The Effects of Short-Term Liabilities on Profitability: A Comparison of German and US Firms*

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Abstract

The paper adopts the methodology of the empirical finance literature to analyze a common question that liability maturity structure has an impact on firm performance. A comparison is made between two countries, the US and Germany, with different types of financial systems. We find that German firms that rely more heavily on short-term liabilities are likely to be more profitable. The link between liability maturity structure and profitability does not appear in the results from the US sample, which reflects the importance of institutional factors.

Keywords: profitability, short-term liabilities, maturity structure, capital structure.

JEL Classification Numbers: G32, G30

1 Introduction

The importance of the determinants of corporate capital structure is well recognized in the finance and economics literature. Numerous papers investigate not only the firm's choice of leverage but also the maturity structure of debt (Guedes and Opler (1996), Ozkan (2002), Antoniou, Guney and Paudyal (2006)). Surprisingly, much less attention has been directed to the relationship between the maturity structure of firms' liabilities and their performance. This study builds on recent advances in the corporate capital structure literature on the role of the term structure of liabilities (e.g. Caprio and Demirguc-Kunt (1997)). Debt maturity structures across panels of firms within the German and the American economies are exploited to identify the mechanisms through which maturity structure affects performance. Previous research has reached conflicting conclusions on the relationship between liability maturity structure and firm performance. In contrast, our empirical evidence reveals that German firms which rely more heavily on short term debt are likely to be more profitable. This relationship does not appear to hold in the sample of US firms.

In general, the theoretical financial literature does not provide a conclusive prediction as to how liability maturity structure affects a firm's performance. Recent studies point out that the maturity structure is closely related to the type of projects the firm carries out and the nature of the financial system. For example, Dewatripont and Maskin (1995) suggest that an economy with many small banks financing a firm (a multi-bank system) will be one in which industries with more short-term projects will be fostered. In contrast, industries characterized by longer-term investment projects will fare better in an economy where firms borrow money only from a few large banks (a single bank system). Carlin and Mayer (1999) suggest that a system like the German bank-based

one, characterized by lending from a single "house bank", should go hand in hand with long-term, relatively low risk investments. In contrast, a market-based system in which arm's-length lending by many smaller banks prevails should promote more high risk, short-term investments.

Given these findings, we broaden the perspective of the existing literature on liability maturity structure in two ways. We explore the largely neglected question of whether the firm's liability maturity structure systematically influences its profitability. Second, we take the financial system perspective into account by analyzing separate samples of German and US firms. Our German sample is particularly interesting as it includes a broader sample of firms than generally considered in studies of listed firms. As our empirical strategy allows for a broader set of liabilities than traded debt, we may conduct the analysis on a larger sample of firms than those with privileged access to the capital markets (e.g., see Audretsch and Elston (2002) and Rajan and Zingales (1995)).

We find clear evidence of a positive association between the ratio of short-term liabilities to total liabilities and non-financial firms' profitability as measured by return on assets (ROA). As this evidence only appears in the German sample, we conjecture that the nature of the financial system plays an important role. In Germany, all subsamples of firms benefit from a heavier reliance on short-term liabilities. The performance of large German companies is more sensitive to their liability term structure than that of their smaller counterparts. Heavier reliance on short-term liabilities increases profitability in a subsample of firms with high short-term debt, but has a smaller effect on profitability for firms with lower reliance on short-term liabilities. This is compatible with the explanation that firm-specific characteristics as well as the nature of the financial system play an important role in determining the effect of liability maturity structure on

profitability.

The rest of the paper is organized as follows. The next section reviews the literature and discusses the relation between liability maturity structure and institutional factors. Section 3 presents the data and estimation techniques and discusses our empirical results. Finally, Section 4 concludes.

2 Review of the literature

There are three non-mutually exclusive theories on the choice of liability maturity structure: the contracting-cost hypothesis, the signalling hypothesis, and the tax hypothesis (Barclay and Smith (1995)). The contracting-cost hypothesis considers the corporation's future capital investment as a real option. In a seminal paper Myers (1977) suggests that firms that employ shorter-maturity debt are likely to have more growth options in their investment opportunities. Debt that matures before execution of investment options cannot lead to suboptimal investment decisions. There could also be a conflict between stockholders and bondholders that might lead to an underinvestment problem if long-term debt is issued. Managers acting on behalf of their stockholders might reject projects with positive net present values because risky debt absorbs a portion of stockholders' benefits. Given that underinvestment deteriorates profits in the long run, such behavior implies a negative relationship between liability maturity and firm performance.

The signalling hypothesis views issuance of short-term debt as a positive signal of the firm's low credit risk. Diamond (1991) finds that the firms with the highest credit rankings prefer to issue short-term debt because of small refinancing risks. This conjecture again implies a negative relationship as better performing firms are more likely to avoid a "crisis at maturity". However, Diamond also shows that low-rated firms are

restricted to short term debt as lenders shy away from long-term commitments.

Finally, the tax hypothesis analyzes the tax implications of the debt maturity choice. For example, Brick and Ravid (1985) find that the firms employ more long-term debt when the term structure has a positive slope. Higher-priced long term debt enables the firm to avoid more taxes: an effect that is the more attractive the higher is firm's profitability.

These hypotheses explain firms' preferences for certain tenors of debt. On the supply side of the market for loanable funds the theoretical evidence on the relationship between firm performance and maturity is again not conclusive. On the one hand, short-term debt in an environment of incomplete contracts grants the lender a control right as the firm's ability to roll over the debt may be conditioned on financial ratios and adequate performance. As this mechanism limits managerial discretion it may contribute to the relaxation of financial constraints (Rajan and Winton (1995)). This increased availability of external finance should stimulate better performance. On the other hand, long-term debt limits managerial discretion by making access to new funds and over-investment less likely Hart and Moore (1995): a feature that would enhance profitability. In this paper we test these conflicting hypotheses arising from the literature regarding the association between non-financial firms' liability structure and their profitability.

In the empirical literature, Schiantarelli and Sembenelli (1999) empirically investigate the effects of firms' debt maturity structure on profitability for Italy and the United Kingdom. They find a positive relationship between initial debt maturity and medium term performance. Schiantarelli and Jaramillo (1996) argue that shorter-term loans are not conducive to greater productivity while long-term loans may lead to improvements in productivity (Schiantarelli and Srivastava (1996)).

In reality, firms make use of many types of liabilities, both short-term and long-term, beyond those strictly classified as debt. Many smaller, less liquid firms firms do not enjoy access to debt markets but nevertheless can acquire external funds through bank lending, loans from associated firms, trade credit and other means. In structuring their liabilities, firms' managers must choose their associated maturity, taking into account many of the same issues and constraints that affect the choice of a debt maturity structure.

Stohs and Mauer (1996) suggest that larger, less risky firms usually make greater use of long-term debt than smaller risky companies. Moreover, Demirguc-Kunt and Maksimovic (1999) point out that large and small firms behave differently when selecting their maturity structure in market and bank-based financial systems. We conjecture from this evidence that the impact of maturity structure on performance could be driven more by the characteristics of the firms in each country than by the institutional factors. In order to discriminate between the two possible explanations we also consider two sample splits.

2.1 The liability maturity structure and institutional factors: market based vs. bank based economies

The market-based Anglo-American systems on the one hand and the bank-based German or Japanese systems on the other are considered polar opposites in the spectrum of possible financial systems Calomiris (1993). The distinctions are manifested in a variety of their characteristics: the relative importance of financial markets and financial intermediaries, corporate governance mechanisms, the insolvency code, investor protection laws, the frequency and depth of relationship banking and firms' capital structure. With respect to the latter two features several stylized facts have been established. First, German firms are much more debt-financed than US firms. Second, a single firm's borrowing

in a bank-based economy such as Germany is more concentrated, with firms often relying on a single "house bank" for their liquidity needs. In this system, lending is more likely to accompanied by the bank's strong commitment to act as an insurer against financial constraints, and more long-term oriented than in a market-based "Anglo-American" economy.

Financial theory proposes that a major determinant in firms' choice of capital structure is the limitation posed by the cost of contracting between firms and capital providers. These costs depend both on the attributes of firms and the institutional environment in which contracts are negotiated and enforced. The contracting literature suggests that, *ceteris paribus*, short-term liabilities are superior for limiting managerial discretion and reducing moral hazard on the firm's side. The literature on relationship banking argues that a close relationship gives the bank an informational advantage and is thus an alternative means for accomplishing this result Boot (2000). By merging both strands and placing them in the context of the stylized nature of the financial systems, we would expect that the use of short-term liabilities would be less beneficial in the bank-based German economy than in the market-based US economy. At the same time, due to the commitment of "house banks" to insure firms against financial constraints, the cost of taking short-term finance may be lower in Germany as the risk of a "crisis at maturity" may be lower within close bank-client relationships. Such possible trade-offs render the question of how the financial system may shape the liability maturity structure of US and German firms an empirical one.

3 Data and Empirical Results

3.1 Data

The data are obtained from the COMPUSTAT and Bundesbank databases. The US estimation sample consists of an unbalanced panel of about 15,000 manufacturing firms for the 1984–2004 period. It is drawn from Standard and Poor's Industrial Annual COMPUSTAT database of publicly traded US corporations. The Bundesbank's balance sheet database of German companies is not restricted to publicly traded firms, but includes a broad spectrum of firms across size categories and industrial sectors.[1] The collection of the data is related to the supervisory status of the Bundesbank, which is legally assigned to overview the credit standing of all companies conducting rediscount transactions. If a company is involved in these transactions, it must submit its annual accounts to the local branches of the Bundesbank in order to prove its solvency.

The Bundesbank database covers on average 125,000 firms' annual characteristics from 1988 to 2000. We consider only manufacturing firms which are corporations with Tax Balance Sheet (Steuerbilanz) or Commercial Balance Sheet (Handelsbilanz) types of accounting.[2]

We utilize data items Net profit, Total assets, Cash and equivalents and Sales to generate measures of profitability (ROA), liquidity ($Cash/TA$) and the sales-to-assets ratio ($Sales/TA$). The key variable for our research is the short-term liability ratio (ST/TL) which is defined as a ratio of current liabilities to total liabilities. Several sample selection criteria are applied to the original sample. Observations with the following

[1] For a more detailed description of the database see von Kalckreuth (2003), Harhoff and Ramb (2005) and the references therein.

[2] We excluded firms with Opening Balance Sheet (Eröffnungsbilanz) or Carcass Balance Sheet (Rumpfbilanz) since these types of balance sheets do not cover the entire year of the firm's activity.

characteristics are removed from the sample: (a) those with values of ratio variables lower than the first percentile or higher than the 99th percentile; (b) those from firms that have fewer than three available observations over the time span.[3] We employ the screened data to reduce the potential impact of outliers upon the parameter estimates.

Table 1 presents descriptive statistics for the pooled time-series cross-sectional data. The average profitability (ROA) in both countries is equal to three per cent. Interestingly, we observe that German companies make heavier use of short-term liabilities. Their average ratio of short-term liabilities to total liabilities (ST/TL) is 0.71 compared to 0.27 for US manufacturers. Furthermore, leverage is much higher for German firms, with total liabilities averaging 81% of total assets versus 53% in the US sample. This is not surprising, as firms in the German bank-based economy make greater use of debt financing. The average German firm employs 271 workers, while the average US firm employs over 20,000.

The empirical literature investigating firms' capital structure behavior has identified that firm-specific characteristics play an important role.[4] We might expect that a group of firms with similar characteristics (e.g., those firms with high levels of leverage) might behave similarly, and quite differently from those with differing characteristics. This implies that the impact of liability maturity structure on performance could be driven more by the firms' features than by the financial environment in each country. Consequently, we split the sample into subsamples. We consider two different sample splits in the interest of identifying groups of firms that may have similar characteristics relevant to their choice of liability maturity structure. One split is based on firm size, measured by the number of employees, and the second split reflects the firm's reliance

[3]This screen is desirable for GMM-SYSTEM estimation discussed in the next subsection.
[4]See Ozkan and Ozkan (2004).

on short-term liabilities.

The sample splits are based on firms' average values of the characteristic lying in the first or fourth quartile of the sample distribution. For instance, a firm with a number of employees above the 75th percentile of the distribution will be classed as large, while a firm with number of employees below the 25th percentile will be classed as small. As such, the classifications are not mutually exhaustive. Tables 2 and 3 reveal that patterns in several of the descriptive statistics remain the same if sub-categories are explored separately. For instance, short-term liabilities as a fraction of total liabilities is considerably higher for German firms than for US firms, as is their ratio of short- and long-term liabilities to total assets. Whereas German ROA is nearly unchanged across subsamples, US firms' subsample ROAs differ considerably between small and large firms.

3.2 Econometric Results

We estimate several sets of regressions, comparing the results with respect to different subsamples. Profitability, measured by return on assets (ROA), is our dependent variable. Hence, for firm i in year t we estimate equation

$$\begin{aligned} ROA_{it} &= \phi_0 + \sum_{s=1}^{2} \phi_s ROA_{i,t-s} + \phi_3 \frac{Cash_{i,t}}{TA_{i,t}} + \phi_4 \frac{Sales_{i,t-1}}{TA_{i,t-1}} \\ &\quad + \phi_5 \frac{ST_{i,t}}{TL_{i,t}} + \phi_6 \log(Labor_{i,t}) + \kappa_t + \omega_i + \nu_{it} \end{aligned} \tag{1}$$

Thus, we can now formally state our hypothesis that the liability maturity structure affects firms' profitability. This hypothesis can be tested by investigating the significance of ϕ_5 in equation (1):

$$\begin{aligned} H_0 &: \phi_5 = 0 \\ H_1 &: \phi_5 \neq 0 \end{aligned} \tag{2}$$

Estimates of optimal corporate behavior often suffer from endogeneity problems, and the use of instrumental variables may be considered as a possible solution. We estimate our econometric models using the system dynamic panel data (DPD) estimator. DPD combines equations in differences of the variables with equations in levels of the variables. In this System GMM approach (see Blundell and Bond (1998)), lagged levels are used as instruments for differenced equations and lagged differences are used as instruments for level equations.

In most specification using German data, the second through eighth lags of ROA_{t-2} $(Cash/TA)_t$, $(Cash/TA)_t$, $(Sales/TA)_{t-1}$, and ST/TL_t are included for the difference equations and second through eighth lags of ΔROA_{t-2}, $\Delta(Cash/TA)_t$, $\Delta(Sales/TA)_{t-1}$, $\Delta ST/TL_t$ for the level equations. The second through fourth lags of the same variables are employed for U.S. regressions.[5] The models are estimated using a first difference transformation to remove the individual firm effect.

The reliability of our econometric methodology depends crucially on the validity of instruments. We check it with Sargan's test of overidentifying restrictions, which is asymptotically distributed as χ^2 in the number of overidentifying restrictions. The consistency of estimates also depends on the serial correlation in the error terms. We present test statistics for first-order and second-order serial correlation in Tables 4, 5 and 6, which lay out our results on the links between corporate performance and liability maturity structure.

Table 4 displays results of equation (1) for all firms in both countries. An increase in the reliance on short-term liabilities leads to an increase in German firms' profitability, but has no effect on US firms' profitability. Hence, our findings support the hypothesis

[5]The set of instruments has been chosen in a way to confirm validity of instruments based on a Sargan test.

that a shorter tenor of liabilities affects the firm's profitability only in the bank-based economy. This finding is consistent with that of Agarwal and Elston (2001) who argue that banks' rent-seeking behavior is responsible for the dominance of long-term liabilities in firms' balance sheets.

Having established the positive effect of short-term liabilities on return on assets for the full sample of German firms, we next investigate if the strength of the association varies across groups of firms with differing characteristics. Table 5 reports results for small and large firms. Based on the point estimates, the financial performance of larger German firms is somewhat less sensitive to variations in their the liability maturity structure. Again, this factor does not affect US firms' profitability.

We find a more interesting contrast in the results for firms with low and high levels of short-term liabilities relative to assets (Table 6). German firms with a heavy reliance on short-term financial commitments display a higher sensitivity to the liability maturity structure compared to those with low demands on near-term cash flow. Both types of firms display significant sensitivity to liquidity as measured by cash holdings. No significant effects appear in either subsample of US firms.

In summary, we reject our null hypothesis, Equation (2), only for Germany. The profitability of firms is affected by the maturity structure in the bank-based economy. The finding that performance improves when firms make greater use of short-term liabilities rather than long-term liabilities supports the theoretical literature on the signaling effect, and on the monitoring and control function of short-term liabilities. However, the empirical insight is somewhat surprising with respect to the financial system literature as it reveals a heavy use of short-term liabilities by German firms and a consistent link between maturity structure and profitability. In contrast, we find no evidence of such a

link in US firms' performance.

4 Conclusions

Economists have become increasingly interested in corporate liability structure issues. Given the substantial literature on determinants of the debt maturity structure, it seems natural to investigate the relationship between non-financial firms' profitability and the ratio of short-term liabilities to total liabilities. We hypothesize that firms' profitability varies in response to variations in firms' liability maturity structure, with greater reliance on short-term liabilities associated with higher profitability.

We test this hypothesis by employing the Bundesbank's balance sheet dataset of German firms for the 1988–2000 period and COMPUSTAT data for US firms during 1984–2005. We receive strong support for our hypothesis from the German sample and each of its subsamples. A robust result across subsamples is that the performance-maturity sensitivity is both statistically and quantitatively significant in Germany, but not so in the US. Therefore, the magnitude and cross-country differences of the relation highlight the importance that the financial environment plays in firms' capital structure decisions and their consequences.

The empirical investigation in this paper is limited by data availability and we have chosen to leave some interesting extensions for future research. An obvious immediate extension is to investigate issues related with German reunification in 1992 or recent recessionary periods in the US. These events provide a number of exogenous shocks to the financing constraints faced by companies in both economies.

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Appendix 1: Construction of the firm specific measures

The following variables are used in the annual empirical study.

Deutsche Bundesbank's balance sheet database:
AP034: Number of employees
AP045: Cash and equivalents
AP088: Total assets
AP111: Short-term borrowed capital
AP128: Long-term borrowed capital
AP144: Sales revenues
AP189: Net profit

COMPUSTAT industrial annual database:
data1: Cash and short-term investments
data5: Total current liabilities
data6: Total assets
data12: Sales
data29: Number of employees
data172: Net income (loss)
data181: Total liabilities

Table 1: Descriptive statistics

All firms						
	Germany (1988–2000)			USA (1984–2005)		
Variable	μ	σ	N	μ	σ	N
ROA	0.03	0.08	123,298	0.04	0.08	13,287
$Cash/TA$	0.07	0.09	117,189	0.11	0.13	13,287
$Sales/TA$	2.11	1.02	121,510	1.13	0.50	13,287
ST/TL	0.71	0.21	122,193	0.26	0.27	12,528
ST/TA	0.57	0.21	12,1379	0.24	0.11	12,948
LT/TA	0.24	0.18	121,379	0.26	0.17	12,900
$(ST + LT)/TA$	0.81	0.17	123,298	0.51	0.19	13,227
$Labor$	270.95	906.02	123,298	20,695.74	50,630.50	12,771

Note: N is sample size (firm-years), μ and σ represent mean and standard deviation respectively. ROA is return on assets. ST/TL is the ratio of short-term liabilities to total liabilities, while ST/TA is the ratio with respect to total assets. LT/TA is the ratio of long-term liabilities to total assets. $(ST + LT)/TA$ is the ratio of total liabilities to total assets. $Labor$ is the number of employees.

Table 2: Descriptive statistics by subsamples: Small vs. Large

	Germany (1988–2000)			USA (1984–2005)		
Variable	μ	σ	N	μ	σ	N
Small firms						
ROA	0.03	0.08	24,610	0.01	0.14	2,093
$Cash/TA$	0.07	0.10	22,104	0.18	0.18	2,093
$Sales/TA$	2.26	1.12	24,113	1.16	0.62	2,093
ST/TL	0.74	0.22	24,206	0.35	0.33	1,780
ST/TA	0.62	0.22	23,860	0.23	0.13	2,058
LT/TA	0.23	0.21	23,860	0.16	0.16	2,049
$(ST+LT)/TA$	0.86	0.15	24,610	0.40	0.20	2,083
$Labor$	12.10	7.11	24,610	348.53	320.79	2,031
Large firms						
ROA	0.03	0.07	37,815	0.04	0.06	4,172
$Cash/TA$	0.06	0.08	36,859	0.08	0.09	4,172
$Sales/TA$	1.81	0.87	37,385	1.05	0.41	4,172
ST/TL	0.69	0.19	37,639	0.28	0.24	4,140
ST/TA	0.51	0.19	37,433	0.28	0.10	3,928
LT/TA	0.23	0.15	37,433	0.31	0.14	3,908
$(ST+LT)/TA$	0.74	0.17	37,815	0.60	0.15	4,146
$Labor$	784.91	1,514.06	37,815	58,584.68	78,600.19	3,948

Note: N is sample size (firm-years), μ and σ represent mean and standard deviation respectively.

Table 3: Descriptive statistics by subsamples: Low vs. High use of Short-term Liabilities

	Germany (1988–2000)			USA (1984–2005)		
Variable	μ	σ	N	μ	σ	N
Firms with low short-term liabilities						
ROA	0.03	0.07	32,325	0.03	0.11	1,249
$Cash/TA$	0.08	0.10	31,004	0.14	0.16	1,249
$Sales/TA$	1.69	0.79	31,982	0.75	0.36	1,249
ST/TL	0.54	0.19	31,441	0.14	0.23	1,049
ST/TA	0.35	0.12	31,558	0.11	0.05	1,210
LT/TA	0.35	0.20	31,558	0.28	0.21	1,204
$(ST+LT)/TA$	0.69	0.20	32,325	0.40	0.22	1,243
$Labor$	445.37	1,218.74	32,325	5,871.22	9,713.57	1,158
Firms with high short-term liabilities						
ROA	0.02	0.07	27,194	0.04	0.08	3,815
$Cash/TA$	0.05	0.08	25,407	0.10	0.11	3,815
$Sales/TA$	2.44	1.17	26,538	1.31	0.52	3,815
ST/TL	0.90	0.10	27,135	0.36	0.29	3,707
ST/TA	0.82	0.11	26,377	0.35	0.09	3,645
LT/TA	0.09	0.10	26,377	0.25	0.14	3,623
$(ST+LT)/TA$	0.91	0.08	27,194	0.61	0.16	3,784
$Labor$	86.52	293.82	27,194	40,927.98	80,130.48	3,661

Note: N is sample size (firm-years), μ and σ represent mean and standard deviation respectively.

Table 4: Sensitivity of ROA to Liability Maturity Structure (ST/TL)

Dependent Variable: ROA_t		
	Germany	USA
ROA_{t-1}	0.417***	0.390***
	(0.085)	(0.073)
ROA_{t-2}	0.043	0.068
	(0.031)	(0.054)
$(Cash/TA)_t$	0.142***	0.090***
	(0.042)	(0.029)
$(Sales/TA)_{t-1}$	0.004	0.027***
	(0.003)	(0.008)
$(ST/TL)_t$	0.064***	-0.001
	(0.012)	(0.008)
$Log(Labor)_t$	-0.029***	0.007*
	(0.008)	(0.004)
Firm-years	73,110	10,331
Sargan	0.225	0.145
AR(1)	–7.00***	-4.74***
AR(2)	0.62	-0.49

Note: Each equation includes constant, year and industry dummy variables. Asymptotic robust standard errors are reported in the brackets. Estimation by two-step System GMM (with Windmeijer-corrected standard errors) using the `xtabond2` package for Stata. Sargan is a Sargan–Hansen test of overidentifying restrictions (p-value reported). AR(k) is the test for k-th order autocorrelation. * significant at 10%; ** significant at 5%; *** significant at 1%.

Table 5: Sensitivity of ROA to Liability Maturity Structure (ST/TL): Small vs. Large firms

Dependent Variable: ROA_t				
	Germany		USA	
	Small	Large	Small	Large
ROA_{t-1}	-0.047	0.129	0.273***	0.406***
	(0.143)	(0.151)	(0.094)	(0.080)
ROA_{t-2}	0.075	0.118*	0.015	0.012
	(0.070)	(0.067)	(0.070)	(0.037)
$(Cash/TA)_t$	0.318***	0.232***	0.059	0.032
	(0.081)	(0.056)	(0.047)	(0.039)
$(Sales/TA)_{t-1}$	0.017**	0.021***	0.034***	0.027***
	(0.007)	(0.007)	(0.012)	(0.008)
$(ST/TL)_t$	0.081***	0.064***	-0.013	0.012
	(0.020)	(0.018)	(0.019)	(0.012)
$Log(Labor)_t$	0.008	0.012	0.017**	-0.001
	(0.009)	(0.013)	(0.007)	(0.004)
Firm-years	12,874	23,966	1,454	3,282
Sargan	0.694	0.225	1.000	0.999
AR(1)	-3.19***	-2.65***	-3.51***	-2.71***
AR(2)	-1.06	-1.25	0.80	-1.35

Note: Each equation includes constant, year and industry dummy variables. Asymptotic robust standard errors are reported in the brackets. Estimation by two-step System GMM (with Windmeijer-corrected standard errors) using the `xtabond2` package for Stata. Sargan is a Sargan–Hansen test of overidentifying restrictions (p-value reported). AR(k) is the test for k-th order autocorrelation. * significant at 10%; ** significant at 5%; *** significant at 1%.

Table 6: Sensitivity of ROA to Liability Maturity Structure (ST/TL): Firms with Low vs. High Short-term Liabilities

Dependent Variable: ROA_t				
	Germany		USA	
	Low ST/TA	High ST/TA	Low ST/TA	High ST/TA
ROA_{t-1}	0.413***	0.086	0.467***	0.137*
	(0.155)	(0.131)	(0.066)	(0.075)
ROA_{t-2}	-0.019	0.160**	0.110*	0.098
	(0.057)	(0.064)	(0.066)	(0.069)
$(Cash/TA)_t$	0.128**	0.305***	-0.004	0.058
	(0.056)	(0.070)	(0.057)	(0.048)
$(Sales/TA)_{t-1}$	0.019**	0.010	0.017**	0.048***
	(0.009)	(0.008)	(0.008)	(0.012)
$(ST/TL)_t$	0.045*	0.082***	0.007	0.013
	(0.025)	(0.030)	(0.014)	(0.017)
$Log(Labor)_t$	-0.008	0.015	-0.002	0.014***
	(0.007)	(0.021)	(0.004)	(0.003)
Firm-years	20,055	14,683	821	2,961
Sargan	0.374	0.233	1.000	0.605
AR(1)	-4.19***	-3.53***	-2.03***	-2.98***
AR(2)	1.17	-1.40	-0.17	-1.03

Note: Each equation includes constant, year and industry dummy variables. Asymptotic robust standard errors are reported in the brackets. Estimation by two-step System GMM (with Windmeijer-corrected standard errors) using the `xtabond2` package for Stata. Sargan is a Sargan–Hansen test of overidentifying restrictions (p-value reported). AR(k) is the test for k-th order autocorrelation. * significant at 10%; ** significant at 5%; *** significant at 1%.