils the diversity of nationally divergent regulatory infrastructures and the respective differences in financial accounting demand.

- **We conclude that the IFRS for SMEs has a focus on “general purpose financial statements” with an implicit orientation towards valuation.**

- The IASB believes that concepts and pervasive principles shall not differ between IFRS for SMEs and full IFRS.
- The IASB believes that the general purpose IFRS for SMEs with global focus fits all possible institutional environments and, therefore, foils the diversity of nationally divergent settings and the respective differences in financial reporting demand.

3.2. SME accounting standard setting qualification of the IASB

3.2.1. System ability in general

Although it is difficult for accounting research to assess accounting standards in detail, it makes sense to analyze the IASB standard setting system in its ability to develop appropriate accounting standards for SMEs (see from a taxation perspective Fülbier and Gassen 1999; Fülbier 2006; see also Brown 2004). Moreover, shifting the analytic focus on the system puts us in the position to appraise the system qualification to develop appropriate standard modifications in the future. Due to the dynamic character of international accounting and the continuous transformation of the respective standards so far, a pure analysis of the IFRS for SMEs status quo would not suffice.

One element of the standard setting system is the conceptual guideline for future standard modifications which is expressed in IFRS for SMEs section 2 (*Concepts and Pervasive Principles*). We have already identified the clear focus on “general purpose financial statements” with the implicit orientation towards valuation in the previous chapter. It can be expected that the dynamic process of developing and improving two accounting systems (full IFRS and IFRS for SMEs), which are targeted at different user groups but share the same conceptual focus, leads to a convergence trend of both regimes. This alone would suffice to raise concern about the appropriate current and future adequacy, efficiency and applicability of the IFRS for SMEs in the SME setting. Another important system element is the standard setting organization itself, the IASB, its decision-making bodies, its members and financial funds.

3.2.2. *Personal membership as a possible indicator for dependency*

We focus first on the organizational structure of the IASB and the IASCF (International Accounting Standards Committee Foundation). Primarily relevant for standard setting is the IASB, a 14 member body (per Dec. 31, 2008; data extracted from IASCF 2009a; due to recent constitutional changes the IASB will be expanded to 16 members by 2012) completely responsible for all IASB technical matters including the preparation and issuing of IFRSs, also the IFRS for SMEs and for approving Interpretations of IFRSs. The board composition should ensure a “broad international basis” and an “overall geographical balance” (IASCF 2009b, Par. 26) which allows a maximum of four European board members (and also max. four from Asia/Oceania, four from North-America, one from Africa, one from South America and two others which adds according to the newly revised constitution up to 16 board members until July 2012). However, the Anglo-American hemisphere including countries like Australia and South Africa is represented by seven members (as of Dec. 31, 2008: Sir David Tweedie, Mary E. Barth, Stephen Cooper, Robert P. Garnett, James J. Leisenring, Warren J. McGregor and John T. Smith) including the chairman. From the SME perspective, this seems acceptable if the SME setting is internationally homogeneous and the respective SME interest/influence is uniformly distributed on an international level. However, in previous sections we have already raised severe doubts that institutional settings are globally homogeneous. As an addition, it should be mentioned that the European Union (EU) is represented by four members in 2008, two each from UK and France. In July 2010 E. König from Germany will join the IASB and replace G. Gélard from France.

The professional origin of the board members seems even more relevant than their geographic origin. The IASCF constitution requires “an appropriate mix of recent practical experiences among auditors, preparers, users and academics” (IASCF 2009b, Par. 27). Nothing is mentioned in the constitution about the character of the companies involved in preparing, auditing or using the respective financial statements. Therefore, not surprisingly, the strong capital market orientation of “full” IFRS is mirrored in the board composition. Apart from a large fraction of members coming from national standard setting bodies or securities commissions (6 members), only members from

large publicly traded companies (3) and 'Big Four' accounting and auditing firms (4) have joined the board. The remaining board member is an academic as of Dec. 31, 2008. None of the members has an SME background.

A similar picture is identified in other IASCF groups such as the IFRIC (International Financial Reporting Interpretations Committee; from March 1, 2010: IFRS Interpretations Committee) and the SAC (Standards Advisory Council; from March 1, 2010: IFRS Advisory Council). Also the trustees, quite important for the IASCF governance structure, represent the three big groups in a similar manner: The securities commissions, stock exchanges and national boards (10), listed companies (9) and major auditing firms (2) (as of Dec. 31, 2008, IASCF 2009a). Again, representatives from the SME sector are neither member of the trustees nor of other IASCF groups.

3.2.3. Funding sources as a possible indicator for dependency

Exerting an influence on IASB accounting standards is not only restricted to personal membership and participation in the standard setting process. The provision of financial funds constitutes another influential instrument. Identifying the IASB financiers may shed some more light on the influential groups behind the institution. Based on data extracted from the IASCF annual report 2008 the overall annual financial funds aggregate to almost 20m GBP (19.822m GBP in 2008). Only one third of these funds (32.7%) is financed from the IASB's own activities, from publications and related activities. The major part of the financial funds is provided by donations (12.747m GBP, 64.3%; the rest is attributable to interest income and other sources of minor impact). The groups dominating the donations control material parts of the IASB financing.

The 'Big Four' accounting and auditing firms represent one major group of contributors: They spend (similar data and relations for previous years) 4.230m GBP (33.2% of the complete donations of 12.747m GBP) in 2008 and, therefore, finance the IASB budget substantially. The remaining donations are provided by so called "financial supporters" who donate heterogeneous amounts on an annual basis. The IASCF annual report 2008 for example identifies 93 companies for Germany contributing 1.011m GBP altogether (7.9%; in comparison USA and UK together spend 2.621m GBP (20.6%)). These include all DAX30 companies who donated 25,000 GBP p.a. and 63 other companies which

donated less than 25,000 GBP each. The latter comprise publicly listed companies such as Evonik AG, Gerresheimer, HeidelbergCement AG, Heidelberger Druckmaschinen AG, Hochtief AG, MLP AG, TAKKT AG, Salzgitter AG, SGL Carbon AG, Südzucker AG or Wirecard AG and also German public, state and some other banks such as KfW Bankengruppe, Landesbank Baden-Württemberg, HSH Nordbank AG, Landesbank Hessen-Thüringen or Deka Bank, DAB Bank AG, Aareal Bank AG. All these companies have a capital market background either as listed firms or as banks involved in capital market transactions. SMEs are not involved. One close corporation, Robert Bosch GmbH, is mentioned as a contributor. With sales over 45bn € and more than 280,000 employees the Bosch group does not seem to be a typical SME representative apart from the fact that Bosch is publicly traded in terms of EU regulation 1606/2002 due to its quoted obligations. Summing up, the identification of major fundraisers of the IASB concurs with the results of the analysis of personal membership. "The IASB claims to be a non-profit organization ... but it is ... closely tied to big profit-making organizations: large multinational corporations, big accounting firms and elite stock exchanges..." (Brown 2004, 385). SMEs are not involved.

3.2.4. Review of the constitution

The identified picture of IASCF and IASB organizational structure, personal membership and funding sources describes the situation so far. Future developments are more difficult to anticipate. The IASCF constitution was originally approved in May 2000 and requires the trustees to undertake a review every five years. This review shall regularly consider the entire structure of the IASCF and IASB organization and its effectiveness. The first review was completed in June 2005 and came into effect on 1 July 2005. Apart from some further amendments, the trustees initiated their second five-yearly review of the organization's constitutional arrangements in February 2008. The trustees decided to split the review process into two parts. The first part focused on the governance and public accountability of the IASC Foundation (esp. the creation of a new Monitoring Board between trustees and public authorities) and on the size and composition of the IASB (IASCF 2008a). It was approved in January 2009 and came into effect on 1 February 2009 (IASCF 2009b, Preface). The analysis above is partly based on this status. Information from the latest available annual report 2008 reflects

the former constitutional situation. However, no material changes with regard to the non-consideration of SME specifics were agreed upon in this first part of the review.

The second part of the constitution review started at the end of 2008 (IASCF 2008b). This part concerned the remainder of the constitution beyond governance and the IASB composition. The Trustees approved the recommended changes in January 2010 that will come into effect on 1 March 2010. The second part of the review comprise changes with respect, amongst others, to the names of bodies within the organization (e.g., IFRS Foundation instead of IASCF), the clarification of the objectives of the IFRS Foundation, some improvements in the governance structure and some enhancements to the due process. None of the reform steps seem explicitly motivated by a stronger SME participation. However, some minor (wording) changes affect the missing SME orientation slightly. The objective of the new IFRS Foundation requires “in the light of global IFRS adoption” some amendments with regard to emerging economies and SMEs. Therefore, the IFRS Foundation has “to take account of, as appropriate, the needs of a range of sizes and types of entities in diverse economic settings” (revised constitution, par. 2c, see also IASCF 2009c). Moreover, in the context of the staff and board member qualifications, the revised constitution comments on the awareness of the financial accounting environment: “High quality financial reporting will be affected by the financial, business and economic environment. IASB-members should have an understanding of the global economic environment in which the IASB operates” (IFRS Foundation criteria for IFRS Board members; see also IASCF 2009c). This statement fits well into the reasoning of this research report about the impact of heterogeneous regulatory infrastructures on financial accounting. However, in the next sentence, the still existing focus on publicly traded companies comes to the fore again: “This global awareness should include awareness of business and financial reporting issues that are relevant to, and affect the quality of, transparent financial reporting and disclosure in the various capital markets worldwide, including those using IFRS.” The position of SME topics remains effectively unchanged.

Another issue of current discussion is the funding situation. The IASCF announced to develop a broader, stable and long-ranging financing system. Long-term funding commitments were published in February 2010. However, there is neither a stronger orientation towards more

SME involvement nor a renunciation of the focus on large, listed, multi-national corporations, big accounting and auditing firms and elite stock exchanges. Instead worldwide participation should be improved for example by providing substantial funds from the EU (4m €), U.S. (3m €) or Japan (2.8m €). A material change in the structure of the funding sources cannot be detected. On the contrary: The 'Big Four' accounting and auditing firms increase their annual funding to 2m € each.

In spite of the latest review of the IASCF constitution, fundamental changes in the standard setting structure and process seem necessary to ensure that the specific information needs of SME contract partners are met in their particular environment (similar for the U.S. AICPA 2005). Based on the analysis of the current situation and of the current efforts to change the IASCF constitution, there is reasonable doubt that the IASB system has the ability to develop appropriate SME accounting standards.

- **Analyzing the IASB conceptual orientation, organization and financing structure enables us to evaluate its suitability to developing appropriate standards and modifications for SMEs now and in the future.**
- **IASCF organs and groups, especially the IASB itself, expose a clear dominance of members from national standard setting bodies and securities commissions, 'big four' audit firms and large listed companies whereas no members with an SME background can be identified.**
- **The financing situation also shows no SME involvement and therefore most probably, no significant SME influence on standard setting.**
- **Latest reviews of the IASCF constitution have not solved the problem. There is still reasonable doubt about the ability of the IASB system to develop appropriate SME accounting standards.**

3.3. Open legal questions with respect to the IFRS for SMEs application

3.3.1. Principle of subsidiarity on the EU level

The IFRS for SMEs is so far nothing else than a single private standard without binding character, developed and approved by the IASB as a private standard setting body. Regulative action on a European and (maybe also) national level is necessary to commit or enable European companies to prepare financial statements according to IFRS for SMEs. Without going into jurisprudential details, we contribute some arguments and raise some questions concerning the legal implementation of the IFRS for SMEs in the EU and its member states.

Legislative competence in the EU is partitioned between member states and the supranational union. Within the scope of concurrent legislation member states take precedence over the European regulator. Legislative competence of the latter is restricted to those problems which can only be solved on the European level, primarily addressing cross-border issues. Even though this idea of subsidiarity has frequently been violated in the history of European regulation, it is still one of the fundamental principles of the European Union (e.g., Herzog et al. 2010). Subsidiarity states that action should be taken at the lowest effective level of governance (see Føllesdal 1998 for a survey of different definitions). Depending on the national constitution, some member states use subsidiarity as a means to strengthen the independence of national governments against the EU (e.g., UK). Others interpret subsidiarity as a safeguard for their federal systems, coupled with the creation of a “committee of the regions” and, therefore, a constitutionally enshrined allocation of powers across multiple levels of government (e.g., Germany). However, in all cases it provides a presumption in favor of decentralization and limitation of European power (Jordan 2000; Teasdale 1993; van Kersbergen and Verbeek 1994). This is, for example, stipulated in Article 3b of the Maastricht Treaty on European Union in 1992: “In areas which do not fall within its exclusive competence, the Community shall take action, in accordance with the principle of subsidiarity, only if and in so far as the objectives of the proposed action cannot be sufficiently achieved by the member states and can therefore, by reason of scale or effects of the proposed action, be better achieved by the Community” (see currently Art. 5 of the Lisbon Treaty on European Union).

From a German perspective the Federal Constitutional Court (Bundesverfassungsgericht, BVerfG) contributes to the question of legislative competence in the EU. In June 2009, the BVerfG strengthened the position of the German constitution and parliament in the process of European regulation. It required compliance with the principle of subsidiarity und emphasized that all European legal acts are to be monitored respectively (BVerfG, 2 BvE 2/08, 30.6.2009). Against this background, a much higher burden of proof is imposed on the EU to demonstrate that action within its sphere of authority is legitimate.

Financial accounting and reporting describe possible fields of regulation and, therefore, mandatory application areas for subsidiarity. When EU regulation 1606 (Regulation (EC) No. 1606/2002 of the European Parliament and of the Council as of 19 July 2002 on the application of international accounting standards) passed the legislative procedure in 2002, it could be justified with respect to the globalization of capital markets and the freedom of capital movement. Here, the cross-border character seems evident. Consequently, this regulation refers in the preamble to “the need to accelerate completion of the internal market for financial services” (No. (1)), “a better functioning of the internal market” (No. (2)), “building an integrated capital market which operates effectively, smoothly and efficiently” (No. (3)), “efficient and cost-effective functioning of the capital market[; t]he protection of investors and the maintenance of confidence in the financial markets” (No. (4)), and “the competitiveness of Community capital markets” (No. (5)).

Other fields of European financial accounting regulation were also justified with respect to subsidiarity. However, the justification becomes increasingly difficult if the capital market argument falls away. Prominent examples are the 4th and 7th directive (78/660/EEC, 83/349/EEC). Here, the regulator refers more generally to the cross-border character of companies' activities which are frequently extended beyond the frontiers of their national territories. Moreover, it was intended to establish minimum equivalent legal requirements in the Community (preamble, 78/660/EEC). The clear focus on corporations, i.e. on companies with limited liability is important. On the one hand, these regulations focus on a legal form which is widely used in the EU member states by larger and more international companies and, naturally, by listed companies. On the other hand, the justification has a clear coordination orientation and

refers explicitly to the “importance for the protection of members and third parties” (also preamble, 78/660/EEC).

The situation in the SME sector is different. These companies are not publicly traded and non-publicly accountable entities. There is no capital market involved which might be subject to globalization, at least no organized capital market. Most likely, non-organized capital markets are relevant for the SME setting. Those markets regularly lack the cross-border dimension. Moreover, SMEs are not regularly organized in forms of corporations. A material portion of SMEs is non-incorporated. Not even the limited liability argument can be utilized. Therefore, a possible European implementation of IFRS for SMEs lacks a proper justification. Where exactly is the cross-border character which justifies European action here in the light of the principle of subsidiarity?

3.3.2. Other open issues at the EU level

Even if the European implementation can be legitimated, other legal questions remain. These questions are currently discussed with regard to the IFRS in general (e.g., EU Parliament 2008; Chiapello and Medjad 2009) and apply also for a possible implementation of IFRS for SMEs in particular:

- (1) Are the IASB and the whole IASCF (International Accounting Standard Committee Foundation; from March 1, 2010: IFRS Foundation) organization qualified to develop global accounting standards with mandatory character in the EU? This particularly implies questions of an improper governance structure, independence and biased lobbying opportunities with regard to financing and individual involvement.
- (2) Are the IASB and the whole IASCF organization qualified to develop IFRS for SMEs? We pose this question with respect to our analysis in chapter 3.2 and, additionally, to similar considerations from the European Parliament (EU Parliament 2008, so called “Radwan initiative”).
- (3) Is the IASB entitled to develop an accounting standard for SMEs? EU Parliament (2008) has already emphasized that the IASB has no political mandate to do so.

- (4) The private character of the IFRS for SMEs requires a transfer process into formal European regulation. The form of the necessary regulation is open and requires further analysis. The existing endorsement mechanism seems inappropriate for the IFRS for SMEs with regard to the clear focus of EU regulation 1606/2002 on publicly traded companies. The EU Parliament (2008) denies the applicability of the existing EU regulation 1606/2002 for IFRS for SMEs. Other alternatives have to be considered (e.g., EU directive).
- (5) Further open questions remain especially with regard to the scope and the level of bindingness. The question of scope refers to the two possible objects of regulation: single and consolidated financial statements. If the European regulator applies IFRS for SMEs to single financial statements, severe frictions may arise due to binding legal consequences of these accounts in a variety of member states (e.g., profit distribution, tax calculation). The second question, the level of bindingness, is connected to the first one. Mandatory application of IFRS for SMEs seems impossible for all European SMEs especially with regard to single financial statements and their strong integration in national legislation. Strong doubts about the correspondence of IFRS for SMEs with the contracting perspective of SMEs in their heterogeneous regulatory infrastructure (see chapter 2 and 4 in this report) support this point of view. Adequacy of the particular rule and congruence for the affected parties are conditions precedent to the legitimacy of European regulations (Kormann 2009). If at all, member state options seem a more appropriate alternative, also for consolidated financial statements.
- (6) Is a possible European implementation of the IFRS for SMEs and the IFRS for SMEs itself in compliance with the 4th and 7th European directive (78/660/EEC and 83/349/EEC)? Several aspects of this question have been discussed in detail, for example, by EFRAG (European Financial Reporting Advisory Group, EFRAG 2010). Compatibility analysis has identified several conflicts and differences.

- (7) Is a possible European implementation of the IFRS for SMEs in compliance with the European charter of fundamental rights? The mandatory adoption by directly enforceable EU regulation or by compulsory transformation into national law seems especially disputable particularly with respect to entrepreneurial freedom (Art. 16 of the European charter of fundamental rights), the principle of equality (Art. 20) and the principle of proportionality (with more details and references to respective decisions of the European Court of Justice Kormann 2009).
- (8) Moreover, the European process of regulation itself raises a crucial question: Is the current EU regulation unbiased? For example, the Alliance for Lobbying Transparency and Ethics Regulation in the EU (ALTER-EU) has investigated the role of the financial industry in shaping EU regulations in the financial sector. They focus on the composition of expert groups which assist the Commission and identify a strong corporate dominance in that particular field. They recommend a more transparent regulation process, a commitment to seeking a more balanced diversity of views and, therefore, a reform of the way in which the Commission gathers expert advice (ALTER-EU 2009). This recommendation could be enhanced with regard to SMEs by addressing the underrepresentation of SME lobby groups in the European regulation process.

3.3.3. Open issues on member state level: A German perspective

The legitimacy of European regulations requires compatibility with national law. This applies also for a possible implementation of IFRS for SMEs. From a German perspective, IFRS for SMEs must be in line with German law, especially with German constitutional law. This basic condition was reemphasized by the German Federal Constitutional Court when it recently strengthened the position of the German constitution and parliament in the process of European regulation (BVerfG, 2 BvE 2/08, 30.6.2009).

Legal analyses may prove whether or not IFRS for SMEs is in line with the charter of fundamental rights codified in the German constitutional law (*Grundgesetz*, GG). These analyses may especially scrutinize the compatibility of IFRS for SMEs with the freedom to choose an occupation (Art. 12 (1) GG, "*Berufsfreiheit*"), the right to private property (Art.

14 (1) GG, “*Grundrecht auf Eigentum*”), the informational self-determination (Art. 2 (1) GG in connection with respective BVerfG decisions, “*informationelle Selbstbestimmung*”) and the principle of equality (Art. 3 (1) GG, “*Gleichheitsgrundsatz*”) (Kormann 2009).

Legal and economic analyses are also necessary to shed some light on the consequences of an IFRS for SMEs adoption in Germany. These consequences will undoubtedly differ depending on scope and bindingness. If the European and/or German regulator consider single financial statements as a possible field of application, all existing legal consequences must be re-investigated (for the Italian and EU perspective Bertoni and De Rosa 2009). One example: If the book-tax conformity (authoritative principle, “*Maßgeblichkeit*”) remains despite German commercial law accounting (HGB) being replaced by IFRS for SMEs, German tax calculation will suffer for example from unrealized profits and shortfalls in objectivity due to fair value measurement (e.g., Fülbiel and Gassen 1999). Again, the implicit focus on valuation hinders the efficient use of the IFRS for SMEs in the context of contracting, especially when liquidity claims have to be coordinated. The ability of this standard to serve specific German contracting purposes seems questionable. Legal and economic analyses (partly provided in chapter 2 and 3 of this report) substantiate this claim.

The analysis of the consequences of IFRS for SMEs in the specific German environment must also comprise the level of consolidated financial statements. Although group accounts are not connected to legal liquidity claims in Germany, they certainly serve other contractual purposes. Therefore, legal and economic expediency of IFRS for SMEs seems disputable in Germany even for consolidated financial statements. Moreover, the German regulator has to compare the existing situation after the BilMoG reform 2009 with IFRS for SMEs.

- **We conclude that the private character of the IFRS for SMEs requires regulative action in the EU. However, legislative competence of the EU is restricted according to the principle of subsidiarity. This imposes a high burden on the EU to demonstrate that European regulation with regard to SME accounting is legitimate. In contrast to publicly traded companies, there is no apparent argument in favor of European action.**

- **Other legal questions with respect to application of the IFRS for SMEs remain open. These questions encompass for example the standard setting qualification of the IASB in general and with regards to SME issues in particular, the form, scope and legal bindingness of a possible regulation and the character of the European regulation process itself.**
- **European SME legislation must be in line with German (constitutional) law. Possible violations of fundamental rights must be analyzed in more depth. It is also necessary to shed some more light on the legal consequences of an adoption of IFRS for SMEs in Germany, especially under consideration of both single and consolidated financial statements. This applies for every other EU member state as well.**

4. Empirical evidence

4.1. Prior literature

4.1.1. *Surveys about SME accounting and the attitude towards IFRS*

The German setting has allowed researchers to study the attitudes and incentives of German SMEs towards IFRS. Apart from the IFRS requirement for consolidated financial statements of publicly traded companies, EU regulation 1609/2002 contains member state options for non-publicly traded companies. These options were transferred to non-publicly traded German companies by the ‘Bilanzrechtsreformgesetz’ (BilReG) 2004 to enable the voluntary adoption of IFRS in their group accounts (§ 315a HGB). This regulation has stimulated a number of studies which try to shed some light on the specific situation of these companies and their attitude towards IFRS. Moreover, the long lasting due process of the IFRS for SMEs, finally approved by the IASB in July 2009, amplifies the motivation to concentrate on non-publicly traded companies. A major strand of this literature is survey based and screened in the following passages. Here, we describe national surveys of preparers (SMEs) and their contractual partner groups as well as international studies.

National surveys of SME accounting with focus on preparers have been conducted since 2003 on a large-scale basis (see the overview in Table 2; also Mages 2009). They primarily investigate the application rate of full IFRS in the consolidated financial statements and the assessment of IFRS, which includes the ex ante expectations and the ex post experiences with conversion and current application. The results indicate that the vast majority of German SMEs does not and will not adopt IFRS. Anticipated material disadvantages of IFRS adoption are especially the increase of complexity, the dynamic change of rules and, therefore, the high(er) administrative burden. Some studies identify potential problems arising from adoption of IFRS with reference to the dominant contracting objective of SME accounting, especially the book-tax-conformity (von Keitz and Stibi 2004; von Keitz et al. 2007). Smaller companies with their even stronger contracting orientation are more likely to be at a distance from predominantly valuation-oriented IFRS. The studies rarely distinguish between single legal entity financial statements prepared according to IFRS for consolidation purposes (“Handelsbilanz II”), IFRS subgroup accounts and financial figures for

consolidation and management accounting purposes and consolidated financial statements prepared voluntarily according to IFRS.

Authors	Survey period	Sample	Return	Rate of IFRS adoption	Motives/advantages of IFRS adoption	Disadvantages of IFRS adoption
Mandler (2003a, 2003b, 2004)	Autumn 2002	400 companies from IHK-section Mittelhessen (max. 500 employees)	24 %	14 % (companies with bigger size)	Better international comparability	Costs of conversion
Wetzel (2003)	April 2003	8,362 non publicly traded German companies (sales min. 35m € or total assets min. 13m €)	10.5 %	n/a	n/a	n/a
von Keitz/Stibi (2004)	Dec. 2003	4,556 companies in Nordrhein-Westfalen (sales min. 20m €)	6.6 %	20 %	Improved corporate financing opportunities	Complexity; costs of conversion, negative impact on taxation
BDI/Ernst & Young (2005)	April 2005	BDI member companies	820 questionnaires	39,6 % im EA, 51,4 % im KA (incl. US-GAAP)	Convergence of financial and managerial accounting; simplified preparation of consolidated financial statements	Administrative/organizational and financial burden
DIHK/PwC (2005)	2005	DIHK member companies	600 questionnaires	8 %	Improved fair presentation	Costs of conversion and follow-up costs
Oehler (2005, 2006a)	Jan.-Febr. 2005	1,800 companies from Mittelfranken (max. 500 employees, sales max. 50m €)	5 %	6.42 %	Required by banks; more information	Costs of conversion; employee training; complexity
Ochs/Leibfried (2006)	Jan.-March 2006	Companies with max. 500 employees and sales max. 50m €	10.4 %	19 %	Better international comparability	Complexity; costs of conversion and follow-up costs
Danne et al. (2007)	Sept. 2006	60 VMEBF member companies	75 %	33.3 %	Better comparability; convergence of financial and managerial accounting	Preparation more time consuming; earnings volatility
DRSC et al. (2007)	May 2007	Random sample of 4,000 companies (sales min. 8m €)	10.3 %	n/a	n/a	n/a
Kajüter et al. (2007)	April-May 2007	971 companies from the Berlin area (max. 500 employees, sales max. 50m €)	11.4 %	21 %	Better comparability of competitors	More employees; complexity
von Keitz et al. (2007)	Dec. 2005	4,780 companies in Nordrhein-Westfalen (sales min. 20m €)	7.3 %	30 %	Improved corporate financing opportunities	Complexity; costs of conversion, negative impact on taxation
Mages (2009)	Summer 2007	2,767 private commercial partnerships (sales min. 40m €)	10.0 %	19.3%	Control relationship to parent company; simplified preparation of consolidated financial statements	Costs of conversion and follow-up costs

Table 2: Preparer oriented surveys about IFRS accounting in the German SME sector

It seems important to note that some studies explicitly address the IFRS for SMEs in a previous stage (e.g., DRSC et al. 2007; Kajüter et al. 2007; Mages 2009). The distant and reluctant attitude towards full IFRS seems to be transferred to IFRS for SMEs. Again, a vast majority of

SMEs dislike and oppose the respective drafts although there is a common understanding that SMEs need a specific and more appropriate set of accounting standards. This appraisal is not only expressed by those SMEs who disapprove IFRS and remain with HGB accounting. Also IFRS adopters express concerns about the content of IFRS for SMEs – admittedly on the basis of the exposure draft (Mages 2009). The vast majority of German SMEs seem to prefer a cautiously modified HGB accounting with a slight rapprochement to IFRS (e.g., Kajüter et al. 2007) – exactly the strategy of the BilMoG reform in 2009.

Another strand of the literature deals with the same topic from a different perspective. These surveys address other groups of contract partners such as creditors and financial analysts (Table 3). Academics have also been interviewed (Mandler 2003b, 2004). The missing opportunity to utilize organized capital markets brings banks and creditors into a major position in the SME financing and contracting system. Therefore, surveys concentrate mainly on the analysis of creditor perceptions. The results are in line with the previous ones. Creditors seem to doubt that IFRS can materially improve financial statement analysis. Consequences for credit rating and the cost of debt capital are not expected in case of an IFRS adoption (Oehler 2005; Zülch and Löw 2008) although the important role of accounting information for rating purposes is emphasized in general (DRSC et al. 2008). The cost of capital indifference applies also to the IFRS for SMEs (Zülch and Löw 2008). The draft version is criticized for having too many choices, for being too discretionary and complex, and for establishing another accounting system which further complicates credit analysis and the rating processes (DRSC et al. 2008, similar from a non-German perspective Sian and Roberts 2008).

A more positive picture of IFRS is documented by other surveys from non-creditor perspectives. Financial analysts and asset management welcome IFRS also for non-publicly traded companies and suppose that those companies systematically underestimate the IFRS advantages (Marten et al. 2002). This result does not seem very surprising considering the fact that the interview partners were mainly recruited from the DVFA (Deutsche Vereinigung für Finanzanalyse und Anlageberatung e.V.), an organization of financial analysts with a strong capital market orientation and not really dealing with SMEs in their daily business. However, the more positive picture of IFRS corresponds with the

appraisal from academics who also presume that SMEs can benefit from IFRS accounting (Mandler 2003b, 2004).

Authors	Survey period	Sample	Return	Results
Marten et al. (2002)	June 2002	1,200 DVFA members (financial analysts and asset managers)	12.75 %	<ul style="list-style-type: none"> IFRS adoption makes sense in the SME sector Non-publicly traded companies often underestimate the advantages of IFRS adoption
Mandler (2003b, 2004)	Autumn 2002	145 academics (working group tax and auditing at German universities of applied sciences)	About 50 %	<ul style="list-style-type: none"> In contrast to the SME sector itself, academics identify more advantages and less disadvantages of IFRS adoption
Oehler (2005, 2006b)	Jan.- Febr. 2005	250 banks (database: Bundesverbandes deutscher Banken)	12 %	<ul style="list-style-type: none"> Banks differentiate between SMEs and other companies for rating purposes IFRS adoption does not improve financial statement analysis IFRS adoption does not per se improve rating
DRSC et al. (2008)	2008	59 employees of all kinds of German banks (Privatbanken, Sparkassen, Landesbanken, Genossenschaftsbanken)	Interviews	<ul style="list-style-type: none"> Accounting information (esp. consolidated financial statements) are important for lending decisions Demand for internationally comparable accounting information in the SME sector IFRS for SMEs has been criticized as being unfavorable for SMEs
Zülch/Löw (2008)	June 2007	2,430 employees in 1,544 banks	11.44 %	<ul style="list-style-type: none"> No rating privilege for IFRS adopters Only two respondents recommend IFRS adoption IFRS adoption does not improve credit costs

Table 3: Other surveys about IFRS accounting in the German SME sector

A third strand of the literature deals with international survey based studies about SME accounting. These surveys focus on the same groups especially on preparers, creditors and auditors (Table 4 with a selection of studies; see Sian and Roberts (2006) for one more comprehensive literature overview). In contrast to the German research their findings are difficult to compare due to heterogeneous regulatory infrastructure. Mazars (2008) is able to differentiate the survey results with regard to several European countries (France, Germany, Italy, The Netherlands, Spain and UK) and identifies interesting differences. The weighting of the objectives and, correspondingly, the relevance of the user groups differ between the countries. One example: In contrast to German SMEs, SMEs from UK, a country without book-tax conformity, do not focus on fiscal authorities when deciding about their financial accounting information. Thus, the perception of IFRS and the assessment of IFRS for SMEs differ respectively. However, similarities exist with regard to the expected administrative burden of the conversion to IFRS and the general demand for less complex accounting systems.

The remaining nationally-focused studies generate a diverse set of findings, indicating the international heterogeneity of the accounting

environment. They are not necessarily conducted in connection with the adoption of IFRS or with the adoption of 'IFRS for SMEs'. A common insight of almost all studies is the dominant position of banks as primary addressee (e.g., Nair and Rittenberg 1983; Abdel-khalik et al. 1983; Page 1984; Carsberg et al. 1985; Collis et al. 2001; Maingot and Zeghal 2006). The focus on lending decisions, debt covenants and the non-involvement in organized capital markets is given as a justification for a more creditor and contracting oriented financial accounting. An extensive information supply – in the U.S, for example, provided by the U.S. GAAP financial accounting system – is considered unreasonably cost-intensive and unnecessary (esp. Nair and Rittenberg 1983, AICPA 2005). It is interesting to note that Stanga and Tiller (1983) find that this result remains valid irrespective of the size of the company. The information demand by creditors seems independent from size aspects in the SME sector.

Another parallel between most of the studies is based upon the major role of tax considerations and management purposes. Even SMEs from Anglo-American countries without a formal book-tax-conformity emphasize the tax accounting objective (Page 1984; Maingot and Zeghal 2006; Son et al. 2006). According to several surveys, accounting information, although financial and external in nature, also serves management purposes (Page 1984; Barker and Noonan 1996; Collis and Jarvis 2000). In connection with the notion that the separation of ownership and control is not common in the SME setting (Carsberg et al., 1985; Marriot and Marriot, 2000), financial accounting of SMEs predominantly seems to serve owner-managers for self information, credit negotiations and as a starting point for taxation.

These empirical findings support the insights from theoretical reasoning (see chapter 2.1): First of all, organized capital markets and capital market participants are consistently excluded from the SME setting. Therefore, there is little delegation of control in the typical SME setting and the equity driven agency relationship between external shareholders (principal) and management (agent) does not justify financial accounting (e.g., Son et al 2006). Instead, the numbers of users of SME financial accounts – in line with the overall number of contract partners – is considered to be limited and focused on some other important contract groups. Although these users are still quite diverse, banks, tax authorities and owner-managers seem to dominate. These findings dem-

onstrate again the specific focus of SME on contracting although the weighting factors seem to differ across countries.

Authors	Sample	Main results
Falk et al. (1976)	950 bank employees from the U.S.	<ul style="list-style-type: none"> • Preference for accounting information about specific financial statement positions of SMEs • Preference for audited SME accounting information in comparison to unaudited statements
Abdel-khalik et al. (1983)	642 SME managers, 554 bank employees, 1,100 CPAs of smaller audit firms, 64 CPAs of "Big Eight" audit firms	<ul style="list-style-type: none"> • Managers and banks are supposed to be the main addressees of SME financial statements • In contrast to SME managers, auditors of SME accounts identify higher accounting related burden • There is a need for a separate set of accounting rules for SMEs due to the difficulty of SMEs with full U.S. GAAP compliance
Nair/Rittenberg (1983)	70 bank employees, 68 SME managers and 54 CPAs	<ul style="list-style-type: none"> • Creditor information is the prevalent objective of SME accounting • No public trading of SMEs and, therefore, no need for extensive financial accounting and reporting • Full compliance with U.S. GAAP imposes high and disproportional burden on SMEs
Stanga/Tiller (1983)	200 bank employees from bigger U.S. banks; 200 bank employees from smaller U.S. banks.	<ul style="list-style-type: none"> • Creditor oriented information needs do not differ between companies in different size ranges
Page (1984)	413 managers of independent British SMEs	<ul style="list-style-type: none"> • Self information for managers, tax calculation and creditor information are the prevalent objectives of SME accounting • 41 % of managers consider annual reports to be useful for management information • Extensive disclosure rules are an important obstacle
Carsberg et al. (1985)	50 British SME managers, 50 partner of British audit firms involved in SME auditing	<ul style="list-style-type: none"> • Management, banks and fiscal authorities are supposed to be the main addressees of SME financial statements • Auditors consider limited disclosure requirements as a major relief for SMEs
Knutson/Wichmann (1985)	659 CPAs from Kentucky and Ohio, USA	<ul style="list-style-type: none"> • No homogeneous benefit of accounting information for companies in all size ranges
Keasey/Short (1990)	100 SMEs from North-East England	<ul style="list-style-type: none"> • Heterogeneous opinion about the compliance burden of accounting • Compliance with accounting standards helpful for self information and debt financing purposes
Holmes et al. (1991)	273 members of the Australian Institute of Chartered Accountants	<ul style="list-style-type: none"> • Differential accounting is considered to be necessary (97 % of the participants)
Coker/Hayes (1992)	486 bank employees from middle Tennessee	<ul style="list-style-type: none"> • Bank employees prefer GAAP/commercial law accounts compared with tax accounts
Baker/Cunningham (1993)	233 bank employees from the U.S.	<ul style="list-style-type: none"> • Trust in company information depends on the source (GAAP/commercial law accounts versus tax accounts) and the existence of an independent audit
McMahon/Davies (1994)	770 strong growing British SMEs	<ul style="list-style-type: none"> • Only marginal impact of full accounting compliance on company growth and financial performance
Barker/Noonan (1996)	240 Irish auditors with SME clients	<ul style="list-style-type: none"> • Financial statements useful for planning and decisions (35 %), tax purposes (21 %), bank purposes (19 %) and review of performance (11 %) • Burden of compliance with accounting standards and auditing is too great; esp. removal of audit requirements and reduction of disclosure could alleviate the burden
Bollen (1996)	570 Dutch SMEs, 200 Dutch bank employees	<ul style="list-style-type: none"> • SMEs identify no additional benefit of full accounting compliance • Bank employees consider accounting information as useful for lending decisions
Collis et al. (2001)	198 entrepreneurs from South England (sales between 1m and 11.2m GBP)	<ul style="list-style-type: none"> • Banks and managers are supposed to be the main addressees of SME financial statements • 51 % of small- and 68 % of middle-sized entities analyze financial statements of competitors

(Table continues on next page...)

Authors	Sample	Main results
McMahon (2001)	5,500 Australian manufacturing SMEs	<ul style="list-style-type: none"> • Extensive financial accounting is one major driver of efficient management and can enhance the growth of SMEs
AICPA (2005)	3,709 respondents: External stakeholders (lenders, investors, sureties), business owners, financial managers and public accounting practitioners	<ul style="list-style-type: none"> • Distinctly different needs and structures between private and public companies; useful if underlying accounting were different • Many full U.S. GAAP requirements lack relevance or decision usefulness to private company constituents • Fundamental changes in current standard setting necessary to ensure that accounting needs of private company constituents are met
Maingot/Zeghal (2006)	600 Canadian accountants and auditors from the SME sector	<ul style="list-style-type: none"> • Tax calculation and creditor information are the prevalent objectives of SME accounting • Full compliance with an extensive set of accounting standards are considered to be (too) expensive and time-consuming • Need for a separate set of accounting rules for SMEs with specific SME related reliefs
Son et al. (2006)	19 semi-structured interviews with users of SME reports in Vietnam	<ul style="list-style-type: none"> • Limited range of users of financial information, mainly tax authorities and government agencies; banks are considered by a minority to be another important user • Addressees are concerned with the reliability of accounting information
Mazars (2008)	593 SMEs from France, Germany, Italy, Spain, The Netherlands and UK	<ul style="list-style-type: none"> • Need for international comparable accounting information and rules • Improved comparability and reduced financing costs are considered to be the major advantages in all countries; costs of conversion is identified as major obstacle
Sian/Roberts (2008)	2 focus groups of micro entity contract partners esp. in UK and Kenya	<ul style="list-style-type: none"> • Preparers, lenders and business owners are identified as key stakeholder groups • No need for IFRS for SMEs in UK, but different in Kenya • IFRS for SMEs too complex and long for micro entities

Table 4: Selected international surveys about SME accounting

4.1.2. Empirical studies about the contracting objective

The empirical implications of the contracting objective, its dominance in the SME setting (chapter 2) and especially the interrelatedness of contracting and valuation usefulness (Gjesdal 1981; Christensen and Demski 2003; Christensen et al. 2005) have rarely been investigated empirically in the prior literature with only a few exceptions. Empirical archival literature has not just yet agreed upon an empirical proxy for the fulfillment of the contracting role of financial accounting, also with exclusive focus on the manager-owner relationship (Watts and Zimmerman 1986, 197). Research is still concerned with this issue (O'Connell 2007). Moreover, the link to the SME sector is almost non existent so far.

In one of the first studies in this particular area, Bushman and Smith (2001) empirically test the link between valuation and contracting/stewardship objectives of accounting earnings in publicly traded companies. Due to the positive correlation of earnings in price-earnings models and compensation-earnings models, they conclude in contrast to Gjesdal (1981) and others that information used for contracting purposes is also useful for valuation. Berger and Hann (2003) come to a similar conclusion again for publicly traded companies: With respect to

segment reporting (SFAS No. 131) they provide evidence that contracting and valuation objective can be served by the same set of information. In a more recent paper, Bushman et al. (2006) investigate the linkage between valuation earnings coefficients, derived from a value relevance regression, and compensation earnings coefficients, derived from a regression of changes in management's cash compensation on earnings changes. They find these two coefficients to be positively correlated and interpret this evidence as being consistent with contracting and valuation usefulness being compatible objectives of financial accounting. Banker et al. (2009) re-confirm this evidence in a similar setting while focusing on the differential effects of earnings and cash flow value relevance. In doing so, both research teams assume that value relevance captures valuation-usefulness of financial accounting, a conjecture which has been controversially discussed in the existing literature (Holthausen and Watts 2001). While these two papers seem to indicate that the valuation and contracting objective lead to comparable accounting outcomes, other research questions this conjecture. O'Connell (2006) shows that, in the U.K., executive compensation is asymmetrically related to accounting earnings, adjusting to conditional accounting which is argued to be a relevant contracting device. In another related paper, LaFond and Watts (2008) find that firms with high levels of information asymmetry, measured by the probability of informed trade, have higher levels of conditional conservatism. LaFond and Watts interpret this finding as indicating that conditional conservatism is a rational equilibrium response to high levels of information asymmetries between company in- and outsiders. This finding indicates that contracting useful conservative earnings works as an alternative information mechanism in settings where the valuation role is impaired because of lacks in market efficiency. This can be interpreted as indicating that, when information asymmetry is high, financial accounting information is becoming less suitable to provide hard-to-verify information and thus, is tailored by its preparers towards its contracting role. This ongoing debate is also fueled by concurrent research: A recent paper by Gassen (2009) shows that U.S. firms which report more conditional conservative earnings and have more stakeholders with higher demands for efficient contracting report earnings which have less information content. Also, current research by Nikolaev (2010), extending the seminal findings of Leftwich (1983), that accounting-based debt cove-

nants include changes to U.S. GAAP, shows that conditional conservative earnings streams are related to the use of debt covenants in public debt contracts.

4.2. Evidence on accounting behavior of private firms

While public firms more or less throughout the world have been thoroughly investigated by empirical accounting research, evidence on the accounting behavior of European private firms still is somewhat scarce. Ball and Shivakumar (2005) show that private UK firms tend to disclose less asymmetric timely (conditional conservative) earnings than public firms. They interpret this finding as indicating that conditional conservatism is demanded by the public debt and equity markets. Coppens and Peek (2005) document small loss avoidance (an established sample measure of earnings management) of private firms and show that firms for strong tax link environments do not show this earnings management behavior, probably because it is not attractive from a tax point of view. Burgstahler et al. (2006) find for a cross-country set of European public and private firms using a combined sample attribute measure of earnings management that private firms tend to manage earnings more than public firms and that firms from high tax link environments manage their earnings more while firms from strong governance infrastructure tend to manage their earnings less. Peek et al. (2009) show creditors demand for conditional conservative earnings varies systematically across European public and private firms, indicating that creditors of private firms are using publicly available financial information for their contracting needs. Current work by Haw et al. (2009) comes to a similar result using Korean data, indicating that private firms issuing public debt show the highest levels of asymmetric timeliness. Another recent study by Bigus et al. (2009) shows that relationship-based lending might be offering an alternative contracting mechanism to financial accounting and that private German firms with relationship-based lending arrangements tend to disclose more opaque (unconditional conservative) accounting information.

4.3. Research design

4.3.1. *Why income smoothing?*

Building on the literature review of the prior section, we now present the research design of our study. It investigates the determinants of the fi-

financial accounting choice of European private firms in order to shed light on the question whether there is homogeneous demand for financial accounting procedures across Europe. As this research report aims at investigating the impact of IFRS for SMEs and since the vast majority of European firms is private (in our sample about 99.8 % of firms are not listed on organized equity markets), we develop our research design so that inferences can be drawn based on data which are publicly available for private firms (similar to, e.g., Coppens and Peek 2005; Burgstahler et al. 2006, and Peek et al. 2009). As many private firms provide only balance sheet and limited income statement information, we focus our analysis on a predominant measure of accounting choice which can be constructed on the basis of this data: income smoothing.

Income smoothing refers to the “dampening of fluctuations about some level of earnings that is currently considered to be normal for a firm” (Beidleman 1973, 653; see for the following Gassen et al. 2006). In contrast to accounting conservatism, it does not necessarily induce a bias into earnings and, thus, has no clear impact on the book value of equity over time. Income smoothing is a central earnings attribute, which can be regarded as describing the overall character of the income recording process. Per se, it is neither ‘good’ nor ‘bad’ (Fudenberg and Tirole 1995).

Albrecht and Richardson (1990) distinguish between intentional and natural smoothing, the latter comprising technical automatisms of the accrual process where there is no manipulation by management. Intentional smoothing can occur either by timing real business decisions (real smoothing) or by choosing accounting methods that allocate earnings over time in the desired manner (artificial smoothing). Common definitions view artificial income smoothing as the process of manipulating the time series of earnings through the accrual process to make the reported income stream less variable, while not increasing or decreasing equity in the long run (Fudenberg and Tirole 1995, 75). Therefore, it can be characterized as a form of earnings management (Dechow and Skinner 2000).

Since income smoothing is introduced by management, management will set the smoothness of earnings to maximize its own utility. Income smoothing can be a rational contracting device in equilibrium, if agents are risk-averse and firm distributions are linked to earnings (Lambert 1984). From an information perspective, income smoothing,

as a discretionary attribute of earnings, conveys information. However, it is here an open question whether smoothing is a valuable property of accounting earnings (Francis et al. 2004) or mainly an indicator of poor regulatory settings on capital markets, enabling managers to withhold viable information and to mislead capital market participants (Leuz et al. 2003). Evidence provided by Tucker and Zarowin (2006) seems to support the former, while recent evidence from McInnis (2009) casts some doubt on that conjecture.

Since we focus on the SME setting outside of the capital market environment, we consider the contracting role of income smoothing as more relevant. Even more: We consider smoothing as one major indicator for the contracting role of SME accounting. The literature identifies especially two earnings attributes with a strong contractual explanation: Income smoothing and conditional conservatism (e.g., Lambert 1984; Watts 2003; Gassen et al. 2006; Fülbier et al. 2008; Gassen 2009). Conditional conservatism refers to the idea that earnings reflect bad news more quickly than good news. To Basu (1997), conditional conservatism is reflected in the asymmetric timeliness of loss vs. profit recognition, which stems from accountants' tendency to require a higher degree of verification for recognizing good news than bad news in financial statements. Although both attributes are conceptually qualified to expose the intensity of the contracting role of financial accounting, the empirical measurement of conditional conservatism remains difficult in the SME setting. So far, the Basu type of reverse regression relies on capital market returns as a news proxy, returns which are not available in the SME setting. Also, alternative concepts of asymmetric timeliness, which use cash flow from operations as a replacement for returns, have already been investigated for private firms throughout Europe (see the references in the last section). Thus, income smoothing is an attractive concept for measuring the contracting role of financial accounting in the SME setting.

This is why we concentrate on the contracting role of income smoothing in this research report. We assume in line with Ball et al. (2000, 3) that the main motivation for smooth earnings is driven by payouts explicitly or implicitly linked to earnings. Since managers and many stakeholders can be considered to be risk-averse and to prefer smooth consumption streams (Morduch 1995), we hypothesize that managers, dividend-oriented investors – in contrast to owner-managers in the SME

setting – as well as non-equity stakeholders such as debt holders, employees and governmental bodies are interested in smooth earnings. They face higher transaction costs compared to shareholders, especially on organized capital markets, when re-allocating their (expected) payouts over time.

One distinct example may expose the demand for smooth earnings also under tax considerations. Due to the fact that, most likely, no country provides an immediate tax loss compensation, tax losses and tax gains are treated differently. The discrimination of tax losses is additionally amplified by forms of minimum taxation and limited loss carry forwards. Given that there is a link between tax and financial accounting, the taxpayer has an incentive to avoid losses in financial accounting and, thus, to smooth earnings. Similar incentives for smoothing in case of positive earnings can be identified with regard to tax progression.

As aforementioned, regulatory settings influence the SME contractual setting and the respective financial accounting demand. Income smoothing as major indicator for the contractual orientation of financial accounting in the SME setting is automatically affected. Therefore, cross-country differences in income smoothing have been identified and explained, for example, by Bao and Bao (2004) by the general patterns influencing accounting in different parts of the world. Ball et al. (2000) argue that these patterns and the above-mentioned incentives to smooth earnings are more pronounced in code-law countries than in common-law countries.

Income smoothing is measured as the variance of net income in relation to the variance to cash flow from operations. In almost all settings, the variance of net income is substantially smaller than the variance of cash flow from operations. From a conceptual point of view, the process of adjusting cash flows by recording accruals is the very heart of the accrual accounting process. So, income smoothing is what financial accountants do and ample empirical evidence exists which documents that (smooth) income has contractual and valuation benefits over (volatile) cash flows. It seems important to note that incoming smoothing is a central earnings attribute, which can be regarded as describing the overall character of the income recording process.

In order to measure the degree of income smoothing, we use a concept established by prior literature (e.g., Leuz et al. 2003; Francis et

al. 2004; Gassen et al. 2006; LaFond et al. 2007) defining our dependent variable SMOOTH as follows:

$$\text{SMOOTH} = -\frac{\text{STDPL}}{\text{STDCF}} \quad (1),$$

where STPL is the standard deviation of the annual profit & loss figure of the reported firm, deflated by lagged total assets and STDCF is the standard deviation of annual cash flow from operations, again deflated by lagged total assets. The term is multiplied by minus one so that higher values imply higher income smoothing. We calculate our measure of income smoothing on firm-specific time series of data, requiring at least five annual observations for each year. This implies that we have only one SMOOTH observation per firm in our sample and that all of our tests will be cross-sectional in nature.

4.3.2. Test Design

In order to test for the cross-sectional determinants in income smoothing we again follow established literature (Dechow and Dichev 2002; Gassen et al. 2006; LaFond et al. 2007) in constructing a determinant model which is presented below as model (2).

$$\begin{aligned} \text{SMOOTH}_i = & \sum_{j,k} \alpha_{j,k} \text{IND}_j \cdot \text{CTRY}_k + \beta_1 \text{SIZE}_i + \beta_2 \text{ASSGROWTH}_i + \beta_3 \text{CF}_i + \\ & \beta_4 \text{STDCF}_i + \beta_5 \% \text{LOSSES}_i + \beta_6 \text{DIVR}_i + \beta_7 \# \text{MANAGER}_i + \\ & \beta_8 \text{INDEP}_i + \beta_9 \text{LEVERAGE}_i + \beta_{10} \text{IEXR}_i + \beta_{11} \text{QUOTED}_i + \\ & \beta_{12} \text{AUDIT}_i + \beta_{13} \text{CONSOL}_i + \beta_{14} \text{SOLE_PROP}_i + \\ & \beta_{15} \text{LIMITED}_i + \varepsilon_i \end{aligned} \quad (2)$$

Detailed variable definitions can be found in the Table A1 of the Appendix. IND and CTRY are included as industry and country fixed effects to capture country-level and industry-level heterogeneity in smoothing behavior. All other variables are based on firm-level data and are deflated by lagged total assets where appropriate. ASSGROWTH (average by-year growth of total assets), CF (average cash flow from operations), STDCF (standard deviation of cash flow from operation) and the percentage of loss years (%LOSSES) are included to control for firm-level innate determinants which are shaped by the operating environment of the firm and capture the firm's operational ability to smooth income.

As discussed in the theoretical section of this report, financial accounting in general and income smoothing in particular are important contractual devices which help governing the relationship between the owner-manager of a firm and other stakeholders (chapter 2). In an environment where (incomplete and/or relational) contracts are written based on financial accounting information, reporting of smoother income streams can render contracts with external stakeholders (the contractual partners of the firm) more efficient. We test for this conjecture by investigating the impact of the relative contractual power of owner-managers and creditors as two important contractual players on the income smoothing behavior of European firms. Based on the theoretical arguments developed in the last section, we hypothesize that demand for income smoothing in a private firm setting is predominantly induced by non-managing stakeholders. Thus, a strong contractual position of owner-managers should reduce income smoothing while a strong contractual position of creditors should increase income smoothing behavior. *DIVR*, *#MANAGER* and *INDEP* serve as proxy for the contractual strength of the owner-manager. *DIVR* captures the average dividend which is distributed to the owner. As dividends are a central component of equity-debt agency conflict (Jensen and Meckling 1976; Jensen et al. 1992), we expect higher dividend levels to be an indicator for a strong owner-manager. *#MANAGER* represents the number of managers as reported by Amadeus (our data source). While it can also be debated whether more managers induce within-group agency conflicts and thus weaken the position of the owner-manager group as a whole, we expect that on average more human capital increases the contractual position of the owner-manager group. Finally, the binary variable *INDEP* indicates that the largest owner of the respective firm holds right to less than 25 % of the firm's capital. We posit that this indicative for a separation between ownership and control and that the resulting agency conflicts will weaken the position of the owner-manager group.

We assess the contractual position of creditors by the two variables *LEVERAGE* and *IEXR*. *LEVERAGE* reports the relation of total liabilities over total assets. The higher *LEVERAGE*, the more important are creditors for the financial stability of the respective firm and the stronger we expect their contractual relationship to be. While *LEVERAGE* relies on the level of non-equity financing, *IEXR* (which captures interest expense over earnings before interest and taxes) reflects the

relevance of non-equity financing for the profitability of the firm. Taken together, these two variables capture the relative importance of creditors for the firm under study. We assume that the contractual position of creditors increases with their importance.

Besides the relative contractual positions of creditors and owner-managers we expect that the regulatory infrastructure mitigates the demands for and the benefits, respective costs of smooth income streams. First, we expect that publicly listed firms (as indicated by the binary variable QUOTED taking a value of one) have to balance the valuation and the contracting role of financial accounting much more intensively than private firms, where the valuation role of accounting is likely to play only a minor role (see chapter 2). While it is possible that smooth income streams can also fulfill a desirable valuation role as a signaling mechanism (Trueman and Titman 1988; Francis et al. 2004; Gassen et al. 2006; LaFond et al. 2007), there is also the conjecture that income smoothing is reducing the valuation relevance of financial accounting as managers try to withhold relevant information from market participants (Leuz et al. 2003, Burgstahler et al. 2006). We do not take a stand in this interesting debate as our main focus lies on private firms. This is why we do not make a prediction for the impact of QUOTED on SMOOTH. A similar argument applies for the question whether audited financial statements can be expected to report smoother or less smooth income streams. While it is generally accepted that the auditing process has a positive impact on financial accounting, reporting and disclosure (De Angelo 1981; Ball 1989; Becker et al. 1998), it is unclear whether income smoothing is positive or negative in terms of accounting quality. Thus, we also make no sign prediction for the impact of AUDIT on SMOOTH. While the vast majority of our firms report single legal statements as their top-level financial report (98.7 %), we have a small subset of firms which report consolidated financial statements. As in most jurisdictions consolidated financial statements are less regularly used in contractual settings (e.g., Sellhorn and Gornik-Tomaszewski 2006; Goncharov and Werner 2009) we assume that consolidated financial streams report less smooth income streams. Finally, we investigate the impact of legal forms on the income smoothing behavior. While legal liability in itself induces another layer of contractual complexity and it can be argued that limited liability increases agency conflicts (e.g., Jensen and Meckling 1976; Brander and Lewis 1986), legal liability firms (as in-

indicated by the binary variable LIMITED taking a value of one) tend to be imbedded in a nexus of standardized contractual and legal designs which limit the contractual relevance of income smoothing behavior. On the other hand, contractual partners of sole proprietor firms (which are indicated by the binary variable SOLE_PROP taking a value of one) face significant agency problems which need to be addressed by individual contractual design, assigning higher weights to contractual devices like financial accounting and income smoothing. This is why we predict sole proprietor firms to report smoother income streams c.p. while we expect limited liability firms to report less smooth income streams.

The estimation results of model (2) on a cross-sectional sample pooled across countries will provide us with evidence with regards to the hypotheses and expectations detailed above. Also, the estimation procedure will provide us with a series of country-industry level intercepts ($CTRIND_{j,k} = \alpha_{j,k}$). Assuming that our model is descriptive of reality, these intercepts will capture country and industry-level heterogeneity in income-smoothing behavior. If we identify heterogeneity in CTRIND this is indicative for heterogeneous demands for accounting mechanisms across Europe.

Given the focus of our research report, we take special interest in accounting heterogeneity across countries. Following a strand of literature in the fields of governance research and international finance (e.g., La Porta et al. 1997, 1998; Leuz et al. 2003, Kaufmann et al. 2009) we investigate the country-level determinants of this observed heterogeneity. Testing for systematic explanations is crucial for our research design as we need to be able to rule out that our observed heterogeneity is simply a bias caused by potentially omitted controlling variables of model (2). Thus, we estimate the models (3) and (4) as presented below.

$$CTRIND_{j,k} = \sum_j \alpha_j IND_j + \beta_1 VOICEACC_k + \beta_2 POLITSTAB_k + \beta_3 GOVEFF_k + \beta_4 REGQUA_k + \beta_5 RULELAW_k + \beta_6 CORRUPT_k + \beta_7 TAXLINK_k + \varepsilon_{j,k} \quad (3)$$

$$CTRIND_{j,k} = \sum_j \alpha_j IND_j + \beta_1 GOVQUAL_k + \beta_2 TAXLINK_k + \varepsilon_{j,k} \quad (4)$$

Industry-fixed effects are included to control for industry-level heterogeneity. The country-level variables VOICEACC, POLITSTAB, GOVEFF, REGQUA, RULELAW and CORRUPT are taken from the Worldwide Governance Indicator (WGI) project of the World Bank. This database is presented by Kaufmann et al. (2009) and has been used by similar studies in the field (e.g., Li 2010). The values of all country-level variables are presented in Table A2. As the WGI databases report a set of point-in-time measures for their governance constructs, we averaged their metrics over the time-period relevant for our study. All measures are based on a wide sample of different surveys capturing various aspects of the international governance infrastructure. Higher values of the constructs indicate higher quality. Quoting directly from Kaufmann et al. (2009, 6), these six concepts can be characterized as follows:

- Voice and Accountability (VOICEACC): captures the perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media.
- Political Stability and Absence of Violence (POLITSTAB): captures the perceptions of the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including politically-motivated violence and terrorism.
- Government Effectiveness (GOVEFF): captures the perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies.
- Regulatory Quality (REGQUAL): captures the perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development.
- Rule of Law (RULELAW): captures the perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence.

- Control of Corruption (CORRUPT): captures the perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests.

Predicting the impact of these broad governance measures on the country-wide smoothing level is complex. Generally, we see two different ways how country-wide governance can impact the usage of income smoothing as a governance mechanism: Country-level governance could work as a complement or as a substitute to income smoothing behavior. If the government infrastructure fulfills a complementary role to income smoothing this could be because income smoothing, which basically re-allocates wealth across time, makes sense only in a setting where agents can rely on governance infrastructure backing their claims in private ordering. On the other hand, income smoothing can serve as a replacement in circumstances where agents have to fear governmental interference (e.g. by ad hoc regulatory action or by corruption). In these infrastructures, smoothing can be used to shield resources from interference by governance or other third parties. Based on this reasoning, we expect a positive impact of GOVEFF and RULELAW on income smoothing and negative impacts of VOICEACCT, POLITSTAB, REGQUA, and CORRUPT.

Since all these constructs are highly correlated with each other for our sample (average Spearman rank correlation is about 0.8) we use factor analysis to identify the first principle component of these six attributes. We view this common first component as an overall measure of governance quality, label it GOVQUAL, and use it as an alternative explanatory variable in model (4), replacing the six individual constructs. While this design choice makes us unable to comment on the impact of different governance aspects on income smoothing behavior, it avoids obvious problems of multi-collinearity due to the noisy nature of the governance constructs. Also, it enables us to give an overall assessment of whether income smoothing and efficient government infrastructure are complements or substitutes.

Prior literature has hypothesized and documented that country-level differences in tax regimes develop an impact on financial accounting in general and income smoothing in particular (LaFond et al. 2007; Goncharov and Werner 2009). Also in line with prior reasoning we ex-

pect that firms in countries which have a strong link of tax and financial accounting (as indicated by the binary variable TAXLINK taking a value of one, values are reported in Table A2) report smoother income streams. The rationale for this lies in the nature of income-based taxation (LaFond et al. 2007). First, although loss firms generally have the option of using loss-carry-forwards, the present tax value of a loss is absolutely lower than the present tax value of a gain, inducing an incentive to smooth away losses. Second, at least in some jurisdictions, tax rates are progressive causing once more an incentive to stay in a favorable tax bracket by smoothing income. We take special care to identify meaningful and reliable measures for TAXLINK using the literature which is given in the Table A2. As we are unable to find authoritative references to classify the countries Bosnia and Herzegovina, Croatia, Iceland, Serbia and Ukraine, we refrain from classifying them by ourselves on an ad-hoc basis.

The use of country-industry level intercepts as dependent variables in the models (3) and (4) increases the power of our tests by repeated sampling. Nevertheless, it could be argued that this repeated sampling artificially inflates the power of our test as our research question of interest here is mainly a country-level phenomenon. Thus, our third test which investigates the determinants country-level heterogeneity is based on only one observation per country (yielding a sample of 23 observations). We use the country-wide average of CTRIND (CTR) as our dependent variable and estimate model (5), which is presented below.

$$CTR_k = \alpha_0 + \beta_1 GOVQUAL_k + \beta_2 TAXLINK_k + \varepsilon_k \quad (5)$$

As the lower power of this test strongly biases against finding significant results, we expect only clear and economically relevant country-level determinants to survive this test.

The series of tests that were just presented are tailored to identifying a homogeneous country-wide impact of the country-wide infrastructure on income smoothing. However, it appears likely that the governance infrastructure has not only a direct impact on income smoothing but also affects other firm-level determinants, moderating their direct impact on income smoothing. Thus, our last test investigates the impact of country-level differences on our independent firm-level determinants

of income smoothing, which we identified based on model (3). In order to do so, we estimate model (6) which is a fully interacted version of model (3) and is presented below.

$$\begin{aligned}
\text{SMOOTH}_i = & \sum_{j,k} \alpha_{j,k} \text{IND}_j \cdot \text{CTRY}_k + \beta_1 \text{SIZE}_i + \beta_2 \text{GOVQUAL}_k \cdot \text{SIZE}_i + \\
& \beta_3 \text{ASSGROWTH}_i + \beta_4 \text{GOVQUAL}_k \cdot \text{ASSGROWTH}_i + \\
& \beta_5 \text{CF}_i + \beta_6 \text{GOVQUAL}_k \cdot \text{CF}_i + \\
& \beta_7 \text{STD CF}_i + \beta_8 \text{GOVQUAL}_k \cdot \text{STD CF}_i + \\
& \beta_9 \% \text{LOSSES}_i + \beta_{10} \text{GOVQUAL}_k \cdot \% \text{LOSSES}_i + \\
& \beta_{11} \text{DIVR}_i + \beta_{12} \text{GOVQUAL}_k \cdot \text{DIVR}_i + \\
& \beta_{13} \# \text{MANAGER}_i + \beta_{14} \text{GOVQUAL}_k \cdot \# \text{MANAGER}_i + \\
& \beta_{15} \text{INDEP}_i + \beta_{16} \text{GOVQUAL}_k \cdot \text{INDEP}_i + \\
& \beta_{17} \text{LEVERAGE}_i + \beta_{18} \text{GOVQUAL}_k \cdot \text{LEVERAGE}_i + \\
& \beta_{19} \text{IEXR}_i + \beta_{20} \text{GOVQUAL}_k \cdot \text{IEXR}_i + \\
& \beta_{21} \text{QUOTED}_i + \beta_{22} \text{GOVQUAL}_k \cdot \text{QUOTED}_i + \\
& \beta_{23} \text{AUDIT}_i + \beta_{24} \text{GOVQUAL}_k \cdot \text{AUDIT}_i + \\
& \beta_{25} \text{CONSOL}_i + \beta_{26} \text{GOVQUAL}_k \cdot \text{CONSOL}_i + \\
& \beta_{27} \text{SOLE_PROP}_i + \beta_{28} \text{GOVQUAL}_k \cdot \text{SOLE_PROP}_i + \\
& \beta_{29} \text{LIMITED}_i + \beta_{30} \text{GOVQUAL}_k \cdot \text{LIMITED}_i + \varepsilon_i \quad (6)
\end{aligned}$$

When interpreting the estimated coefficients of model (6) we focus on the interaction results for the owner-manager incentives, the creditor incentives and the regulatory infrastructure. Generally, if efficient governance mechanisms are a substitute to income smoothing, then we expect the interaction terms to be significant opposite to the main effects. If efficient governance is a complement to the usage of income smoothing as a contracting device, then we would expect the interaction effects to have the same sign that the main effects have. Utilizing this test and the results of the models (3) to (5) should allow us to find an answer to whether European private firms have heterogeneous demands for accounting mechanisms and whether this heterogeneity is systematically shaped by their regulatory infrastructure and the tax environment.

4.4. Sample and descriptive statistics

Our analyses are based on the Amadeus database maintained by Bureau van Dijk. Amadeus provides financial statement and ownership data for private and public firms across Europe and is generally accepted by the academic literature to be the leading data source for

European private firms (e.g. Coppens and Peek 2005; Burgstahler et al. 2006). Using a total of 7.7 million of firm-year observations from 28 different European countries (panel sample structure is detailed in Table B1 of the Appendix) we construct a cross-sectional sample of firms. In order to be part of the sample each firm-year observation needs to be based on local accounting standards and have the accounting data for our analyses available (see the variable definitions of Table A1 and descriptive statistics reported in Table B3 for a complete list). We ensure data consistency by testing whether total assets match the sum of liabilities and equity. In order to achieve this we also delete observations with negative equity values. We delete observations from the financial services sector (SIC 6XXX) since these firms generally apply different accounting rules and are only sparsely covered by Amadeus. We use the firm's most highly aggregated report available at Amadeus. This means, if the firm provides consolidated financial statements, we base our analyses on consolidated data. If the firm provides only single legal entity financial statements, we use these. For each firm, we require at least five years of firm-year data to calculate our firm-level statistics.

This procedure yields us a sample of 1,111,583 firm observations. The structure of this cross-sectional sample can be assessed from Table B2. As has also been documented by other studies (e.g. Peek et al. 2009), data from Amadeus show significant and in some cases extreme coverage bias. To give just one example, German firms make up only 0.1 % of our final sample although Germany is the biggest economy in our sample. The reason for this lies in the nature of the data gathering process which the data providers of Amadeus apply. As they have to rely on publicly filed data in the local jurisdiction, local disclosure rules and compliance of the respective firms influence the coverage bias. Because of these unavoidable problems of the sampling procedure, our results cannot be regarded as quantitatively descriptive for the unobservable European universe of private firms, let alone for the population of specific countries. However, as our tests are based on multivariate analyses which control for a wide vector of independent variables that might also influence the coverage bias, we feel that our test design is an appropriate answer to address the unavoidable problems of the sampling procedure.

The industry sample composition is as expected: About a third of a sample consists of trade companies, roughly 20% each belong to the

manufacturing and the service industries. The remaining firms can mostly be allocated to Mining and Construction (12.8%), Transport and Utilities (6.4%), and Agriculture (2.7%). The countries which constitute the largest part of the sample are France (25.9%), Spain (16.1%), Belgium (12.2%), Italy (10.5%) and the UK (7.2%). Table B3 gives some information about the distribution and the correlation of the dependent and independent variables. Detailed information about the country-level sample composition can be assessed from the descriptive tables presented in Table B6. The average firm from our sample has total assets of around US-\$ 5 Mio (Median: US-\$ 560.980). This skewed distribution is typical for accounting studies and is one reason why we use the logged SIZE variable for our tests. As can be seen from these values, the average firm from our sample is rather small, especially compared to studies which look at the public market. The SMOOTH variable indicates that the vast majority (86.3 %) of our sample has earnings which are less volatile than cash flows (SMOOTH > -1). On average, firms are growing and profitable (as can be deducted from ASSGROWTH, EBIT, and PL). Accruals (ACC: the difference between net income and cash flow from operations) are negative on average which is in line with a wide body of the literature. The average loss frequency (%LOSSES) is 11%, average leverage is 62% indicating an average equity ratio of 38% in our sample. The interest margin (IEXR) is 40% on average. Taken together, this clearly indicates that non-equity financing is important for the majority of our firms. The average dividend payout (DIVR) ratio is 36% and for most companies the number of managers ranks from one to three. Only 3.4% of our sample are characterized by Amadeus as having a dispersed ownership (biggest shareholder controls less than 25% of equity). Additionally, only 0.2% (a total of 2,446 firms) are publicly listed. For 23.4% of our sample, Amadeus reports at least one auditor. 1.3% of firm reports are marked as consolidated reports. Based on a text string which describes the legal form of each firm, we classify 73.9% as having no unlimited liable partner and 6.2% as being sole proprietor firms. As our classification approach is likely to produce erroneous classifications, we follow a conservative approach, avoiding to wrongly classify a firm into the respective category.

Panel B of Table B3 reports the correlation of our variables. Pearson correlations are presented above and Spearman correlations below the diagonal. Correlations which are significant below 1% appear in bold

print. The correlations between the independent constructs are generally weak to medium, so multi-collinearity is no concern for our research design. Although univariate relations do not take the interdependency of our constructs into account, we take interest in pointing out that our main independent variables (LEVERAGE, IEXR and DIVR) are economically and statistically related to SMOOTH, our dependent variable.

4.5. Results

Table B4 presents our main test results. Panel A reports the results of our estimation of model (2) on our cross-sectional sample of 1,111,583 firm pooled across countries. The R^2 of our regression is 39% indicating a reasonable fit of the data. Given the extremely large sample, it is not surprising that most of the reported standard errors are extremely small compared to their coefficients. All innate factors load as predicted. The dividend ratio and (with much lower economic relevance) the number of managers are significantly negatively related with the smoothing behavior, indicating that firms with more powerful owner-managers smooth less. The dummy variable, indicating independent ownership is not loading, which probably indicates that in the rare cases where independent owners are present, managers use other mechanisms to contract with their non-controlling owners.

When we turn to our variables indicating the relative contractual power of creditors, both of our constructs, leverage and the interest margin, have a highly significant positive relation with the income smoothing behavior. As we view it, this indicates that creditors of private firms demand smooth income streams. As their contractual position increases, firms are more willing to fulfill their demand.

The last group of independent variables examines the interplay between the regulatory environment and the smoothing behavior of our firms. We find smoothing to be less pronounced for publicly listed firms, which is in line with the expectation that public firms need to balance the valuation induced demand for timely information with the contracting-linked demand for smooth earnings. Auditing does not appear to have a clear impact on earnings smoothness, probably because the impact of income smoothness on accounting quality varies with the governance and contractual infrastructure of the reporting firm. Firms which file consolidated financial reports exhibit significantly less smooth income streams. Again this fits the notion that earnings smoothness serves a

contracting role while the consolidated financial statements are less often used in contractual settings. Finally, we find that firms with limited liability report significantly less smooth income streams. This confirms our expectations that limited liability firms operate in a contracting environment which provides alternative contracting mechanisms, lowering the demand for smooth income streams.

Taken together, the results of model (2) clearly indicate that for private firms, income smoothing is driven by the demand of creditors. When owner-managers are strong, firms smooth less; when creditors are strong, firms smooth more.

The results of the first test show that the income smoothing behavior of European firms is shaped by contractual as well as regulatory firm-level incentives. The next series of tests investigates whether country-level determinants also explain differences in smoothing behavior. To address this question we analyze the country-industry level intercepts of model (2) which capture the remaining industry and country-level heterogeneity of our smoothing determinant model. Panel B of Table B4 reports statistics for these intercepts. As we are using an industry classification based on two-digit SIC code, we estimate around 60 industry-level intercepts for each country. Based on these intercepts, the Italian infrastructure appears to have the strongest positive impact on smoothing behavior and the Serbian environment the most negative impact. The range of differences between countries appears fairly large (more than 3 average within-country standard deviations). Still, it might be that these country-level differences are just random. In order to test whether this is the case, we estimate our models (3) and (4) which try to explain the country-industry level intercepts.

Panel C of Table B4 reports the results. Model (3) is presented in the leftmost two columns. It uses the governance indicators of the Worldwide Governance Initiative and a binary variable TAXLINK which, based on prior research, classifies the countries in having strong (TAXLINK=1) or weak (TAXLINK=0) links between tax and financial accounting. The results of model (3), backed by a model fit of 17%, indicate that country-wide smoothing behavior is positively related to Voice and Accountability (VOICEACC), Governmental Efficiency (GOVEFF), and to a strong link between tax and financial accounting. On the other hand, it is negatively related to the stability of the political system (POLITSTAB), the quality of the legal system (RULELAW) and to the absence of cor-

ruption (CORRUPT). With the exemption of the result for the legal system, where we expected a positive impact, all results are as predicted in the research design section. We take the results of model (3) as indicating that clearly, the demand for income smoothing varies across countries and that these variations can be explained by differences in the tax regimes and the governance infrastructure. When we turn to the governance infrastructure it appears unclear whether income smoothing is a complement or a substitute to high quality governance mechanisms. It seems as if, generally, smooth income streams are used to “contract around” governance problems like corruption and political instable environment. On the other hand, efficient governance seems to help income smoothing.

In order to identify an overall effect of governance quality on income smoothing and to verify that the findings of model (3) are not due to multi-collinearity of the WBI constructs, we use factor analysis to extract the first principal component (GOVQUAL) of the WBI indicators. In model (4) we use only GOVQUAL and TAXLINK as possible determinants of country-wide smoothing behavior. The two middle columns of Table B4 present the estimation results. While TAXLINK continues to be significantly positively related to country-wide smoothing, our overall government quality metric is significantly negatively related to country-wide smoothing. The results of model (4) indicate that the positive impact of taxation on income smoothing for private firms appears to be robust and strong, while the overall impact of governance quality appears to be negative. This would imply that income smoothing and governance quality are substitutes rather than complements.

The last test in this setting addresses methodological concerns that our findings are based on repeated sampling per country. To mitigate this concern we limit our sample to one observation per firm, averaging our dependent variable over all industry-wide observations per country. We estimate model (5) over the remaining sample of 23 observations. While we continue to find the expected link of the tax regime on country-wide smoothing levels, the effect of the governance quality construct becomes insignificant, most probably because of the lower power of our test.

The results of Panel C of Table B4 clearly indicate that the observed country-level heterogeneity in income smoothing can be traced down to differences in the link between tax and financial accounting

and, to a lesser extent, to differences in governance regimes. We see that overall, efficient governance and smoothing seem to be acting as substitute but we re-investigate this question in our final test.

The last test is presented in Panel D of Table B4. In this test, we estimate model (6), which is an interacting variant of model (2). As we interact all independent variables with our governance quality metric GOVQUAL, we allow the coefficients of our independent variables to vary with country-level governance quality. If governance is a substitute for smoothing, we expect the interacting terms to have the opposite signs of the main effects. If both are complements, then the signs should be the same. This argument holds only for the incentive variables, we do not have a prediction for the effect to the innate determinants. As can be assessed from Panel D, the interacting effects have in most cases the opposite sign in comparison to the main effects and are also mostly significant. This indicates that in countries with generally high governance quality, the incentive effects of income smoothing are less pronounced, which again indicates that in these countries, income smoothing is shaped more by innate determinants (as also indicated by our interacting effects) and less by firm-level or regulatory incentives.¹ We take special interest in some side results of the interacted model. First, the interaction effect is positive for independent owners, indicating that in strong governance environments, firms with independent owners smooth relatively more. This result could be linked to the complementary aspect of governance quality and income smoothing: Smoothing can only be efficient for an outside investor of a private firm, if the overall governance regime is efficient. In weak governance environments, outside private investors might be more likely to use other contractual mechanisms. Also, the results for the main and the interaction effect on auditing indicate that in weak governance settings, auditing increases smoothing while in strong governance regimes, auditing reduces income smoothing. If we assume that auditing in general is improving accounting quality, this finding might indicate that smoothing is beneficiary in terms of accounting quality for firms in weak governance environments while it reduces accounting quality in strong governance regimes. Taken together, we feel that our final test clearly indicates that firm-level and country-level incentives shape the equilibrium demand for account-

¹ The interested reader can also study this finding in more detail by referring to within country analyses, which main (complete) results are presented in Table B5 (B6).

ing mechanisms and that the incentive-linked demand for income smoothing is moderated by the efficiency of the relevant country's government regime.

4.6. Summary of empirical findings

Using empirical analyses, we investigated the determinants of the financial accounting choice of European private firms. Focusing on income smoothing as a predominant earnings attribute which is closely linked to the central components of the accounting decision process, we document, that

- **the income smoothing behavior of European private firms is shaped by competing incentives: Creditors demand more, owner-managers prefer less income smoothing.**
- **Also, the regulatory infrastructure plays a crucial role. Public firms produce less smooth earnings streams as they also have to cater to outside investors and their needs for timely earnings information. The same applies for firms preparing consolidated financial statements which are less often used in contractual settings.**
- **Besides these firm-level incentives, country-wide determinants also have a direct and significant impact on the equilibrium level of income smoothing. Firms in countries with a strong tax link between financial and tax accounting report significantly smoother earnings streams.**
- **Finally, it appears that the demand and the reward for smoothing varies with the relevant governance regime. In weak governance regimes, income smoothing is shaped by incentives and auditors seem to support smooth income streams. In strong governance environments, smoothing is shaped more by innate determinants than by incentives. Also, auditors seem to reduce income smoothing in these settings.**

Taken together this indicates that firms across Europe have different demands for accounting mechanism and that these demands are tai-

lored to reflect the heterogeneous environments the firms are operating in. It seems important to note that this paper does not and cannot address the question of which combination of accounting choice and governance regime is more desirable from an efficiency point of view. Also, our analyses assume, in line with most positive empirical research, that our observed markets are in a kind of equilibrium. However, our results clearly shed light on the question whether there is demand homogeneity in term of financial accounting procedures across Europe: No, there is not! Demand differs systematically and most probably should differ as long as the regulatory (let alone cultural) environments differ.

5. Conclusion

This research report investigated the feasibility of adopting IFRS for SMEs for private firms across Europe. This conclusion restates the central findings of the report. Readers with an interest in the detailed theoretical and empirical analyses may refer to the respective chapter indicated in brackets. For a general overview about the idea and results of this report readers are encouraged to refer to the management summary at the beginning of this document.

After exposing research objective and proceeding (chapter 1.1) we issue the disclaimer that accounting research is unable to deduce detailed accounting standards and institutional designs. This “general impossibility of normative accounting standards” (Demski 1973) holds even if accounting objectives are exogenously set by the political arena or by high level principles like a conceptual framework. Instead, accounting research, empirical or theoretical, tries to support standard setters by identifying and explaining causal relationships and economic consequences of financial accounting (chapter 1.2).

Starting with the theoretical analysis, we expose the contractual setting of private firms (SMEs) and expose the specific role of financial accounting in this particular setting. Financial accounting describes a standardized information process. Its outcome (financial reporting) is used to reduce information asymmetries between corporate insiders (management) and their contractual partners. As such, financial accounting is an essential element of the corporate governance system. Financial accounting does not provide a homogeneous information system even if accounting rules are standardized. Differences in financial accounting information arise because of differences in incentives, in the

relative importance of contractual partners, and in their informational and regulatory infrastructure (chapter 2.1).

As our research focuses on small and medium-sized entities (SMEs), we need an operational definition of SMEs. We characterize SMEs to be smaller than public firms on average and, especially, to be private (not listed at public equity markets). The contractual environment of SMEs is characterized by less severe principal agent conflicts between owners and managers, since control lies in the hand of the owners (owner-manager setup) in many settings. The role of debt-related agency conflicts persists for private firms, but might be mitigated by relationship-based lending arrangements. Tax-related conflicts also influence financial accounting, at least in cases of book-tax-conformity. Both agency conflicts are likely to have a significant impact on financial accounting and reporting in the SME setting (chapter 2.2).

Beneath the meta-objective of financial accounting, the reduction of information asymmetries, two alternative sub-objectives can be distinguished: Contracting and valuation. The extent to which these two objectives are complementary or alternative objectives of financial reporting, is a matter of open theoretical and empirical debate. Financial accounting regimes vary in terms of their objective(s) and the weighting of their objectives. Normally, these weights will reflect the specific contractual settings and regulatory infrastructure of the firms which are subject to the respective regime (chapter 2.3).

The contractual setting of SMEs is compared to the setting of public firms at organized and thus more transaction cost efficient capital markets. In contrast to the latter, SME's contractual partners do not have the opportunity to diversify their unsystematic risk and to price protect themselves against governance related risk. The higher the transaction costs, the more relevant are alternative contractual safeguards and, finally, the contracting role of financial accounting. The German HGB can be characterized as a multiple objective regime which represents both aspects, contracting and valuation. However, in contrast to the clear valuation orientation of IFRS or US-GAAP, the contracting objective dominates the HGB even if recent regulatory reforms (BilMoG 2009) tend to strengthen the valuation objective. Again, the weighting of the HGB objectives reflects the specific contractual settings and regulatory infrastructure in Germany (also chapter 2.3).

In a next step we turn to the institutional analysis, which investigates the institutional and legal infrastructure of the IASB and Europe in general and of the IFRS for SME in particular. The contracting view of financial reporting suggests that financial reporting regimes should be designed with the relevant accounting-related contractual designs in mind. Different contractual designs might warrant different accounting regimes. The IFRS for SMEs does not seem to follow that suggestion. Instead it has a clear focus on “general purpose financial statements” with an implicit orientation towards valuation. The IASB postulates that the general purpose IFRS for SMEs fits all possible institutional environments and, therefore, foils the diversity of nationally divergent regulatory settings and the resulting differences in financial reporting demand (chapter 3.1).

Regardless of the general objective of the IFRS for SMEs it appears useful to analyze the personal membership and financing structure of the IASB to evaluate its suitability for developing appropriate standards and modifications for SMEs now and in the future. IASCF (since March 1, 2010: IFRS Foundation) organs and groups, especially the IASB, expose a clear dominance of members from national standard setting bodies and securities commissions, ‘big four’ audit firms and large listed companies whereas no members with a SME background exist. The financing situation also shows no SME involvement and therefore most probably, no significant SME influence on standard setting. Latest reviews of the IASCF constitution have not affected this issue. There is still reasonable doubt that the IASB system has the ability to develop appropriate SME accounting standards (chapter 3.2).

The private character of IASB standards requires regulative action at the EU level. However, legislative competence of the EU is restricted according to the principle of subsidiarity. The latter imposes a high burden on the EU to demonstrate that European regulation with regard to SME accounting is legitimate. In contrast to publicly traded companies, there is no apparent argument in favor of European action. Other legal questions with respect to the adoption of IFRS for SMEs in the EU remain open. These questions encompass the general and SME standard setting qualification of the IASB, the form, scope and legal bindingness of a possible regulation and the character of the European regulation process itself. Also, European SME legislation must be in line with German and other EU member state (constitutional) law. Possible

violations of fundamental rights must be analyzed in more depth. It is also necessary to shed some more light on the legal consequences of an adoption of IFRS for SMEs in EU member states. Legal consequences can be expected to be more prominent at the single legal statement level (chapter 3.3).

In the last major section of our report, we provide empirical evidence to support our theoretical reasoning. After a comprehensive literature overview about the specifics of SME accounting (chapter 4.1), we prepare a large-sample empirical study to investigate whether the demand for financial accounting regimes is homogenous across private European firms. The weight which an accounting regime attaches to contracting objective(s) will be reflected in the accounting outcomes. Empirically, accounting outcomes can be assessed by earnings attributes. Prior literature identified conditional conservatism or income smoothing as two central earnings attributes which are probably supporting efficient contractual design. Building on prior literature and adhering to our particular SME setting, we choose income smoothing as our measure for assessing the contracting role of financial accounting. High(er) levels of income smoothing can be linked to a strong(er) role of contracting objectives. As regulatory infrastructures and firm-level incentives of SMEs differ across Europe, we expect income smoothing behavior to differ across Europe in a cross-country perspective (for test design and sample of our empirical sample please refer to the chapters 4.2 and 4.3).

Our empirical tests show that the income smoothing behavior of European private firms is shaped by competing incentives: Creditors demand more, owner-managers prefer less income smoothing. Besides these firm-level incentives, country-wide determinants also have a direct and significant impact on the equilibrium level of income smoothing. Firms in countries with a strong tax link between financial and tax accounting report significantly smoother earnings streams (chapter 4.4).

Finally, it appears that the demand and the reward for smoothing vary with the relevant governance regime. In weak governance regimes, income smoothing is shaped by incentives and auditors seem to support smooth income streams. In strong governance environments, smoothing is shaped more by innate determinants than by incentives. Also, auditors seem to reduce income smoothing in these settings. Taken together, our results clearly indicate that the demand for financial account-

ing regimes by European private firms is heterogeneous and shaped by their contractual environment as well as by the country-level regulatory infrastructure. This heterogeneous demand makes the benefits of a Europe-wide adoption of IFRS for SMEs highly questionable (also chapter 4.4).

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Appendix A: Variables and Country-Level Data

Table A1: Variable Definitions

SMOOTH	Minus one times the firm-level standard deviation of profit and loss over the standard deviation of cash flow from operations (both variables deflated by lagged total assets)
TA	Firm-level average of total assets, measured in thousand US-\$
ASSGROWTH	Firm-level average of by year percentage growth in assets (measured in local currency)
SIZE	Natural logarithm of TA
PL	Firm-level average of profit and loss, deflated by lagged total assets
EBIT	Firm-level average of earnings before interest and taxes, deflated by lagged total assets
ACC	Firm-level average of accruals, calculated as change in working capital minus depreciation, deflated by lagged total assets
CF	Firm-level average of cash flow from operations, calculated as profit and loss minus accruals, deflated by lagged total assets
STDCF	Firm-level standard deviation of cash flow from operations, deflated by lagged total assets
%LOSSES	Firm-level percentage of loss observations
LEVERAGE	Firm-level average of leverage, calculated as liabilities over total assets
IEXR	Firm-level average of the interest margin, calculated as interest expense over earnings before interest and taxes. If IEXR exceeds one or is negative than it is fixed at one.
DIVR	Firm-level average of paid dividends (assessed by next year non-earnings change in equity) over earnings before interest and taxes. If DIVR exceeds one or is negative than it is fixed at one.
#MANAGER	Head count of top-level management
INDEP	Binary variable: one if the major shareholder of the firm controls less than 25 % of capital, zero otherwise
QUOTED	Binary variable: one if the shares of the firm are traded on an organized capital market, zero otherwise
AUDIT	Binary variable: one if the firm's financial statements are audited and zero otherwise
CONSOL	Binary variable: one if the firm's financial statements are audited and zero otherwise
LIMITED	Binary variable: one if a firm has limited liability, zero otherwise
SOLE_PROP	Binary variable: one if the firm is organized as a sole proprietorship, zero otherwise
IND _j	Binary variable: one if the firm belong to SIC two digit industry group j, zero otherwise
CTR _k	Binary variable: one if the firm belong to country k, zero otherwise
NOBS	Number of observations used to calculate the firm-level statistics

Table A2: Country-level Data

Concept	Voice and Ac- countability	Political Stability	Government Effectiveness	Regulatory Quality	Rule of Law	Corruption	Strong link of financial and tax accounting
Data source	Kaufman et al, 2009	Kaufman et al, 2009	Kaufman et al, 2009	Kaufman et al, 2009	Kaufman et al, 2009	Kaufman et al, 2009	OECD 1987; Spengel 2004; Schanz and Schanz 2009
Variable Name	VOICEACC	POLITSTAB	GOVEFF	REGQUA	RULELAW	CORRUPT	TAXLINK
BELGIUM	93	79	93	89	90	91	1
BOS. AND HERZEG.	47	27	22	35	36	44	
BULGARIA	63	55	56	66	50	52	1
CROATIA	58	55	66	61	52	56	
CZECH REPUBLIC	78	76	80	81	74	68	0
ESTONIA	81	70	81	91	75	76	1
FINLAND	98	99	98	97	98	100	1
FRANCE	87	70	90	83	90	90	1
GERMANY	93	83	93	92	94	94	1
GREECE	78	62	75	77	75	68	1
HUNGARY	85	75	78	83	76	74	0
ICELAND	96	97	97	89	99	98	
IRELAND	93	91	92	97	93	92	0
ITALY	79	64	75	78	70	70	1
LATVIA	72	66	70	80	63	60	0
LUXEMBOURG	96	98	96	98	97	95	1
NETHERLANDS	98	87	97	98	95	97	0
NORWAY	98	95	97	90	99	96	1
POLAND	78	63	72	72	65	67	0
PORTUGAL	91	86	84	85	85	86	1
ROMANIA	60	54	50	56	49	49	1
SERBIA	40	19	37	30	24	34	
SLOVAKIA	74	71	73	77	62	66	0
SPAIN	87	59	88	87	87	87	1
SWEDEN	98	94	97	93	97	98	1
SWITZERLAND	96	98	99	94	99	97	1
UKRAINE	37	39	31	32	26	23	
UNITED KINGDOM	91	70	94	97	94	95	0

Table B1: Panel Sample

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Total	Percent
BELGIUM	0	43	84	172	456	2,355	5,390	30,773	88,796	96,221	102,565	122,329	127,020	125,942	122,050	113,860	76,779	483	1,015,318	13.2%
BOS. AND HERZEG.	0	0	0	0	0	0	0	0	0	0	30	1,230	1,232	1,232	1,230	1,226	12	0	6,192	0.1%
BULGARIA	0	0	0	3	24	218	876	3,237	5,478	6,561	7,409	7,218	7,327	6,921	6,396	5,837	258	0	57,763	0.7%
CROATIA	0	0	0	0	0	0	0	0	8	4	85	320	8916	8913	8919	8907	8894	1	44,967	0.6%
CZECH REPUBLIC	0	0	0	53	349	833	1,494	3,013	3,605	4,202	4,465	5,974	6,714	6,939	6,713	5,854	1,217	3	51,428	0.7%
ESTONIA	0	0	0	0	0	0	0	2,219	5,172	8,827	8,790	8,828	8,484	8,383	0	0	0	0	50,703	0.7%
FINLAND	0	0	0	11	64	167	669	6,028	17,379	21,095	22,953	24,875	25,374	22,877	22,240	21,664	13,759	277	199,432	2.6%
FRANCE	1	0	5	14	17	40	60	111	149,150	216,599	236,467	252,351	258,401	259,825	254,628	241,716	136,134	1,105	2,006,624	26.0%
GERMANY	0	0	0	0	2	2	5	16	51	363	702	1,246	1,460	1,467	1,485	1,362	663	8	8,832	0.1%
GREECE	0	0	0	0	0	81	244	1,914	8,759	9,859	10,891	11,805	12,497	12,219	12,037	11,597	9,042	9	100,954	1.3%
HUNGARY	0	0	0	0	0	0	43	7,249	8,341	9,357	3,422	3,628	4,072	10,222	10,494	7,941	8	0	64,777	0.8%
ICELAND	0	0	0	0	0	7	34	176	883	1,426	1,569	1,710	1,771	1,791	1,719	1,546	70	0	12,702	0.2%
IRELAND	0	0	0	0	0	0	0	0	6	26	32	32	33	30	5	2	2	0	168	0.0%
ITALY	21	243	333	811	1,493	3,596	10,892	27,013	46,328	55,904	79,574	95,285	101,487	108,964	107,383	104,499	57,004	0	800,830	10.4%
LATVIA	0	0	0	0	0	0	0	0	0	14	32	45	48	45	50	43	22	0	299	0.0%
LUXEMBOURG	0	0	0	1	5	15	21	59	73	87	85	83	105	101	91	97	14	0	837	0.0%
NETHERLANDS	0	0	0	2	2	47	154	929	1,958	1,845	1,987	2,869	3,005	2,990	2,871	2,643	697	3	22,002	0.3%
NORWAY	0	0	0	5	7	419	2,520	18,181	32,903	36,043	38,995	41,254	41,690	40,939	38,993	36,946	16,548	9	345,452	4.5%
POLAND	0	0	0	0	0	6	27	470	1,262	1,802	2,274	3,168	3,315	3,342	3,179	3,129	17	0	21,991	0.3%
PORTUGAL	0	9	45	248	921	1,515	2,468	4,476	6,646	8,223	8,778	10,577	11,699	11,414	12,408	11,883	1	0	91,311	1.2%
ROMANIA	0	0	0	0	0	0	0	44,725	49,374	53,612	56,748	63,330	64,142	63,242	60,912	57,295	0	0	513,380	6.7%
SERBIA	0	0	0	0	0	0	0	10	232	9,271	9,982	10,151	10,788	10,619	10,138	9,567	1,680	0	72,438	0.9%
SLOVAKIA	0	0	0	17	41	73	158	286	354	486	698	904	1,055	1,049	1,051	980	138	0	7,290	0.1%
SPAIN	0	5	280	1,464	32,03	7,873	18,463	87,725	106,054	120,275	137,482	151,391	151,605	150,992	147,598	133,082	1,176	4	1,218,672	15.8%
SWEDEN	0	0	0	0	0	0	0	6,428	37,214	41,057	43,292	45,106	45,839	45,239	44,425	43,372	34,609	215	386,796	5.0%
SWITZERLAND	0	0	0	0	0	0	5	48	152	198	223	234	236	246	236	233	148	0	1,959	0.0%
UKRAINE	0	0	0	0	0	0	0	2	2,146	6,131	9,904	10,353	10,516	10,519	10,215	9,587	1	0	69,374	0.9%
UNITED KINGDOM	0	0	0	0	51	865	2,379	11,740	38,984	56,488	64,071	69,620	72,232	68,484	62,220	55,703	40,366	2,735	545,938	7.1%
Total	22	300	747	2,801	6,635	18,112	45,902	256,828	611,308	765,976	853,505	945,916	981,063	984,946	949,686	890,571	399,259	4,852	7,7184,29	100.0%
Percent	0.0%	0.0%	0.0%	0.0%	0.1%	0.2%	0.6%	3.3%	7.9%	9.9%	11.1%	12.3%	12.7%	12.8%	12.3%	11.5%	5.2%	0.1%	100.0%	

Table B2: Cross-Sectional (Firm-level) Sample

Sic Code	0XXX	1XXX	2XXX	3XXX	4XXX	5XXX	7XXX	8XXX	9XXX	Total	Percent
Description	Agric., For., and Fishing	Mining and Constr..	Manuf. (Basic Goods)	Manuf. (Refined Goods)	Transp., Comm., Utilities	Trade	Service (Pers.)	Services (Public)	Public Admin.		
BELGIUM	3,439	18,200	8,001	6,935	7,493	46,121	20,893	24,504	37	135,623	12.2%
BOS. AND HERZEG.	13	142	231	109	106	528	50	50	3	1,232	0.1%
BULGARIA	280	833	1,173	932	674	3,477	927	452	3	8,751	0.8%
CROATIA	243	762	805	921	674	4,183	679	656	1	8,924	0.8%
CZECH REPUBLIC	609	705	910	1,685	598	1,917	549	455	2	7,430	0.7%
ESTONIA	510	842	968	633	1,051	2,951	981	1,054	0	8,990	0.8%
FINLAND	879	3,951	2,093	3,120	2,897	7,223	3,251	3,953	4	27,371	2.5%
FRANCE	5,341	44,005	23,734	27,973	16,345	101,099	43,110	26,030	2	287,639	25.9%
GERMANY	18	124	148	279	296	299	155	146	6	1,471	0.1%
GREECE	273	903	2,799	1,748	631	4,527	1,706	640	1	13,228	1.2%
HUNGARY	1,100	901	1,292	1,349	872	3,617	871	915	1	10,918	1.0%
ICELAND	140	258	207	175	115	463	315	332	0	2,005	0.2%
IRELAND	0	3	3	6	1	6	8	5	1	33	0.0%
ITALY	2,052	11,548	17,285	27,670	7,470	35,831	9,413	5,143	8	116,420	10.5%
LATVIA	10	2	21	6	3	9	0	0	0	51	0.0%
LUXEMBOURG	1	22	7	20	14	43	11	2	0	120	0.0%
NETHERLANDS	43	305	467	537	315	1,176	310	41	1	3,195	0.3%
NORWAY	1,168	6,445	3,229	3,235	3,579	15,074	6,947	6,250	2	45,929	4.1%
POLAND	124	324	607	594	557	1,009	175	327	2	3,719	0.3%
PORTUGAL	279	1,858	2,120	1,774	875	5,881	874	609	1	14,271	1.3%
ROMANIA	160	5,648	9,489	5,370	5,199	36,102	6,416	6,165	10	74,559	6.7%
SERBIA	723	1,209	1,951	1,802	746	3,764	466	411	39	11,111	1.0%
SLOVAKIA	182	97	142	224	94	210	94	69	0	1,112	0.1%
SPAIN	5,062	26,994	21,440	21,895	11,984	59,902	20,823	10,348	64	178,512	16.1%
SWEDEN	2,555	7,910	4,200	6,862	3,559	19,126	7,473	6,348	5	58,038	5.2%
SWITZERLAND	0	0	11	10	154	29	31	19	1	255	0.0%
UKRAINE	2,985	959	1,588	1,569	1,224	1,516	322	694	18	10,875	1.0%
UNITED KINGDOM	1,382	7,764	5,189	7,364	4,081	14,503	26,940	12,424	154	79,801	7.2%
Total	29,571	142,714	110,110	124,797	71,607	370,586	153,790	108,042	366	1,111,583	100.0%
Percent	2.7%	12.8%	9.9%	11.2%	6.4%	33.3%	13.8%	9.7%	0.0%	100.0%	

Table B3: Descriptive Statistics (N=1,111,583)**Panel A: Distributional Properties**

Variable	Mean	Std. Dev.	Minimum	25%	50%	75%	Maximum
SMOOTH	-0.567	0.415	-3.541	-0.818	-0.492	-0.242	-0.004
TA	4,967.690	77,151.440	0.762	195.972	560.980	1,949.740	13,840,725.200
ASSGROWTH	0.167	0.307	-0.226	0.024	0.094	0.204	4.640
EBIT	0.119	0.285	-4.051	0.035	0.080	0.157	3.530
PL	0.097	0.187	-0.162	0.014	0.050	0.111	2.077
CF	0.107	0.196	-1.135	0.024	0.083	0.158	2.112
ACC	-0.010	0.132	-0.391	-0.069	-0.026	0.020	1.741
STDCF	0.203	0.222	0.005	0.089	0.145	0.237	2.798
%LOSSES	0.172	0.218	0.000	0.000	0.111	0.286	1.000
LEVERAGE	0.622	0.222	0.000	0.474	0.656	0.798	1.000
IEXR	0.402	0.298	0.000	0.139	0.369	0.631	1.000
DIVR	0.364	0.214	0.000	0.200	0.333	0.503	1.000
#MANAGER	2.302	2.631	0.000	1.000	1.000	3.000	485.000
INDEP	0.034						
QUOTED	0.002						
AUDIT	0.234						
CONSOL	0.013						
LIMITED	0.739						
SOLE_PROP	0.062						
NOBS	6.943	1.438	5.000	6.000	7.000	8.000	9.000

(Table B3 Continued)

Panel B: Correlations

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
A: SMOOTH		0.004	-0.100	-0.184	-0.338	-0.326	0.007	0.031	-0.154	0.304	0.064	-0.248	0.011	-0.013	-0.019	-0.073	-0.014	-0.007	-0.118	0.039
B: TA	0.276		-0.008	-0.011	-0.016	-0.012	-0.005	-0.023	0.000	0.005	0.011	0.009	0.100	0.027	0.175	0.051	0.170	-0.010	0.024	0.018
C: ASSGROWTH	0.034	-0.047		0.310	0.430	0.028	0.570	0.617	-0.122	0.091	-0.152	0.051	-0.053	-0.016	0.002	-0.076	-0.023	0.093	-0.036	-0.089
D: EBIT	-0.229	-0.198	0.399		0.694	0.508	0.229	0.335	-0.265	0.007	-0.288	0.197	-0.150	-0.036	-0.009	-0.045	-0.045	0.040	0.158	-0.040
E: PL	-0.342	-0.238	0.396	0.854		0.762	0.286	0.572	-0.286	-0.119	-0.233	0.353	-0.048	-0.024	-0.011	0.050	-0.029	-0.058	0.226	-0.065
F: CF	-0.412	-0.251	0.023	0.494	0.601		-0.396	0.215	-0.190	-0.185	-0.124	0.331	-0.035	-0.020	-0.008	0.075	-0.017	-0.100	0.238	-0.021
G: ACC	0.174	0.096	0.356	0.160	0.144	-0.594		0.492	-0.130	0.107	-0.147	0.010	-0.018	-0.004	-0.004	-0.040	-0.016	0.066	-0.032	-0.061
H: STDCF	0.219	-0.292	0.410	0.235	0.257	0.027	0.228		-0.022	0.064	-0.069	0.129	-0.073	-0.027	-0.017	-0.049	-0.047	0.012	0.078	-0.129
I: %LOSSES	-0.188	-0.084	-0.236	-0.524	-0.558	-0.249	-0.178	0.036		0.027	0.503	-0.088	0.038	0.020	0.011	0.002	0.014	-0.030	0.002	-0.064
J: LEVERAGE	0.362	0.114	0.125	-0.141	-0.290	-0.299	0.117	0.107	0.074		0.178	-0.167	-0.049	-0.040	-0.024	-0.051	-0.011	-0.004	-0.084	-0.062
K: IEXR	0.089	0.116	-0.198	-0.570	-0.575	-0.284	-0.144	-0.059	0.494	0.235		-0.159	0.133	0.009	0.009	0.074	0.029	-0.118	0.208	-0.014
L: DIVR	-0.285	-0.112	-0.017	0.210	0.354	0.321	-0.040	0.069	-0.087	-0.182	-0.187		0.063	0.020	0.026	0.166	0.017	-0.105	0.144	-0.017
M: #MANAGER	-0.016	0.327	-0.004	-0.048	-0.009	-0.042	0.045	-0.054	0.008	-0.058	0.140	0.077		0.121	0.100	0.401	0.152	-0.069	0.121	0.158
N: INDEP	-0.011	0.095	-0.012	-0.043	-0.028	-0.028	0.011	-0.041	0.012	-0.037	0.008	0.022	0.098		0.094	0.049	0.184	0.027	-0.004	0.016
O: QUOTED	-0.021	0.077	0.010	-0.015	-0.010	-0.009	-0.001	-0.029	0.008	-0.026	0.009	0.028	0.066	0.094		0.047	0.256	0.021	-0.012	-0.003
P: AUDIT	-0.095	0.298	-0.044	0.009	0.073	0.051	0.012	-0.047	0.000	-0.052	0.065	0.176	0.443	0.049	0.047		0.110	-0.235	0.357	0.124
Q: CONSOL	-0.020	0.168	-0.018	-0.033	-0.023	-0.014	-0.011	-0.076	0.011	-0.014	0.029	0.025	0.126	0.184	0.256	0.110		-0.021	0.063	0.016
R: LIMITED	-0.004	-0.202	0.074	0.015	0.011	-0.032	0.019	0.016	-0.021	-0.023	-0.104	-0.095	-0.060	0.027	0.021	-0.235	-0.021		-0.432	0.026
S: SOLE_PROP	-0.136	0.019	-0.031	0.070	0.123	0.121	-0.014	0.057	0.000	-0.082	0.187	0.129	0.241	-0.004	-0.012	0.357	0.063	-0.432		-0.031
T: NOBS	0.007	0.213	-0.060	-0.003	-0.005	0.014	-0.025	-0.147	-0.041	-0.074	-0.004	-0.029	0.161	0.016	-0.003	0.123	0.016	0.026	-0.031	

Notes: Table B3 presents information for the pooled cross-sectional firm-level sample. Variable definitions are as given in Table A1. All variables were winsorized at their top and bottom percentiles. In Panel B, Pearson correlations are above and Spearman correlations are below the diagonal. Correlations which are significant (two-sided) below 1% appear in bold print.

Table B4: Determinants of Income Smoothing: Pooled Analysis

Panel A: Regression Results

Coefficient	Estimate	Std. err	Prob.
<i>Innate Determinants</i>			
SIZE	0.029	0.000	0.000
ASSGROWTH	-0.373	0.001	0.000
CF	-0.572	0.002	0.000
STDCF	0.681	0.002	0.000
%LOSSES	-0.524	0.002	0.000
<i>Owner-manager Incentives</i>			
DIVR	-0.136	0.002	0.000
#MANAGER	-0.001	0.000	0.000
INDEP	0.000	0.002	0.936
<i>Creditor Incentives</i>			
LEVERAGE	0.320	0.002	0.000
IEXR	0.122	0.001	0.000
<i>Regulatory Infrastructure</i>			
QUOTED	-0.084	0.007	0.000
AUDIT	0.001	0.001	0.526
CONSOL	-0.052	0.003	0.000
SOLE_PROP	0.005	0.004	0.184
LIMITED	-0.013	0.001	0.000
Country-Industry fixed effects	Yes		
n	1,111,583		
R ²	0.390		

(Table B4 Continued)

Panel B: Average Country-Industry Intercepts by Country

Country	n	Mean	Std. Dev.
ITALY	67	-0.719	0.031
BULGARIA	65	-0.742	0.135
LUXEMBOURG	32	-0.765	0.198
PORTUGAL	63	-0.775	0.137
GREECE	61	-0.779	0.111
SPAIN	72	-0.785	0.053
CROATIA	64	-0.815	0.213
SLOVAKIA	57	-0.834	0.181
UKRAINE	70	-0.860	0.133
SWEDEN	65	-0.870	0.073
BELGIUM	72	-0.873	0.091
FRANCE	67	-0.880	0.060
CZECH REPUBLIC	65	-0.880	0.133
SWITZERLAND	32	-0.881	0.229
GERMANY	58	-0.890	0.156
HUNGARY	63	-0.895	0.183
NETHERLANDS	59	-0.903	0.129
FINLAND	63	-0.947	0.113
BOS. AND HERZEG.	60	-0.948	0.279
ESTONIA	61	-0.958	0.111
ICELAND	56	-0.972	0.136
NORWAY	69	-0.982	0.160
ROMANIA	67	-1.000	0.178
POLAND	63	-1.000	0.275
IRELAND	21	-1.020	0.245
UNITED KINGDOM	73	-1.029	0.065
LATVIA	21	-1.033	0.394
SERBIA	66	-1.132	0.161

(Table B4 Continued)

Panel C: Country-level Determinants

Dependent-Variable	Country-industry level intercepts		Country-industry level intercepts		Country-level intercepts	
Coefficient	Estimate (Std. err.)	Prob.	Estimate (Std. err.)	Prob.	Estimate (Std. err.)	Prob.
INTERCEPT					-0.945 (0.032)	0.000
VOICEACC	0.013 (0.003)	0.000				
POLITSTAB	-0.003 (0.001)	0.000				
GOVEFF	0.010 (0.003)	0.000				
REGQUA	0.002 (0.001)	0.236				
RULELAW	-0.008 (0.002)	0.002				
CORRUPT	-0.011 (0.002)	0.000				
GOVQUAL			-0.026 (0.007)	0.000	-0.021 (0.029)	0.478
TAXLINK	0.131 (0.012)	0.000	0.083 (0.010)	0.000	0.096 (0.039)	0.023
Industry Fixed Effects	Yes		Yes		n/a	
R ²	0.170		0.124		0.239	
N	1,336		1,336		23	

(Table B4 Continued)

Panel D: Governance Quality as a Moderating Factor

Coefficient	Estimate	Std. err	Prob.
Innate Determinants			
SIZE	0.031	0.000	0.000
GOVQUAL*SIZE	0.003	0.000	0.000
ASSGROWTH	-0.393	0.002	0.000
GOVQUAL*ASSGROWTH	-0.060	0.002	0.000
CF	-0.623	0.002	0.000
GOVQUAL*CF	-0.129	0.002	0.000
STDCF	0.905	0.002	0.000
GOVQUAL*STDCF	0.348	0.002	0.000
%LOSSES	-0.524	0.002	0.000
GOVQUAL*%LOSSES	-0.102	0.003	0.000
Owner-manager Incentives			
DIVR	-0.140	0.002	0.000
GOVQUAL*DIVR	0.024	0.003	0.000
#MANAGER	-0.002	0.000	0.000
GOVQUAL*#MANAGER	0.005	0.000	0.000
INDEP	0.001	0.002	0.668
GOVQUAL*INDEP	0.011	0.002	0.000
Creditor Incentives			
LEVERAGE	0.317	0.002	0.000
GOVQUAL*LEVERAGE	-0.028	0.002	0.000
IEXR	0.134	0.002	0.000
GOVQUAL*IEXR	-0.053	0.002	0.000
Regulatory Infrastructure			
QUOTED	-0.098	0.007	0.000
GOVQUAL*QUOTED	0.005	0.007	0.452
AUDIT	0.012	0.002	0.000
GOVQUAL*AUDIT	-0.037	0.003	0.000
CONSOL	-0.036	0.006	0.000
GOVQUAL*CONSOL	-0.011	0.008	0.206
SOLE_PROP	0.019	0.005	0.000
GOVQUAL*SOLE_PROP	-0.016	0.007	0.018
LIMITED	-0.013	0.001	0.000
GOVQUAL*LIMITED	0.010	0.002	0.000
Country-Industry fixed effects	Yes		
n	1,111,583		
R ²	0.406		

Notes: Table B4 presents the main results of our tests, which are based on the pooled cross-sectional firm-level sample (presented in Tables B2 and B3). Country-level variables are as presented in Table A2. In Panels C and D, GOVQUAL is the first principal component of the Kaufman et al. factors as displayed in Table A2. All other variable definitions are as given in Table A1. All variables were winsorized at their top and bottom percentiles. Panel A reports

the results of an Ordinary Least Square (OLS) estimation of model (2). In Panel B, summary statistics for the country-industry level intercepts of the model from Panel A are disclosed. The countries are ranked by then mean magnitude of their respective intercepts. Panel C gives the OLS estimation results for the models (3), (4) and (5). Models (3) and (4) use the country-industry level intercepts of model (2) (as presented in Panel B) as their dependent variable. Model (5) uses the country-wide means of the country-industry level intercepts as dependent variable. Standard Errors are disclosed in parentheses. In Panel D, the OLS results for the estimation of model (6) are presented. All probabilities reported in Table B4 are two-sided.

Table B5: Country-Level Analysis, Main Results

Country		QUOTED	AUDIT	CONSOL	SOLE_PROP	LIMITED	LEVERAGE	IEXR	DIVR	#MANAGER	INDEP
BELGIUM	Coef.	0.037	-0.064	-0.037		-0.014	0.178	0.252	-0.187	-0.001	-0.003
	(Std. err.)	(0.054)	(0.004)	(0.022)		(0.004)	(0.004)	(0.005)	(0.005)	(0.000)	(0.008)
BOS. AND HERZEG.	Coef.					-0.036	0.075	0.301	0.074	0.021	0.043
	(Std. err.)					(0.062)	(0.058)	(0.063)	(0.067)	(0.022)	(0.048)
BULGARIA	Coef.	-0.028	0.016		0.121	0.092	0.374	0.228	-0.051	-0.012	-0.009
	(Std. err.)	(0.049)	(0.022)		(0.026)	(0.023)	(0.020)	(0.022)	(0.028)	(0.005)	(0.022)
CROATIA	Coef.	-0.053	0.014	-0.248	0.007	0.017	0.219	0.197	-0.170	-0.007	0.020
	(Std. err.)	(0.040)	(0.026)	(0.150)	(0.078)	(0.046)	(0.019)	(0.015)	(0.020)	(0.003)	(0.040)
CZECH REPUBLIC	Coef.	0.008	-0.003		0.226	0.000	0.187	0.143	-0.097	0.003	-0.010
	(Std. err.)	(0.073)	(0.013)		(0.070)	(0.019)	(0.019)	(0.021)	(0.023)	(0.002)	(0.046)
ESTONIA	Coef.	0.253	-0.102			-0.020	0.497	0.164	0.003	0.020	-0.005
	(Std. err.)	(0.211)	(0.015)			(0.039)	(0.026)	(0.027)	(0.028)	(0.004)	(0.046)
FINLAND	Coef.	-0.075	-0.018	-0.051			0.303	0.109	-0.142	0.004	-0.049
	(Std. err.)	(0.038)	(0.004)	(0.013)			(0.009)	(0.009)	(0.011)	(0.002)	(0.022)
FRANCE	Coef.	-0.119	-0.002	-0.022		0.013	0.257	0.114	-0.077	0.000	0.021
	(Std. err.)	(0.021)	(0.002)	(0.014)		(0.001)	(0.003)	(0.003)	(0.003)	(0.000)	(0.003)
GERMANY	Coef.	-0.117		0.008	-0.001	-0.068	0.173	0.187	-0.143	-0.001	0.002
	(Std. err.)	(0.037)		(0.032)	(0.152)	(0.050)	(0.054)	(0.046)	(0.047)	(0.003)	(0.036)
GREECE	Coef.	-0.119	-0.077		0.116	0.091	0.100	0.083	-0.132	-0.002	0.029
	(Std. err.)	(0.022)	(0.007)		(0.280)	(0.038)	(0.013)	(0.010)	(0.015)	(0.001)	(0.011)
HUNGARY	Coef.	-0.127			0.073	0.005	0.257	0.131	-0.130	0.004	0.009
	(Std. err.)	(0.314)			(0.073)	(0.011)	(0.018)	(0.015)	(0.019)	(0.001)	(0.018)
ICELAND	Coef.	0.202		-0.012		0.080	0.181	0.134	-0.078	-0.008	0.075
	(Std. err.)	(0.192)		(0.065)		(0.127)	(0.045)	(0.053)	(0.047)	(0.008)	(0.041)
ITALY	Coef.	-0.044		-0.015		0.003	0.365	0.107	-0.173	0.001	0.004
	(Std. err.)	(0.024)		(0.007)		(0.002)	(0.004)	(0.003)	(0.005)	(0.000)	(0.005)
LUXEMBOURG	Coef.	0.368		0.147			0.018	-0.066	-0.196	-0.018	0.114
	(Std. err.)	(0.189)		(0.109)			(0.143)	(0.104)	(0.118)	(0.014)	(0.122)
NETHERLANDS	Coef.	-0.106	0.023	0.013		0.038	0.222	0.033	-0.153	-0.001	-0.012
	(Std. err.)	(0.031)	(0.041)	(0.012)		(0.039)	(0.030)	(0.022)	(0.028)	(0.001)	(0.027)

(Continued on next page...)

(Table B5 Continued)

Country		QUOTED	AUDIT	CONSOL	SOLE_PROP	LIMITED	LEVERAGE	IEXR	DIVR	#MANAGER	INDEP
NORWAY	Coef.	-0.004	-0.061	-0.067		0.091	0.258	0.078	-0.135	0.002	0.026
	(Std. err.)	(0.061)	(0.328)	(0.014)		(0.053)	(0.011)	(0.010)	(0.010)	(0.001)	(0.008)
POLAND	Coef.	-0.360	-0.037	0.056		-0.004	0.042	0.300	-0.089	-0.009	-0.001
	(Std. err.)	(0.192)	(0.023)	(0.073)		(0.023)	(0.038)	(0.038)	(0.038)	(0.041)	(0.037)
PORTUGAL	Coef.	0.026	-0.033	-0.168		0.007	0.241	0.211	-0.126	-0.001	0.008
	(Std. err.)	(0.056)	(0.006)	(0.036)		(0.012)	(0.012)	(0.009)	(0.013)	(0.001)	(0.008)
ROMANIA	Coef.	0.244	0.094			0.018	0.436	0.311	-0.213	0.013	-0.025
	(Std. err.)	(0.121)	(0.010)			(0.014)	(0.010)	(0.010)	(0.010)	(0.003)	(0.016)
SERBIA	Coef.	-0.055			0.052	-0.012	0.099	0.055	0.075	0.003	-0.004
	(Std. err.)	(0.021)			(0.106)	(0.006)	(0.012)	(0.012)	(0.016)	(0.006)	(0.012)
SLOVAKIA	Coef.	-0.027	0.008			-0.044	0.206	0.207	-0.070	0.001	-0.455
	(Std. err.)	(0.051)	(0.030)			(0.050)	(0.055)	(0.065)	(0.064)	(0.005)	(0.253)
SPAIN	Coef.	-0.113	0.009	0.000		-0.026	0.314	0.148	-0.143	0.003	0.001
	(Std. err.)	(0.026)	(0.002)	(0.010)		(0.008)	(0.003)	(0.003)	(0.004)	(0.000)	(0.003)
SWEDEN	Coef.	-0.132		-0.030			0.360	0.178	-0.096	-0.005	-0.011
	(Std. err.)	(0.033)		(0.007)			(0.007)	(0.007)	(0.007)	(0.001)	(0.006)
SWITZERLAND	Coef.	-0.128	0.136	-0.194		0.020	0.240	0.139	-0.066	0.001	0.153
	(Std. err.)	(0.084)	(0.107)	(0.065)		(0.077)	(0.113)	(0.084)	(0.108)	(0.003)	(0.055)
UKRAINE	Coef.	-0.161	0.281			-0.012	-0.013	0.096	0.217	-0.034	-0.019
	(Std. err.)	(0.108)	(0.288)			(0.011)	(0.025)	(0.020)	(0.024)	(0.011)	(0.011)
UNITED KINGDOM	Coef.	-0.136	-0.004	-0.023	0.000	-0.006	0.275	0.000	-0.095	0.001	-0.002
	(Std. err.)	(0.016)	(0.003)	(0.006)	(0.005)	(0.010)	(0.005)	(0.004)	(0.006)	(0.000)	(0.006)
As predicted (Sign.)		18 (9)	10 (5)	11 (7)	7 (2)	10 (2)	25 (22)	25 (22)	22 (18)	12 (5)	13 (4)
Not as predicted (Sign.)		7 (1)	8 (2)	5 (0)	1 (0)	13 (4)	1 (0)	1 (0)	4 (2)	14 (8)	13 (1)

Notes: Table B5 presents the key results of within-country OLS estimations of model (2). Full results can be found in the Panels of Table B6. Variable definitions are as given in Table A1. All variables were winsorized at their top and bottom percentiles. The table gives the estimated coefficients of the main independent variables of interest, the coefficients for innate determinants are omitted to preserve space. Standard Errors are disclosed in parentheses. In Panel D, the OLS results for the estimation of model (6) are presented. All probabilities reported in Table B4 are two-sided. Estimated coefficients which are significant (two-sided) below 5% appear in bold print.

Table B6: Determinants of Income Smoothing: Country-Level Analysis

Panel A1: Descriptive Statistics Belgium (N=135,523)

Variable	Mean	Std. Dev.	Minimum	25%	50%	75%	Maximum
SMOOTH	-0.635	0.377	-1.948	-0.862	-0.586	-0.343	-0.053
TA	1,537.300	4,763.340	24.956	158.124	359.698	884.405	38,254.740
ASSGROWTH	0.091	0.147	-0.164	0.001	0.062	0.145	0.740
EBIT	0.085	0.093	-0.100	0.028	0.066	0.124	0.439
PL	0.049	0.068	-0.094	0.006	0.034	0.078	0.303
CF	0.126	0.096	-0.069	0.059	0.112	0.182	0.421
ACC	-0.077	0.071	-0.288	-0.116	-0.068	-0.031	0.086
STDCF	0.143	0.086	0.017	0.077	0.124	0.192	0.412
%LOSSES	0.252	0.236	0.000	0.000	0.222	0.400	1.000
LEVERAGE	0.579	0.237	0.000	0.405	0.612	0.774	1.000
IEXR	0.508	0.269	0.009	0.293	0.519	0.721	1.000
DIVR	0.283	0.169	0.000	0.151	0.244	0.377	0.806
#MANAGER	1.564	1.986	0.000	0.000	1.000	2.000	114.000
INDEP	0.013						
PUBLIC	0.000						
AUDIT	0.080						
CONSOL	0.002						
LIMITED	0.932						
SOLE_PROP	0.000						
NOBS	7.486	1.432	5.000	6.000	8.000	9.000	9.000

(Table B6 Continued)

Panel A2: Regression Results Belgium

Coefficient	Estimate	Std. err	Prob.
<i>Innate Determinants</i>			
SIZE	0.056	0.001	0.000
ASSGROWTH	-0.304	0.006	0.000
CF	-0.579	0.012	0.000
STD CF	1.854	0.011	0.000
%LOSSES	-0.608	0.005	0.000
<i>Owner-manager Incentives</i>			
DIVR	-0.187	0.005	0.000
#MANAGER	-0.001	0.000	0.127
INDEP	-0.003	0.008	0.677
<i>Creditor Incentives</i>			
LEVERAGE	0.178	0.004	0.000
IEXR	0.252	0.005	0.000
<i>Regulatory Infrastructure</i>			
QUOTED	0.037	0.054	0.498
AUDIT	-0.064	0.004	0.000
CONSOL	-0.037	0.022	0.093
SOLE_PROP			
LIMITED	-0.014	0.004	0.001
Industry fixed effects	Yes		
n	135,623		
R ²	0.302		

Notes: Table B6 presents within-county sample descriptive statistics and estimation results for each country present in the cross-sectional sample (as presented in the Tables B2 and B3) which has enough data to estimate model (2). The first Panel reports descriptive statistics, the second panel reports the OLS estimation results if estimating model (2) on the respective country's data. Variable definitions are as given in Table A1. All variables were winsorized at their top and bottom percentiles. All reported probabilities are two-sided.

(Table B6 Continued)

Panel B1: Descriptive Statistics Bosnia and Herzegovina (N=1,232)

Variable	Mean	Std. Dev.	Minimum	25%	50%	75%	Maximum
SMOOTH	-0.757	0.500	-2.839	-0.995	-0.660	-0.400	-0.086
TA	3,398.910	13,148.890	75.659	319.329	715.816	1,968.300	120,217.330
ASSGROWTH	0.188	0.230	-0.152	0.016	0.146	0.300	1.107
EBIT	0.128	0.106	0.003	0.047	0.098	0.177	0.486
PL	0.138	0.134	-0.020	0.036	0.095	0.206	0.591
CF	0.129	0.135	-0.124	0.036	0.096	0.195	0.600
ACC	0.010	0.085	-0.174	-0.042	-0.006	0.053	0.272
STDCF	0.186	0.127	0.011	0.090	0.157	0.254	0.573
%LOSSES	0.136	0.191	0.000	0.000	0.000	0.200	1.000
LEVERAGE	0.508	0.260	0.002	0.307	0.507	0.720	1.000
IEXR	0.247	0.231	0.001	0.049	0.181	0.389	0.910
DIVR	0.567	0.221	0.200	0.400	0.585	0.746	1.000
#MANAGER	1.001	0.714	0.000	1.000	1.000	1.000	5.000
INDEP	0.889						
PUBLIC	0.000						
AUDIT	0.000						
CONSOL	0.000						
LIMITED	0.938						
SOLE_PROP	0.000						
NOBS	5.026	0.164	5.000	5.000	5.000	5.000	7.000

(Table B6 Continued)

Panel B2: Regression Results Bosnia and Herzegovina

Coefficient	Estimate	Std. err	Prob.
<i>Innate Determinants</i>			
SIZE	0.047	0.012	0.000
ASSGROWTH	-0.537	0.065	0.000
CF	-1.525	0.121	0.000
STDCF	2.065	0.128	0.000
%LOSSES	-0.278	0.077	0.000
<i>Owner-manager Incentives</i>			
DIVR	0.074	0.067	0.267
#MANAGER	0.021	0.022	0.339
INDEP	0.043	0.048	0.366
<i>Creditor Incentives</i>			
LEVERAGE	0.075	0.058	0.193
IEXR	0.301	0.063	0.000
<i>Regulatory Infrastructure</i>			
QUOTED			
AUDIT			
CONSOL			
SOLE_PROP			
LIMITED	-0.036	0.062	0.562
Industry fixed effects	Yes		
n	1,232		
R ²	0.304		

Notes: Table B6 presents within-county sample descriptive statistics and estimation results for each country present in the cross-sectional sample (as presented in the Tables B2 and B3) which has enough data to estimate model (2). The first Panel reports descriptive statistics, the second panel reports the OLS estimation results if estimating model (2) on the respective country's data. Variable definitions are as given in Table A1. All variables were winsorized at their top and bottom percentiles. All reported probabilities are two-sided.

(Table B6 Continued)

Panel C1: Descriptive Statistics Bulgaria (N=8,751)

Variable	Mean	Std. Dev.	Minimum	25%	50%	75%	Maximum
SMOOTH	-0.516	0.519	-3.008	-0.711	-0.361	-0.160	-0.018
TA	1,335.230	3,850.040	8.871	78.621	244.575	789.092	29,165.430
ASSGROWTH	0.559	0.669	-0.135	0.150	0.348	0.705	3.637
EBIT	0.147	0.191	-0.212	0.034	0.099	0.210	0.928
PL	0.102	0.143	-0.158	0.017	0.063	0.149	0.660
CF	0.071	0.226	-0.639	-0.041	0.060	0.184	0.742
ACC	0.032	0.200	-0.391	-0.077	-0.001	0.107	0.808
STDCF	0.376	0.293	0.038	0.171	0.290	0.487	1.534
%LOSSES	0.179	0.242	0.000	0.000	0.000	0.286	1.000
LEVERAGE	0.535	0.256	0.000	0.331	0.552	0.753	0.994
IEXR	0.331	0.258	0.000	0.114	0.283	0.503	1.000
DIVR	0.338	0.172	0.008	0.200	0.314	0.430	0.833
#MANAGER	1.820	1.240	0.000	1.000	1.000	2.000	5.000
INDEP	0.048						
PUBLIC	0.010						
AUDIT	0.048						
CONSOL	0.000						
LIMITED	0.811						
SOLE_PROP	0.128						
NOBS	6.601	1.401	5.000	5.000	6.000	8.000	9.000

(Table B6 Continued)

Panel C2: Regression Results Bulgaria

Coefficient	Estimate	Std. err	Prob.
<i>Innate Determinants</i>			
SIZE	0.014	0.003	0.000
ASSGROWTH	-0.207	0.008	0.000
CF	-0.377	0.022	0.000
STDCF	0.518	0.019	0.000
%LOSSES	-0.541	0.024	0.000
<i>Owner-manager Incentives</i>			
DIVR	-0.051	0.028	0.065
#MANAGER	-0.012	0.005	0.011
INDEP	-0.009	0.022	0.671
<i>Creditor Incentives</i>			
LEVERAGE	0.374	0.020	0.000
IEXR	0.228	0.022	0.000
<i>Regulatory Infrastructure</i>			
QUOTED	-0.028	0.049	0.561
AUDIT	0.016	0.022	0.469
CONSOL			
SOLE_PROP	0.121	0.026	0.000
LIMITED	0.092	0.023	0.000
Industry fixed effects	Yes		
n	8,751		
R ²	0.345		

Notes: Table B6 presents within-county sample descriptive statistics and estimation results for each country present in the cross-sectional sample (as presented in the Tables B2 and B3) which has enough data to estimate model (2). The first Panel reports descriptive statistics, the second panel reports the OLS estimation results if estimating model (2) on the respective country's data. Variable definitions are as given in Table A1. All variables were winsorized at their top and bottom percentiles. All reported probabilities are two-sided.

(Table B6 Continued)

Panel D1: Descriptive Statistics Croatia (N=8,924)

Variable	Mean	Std. Dev.	Minimum	25%	50%	75%	Maximum
SMOOTH	-0.476	0.432	-2.161	-0.664	-0.350	-0.153	-0.015
TA	4,240.690	13,396.660	31.884	195.610	570.099	2,049.680	102,829.000
ASSGROWTH	0.126	0.159	-0.177	0.018	0.099	0.207	0.695
EBIT	0.089	0.115	-0.138	0.017	0.064	0.137	0.503
PL	0.067	0.084	-0.098	0.013	0.044	0.100	0.373
CF	0.107	0.109	-0.106	0.034	0.086	0.160	0.473
ACC	-0.040	0.077	-0.261	-0.084	-0.038	0.004	0.172
STDCF	0.139	0.088	0.016	0.072	0.119	0.186	0.412
%LOSSES	0.093	0.203	0.000	0.000	0.000	0.000	1.000
LEVERAGE	0.623	0.237	0.004	0.452	0.654	0.815	1.000
IEXR	0.404	0.321	0.000	0.101	0.358	0.664	1.000
DIVR	0.432	0.203	0.200	0.230	0.400	0.585	0.975
#MANAGER	1.702	1.549	0.000	1.000	1.000	2.000	10.000
INDEP	0.010						
PUBLIC	0.014						
AUDIT	0.034						
CONSOL	0.001						
LIMITED	0.988						
SOLE_PROP	0.004						
NOBS	5.039	0.229	5.000	5.000	5.000	5.000	7.000

(Table B6 Continued)

Panel D2: Regression Results Croatia

Coefficient	Estimate	Std. err	Prob.
<i>Innate Determinants</i>			
SIZE	0.019	0.003	0.000
ASSGROWTH	-0.444	0.027	0.000
CF	-0.925	0.043	0.000
STDCF	1.915	0.049	0.000
%LOSSES	-0.963	0.021	0.000
<i>Owner-manager Incentives</i>			
DIVR	-0.170	0.020	0.000
#MANAGER	-0.007	0.003	0.034
INDEP	0.020	0.040	0.616
<i>Creditor Incentives</i>			
LEVERAGE	0.219	0.019	0.000
IEXR	0.197	0.015	0.000
<i>Regulatory Infrastructure</i>			
QUOTED	-0.053	0.040	0.187
AUDIT	0.014	0.026	0.594
CONSOL	-0.248	0.150	0.099
SOLE_PROP	0.007	0.078	0.930
LIMITED	0.017	0.046	0.710
Industry fixed effects	Yes		
n	8,924		
R ²	0.333		

Notes: Table B6 presents within-county sample descriptive statistics and estimation results for each country present in the cross-sectional sample (as presented in the Tables B2 and B3) which has enough data to estimate model (2). The first Panel reports descriptive statistics, the second panel reports the OLS estimation results if estimating model (2) on the respective country's data. Variable definitions are as given in Table A1. All variables were winsorized at their top and bottom percentiles. All reported probabilities are two-sided.

(Table B6 Continued)

Panel E1: Descriptive Statistics Czech Republic (N=7,430)

Variable	Mean	Std. Dev.	Minimum	25%	50%	75%	Maximum
SMOOTH	-0.588	0.388	-1.939	-0.826	-0.519	-0.280	-0.040
TA	10,390.030	25,757.040	68.131	1,193.410	2,904.890	7,551.940	187,887.120
ASSGROWTH	0.135	0.224	-0.177	0.008	0.076	0.192	1.350
EBIT	0.102	0.114	-0.083	0.025	0.073	0.150	0.537
PL	0.062	0.085	-0.094	0.009	0.040	0.096	0.398
CF	0.086	0.095	-0.139	0.030	0.073	0.130	0.429
ACC	-0.023	0.065	-0.182	-0.062	-0.031	0.008	0.193
STDCF	0.147	0.103	0.016	0.072	0.119	0.193	0.521
%LOSSES	0.190	0.233	0.000	0.000	0.111	0.333	1.000
LEVERAGE	0.516	0.234	0.001	0.328	0.520	0.708	0.998
IEXR	0.472	0.263	0.013	0.261	0.458	0.675	1.000
DIVR	0.381	0.169	0.111	0.242	0.367	0.494	0.865
#MANAGER	3.243	2.352	0.000	2.000	3.000	4.000	21.000
INDEP	0.007						
PUBLIC	0.003						
AUDIT	0.854						
CONSOL	0.000						
LIMITED	0.941						
SOLE_PROP	0.003						
NOBS	6.922	1.582	5.000	5.000	7.000	9.000	9.000

(Table B6 Continued)

Panel E2: Regression Results Czech Republic

Coefficient	Estimate	Std. err	Prob.
<i>Innate Determinants</i>			
SIZE	0.022	0.003	0.000
ASSGROWTH	-0.317	0.019	0.000
CF	-1.107	0.048	0.000
STDCF	1.406	0.043	0.000
%LOSSES	-0.669	0.023	0.000
<i>Owner-manager Incentives</i>			
DIVR	-0.097	0.023	0.000
#MANAGER	0.003	0.002	0.173
INDEP	-0.010	0.046	0.829
<i>Creditor Incentives</i>			
LEVERAGE	0.187	0.019	0.000
IEXR	0.143	0.021	0.000
<i>Regulatory Infrastructure</i>			
QUOTED	0.008	0.073	0.913
AUDIT	-0.003	0.013	0.800
CONSOL			
SOLE_PROP	0.226	0.070	0.001
LIMITED	0.000	0.019	0.983
Industry fixed effects	Yes		
n	7,430		
R ²	0.311		

Notes: Table B6 presents within-county sample descriptive statistics and estimation results for each country present in the cross-sectional sample (as presented in the Tables B2 and B3) which has enough data to estimate model (2). The first Panel reports descriptive statistics, the second panel reports the OLS estimation results if estimating model (2) on the respective country's data. Variable definitions are as given in Table A1. All variables were winsorized at their top and bottom percentiles. All reported probabilities are two-sided.

(Table B6 Continued)

Panel F1: Descriptive Statistics Estonia (N=8,990)

Variable	Mean	Std. Dev.	Minimum	25%	50%	75%	Maximum
SMOOTH	-0.854	0.536	-3.037	-1.071	-0.780	-0.484	-0.075
TA	436.241	1,224.830	3.676	29.209	90.270	287.345	9,354.400
ASSGROWTH	0.229	0.279	-0.226	0.048	0.174	0.341	1.434
EBIT	0.150	0.172	-0.168	0.034	0.112	0.226	0.765
PL	0.142	0.165	-0.132	0.026	0.101	0.216	0.745
CF	0.177	0.186	-0.168	0.050	0.143	0.270	0.795
ACC	-0.035	0.121	-0.336	-0.110	-0.039	0.035	0.311
STDCF	0.282	0.195	0.035	0.144	0.233	0.364	1.059
%LOSSES	0.243	0.226	0.000	0.000	0.200	0.400	1.000
LEVERAGE	0.475	0.230	0.000	0.295	0.478	0.655	0.997
IEXR	0.224	0.234	0.000	0.003	0.175	0.383	0.863
DIVR	0.385	0.197	0.018	0.200	0.369	0.500	0.933
#MANAGER	2.491	1.750	0.000	1.000	2.000	4.000	18.000
INDEP	0.012						
PUBLIC	0.001						
AUDIT	0.738						
CONSOL	0.000						
LIMITED	0.983						
SOLE_PROP	0.000						
NOBS	5.640	0.730	5.000	5.000	5.000	6.000	7.000

(Table B6 Continued)

Panel F2: Regression Results Estonia

Coefficient	Estimate	Std. err	Prob.
<i>Innate Determinants</i>			
SIZE	0.022	0.005	0.000
ASSGROWTH	-0.549	0.022	0.000
CF	-0.764	0.038	0.000
STDCF	1.353	0.032	0.000
%LOSSES	-0.718	0.029	0.000
<i>Owner-manager Incentives</i>			
DIVR	0.003	0.028	0.905
#MANAGER	0.020	0.004	0.000
INDEP	-0.005	0.046	0.906
<i>Creditor Incentives</i>			
LEVERAGE	0.497	0.026	0.000
IEXR	0.164	0.027	0.000
<i>Regulatory Infrastructure</i>			
QUOTED	0.253	0.211	0.230
AUDIT	-0.102	0.015	0.000
CONSOL			
SOLE_PROP			
LIMITED	-0.020	0.039	0.610
Industry fixed effects	Yes		
n	8,990		
R ²	0.256		

Notes: Table B6 presents within-county sample descriptive statistics and estimation results for each country present in the cross-sectional sample (as presented in the Tables B2 and B3) which has enough data to estimate model (2). The first Panel reports descriptive statistics, the second panel reports the OLS estimation results if estimating model (2) on the respective country's data. Variable definitions are as given in Table A1. All variables were winsorized at their top and bottom percentiles. All reported probabilities are two-sided.

(Table B6 Continued)

Panel G1: Descriptive Statistics Finland (N=27,371)

Variable	Mean	Std. Dev.	Minimum	25%	50%	75%	Maximum
SMOOTH	-0.728	0.373	-2.045	-0.945	-0.703	-0.455	-0.072
TA	2,517.860	9,552.040	20.803	152.071	359.412	1,017.170	77,274.170
ASSGROWTH	0.113	0.145	-0.152	0.019	0.088	0.175	0.694
EBIT	0.185	0.146	-0.070	0.079	0.157	0.263	0.675
PL	0.126	0.108	-0.055	0.045	0.105	0.186	0.477
CF	0.175	0.123	-0.075	0.085	0.160	0.250	0.540
ACC	-0.049	0.077	-0.261	-0.091	-0.043	-0.004	0.155
STDCF	0.166	0.097	0.022	0.091	0.146	0.222	0.461
%LOSSES	0.143	0.191	0.000	0.000	0.000	0.222	1.000
LEVERAGE	0.498	0.238	0.002	0.307	0.500	0.690	0.999
IEXR	0.408	0.268	0.007	0.185	0.381	0.600	1.000
DIVR	0.488	0.193	0.054	0.350	0.489	0.627	0.930
#MANAGER	2.845	1.287	0.000	2.000	3.000	4.000	5.000
INDEP	0.008						
PUBLIC	0.003						
AUDIT	0.341						
CONSOL	0.030						
LIMITED	0.000						
SOLE_PROP	0.000						
NOBS	7.286	1.463	5.000	6.000	7.000	9.000	9.000

(Table B6 Continued)

Panel G2: Regression Results Finland

Coefficient	Estimate	Std. err	Prob.
<i>Innate Determinants</i>			
SIZE	0.049	0.002	0.000
ASSGROWTH	-0.485	0.015	0.000
CF	-0.702	0.020	0.000
STDCF	1.756	0.023	0.000
%LOSSES	-0.647	0.013	0.000
<i>Owner-manager Incentives</i>			
DIVR	-0.142	0.011	0.000
#MANAGER	0.004	0.002	0.018
INDEP	-0.049	0.022	0.028
<i>Creditor Incentives</i>			
LEVERAGE	0.303	0.009	0.000
IEXR	0.109	0.009	0.000
<i>Regulatory Infrastructure</i>			
QUOTED	-0.075	0.038	0.047
AUDIT	-0.018	0.004	0.000
CONSOL	-0.051	0.013	0.000
SOLE_PROP LIMITED			
Industry fixed effects	Yes		
n	27,371		
R ²	0.301		

Notes: Table B6 presents within-county sample descriptive statistics and estimation results for each country present in the cross-sectional sample (as presented in the Tables B2 and B3) which has enough data to estimate model (2). The first Panel reports descriptive statistics, the second panel reports the OLS estimation results if estimating model (2) on the respective country's data. Variable definitions are as given in Table A1. All variables were winsorized at their top and bottom percentiles. All reported probabilities are two-sided.

(Table B6 Continued)

Panel H1: Descriptive Statistics France (N=287,639)

Variable	Mean	Std. Dev.	Minimum	25%	50%	75%	Maximum
SMOOTH	-0.608	0.363	-1.833	-0.828	-0.550	-0.326	-0.064
TA	2,138.400	6,611.450	46.166	219.813	456.848	1,234.670	52,938.630
ASSGROWTH	0.089	0.112	-0.127	0.015	0.069	0.140	0.514
EBIT	0.111	0.103	-0.078	0.043	0.089	0.156	0.493
PL	0.082	0.078	-0.053	0.029	0.064	0.116	0.375
CF	0.116	0.093	-0.066	0.052	0.101	0.164	0.427
ACC	-0.034	0.058	-0.203	-0.066	-0.031	0.000	0.122
STDCF	0.131	0.071	0.024	0.078	0.117	0.171	0.347
%LOSSES	0.125	0.180	0.000	0.000	0.000	0.200	1.000
LEVERAGE	0.622	0.186	0.000	0.499	0.643	0.765	1.000
IEXR	0.261	0.243	0.000	0.047	0.199	0.417	0.947
DIVR	0.428	0.223	0.011	0.244	0.400	0.589	0.987
#MANAGER	1.735	2.389	0.000	1.000	1.000	1.000	73.000
INDEP	0.028						
PUBLIC	0.001						
AUDIT	0.248						
CONSOL	0.002						
LIMITED	0.775						
SOLE_PROP	0.000						
NOBS	6.976	1.298	5.000	6.000	7.000	8.000	9.000

(Table B6 Continued)

Panel H2: Regression Results France

Coefficient	Estimate	Std. err	Prob.
<i>Innate Determinants</i>			
SIZE	0.055	0.001	0.000
ASSGROWTH	-0.533	0.005	0.000
CF	-1.065	0.007	0.000
STDCF	2.159	0.009	0.000
%LOSSES	-0.816	0.004	0.000
<i>Owner-manager Incentives</i>			
DIVR	-0.077	0.003	0.000
#MANAGER	0.000	0.000	0.088
INDEP	0.021	0.003	0.000
<i>Creditor Incentives</i>			
LEVERAGE	0.257	0.003	0.000
IEXR	0.114	0.003	0.000
<i>Regulatory Infrastructure</i>			
QUOTED	-0.119	0.021	0.000
AUDIT	-0.002	0.002	0.189
CONSOL	-0.022	0.014	0.101
SOLE_PROP			
LIMITED	0.013	0.001	0.000
Industry fixed effects	Yes		
n	287,639		
R ²	0.371		

Notes: Table B6 presents within-county sample descriptive statistics and estimation results for each country present in the cross-sectional sample (as presented in the Tables B2 and B3) which has enough data to estimate model (2). The first Panel reports descriptive statistics, the second panel reports the OLS estimation results if estimating model (2) on the respective country's data. Variable definitions are as given in Table A1. All variables were winsorized at their top and bottom percentiles. All reported probabilities are two-sided.

(Table B6 Continued)

Panel I1: Descriptive Statistics Germany (N=1,471)

Variable	Mean	Std. Dev.	Minimum	25%	50%	75%	Maximum
SMOOTH	-0.529	0.414	-1.997	-0.780	-0.431	-0.194	-0.014
TA	421,847.230	1,705,479.010	213.537	6,291.410	40,120.280	141,758.490	13,840,725.200
ASSGROWTH	0.059	0.113	-0.147	-0.009	0.036	0.098	0.567
EBIT	0.075	0.089	-0.198	0.024	0.062	0.111	0.411
PL	0.039	0.064	-0.124	0.006	0.027	0.063	0.319
CF	0.088	0.081	-0.141	0.045	0.083	0.125	0.380
ACC	-0.049	0.058	-0.210	-0.080	-0.052	-0.023	0.153
STDCF	0.104	0.079	0.008	0.047	0.081	0.142	0.393
%LOSSES	0.167	0.242	0.000	0.000	0.000	0.250	1.000
LEVERAGE	0.626	0.208	0.008	0.482	0.651	0.790	0.999
IEXR	0.435	0.298	0.002	0.174	0.396	0.670	1.000
DIVR	0.448	0.210	0.143	0.278	0.405	0.600	1.000
#MANAGER	3.568	4.042	0.000	1.000	2.000	4.000	29.000
INDEP	0.078						
PUBLIC	0.161						
AUDIT	0.000						
CONSOL	0.257						
LIMITED	0.957						
SOLE_PROP	0.004						
NOBS	5.730	0.986	5.000	5.000	5.000	6.000	9.000

(Table B6 Continued)

Panel I2: Regression Results Germany

Coefficient	Estimate	Std. err	Prob.
<i>Innate Determinants</i>			
SIZE	0.008	0.006	0.182
ASSGROWTH	-0.412	0.092	0.000
CF	-0.695	0.135	0.000
STD CF	1.967	0.141	0.000
%LOSSES	-0.748	0.054	0.000
<i>Owner-manager Incentives</i>			
DIVR	-0.143	0.047	0.002
#MANAGER	-0.001	0.003	0.864
INDEP	0.002	0.036	0.948
<i>Creditor Incentives</i>			
LEVERAGE	0.173	0.054	0.001
IEXR	0.187	0.046	0.000
<i>Regulatory Infrastructure</i>			
QUOTED	-0.117	0.037	0.001
AUDIT			
CONSOL	0.008	0.032	0.796
SOLE_PROP	-0.001	0.152	0.994
LIMITED	-0.068	0.050	0.181
Industry fixed effects	Yes		
n	1,471		
R ²	0.345		

Notes: Table B6 presents within-county sample descriptive statistics and estimation results for each country present in the cross-sectional sample (as presented in the Tables B2 and B3) which has enough data to estimate model (2). The first Panel reports descriptive statistics, the second panel reports the OLS estimation results if estimating model (2) on the respective country's data. Variable definitions are as given in Table A1. All variables were winsorized at their top and bottom percentiles. All reported probabilities are two-sided.

(Table B6 Continued)

Panel J1: Descriptive Statistics Greece (N=13,228)

Variable	Mean	Std. Dev.	Minimum	25%	50%	75%	Maximum
SMOOTH	-0.465	0.324	-1.601	-0.634	-0.389	-0.219	-0.040
TA	6,972.850	16,046.530	174.225	1,004.210	2,260.020	5,444.230	118,272.730
ASSGROWTH	0.139	0.135	-0.102	0.049	0.114	0.200	0.676
EBIT	0.097	0.095	-0.083	0.036	0.078	0.135	0.459
PL	0.048	0.068	-0.091	0.007	0.033	0.075	0.310
CF	0.053	0.094	-0.163	-0.005	0.045	0.104	0.356
ACC	-0.006	0.073	-0.200	-0.052	-0.008	0.039	0.196
STDCF	0.154	0.085	0.029	0.089	0.136	0.204	0.408
%LOSSES	0.228	0.252	0.000	0.000	0.143	0.375	1.000
LEVERAGE	0.599	0.232	0.001	0.433	0.632	0.790	1.000
IEXR	0.498	0.294	0.006	0.250	0.491	0.731	1.000
DIVR	0.494	0.186	0.125	0.356	0.486	0.621	1.000
#MANAGER	7.571	3.654	1.000	5.000	7.000	9.000	78.000
INDEP	0.061						
PUBLIC	0.014						
AUDIT	0.338						
CONSOL	0.000						
LIMITED	0.996						
SOLE_PROP	0.000						
NOBS	7.632	1.478	5.000	6.000	8.000	9.000	9.000

(Table B6 Continued)

Panel J2: Regression Results Greece

Coefficient	Estimate	Std. err	Prob.
<i>Innate Determinants</i>			
SIZE	0.037	0.003	0.000
ASSGROWTH	-0.236	0.020	0.000
CF	-0.903	0.032	0.000
STDCF	1.457	0.033	0.000
%LOSSES	-0.408	0.012	0.000
<i>Owner-manager Incentives</i>			
DIVR	-0.132	0.015	0.000
#MANAGER	-0.002	0.001	0.001
INDEP	0.029	0.011	0.006
<i>Creditor Incentives</i>			
LEVERAGE	0.100	0.013	0.000
IEXR	0.083	0.010	0.000
<i>Regulatory Infrastructure</i>			
QUOTED	-0.119	0.022	0.000
AUDIT	-0.077	0.007	0.000
CONSOL			
SOLE_PROP	0.116	0.280	0.680
LIMITED	0.091	0.038	0.017
Industry fixed effects	Yes		
n	13,228		
R ²	0.274		

Notes: Table B6 presents within-county sample descriptive statistics and estimation results for each country present in the cross-sectional sample (as presented in the Tables B2 and B3) which has enough data to estimate model (2). The first Panel reports descriptive statistics, the second panel reports the OLS estimation results if estimating model (2) on the respective country's data. Variable definitions are as given in Table A1. All variables were winsorized at their top and bottom percentiles. All reported probabilities are two-sided.

(Table B6 Continued)

Panel K1: Descriptive Statistics Hungary (N=10,918)

Variable	Mean	Std. Dev.	Minimum	25%	50%	75%	Maximum
SMOOTH	-0.634	0.376	-1.991	-0.872	-0.610	-0.340	-0.044
TA	1,721.560	4,325.400	17.088	139.981	420.534	1,315.260	32,142.360
ASSGROWTH	0.318	0.343	-0.151	0.106	0.240	0.419	1.981
EBIT	0.138	0.153	-0.154	0.043	0.105	0.196	0.738
PL	0.107	0.127	-0.125	0.026	0.076	0.155	0.605
CF	0.162	0.170	-0.202	0.053	0.136	0.247	0.744
ACC	-0.055	0.103	-0.306	-0.117	-0.059	-0.002	0.261
STDCF	0.235	0.161	0.032	0.123	0.194	0.302	0.888
%LOSSES	0.152	0.205	0.000	0.000	0.000	0.200	1.000
LEVERAGE	0.552	0.191	0.006	0.411	0.560	0.700	0.998
IEXR	0.497	0.258	0.016	0.294	0.499	0.683	1.000
DIVR	0.352	0.176	0.042	0.200	0.333	0.458	0.833
#MANAGER	2.991	2.971	0.000	1.000	2.000	4.000	59.000
INDEP	0.028						
PUBLIC	0.000						
AUDIT	0.000						
CONSOL	0.000						
LIMITED	0.907						
SOLE_PROP	0.002						
NOBS	5.933	1.077	5.000	5.000	6.000	6.000	9.000

(Table B6 Continued)

Panel K2: Regression Results Hungary

Coefficient	Estimate	Std. err	Prob.
<i>Innate Determinants</i>			
SIZE	0.015	0.003	0.000
ASSGROWTH	-0.284	0.010	0.000
CF	-0.816	0.024	0.000
STDCF	0.849	0.023	0.000
%LOSSES	-0.652	0.018	0.000
<i>Owner-manager Incentives</i>			
DIVR	-0.130	0.019	0.000
#MANAGER	0.004	0.001	0.001
INDEP	0.009	0.018	0.641
<i>Creditor Incentives</i>			
LEVERAGE	0.257	0.018	0.000
IEXR	0.131	0.015	0.000
<i>Regulatory Infrastructure</i>			
QUOTED	-0.127	0.314	0.685
AUDIT			
CONSOL			
SOLE_PROP	0.073	0.073	0.317
LIMITED	0.005	0.011	0.647
Industry fixed effects	Yes		
n	10,918		
R ²	0.308		

Notes: Table B6 presents within-county sample descriptive statistics and estimation results for each country present in the cross-sectional sample (as presented in the Tables B2 and B3) which has enough data to estimate model (2). The first Panel reports descriptive statistics, the second panel reports the OLS estimation results if estimating model (2) on the respective country's data. Variable definitions are as given in Table A1. All variables were winsorized at their top and bottom percentiles. All reported probabilities are two-sided.

(Table B6 Continued)

Panel L1: Descriptive Statistics Iceland (N=2,005)

Variable	Mean	Std. Dev.	Minimum	25%	50%	75%	Maximum
SMOOTH	-0.780	0.411	-2.434	-0.996	-0.732	-0.487	-0.121
TA	2,860.830	10,749.000	14.603	143.938	394.614	1,178.480	86,856.830
ASSGROWTH	0.234	0.330	-0.174	0.043	0.150	0.302	1.976
EBIT	0.195	0.213	-0.119	0.054	0.131	0.274	1.037
PL	0.137	0.183	-0.162	0.019	0.089	0.205	0.844
CF	0.169	0.198	-0.204	0.039	0.126	0.255	0.894
ACC	-0.033	0.105	-0.347	-0.088	-0.035	0.018	0.297
STDCF	0.303	0.230	0.041	0.143	0.235	0.386	1.254
%LOSSES	0.294	0.238	0.000	0.143	0.250	0.429	1.000
LEVERAGE	0.564	0.220	0.000	0.415	0.587	0.738	0.978
IEXR	0.494	0.255	0.007	0.301	0.490	0.695	1.000
DIVR	0.540	0.191	0.143	0.400	0.540	0.676	0.954
#MANAGER	3.027	1.149	0.000	2.000	3.000	4.000	5.000
INDEP	0.044						
PUBLIC	0.002						
AUDIT	0.000						
CONSOL	0.019						
LIMITED	0.995						
SOLE_PROP	0.000						
NOBS	6.335	1.087	5.000	5.000	6.000	7.000	9.000

(Table B6 Continued)

Panel L2: Regression Results Iceland

Coefficient	Estimate	Std. err	Prob.
<i>Innate Determinants</i>			
SIZE	0.032	0.007	0.000
ASSGROWTH	-0.386	0.030	0.000
CF	-0.621	0.059	0.000
STDCF	0.921	0.046	0.000
%LOSSES	-0.408	0.050	0.000
<i>Owner-manager Incentives</i>			
DIVR	-0.078	0.047	0.095
#MANAGER	-0.008	0.008	0.336
INDEP	0.075	0.041	0.071
<i>Creditor Incentives</i>			
LEVERAGE	0.181	0.045	0.000
IEXR	0.134	0.053	0.011
<i>Regulatory Infrastructure</i>			
QUOTED	0.201	0.192	0.295
AUDIT			
CONSOL	-0.012	0.065	0.854
SOLE_PROP			
LIMITED	0.080	0.127	0.532
Industry fixed effects	Yes		
n	2,005		
R ²	0.248		

Notes: Table B6 presents within-county sample descriptive statistics and estimation results for each country present in the cross-sectional sample (as presented in the Tables B2 and B3) which has enough data to estimate model (2). The first Panel reports descriptive statistics, the second panel reports the OLS estimation results if estimating model (2) on the respective country's data. Variable definitions are as given in Table A1. All variables were winsorized at their top and bottom percentiles. All reported probabilities are two-sided.

(Table B6 Continued)

Panel M1: Descriptive Statistics Italy (N=116,420)

Variable	Mean	Std. Dev.	Minimum	25%	50%	75%	Maximum
SMOOTH	-0.281	0.270	-1.275	-0.397	-0.191	-0.080	-0.004
TA	7,820.760	17,809.710	307.764	1,328.810	2,759.960	6,220.140	134,224.240
ASSGROWTH	0.101	0.132	-0.154	0.020	0.078	0.153	0.658
EBIT	0.068	0.063	-0.067	0.030	0.056	0.091	0.310
PL	0.021	0.040	-0.067	0.000	0.010	0.034	0.174
CF	0.033	0.079	-0.191	-0.013	0.031	0.078	0.252
ACC	-0.012	0.068	-0.187	-0.052	-0.016	0.024	0.202
STDCF	0.170	0.107	0.022	0.088	0.143	0.227	0.510
%LOSSES	0.228	0.255	0.000	0.000	0.167	0.400	1.000
LEVERAGE	0.773	0.177	0.010	0.676	0.821	0.911	1.000
IEXR	0.460	0.288	0.000	0.210	0.461	0.695	1.000
DIVR	0.257	0.141	0.000	0.167	0.208	0.333	0.714
#MANAGER	2.189	2.829	0.000	0.000	1.000	4.000	10.000
INDEP	0.021						
PUBLIC	0.001						
AUDIT	0.000						
CONSOL	0.010						
LIMITED	0.191						
SOLE_PROP	0.000						
NOBS	6.879	1.506	5.000	5.000	7.000	8.000	9.000

(Table B6 Continued)

Panel M2: Regression Results Italy

Coefficient	Estimate	Std. err	Prob.
<i>Innate Determinants</i>			
SIZE	0.003	0.001	0.001
ASSGROWTH	-0.205	0.005	0.000
CF	-0.412	0.010	0.000
STDCF	0.979	0.006	0.000
%LOSSES	-0.290	0.003	0.000
<i>Owner-manager Incentives</i>			
DIVR	-0.173	0.005	0.000
#MANAGER	0.001	0.000	0.002
INDEP	0.004	0.005	0.344
<i>Creditor Incentives</i>			
LEVERAGE	0.365	0.004	0.000
IEXR	0.107	0.003	0.000
<i>Regulatory Infrastructure</i>			
QUOTED	-0.044	0.024	0.072
AUDIT			
CONSOL	-0.015	0.007	0.026
SOLE_PROP			
LIMITED	0.003	0.002	0.138
Industry fixed effects	Yes		
n	116,420		
R ²	0.363		

Notes: Table B6 presents within-county sample descriptive statistics and estimation results for each country present in the cross-sectional sample (as presented in the Tables B2 and B3) which has enough data to estimate model (2). The first Panel reports descriptive statistics, the second panel reports the OLS estimation results if estimating model (2) on the respective country's data. Variable definitions are as given in Table A1. All variables were winsorized at their top and bottom percentiles. All reported probabilities are two-sided.

(Table B6 Continued)

Panel N1: Descriptive Statistics Luxembourg (N=120)

Variable	Mean	Std. Dev.	Minimum	25%	50%	75%	Maximum
SMOOTH	-0.356	0.274	-1.166	-0.504	-0.297	-0.133	-0.012
TA	173,672.250	696,796.030	1,260.350	9,445.260	20,969.700	52,344.870	4,686,401.040
ASSGROWTH	0.110	0.137	-0.058	0.035	0.080	0.147	0.847
EBIT	0.079	0.069	-0.033	0.026	0.065	0.112	0.292
PL	0.063	0.056	-0.014	0.016	0.049	0.100	0.209
CF	0.064	0.104	-0.210	0.006	0.057	0.124	0.340
ACC	-0.002	0.090	-0.210	-0.060	-0.009	0.048	0.273
STDCF	0.182	0.102	0.039	0.107	0.161	0.238	0.513
%LOSSES	0.103	0.169	0.000	0.000	0.000	0.200	0.667
LEVERAGE	0.627	0.202	0.069	0.487	0.635	0.785	0.978
IEXR	0.417	0.315	0.008	0.126	0.379	0.685	1.000
DIVR	0.463	0.207	0.143	0.286	0.437	0.617	1.000
#MANAGER	5.292	3.291	2.000	3.000	4.000	6.000	18.000
INDEP	0.058						
PUBLIC	0.033						
AUDIT	0.000						
CONSOL	0.067						
LIMITED	0.992						
SOLE_PROP	0.000						
NOBS	6.975	1.580	5.000	5.000	7.000	9.000	9.000

(Table B6 Continued)

Panel N2: Regression Results Luxembourg

Coefficient	Estimate	Std. err	Prob.
<i>Innate Determinants</i>			
SIZE	-0.013	0.019	0.496
ASSGROWTH	-0.513	0.173	0.004
CF	-0.790	0.299	0.010
STDCF	0.968	0.250	0.000
%LOSSES	-0.407	0.197	0.042
<i>Owner-manager Incentives</i>			
DIVR	-0.196	0.118	0.100
#MANAGER	-0.018	0.014	0.217
INDEP	0.114	0.122	0.352
<i>Creditor Incentives</i>			
LEVERAGE	0.018	0.143	0.899
IEXR	-0.066	0.104	0.528
<i>Regulatory Infrastructure</i>			
QUOTED	0.368	0.189	0.055
AUDIT			
CONSOL	0.147	0.109	0.183
SOLE_PROP			
LIMITED			
Industry fixed effects	Yes		
n	120		
R ²	0.622		

Notes: Table B6 presents within-county sample descriptive statistics and estimation results for each country present in the cross-sectional sample (as presented in the Tables B2 and B3) which has enough data to estimate model (2). The first Panel reports descriptive statistics, the second panel reports the OLS estimation results if estimating model (2) on the respective country's data. Variable definitions are as given in Table A1. All variables were winsorized at their top and bottom percentiles. All reported probabilities are two-sided.

(Table B6 Continued)

Panel O1: Descriptive Statistics The Netherlands (N=3,195)

Variable	Mean	Std. Dev.	Minimum	25%	50%	75%	Maximum
SMOOTH	-0.495	0.337	-1.661	-0.686	-0.415	-0.236	-0.047
TA	192,315.140	643,957.330	1,674.740	10,880.430	27,126.350	77,799.540	4,784,099.850
ASSGROWTH	0.084	0.104	-0.121	0.019	0.069	0.130	0.492
EBIT	0.107	0.095	-0.077	0.046	0.087	0.143	0.457
PL	0.069	0.069	-0.068	0.024	0.055	0.098	0.315
CF	0.085	0.093	-0.164	0.031	0.082	0.138	0.362
ACC	-0.015	0.076	-0.192	-0.063	-0.024	0.024	0.227
STDCF	0.143	0.093	0.023	0.074	0.118	0.188	0.458
%LOSSES	0.147	0.207	0.000	0.000	0.000	0.222	1.000
LEVERAGE	0.648	0.177	0.030	0.545	0.668	0.774	1.000
IEXR	0.401	0.288	0.004	0.158	0.357	0.602	1.000
DIVR	0.412	0.192	0.094	0.250	0.400	0.554	0.878
#MANAGER	2.552	8.123	0.000	0.000	2.000	4.000	437.000
INDEP	0.042						
PUBLIC	0.034						
AUDIT	0.985						
CONSOL	0.524						
LIMITED	0.984						
SOLE_PROP	0.000						
NOBS	6.886	1.580	5.000	5.000	7.000	9.000	9.000

(Table B6 Continued)

Panel O2: Regression Results The Netherlands

Coefficient	Estimate	Std. err	Prob.
<i>Innate Determinants</i>			
SIZE	0.001	0.004	0.768
ASSGROWTH	-0.365	0.053	0.000
CF	-0.797	0.066	0.000
STDCF	1.520	0.061	0.000
%LOSSES	-0.511	0.031	0.000
<i>Owner-manager Incentives</i>			
DIVR	-0.153	0.028	0.000
#MANAGER	-0.001	0.001	0.181
INDEP	-0.012	0.027	0.662
<i>Creditor Incentives</i>			
LEVERAGE	0.222	0.030	0.000
IEXR	0.033	0.022	0.126
<i>Regulatory Infrastructure</i>			
QUOTED	-0.106	0.031	0.001
AUDIT	0.023	0.041	0.571
CONSOL	0.013	0.012	0.267
SOLE_PROP			
LIMITED	0.038	0.039	0.330
Industry fixed effects	Yes		
n	3,195		
R ²	0.375		

Notes: Table B6 presents within-county sample descriptive statistics and estimation results for each country present in the cross-sectional sample (as presented in the Tables B2 and B3) which has enough data to estimate model (2). The first Panel reports descriptive statistics, the second panel reports the OLS estimation results if estimating model (2) on the respective country's data. Variable definitions are as given in Table A1. All variables were winsorized at their top and bottom percentiles. All reported probabilities are two-sided.

(Table B6 Continued)

Panel P1: Descriptive Statistics Norway (N=45,929)

Variable	Mean	Std. Dev.	Minimum	25%	50%	75%	Maximum
SMOOTH	-0.699	0.391	-2.164	-0.905	-0.636	-0.415	-0.102
TA	2,410.290	8,680.390	31.747	183.520	427.994	1,129.380	71,905.410
ASSGROWTH	0.127	0.173	-0.174	0.022	0.092	0.189	0.888
EBIT	0.160	0.146	-0.151	0.062	0.131	0.232	0.644
PL	0.107	0.108	-0.132	0.033	0.088	0.163	0.451
CF	0.121	0.121	-0.194	0.044	0.112	0.193	0.452
ACC	-0.015	0.081	-0.207	-0.063	-0.019	0.026	0.244
STDCF	0.193	0.109	0.032	0.112	0.169	0.251	0.557
%LOSSES	0.206	0.224	0.000	0.000	0.143	0.333	1.000
LEVERAGE	0.713	0.156	0.006	0.636	0.747	0.828	1.000
IEXR	0.350	0.264	0.001	0.123	0.315	0.543	1.000
DIVR	0.451	0.194	0.002	0.307	0.452	0.598	0.857
#MANAGER	4.606	3.029	0.000	2.000	4.000	7.000	19.000
INDEP	0.042						
PUBLIC	0.002						
AUDIT	1.000						
CONSOL	0.016						
LIMITED	0.998						
SOLE_PROP	0.000						
NOBS	7.521	1.491	5.000	6.000	8.000	9.000	9.000

(Table B6 Continued)

Panel P2: Regression Results Norway

Coefficient	Estimate	Std. err	Prob.
<i>Innate Determinants</i>			
SIZE	0.048	0.002	0.000
ASSGROWTH	-0.585	0.010	0.000
CF	-0.877	0.017	0.000
STDCF	1.573	0.016	0.000
%LOSSES	-0.564	0.011	0.000
<i>Owner-manager Incentives</i>			
DIVR	-0.135	0.010	0.000
#MANAGER	0.002	0.001	0.016
INDEP	0.026	0.008	0.001
<i>Creditor Incentives</i>			
LEVERAGE	0.258	0.011	0.000
IEXR	0.078	0.010	0.000
<i>Regulatory Infrastructure</i>			
QUOTED	-0.004	0.061	0.952
AUDIT	-0.061	0.328	0.854
CONSOL	-0.067	0.014	0.000
SOLE_PROP			
LIMITED	0.091	0.053	0.086
Industry fixed effects	Yes		
n	45,929		
R ²	0.295		

Notes: Table B6 presents within-county sample descriptive statistics and estimation results for each country present in the cross-sectional sample (as presented in the Tables B2 and B3) which has enough data to estimate model (2). The first Panel reports descriptive statistics, the second panel reports the OLS estimation results if estimating model (2) on the respective country's data. Variable definitions are as given in Table A1. All variables were winsorized at their top and bottom percentiles. All reported probabilities are two-sided.

(Table B6 Continued)

Panel Q1: Descriptive Statistics Poland (N=3,719)

Variable	Mean	Std. Dev.	Minimum	25%	50%	75%	Maximum
SMOOTH	-0.711	0.501	-2.775	-0.951	-0.616	-0.347	-0.058
TA	12,866.180	25,734.300	151.469	2,245.420	4,945.410	11,205.750	178,020.560
ASSGROWTH	0.135	0.158	-0.151	0.032	0.107	0.202	0.791
EBIT	0.100	0.108	-0.106	0.024	0.082	0.151	0.487
PL	0.066	0.089	-0.111	0.008	0.047	0.104	0.381
CF	0.099	0.096	-0.109	0.038	0.084	0.148	0.422
ACC	-0.033	0.066	-0.191	-0.072	-0.040	-0.001	0.163
STDCF	0.120	0.080	0.012	0.060	0.100	0.160	0.382
%LOSSES	0.182	0.249	0.000	0.000	0.000	0.333	1.000
LEVERAGE	0.512	0.226	0.017	0.336	0.526	0.694	0.982
IEXR	0.422	0.280	0.007	0.193	0.391	0.626	1.000
DIVR	0.399	0.222	0.000	0.208	0.355	0.537	0.996
#MANAGER	1.026	0.172	0.000	1.000	1.000	1.000	2.000
INDEP	0.038						
PUBLIC	0.001						
AUDIT	0.828						
CONSOL	0.010						
LIMITED	0.817						
SOLE_PROP	0.000						
NOBS	5.913	1.076	5.000	5.000	6.000	7.000	9.000

(Table B6 Continued)

Panel Q2: Regression Results Poland

Coefficient	Estimate	Std. err	Prob.
<i>Innate Determinants</i>			
SIZE	0.044	0.007	0.000
ASSGROWTH	-0.392	0.051	0.000
CF	-1.129	0.093	0.000
STDCF	2.751	0.102	0.000
%LOSSES	-0.858	0.042	0.000
<i>Owner-manager Incentives</i>			
DIVR	-0.089	0.038	0.020
#MANAGER	-0.009	0.041	0.830
INDEP	-0.001	0.037	0.979
<i>Creditor Incentives</i>			
LEVERAGE	0.042	0.038	0.260
IEXR	0.300	0.038	0.000
<i>Regulatory Infrastructure</i>			
QUOTED	-0.360	0.192	0.061
AUDIT	-0.037	0.023	0.117
CONSOL	0.056	0.073	0.443
SOLE_PROP			
LIMITED	-0.004	0.023	0.858
Industry fixed effects	Yes		
n	3,719		
R ²	0.297		

Notes: Table B6 presents within-county sample descriptive statistics and estimation results for each country present in the cross-sectional sample (as presented in the Tables B2 and B3) which has enough data to estimate model (2). The first Panel reports descriptive statistics, the second panel reports the OLS estimation results if estimating model (2) on the respective country's data. Variable definitions are as given in Table A1. All variables were winsorized at their top and bottom percentiles. All reported probabilities are two-sided.

(Table B6 Continued)

Panel R1: Descriptive Statistics Portugal (N=14,271)

Variable	Mean	Std. Dev.	Minimum	25%	50%	75%	Maximum
SMOOTH	-0.309	0.302	-1.475	-0.426	-0.209	-0.090	-0.011
TA	6,561.140	17,346.380	32.717	430.883	1,540.150	4,564.290	127,643.130
ASSGROWTH	0.132	0.162	-0.134	0.029	0.097	0.191	0.834
EBIT	0.055	0.064	-0.090	0.017	0.045	0.082	0.286
PL	0.030	0.047	-0.078	0.004	0.020	0.048	0.208
CF	0.042	0.101	-0.271	-0.011	0.045	0.101	0.310
ACC	-0.013	0.092	-0.226	-0.069	-0.021	0.033	0.293
STDCF	0.197	0.128	0.029	0.103	0.165	0.258	0.657
%LOSSES	0.172	0.226	0.000	0.000	0.000	0.286	1.000
LEVERAGE	0.654	0.189	0.001	0.546	0.691	0.794	0.998
IEXR	0.584	0.279	0.021	0.366	0.613	0.819	1.000
DIVR	0.303	0.165	0.000	0.200	0.262	0.400	0.801
#MANAGER	4.534	3.967	0.000	2.000	3.000	7.000	40.000
INDEP	0.076						
PUBLIC	0.002						
AUDIT	0.190						
CONSOL	0.004						
LIMITED	0.973						
SOLE_PROP	0.000						
NOBS	6.398	1.376	5.000	5.000	6.000	7.000	9.000

(Table B6 Continued)

Panel R2: Regression Results Portugal

Coefficient	Estimate	Std. err	Prob.
<i>Innate Determinants</i>			
SIZE	0.023	0.002	0.000
ASSGROWTH	-0.305	0.014	0.000
CF	-0.266	0.025	0.000
STDCF	0.922	0.019	0.000
%LOSSES	-0.515	0.011	0.000
<i>Owner-manager Incentives</i>			
DIVR	-0.126	0.013	0.000
#MANAGER	-0.001	0.001	0.238
INDEP	0.008	0.008	0.290
<i>Creditor Incentives</i>			
LEVERAGE	0.241	0.012	0.000
IEXR	0.211	0.009	0.000
<i>Regulatory Infrastructure</i>			
QUOTED	0.026	0.056	0.639
AUDIT	-0.033	0.006	0.000
CONSOL	-0.168	0.036	0.000
SOLE_PROP			
LIMITED	0.007	0.012	0.586
Industry fixed effects	Yes		
n	14,271		
R ²	0.388		

Notes: Table B6 presents within-county sample descriptive statistics and estimation results for each country present in the cross-sectional sample (as presented in the Tables B2 and B3) which has enough data to estimate model (2). The first Panel reports descriptive statistics, the second panel reports the OLS estimation results if estimating model (2) on the respective country's data. Variable definitions are as given in Table A1. All variables were winsorized at their top and bottom percentiles. All reported probabilities are two-sided.

(Table B6 Continued)

Panel S1: Descriptive Statistics Romania (N=74,559)

Variable	Mean	Std. Dev.	Minimum	25%	50%	75%	Maximum
SMOOTH	-0.757	0.620	-3.541	-1.009	-0.632	-0.309	-0.037
TA	206.514	525.105	0.762	13.332	42.876	136.805	3,662.290
ASSGROWTH	0.789	0.736	-0.058	0.368	0.592	0.943	4.640
EBIT	0.424	0.425	-0.168	0.142	0.296	0.570	2.109
PL	0.348	0.386	-0.137	0.089	0.221	0.469	1.899
CF	0.141	0.430	-1.135	-0.089	0.086	0.329	1.529
ACC	0.206	0.334	-0.286	0.003	0.130	0.308	1.741
STDCF	0.611	0.478	0.093	0.310	0.475	0.731	2.798
%LOSSES	0.135	0.180	0.000	0.000	0.000	0.200	1.000
LEVERAGE	0.662	0.208	0.000	0.525	0.692	0.827	1.000
IEXR	0.186	0.216	0.000	0.002	0.111	0.302	0.859
DIVR	0.465	0.198	0.034	0.316	0.456	0.610	0.889
#MANAGER	1.401	0.718	1.000	1.000	1.000	2.000	5.000
INDEP	0.014						
PUBLIC	0.000						
AUDIT	0.047						
CONSOL	0.000						
LIMITED	0.982						
SOLE_PROP	0.000						
NOBS	6.886	1.475	5.000	6.000	7.000	8.000	9.000

(Table B6 Continued)

Panel S2: Regression Results Romania

Coefficient	Estimate	Std. err	Prob.
<i>Innate Determinants</i>			
SIZE	0.040	0.001	0.000
ASSGROWTH	-0.345	0.003	0.000
CF	-0.453	0.005	0.000
STDCF	0.483	0.005	0.000
%LOSSES	-0.368	0.012	0.000
<i>Owner-manager Incentives</i>			
DIVR	-0.213	0.010	0.000
#MANAGER	0.013	0.003	0.000
INDEP	-0.025	0.016	0.111
<i>Creditor Incentives</i>			
LEVERAGE	0.436	0.010	0.000
IEXR	0.311	0.010	0.000
<i>Regulatory Infrastructure</i>			
QUOTED	0.244	0.121	0.043
AUDIT	0.094	0.010	0.000
CONSOL			
SOLE_PROP			
LIMITED	0.018	0.014	0.212
Industry fixed effects	Yes		
n	74,559		
R ²	0.343		

Notes: Table B6 presents within-county sample descriptive statistics and estimation results for each country present in the cross-sectional sample (as presented in the Tables B2 and B3) which has enough data to estimate model (2). The first Panel reports descriptive statistics, the second panel reports the OLS estimation results if estimating model (2) on the respective country's data. Variable definitions are as given in Table A1. All variables were winsorized at their top and bottom percentiles. All reported probabilities are two-sided.

(Table B6 Continued)

Panel T1: Descriptive Statistics Serbia (N=11,111)

Variable	Mean	Std. Dev.	Minimum	25%	50%	75%	Maximum
SMOOTH	-0.883	0.288	-2.037	-1.005	-0.908	-0.736	-0.185
TA	2,478.980	7,433.510	8.731	65.733	213.254	1,115.640	47,752.520
ASSGROWTH	0.495	0.377	-0.065	0.258	0.408	0.625	2.341
EBIT	0.075	0.177	-0.370	-0.031	0.049	0.162	0.702
PL	0.343	0.310	-0.048	0.114	0.255	0.482	1.413
CF	0.312	0.307	-0.159	0.094	0.234	0.446	1.376
ACC	0.031	0.126	-0.289	-0.043	0.015	0.100	0.422
STDCF	0.674	0.581	0.063	0.267	0.483	0.877	2.745
%LOSSES	0.169	0.168	0.000	0.000	0.143	0.286	1.000
LEVERAGE	0.539	0.245	0.002	0.343	0.552	0.740	1.000
IEXR	0.383	0.304	0.000	0.129	0.334	0.622	1.000
DIVR	0.604	0.178	0.200	0.470	0.600	0.714	1.000
#MANAGER	1.038	0.461	0.000	1.000	1.000	1.000	5.000
INDEP	0.064						
PUBLIC	0.019						
AUDIT	0.000						
CONSOL	0.000						
LIMITED	0.517						
SOLE_PROP	0.001						
NOBS	6.519	0.947	5.000	6.000	7.000	7.000	9.000

(Table B6 Continued)

Panel T2: Regression Results Serbia

Coefficient	Estimate	Std. err	Prob.
<i>Innate Determinants</i>			
SIZE	0.001	0.002	0.604
ASSGROWTH	0.017	0.008	0.024
CF	-0.456	0.018	0.000
STDCF	0.163	0.009	0.000
%LOSSES	-0.151	0.019	0.000
<i>Owner-manager Incentives</i>			
DIVR	0.075	0.016	0.000
#MANAGER	0.003	0.006	0.686
INDEP	-0.004	0.012	0.715
<i>Creditor Incentives</i>			
LEVERAGE	0.099	0.012	0.000
IEXR	0.055	0.012	0.000
<i>Regulatory Infrastructure</i>			
QUOTED	-0.055	0.021	0.010
AUDIT			
CONSOL			
SOLE_PROP	0.052	0.106	0.622
LIMITED	-0.012	0.006	0.060
Industry fixed effects	Yes		
n	11,111		
R ²	0.083		

Notes: Table B6 presents within-county sample descriptive statistics and estimation results for each country present in the cross-sectional sample (as presented in the Tables B2 and B3) which has enough data to estimate model (2). The first Panel reports descriptive statistics, the second panel reports the OLS estimation results if estimating model (2) on the respective country's data. Variable definitions are as given in Table A1. All variables were winsorized at their top and bottom percentiles. All reported probabilities are two-sided.

(Table B6 Continued)

Panel U1: Descriptive Statistics Slovakia (N=1,112)

Variable	Mean	Std. Dev.	Minimum	25%	50%	75%	Maximum
SMOOTH	-0.579	0.407	-2.059	-0.798	-0.492	-0.277	-0.033
TA	10,346.340	22,394.680	166.328	1,574.840	3,524.310	8,345.060	156,843.050
ASSGROWTH	0.113	0.189	-0.155	-0.004	0.063	0.179	0.989
EBIT	0.076	0.096	-0.082	0.013	0.050	0.121	0.436
PL	0.044	0.077	-0.104	-0.001	0.023	0.077	0.337
CF	0.086	0.083	-0.089	0.036	0.072	0.122	0.383
ACC	-0.041	0.060	-0.204	-0.075	-0.048	-0.014	0.153
STDCF	0.126	0.086	0.018	0.061	0.103	0.173	0.439
%LOSSES	0.225	0.256	0.000	0.000	0.167	0.400	1.000
LEVERAGE	0.484	0.228	0.014	0.294	0.494	0.665	0.979
IEXR	0.469	0.282	0.009	0.242	0.462	0.697	1.000
DIVR	0.415	0.173	0.126	0.276	0.400	0.534	0.853
#MANAGER	4.009	2.807	0.000	2.000	3.000	5.000	23.000
INDEP	0.002						
PUBLIC	0.054						
AUDIT	0.142						
CONSOL	0.000						
LIMITED	0.849						
SOLE_PROP	0.000						
NOBS	6.556	1.503	5.000	5.000	6.000	8.000	9.000

(Table B6 Continued)

Panel U2: Regression Results Slovakia

Coefficient	Estimate	Std. err	Prob.
<i>Innate Determinants</i>			
SIZE	0.037	0.010	0.000
ASSGROWTH	-0.264	0.065	0.000
CF	-0.848	0.155	0.000
STDCF	1.918	0.154	0.000
%LOSSES	-0.689	0.067	0.000
<i>Owner-manager Incentives</i>			
DIVR	-0.070	0.064	0.274
#MANAGER	0.001	0.005	0.785
INDEP	-0.455	0.253	0.072
<i>Creditor Incentives</i>			
LEVERAGE	0.206	0.055	0.000
IEXR	0.207	0.065	0.002
<i>Regulatory Infrastructure</i>			
QUOTED	-0.027	0.051	0.594
AUDIT	0.008	0.030	0.792
CONSOL			
SOLE_PROP			
LIMITED	-0.044	0.050	0.374
Industry fixed effects	Yes		
n	1,112		
R ²	0.336		

Notes: Table B6 presents within-county sample descriptive statistics and estimation results for each country present in the cross-sectional sample (as presented in the Tables B2 and B3) which has enough data to estimate model (2). The first Panel reports descriptive statistics, the second panel reports the OLS estimation results if estimating model (2) on the respective country's data. Variable definitions are as given in Table A1. All variables were winsorized at their top and bottom percentiles. All reported probabilities are two-sided.

(Table B6 Continued)

Panel V1: Descriptive Statistics Spain (N=178,512)

Variable	Mean	Std. Dev.	Minimum	25%	50%	75%	Maximum
SMOOTH	-0.372	0.332	-1.584	-0.535	-0.270	-0.117	-0.013
TA	3,116.410	8,596.610	53.064	334.841	787.939	2,100.640	66,458.370
ASSGROWTH	0.159	0.169	-0.114	0.049	0.121	0.225	0.857
EBIT	0.079	0.076	-0.087	0.031	0.065	0.112	0.356
PL	0.048	0.053	-0.063	0.014	0.036	0.071	0.243
CF	0.029	0.111	-0.345	-0.025	0.038	0.096	0.289
ACC	0.019	0.103	-0.188	-0.045	0.002	0.065	0.393
STDCF	0.192	0.135	0.026	0.097	0.156	0.246	0.706
%LOSSES	0.129	0.196	0.000	0.000	0.000	0.200	1.000
LEVERAGE	0.639	0.218	0.000	0.493	0.676	0.815	0.999
IEXR	0.439	0.273	0.002	0.209	0.429	0.654	1.000
DIVR	0.232	0.154	0.000	0.143	0.200	0.307	0.754
#MANAGER	2.260	1.972	0.000	1.000	2.000	3.000	61.000
INDEP	0.034						
PUBLIC	0.001						
AUDIT	0.132						
CONSOL	0.004						
LIMITED	0.994						
SOLE_PROP	0.000						
NOBS	6.827	1.433	5.000	6.000	7.000	8.000	9.000

(Table B6 Continued)

Panel V2: Regression Results Spain

Coefficient	Estimate	Std. err	Prob.
<i>Innate Determinants</i>			
SIZE	0.003	0.001	0.000
ASSGROWTH	-0.470	0.004	0.000
CF	-0.632	0.008	0.000
STDCF	0.791	0.006	0.000
%LOSSES	-0.600	0.004	0.000
<i>Owner-manager Incentives</i>			
DIVR	-0.143	0.004	0.000
#MANAGER	0.003	0.000	0.000
INDEP	0.001	0.003	0.840
<i>Creditor Incentives</i>			
LEVERAGE	0.314	0.003	0.000
IEXR	0.148	0.003	0.000
<i>Regulatory Infrastructure</i>			
QUOTED	-0.113	0.026	0.000
AUDIT	0.009	0.002	0.000
CONSOL	0.000	0.010	0.992
SOLE_PROP			
LIMITED	-0.026	0.008	0.001
Industry fixed effects	Yes		
n	178,512		
R ²	0.403		

Notes: Table B6 presents within-county sample descriptive statistics and estimation results for each country present in the cross-sectional sample (as presented in the Tables B2 and B3) which has enough data to estimate model (2). The first Panel reports descriptive statistics, the second panel reports the OLS estimation results if estimating model (2) on the respective country's data. Variable definitions are as given in Table A1. All variables were winsorized at their top and bottom percentiles. All reported probabilities are two-sided.

(Table B6 Continued)

Panel W1: Descriptive Statistics Sweden (N=58,038)

Variable	Mean	Std. Dev.	Minimum	25%	50%	75%	Maximum
SMOOTH	-0.575	0.368	-1.856	-0.793	-0.509	-0.291	-0.036
TA	2,451.190	9,045.760	26.492	130.704	320.408	974.470	74,378.880
ASSGROWTH	0.092	0.134	-0.170	0.009	0.070	0.149	0.645
EBIT	0.089	0.088	-0.151	0.038	0.080	0.133	0.379
PL	0.047	0.057	-0.111	0.012	0.040	0.077	0.234
CF	0.086	0.081	-0.122	0.032	0.081	0.136	0.308
ACC	-0.039	0.069	-0.224	-0.079	-0.034	0.002	0.145
STDCF	0.146	0.083	0.022	0.083	0.129	0.194	0.399
%LOSSES	0.183	0.216	0.000	0.000	0.125	0.333	1.000
LEVERAGE	0.593	0.206	0.007	0.447	0.614	0.755	1.000
IEXR	0.509	0.257	0.015	0.312	0.513	0.700	1.000
DIVR	0.347	0.189	0.000	0.200	0.326	0.462	0.868
#MANAGER	1.829	1.221	0.000	1.000	1.000	2.000	5.000
INDEP	0.067						
PUBLIC	0.002						
AUDIT	0.000						
CONSOL	0.060						
LIMITED	1.000						
SOLE_PROP	0.000						
NOBS	6.665	1.386	5.000	5.000	6.000	8.000	9.000

(Table B6 Continued)

Panel W2: Regression Results Sweden

Coefficient	Estimate	Std. err	Prob.
<i>Innate Determinants</i>			
SIZE	0.023	0.001	0.000
ASSGROWTH	-0.366	0.011	0.000
CF	-0.701	0.019	0.000
STDCF	1.680	0.017	0.000
%LOSSES	-0.792	0.008	0.000
<i>Owner-manager Incentives</i>			
DIVR	-0.096	0.007	0.000
#MANAGER	-0.005	0.001	0.000
INDEP	-0.011	0.006	0.093
<i>Creditor Incentives</i>			
LEVERAGE	0.360	0.007	0.000
IEXR	0.178	0.007	0.000
<i>Regulatory Infrastructure</i>			
QUOTED	-0.132	0.033	0.000
AUDIT			
CONSOL	-0.030	0.007	0.000
SOLE_PROP			
LIMITED			
Industry fixed effects	Yes		
n	58,038		
R ²	0.294		

Notes: Table B6 presents within-county sample descriptive statistics and estimation results for each country present in the cross-sectional sample (as presented in the Tables B2 and B3) which has enough data to estimate model (2). The first Panel reports descriptive statistics, the second panel reports the OLS estimation results if estimating model (2) on the respective country's data. Variable definitions are as given in Table A1. All variables were winsorized at their top and bottom percentiles. All reported probabilities are two-sided.

(Table B6 Continued)

Panel X1: Descriptive Statistics Switzerland (N=255)

Variable	Mean	Std. Dev.	Minimum	25%	50%	75%	Maximum
SMOOTH	-0.407	0.380	-1.484	-0.649	-0.251	-0.108	-0.007
TA	313,819.670	929,908.240	1,366.210	16,003.740	54,664.310	186,635.910	6,954,837.660
ASSGROWTH	0.048	0.118	-0.118	-0.009	0.022	0.073	0.899
EBIT	0.031	0.045	-0.140	0.009	0.032	0.053	0.153
PL	0.018	0.033	-0.114	0.002	0.013	0.031	0.113
CF	0.083	0.055	-0.069	0.050	0.075	0.112	0.283
ACC	-0.065	0.047	-0.256	-0.088	-0.056	-0.037	0.012
STDCF	0.054	0.034	0.005	0.027	0.047	0.073	0.163
%LOSSES	0.128	0.215	0.000	0.000	0.000	0.200	1.000
LEVERAGE	0.597	0.209	0.037	0.444	0.629	0.765	0.989
IEXR	0.545	0.306	0.009	0.296	0.558	0.802	1.000
DIVR	0.362	0.215	0.042	0.177	0.323	0.507	1.000
#MANAGER	14.133	7.219	1.000	10.000	13.000	16.000	59.000
INDEP	0.208						
PUBLIC	0.106						
AUDIT	0.949						
CONSOL	0.243						
LIMITED	0.820						
SOLE_PROP	0.000						
NOBS	7.467	1.365	5.000	6.000	8.000	9.000	9.000

(Table B6 Continued)

Panel X2: Regression Results Switzerland

Coefficient	Estimate	Std. err	Prob.
<i>Innate Determinants</i>			
SIZE	-0.017	0.017	0.337
ASSGROWTH	-0.159	0.205	0.440
CF	-0.632	0.470	0.180
STD CF	1.956	0.699	0.006
%LOSSES	-0.950	0.122	0.000
<i>Owner-manager Incentives</i>			
DIVR	-0.066	0.108	0.541
#MANAGER	0.001	0.003	0.812
INDEP	0.153	0.055	0.006
<i>Creditor Incentives</i>			
LEVERAGE	0.240	0.113	0.035
IEXR	0.139	0.084	0.101
<i>Regulatory Infrastructure</i>			
QUOTED	-0.128	0.084	0.130
AUDIT	0.136	0.107	0.206
CONSOL	-0.194	0.065	0.003
SOLE_PROP			
LIMITED	0.020	0.077	0.799
Industry fixed effects	Yes		
n	255		
R ²	0.512		

Notes: Table B6 presents within-county sample descriptive statistics and estimation results for each country present in the cross-sectional sample (as presented in the Tables B2 and B3) which has enough data to estimate model (2). The first Panel reports descriptive statistics, the second panel reports the OLS estimation results if estimating model (2) on the respective country's data. Variable definitions are as given in Table A1. All variables were winsorized at their top and bottom percentiles. All reported probabilities are two-sided.

(Table B6 Continued)

Panel Y1: Descriptive Statistics Ukraine (N=10,875)

Variable	Mean	Std. Dev.	Minimum	25%	50%	75%	Maximum
SMOOTH	-0.828	0.572	-3.072	-1.087	-0.731	-0.414	-0.046
TA	4,707.970	14,310.970	36.165	465.544	1,049.950	2,693.190	112,321.010
ASSGROWTH	0.106	0.222	-0.218	-0.032	0.045	0.180	1.090
EBIT	0.054	0.116	-0.144	-0.018	0.026	0.097	0.509
PL	0.025	0.086	-0.145	-0.025	0.009	0.057	0.341
CF	0.051	0.082	-0.137	0.004	0.037	0.085	0.352
ACC	-0.026	0.067	-0.204	-0.061	-0.030	0.004	0.204
STDCF	0.119	0.091	0.011	0.053	0.092	0.160	0.436
%LOSSES	0.367	0.325	0.000	0.000	0.333	0.625	1.000
LEVERAGE	0.352	0.239	0.001	0.152	0.305	0.521	0.999
IEXR	0.270	0.283	0.000	0.000	0.178	0.474	1.000
DIVR	0.453	0.211	0.127	0.286	0.429	0.600	1.000
#MANAGER	1.700	0.474	0.000	1.000	2.000	2.000	5.000
INDEP	0.347						
PUBLIC	0.002						
AUDIT	0.000						
CONSOL	0.000						
LIMITED	0.648						
SOLE_PROP	0.000						
NOBS	6.379	0.943	5.000	6.000	6.000	7.000	9.000

(Table B6 Continued)

Panel Y2: Regression Results Ukraine

Coefficient	Estimate	Std. err	Prob.
<i>Innate Determinants</i>			
SIZE	0.051	0.004	0.000
ASSGROWTH	-0.298	0.027	0.000
CF	-1.185	0.071	0.000
STDCF	2.673	0.066	0.000
%LOSSES	-0.449	0.019	0.000
<i>Owner-manager Incentives</i>			
DIVR	0.217	0.024	0.000
#MANAGER	-0.034	0.011	0.002
INDEP	-0.019	0.011	0.079
<i>Creditor Incentives</i>			
LEVERAGE	-0.013	0.025	0.603
IEXR	0.096	0.020	0.000
<i>Regulatory Infrastructure</i>			
QUOTED	-0.161	0.108	0.137
AUDIT	0.281	0.288	0.329
CONSOL			
SOLE_PROP			
LIMITED	-0.012	0.011	0.279
Industry fixed effects	Yes		
n	10,875		
R ²	0.253		

Notes: Table B6 presents within-county sample descriptive statistics and estimation results for each country present in the cross-sectional sample (as presented in the Tables B2 and B3) which has enough data to estimate model (2). The first Panel reports descriptive statistics, the second panel reports the OLS estimation results if estimating model (2) on the respective country's data. Variable definitions are as given in Table A1. All variables were winsorized at their top and bottom percentiles. All reported probabilities are two-sided.

(Table B6 Continued)

Panel Z1: Descriptive Statistics United Kingdom (N=79,801)

Variable	Mean	Std. Dev.	Minimum	25%	50%	75%	Maximum
SMOOTH	-0.782	0.368	-1.971	-1.004	-0.829	-0.504	-0.080
TA	13,406.790	52,611.950	9.235	132.642	696.433	4,903.370	418,425.060
ASSGROWTH	0.122	0.180	-0.199	0.012	0.083	0.186	0.895
EBIT	0.086	0.861	-4.051	0.004	0.086	0.259	2.520
PL	0.238	0.399	-0.112	0.030	0.089	0.245	2.077
CF	0.267	0.404	-0.119	0.054	0.124	0.286	2.112
ACC	-0.030	0.070	-0.232	-0.064	-0.027	0.000	0.192
STDCF	0.264	0.268	0.016	0.090	0.172	0.331	1.393
%LOSSES	0.200	0.234	0.000	0.000	0.143	0.333	1.000
LEVERAGE	0.514	0.248	0.000	0.322	0.530	0.713	1.000
IEXR	0.688	0.322	0.013	0.421	0.797	1.000	1.000
DIVR	0.481	0.232	0.000	0.289	0.470	0.667	0.970
#MANAGER	4.388	3.642	0.000	3.000	3.000	5.000	485.000
INDEP	0.047						
PUBLIC	0.007						
AUDIT	0.854						
CONSOL	0.059						
LIMITED	0.024						
SOLE_PROP	0.847						
NOBS	6.841	1.448	5.000	6.000	7.000	8.000	9.000

(Table B6 Continued)

Panel Z2: Regression United Kingdom

Coefficient	Estimate	Std. err	Prob.
<i>Innate Determinants</i>			
SIZE	0.034	0.001	0.000
ASSGROWTH	-0.336	0.007	0.000
CF	-0.408	0.005	0.000
STDCF	0.510	0.007	0.000
%LOSSES	-0.384	0.006	0.000
<i>Owner-manager Incentives</i>			
DIVR	-0.095	0.006	0.000
#MANAGER	0.001	0.000	0.016
INDEP	-0.002	0.006	0.720
<i>Creditor Incentives</i>			
LEVERAGE	0.275	0.005	0.000
IEXR	0.000	0.004	0.995
<i>Regulatory Infrastructure</i>			
QUOTED	-0.136	0.016	0.000
AUDIT	-0.004	0.003	0.257
CONSOL	-0.023	0.006	0.000
SOLE_PROP	0.000	0.005	0.941
LIMITED	-0.006	0.010	0.529
Industry fixed effects	Yes		
n	79,801		
R ²	0.286		

Notes: Table B6 presents within-county sample descriptive statistics and estimation results for each country present in the cross-sectional sample (as presented in the Tables B2 and B3) which has enough data to estimate model (2). The first Panel reports descriptive statistics, the second panel reports the OLS estimation results if estimating model (2) on the respective country's data. Variable definitions are as given in Table A1. All variables were winsorized at their top and bottom percentiles. All reported probabilities are two-sided.

