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# The determinants of multiple bank loan renegotiations in Europe☆

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ABSTRACT

This article provides empirical evidence on the determinants of multiple bank loan renegotiations in Europe over the last decade. It finds that renegotiations differ from those in the US in terms of frequency, amended terms, and first occurrence. Multiple renegotiations concern very large loans, which are funded by large pools of lenders with fewer lead banks. Borrower transparency and amendment characteristics halt the number of renegotiation rounds, while the credit crisis of 2008 has had the opposite effect. Financial development, banking structure, and creditor rights also influence the renegotiation process. Overall, the renegotiation process adapts to informational frictions in the borrower–lender relationship.



## 1. Introduction

Bank loans are the main source of external capital for European companies. In 2011, bank private credit to GDP reached 120% in the Eurozone, while stock market capitalization to GDP was considerably lower at 32% (Global Financial Development Report, 2013). Moreover, syndicated loans are also cheaper in Europe than in the US (Carey & Nini, 2007). However, during the third trimester of 2013, about 186 billion USD of bank debt was refinanced, while only 26 billion USD of loans were new issues (source: Dealogic). As such, a vast majority of corporate syndicated loans in Europe actually exist as part of debt refinancing, which is done via debt renegotiation or loan amendments.

Debt renegotiation occurs when the borrower and/or the lender are unable or unwilling to commit to the initial and potentially restrictive terms of the contract, because the borrower–lender relationship reaches a point where the initial contract stipulates an ex post inefficient outcome. This is more likely to occur when unanticipated or non-contractible states of the world occur, consequently leading to an accrual of new information. Debt renegotiations bear several costs in the form of a fee that varies with the size and complexity of the loan, as well as according to time and effort.

Several recent theoretical and empirical studies have shown that the possibility of renegotiation can enhance the efficiency of contracts for the benefit of borrowers and lenders (Bourgeon & Dionne, 2013; Dessein, 2005; Garleanu & Zwiebel, 2009; Roberts & Sufi, 2009).[1] In a nutshell, lenders can learn of the quality of the borrower through ex post renegotiation as new information becomes available, and improve the efficiency of the contract over time. Eventually, amending initial loan terms can translate into a mutual gain for both contracting parties. This is why debt reorganization can even enhance the market value of debt, as the process enables creditors to avoid ill-timed liquidation (Mella-Barral, 1999). Renegotiation of financial contracts can also generate value for borrowers' shareholders, in particular when amendments take place early in the life of the loan or when they are less frequent (Godlewski, 2013a).

The path towards a more efficient or complete contract can vary, particularly in terms of the number of renegotiation rounds. For instance, Nikolaev (2013) and Roberts (2012) report that half and two-thirds of loan amendments in their respective samples are multiple renegotiations. In my sample of more than 600 loan renegotiations over the last decade in Europe, one out of three borrowers renegotiated their

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[1] In contrast, according to the theory of complete contracts, debt renegotiation destroys the value of entering a contract, because the scope for renegotiation can have an adverse effect on ex ante incentives and contract efficiency (Dewatripont & Maskin, 1990, 1995; Hart & Moore, 1988; Fudenberg & Tirole, 1990; Hart, 1995).

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loan(s) multiple times. If less frequent amendments are beneficial for shareholders, and parties are aware that each renegotiation is a costly process, why would a borrower renegotiate several times and why would a lender accept multiple renegotiations? More generally, what are the determinants for multiple rounds of loan agreement renegotiations?

The aim of this article is to provide empirical evidence on these issues using detailed data on bank loan renegotiations in 22 European countries between 1999 and 2010. In particular, I investigate how initial loan terms affect the number of renegotiation rounds. I also exploit the cross-country dimension of my data to shed some light on the impact of country characteristics related to law and finance on debt renegotiation. Thus, I contribute to an emerging empirical literature on the determinants, mechanics, and consequences of private debt contracts renegotiation (Godlewski, 2013a, 2013b; Nikolaev, 2013; Roberts, 2012; Roberts & Sufi, 2009).

The closest article to mine is by Roberts (2012), who demonstrated that renegotiations are initiated by borrowers in response to changing conditions in order to modify contractual constraints designed to mitigate informational frictions. These modifications are largely driven by borrowers' desire to alter their investment, operating, or financing policies. Indeed, better informed borrowers usually yield stronger control rights to less informed lenders in the initial contract, especially when information asymmetry is greater; this is because it is more costly to acquire information by the lender and less costly to renegotiate (Dessein, 2005; Garleanu & Zwiebel, 2009). Therefore, several activities, such as increasing capital expenditures or dividends, or undertaking an acquisition, may be explicitly restricted by the initial loan agreement through various covenants due to information asymmetry between the contracting parties.

Another related article is by Roberts and Sufi (2009), who find that the accrual of new information concerning the credit quality, investment opportunities, and collateral of the borrower, as well as macroeconomic fluctuations in credit and equity market conditions, are the primary determinants of renegotiation and its outcomes. Hence, a loan renegotiation (outside of default) can be viewed as the result of new information accrual leading to a shift of bargaining power in the borrower–lender relationship.

The renegotiation process can also be considered by the borrower as a signaling game, influencing a lender's renegotiation strategy (e.g. “tough” or “soft”) via repayment offers (Gale & Hellwig, 1989). This is a critical issue, as firms with higher ex ante credit risk find the option to renegotiate most valuable (Berlin & Mester, 1992). The lender can consider the renegotiation as a reputation device, providing incentives to devote a larger amount of resources to information production in order to make the “right” renegotiation decision (Chemmanur & Fulghieri, 1994), and thereby avoiding soft budget constraint problems. A lender's renegotiation strategy may also reduce the borrower's incentives to engage in opportunistic renegotiation (Bourgeon & Dionne, 2013).

Both “tough” and “soft” renegotiation strategies have their pros and cons. The lender can adopt a “tough” renegotiation strategy in order to signal its reputation and mitigate borrower moral hazard, limiting the number of subsequent costly loan amendments. This is more likely if the lender retains stronger bargaining power during renegotiation, and the borrower has access to fewer or less viable outside options for external refinancing. However, if the renegotiation strategy appears “wrong” ex post, and consequently fails to properly update the debt contract, the renegotiation process may need to start again. A “soft” renegotiation strategy can eventually avoid such problems by updating the debt contract following a “smoother” path; if a “wrong” negotiation strategy is implemented, it may increase a borrower's opportunistic behavior, thus hampering the lender's reputation and leading to subsequent renegotiation rounds.

The rest of the article is structured as follows. Empirical hypotheses are laid down and discussed in Section 2. Section 3 is dedicated to the presentation of data and the methodology. Results are discussed in Section 4. Finally, Section 5 concludes the article.

## 2. Hypotheses

In this section I discuss empirical hypotheses regarding micro and macro factors that are expected to influence the number of bank loan renegotiation rounds.

The terms of the initial debt contract play a strategic role in the development of the borrower–lender relationship, because they indirectly determine the likelihood of renegotiation and the terms of the renegotiated contract (Bester, 1994). Greater informational asymmetries in the bank–borrower relationship imply that the initial bank debt contract is far from being complete or efficient, and therefore might need to be amended. Indeed, the main conclusions to be drawn from the incomplete contracts theory are that leaving scope for renegotiation can enhance the efficiency of contracts (Dessein, 2005; Garleanu & Zwiebel, 2009). However, each renegotiation round and amendment comes at a cost (particularly for the lender) in terms of time, effort, reputation, and coordination (Bolton & Scharfstein, 1996).[2] Furthermore, early and less frequent amendments may be preferred by borrowers' shareholders, as they increase their wealth (Godlewski, 2013a).

Loan terms at origination reflect the available information set, and thus information asymmetry between the borrower and the lender at that time, even if financial institutions are considered as “experts” in information processing (Bhattacharya & Thakor, 1993; Fama, 1985). Hence, characteristics related to larger (respectively, lower) informational frictions are expected to increase (respectively, decrease) the number of renegotiation rounds when attempting to reach a more efficient or complete contract.

The size of a loan is the first major characteristic of a credit arrangement. Large facilities can signal lenders' greater confidence in the borrower success due to less uncertainty and information asymmetry (Mosebach, 1999). Similar arguments can be applied to loan maturity. For instance, Berger, Espinosa-Vega, Frame, and Miller (2005) find that loan maturity increases when information asymmetry is reduced. Therefore, larger facilities and longer maturities are expected to decrease the number of renegotiation rounds. However, very large loans can be renegotiated multiple times for the simple reason that lenders may prefer to amend the contract to avoid costs related to borrower distress, loan loss provisions, non-performing loans, regulatory capital, and reduced profitability.

Other important contract features are collateral and covenants, which aim to resolve the consequences of informational frictions between the borrower and the lender. Collateral helps the bank obtain private information owned by the borrower, and thus serves as a signaling and screening device to reduce adverse selection problems (Besanko & Thakor, 1987; Bester, 1985). However, Bester (1994) shows that collateral requirements make it more likely that the initial debt contract is renegotiated. Thus, it is unclear if a secured loan is more or less likely to be renegotiated multiple times. Nevertheless, reducing adverse selection problems should reduce the number of renegotiation rounds, whereas covenants restrict borrower behavior and thus moral hazard incentives. Following Garleanu and Zwiebel (2009), covenants are expected to increase the number of rounds when renegotiation is triggered by the arrival of new information that

[2] In the case of a large (syndicated) loan with a large banking pool, the amendments must be approved by a certain percentage of lenders, usually according to three levels of approval: required-lenders level; full vote; and supermajority. The first level is a simple majority of approval of nonmaterial amendments and waivers, or changes affecting one facility. A full vote, including participants, is required to approve material changes such as RATS (rate, amortization, term, security). A supermajority – typically 70% to 80% of lenders – is required for certain material changes, such as alterations to amortization and the release of collateral.