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VALUE FOR SELLING SHAREHOLDERS? EMPIRICAL EVIDENCE FROM
EUROPEAN DATA**

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Abstract

Although a large stream of literature has been published about the asset sale process of American corporations, little is known about the relationship between asset disposals and corporate value in Europe. This paper aims at establishing if asset sales in a sample of listed Continental European sellers create or destroy value for their shareholders by linking the sale proceeds, the declared use of them by the seller's management and the consequences of that to shareholders' value. We find a statistically significant negative difference between the means and the medians of abnormal returns estimated for selling firms that claim that they will retain the proceeds and the abnormal returns estimated for selling firms that claim that they will use the cash obtained from the deal to pay off their debt holders. We interpret this result as a sign of agency problems that shareholders anticipate when evaluating the deal. We also check if a change in credit conditions modify the market reaction at announcement date by estimating the selling firms' abnormal returns at announcement date during the crisis years. Our results indicate that the abnormal returns for retaining firms increase, becoming indistinguishable from the abnormal returns calculated for firms that payoff the deal proceeds to their creditors. As for the variables explaining the above results, we check if the ones suggested by the academic literature are still valid when applied to a different context. While the explanatory power of them is high in interpreting the abnormal return of selling firms that claim to retain the sale proceeds, they not furnish a good explanation neither for the variance of abnormal returns of firms that pay out the cash to their creditors nor for the variance of abnormal returns estimated during the crisis years, independent of the stated use of the deal proceeds. A more thorough analysis is therefore needed in order to establish what drives these results.

Keywords: Asset sales, refocusing strategies, corporate restructuring
JEL Codes: G34

1. Introduction

As reported in Bates 2005 and Warusawitharana 2008, American firms frequently trade their operating assets. In contrast to the evidence on mergers, this activity on average creates value for both trading firms' shareholders, suggesting that these deals are regarded by investors as increasing the efficiency of assets' allocation in the economy. According to this view, transactions involving operating assets are deals in which firms that are poorly equipped to exploit an asset potential for creating value sell it to ones that have the ability to better deploy it. The sellers grab part of the extra value that the asset's acquirers are going to create through the deal price, which is supposedly higher than the value the asset they are selling has for them. On the other hand, the deal price is lower than the buyers' reservation price, which incorporates the value the buyers' are expecting to create by inserting the new asset in their existing operating structure. Both buyers' and sellers' shareholders are then satisfied with the outcome of the deal and a positive abnormal return at announcement date for both of them is the outcome.

Even if this story captures what happens on average, it underestimates other aspects of the deals, especially on the selling side.

First, asset trades are transactions in which the price is largely paid in cash. The selling firms' managers are de facto free to allocate the resources they get from the deal. When managerial incentives are not aligned with shareholders', the selling firm's managers are well positioned to use the cash in order to pursue their own goals, which are conflicting with the aim of enhancing the firm's equity value. The abnormal return at announcement date should echo that worry, at least when managers declare that they are going to reinvest the deal proceeds in the firm's operations.

Second, the assumption that the seller is able to trade the asset at premium is not always realistic. According to the empirical literature, at least some sales are initiated by firms that are plagued by liquidity problems. Considering that, except for very large deals, these transactions can be initiated, managed and concluded without shareholders' intervention, in the urge of getting funded to postpone immediate liquidation, selling firms' managers might find it

convenient to trade the asset at a discount to fundamental value, concluding what is called a “fire sale” deal (Shleifer and Vishny, 2011).

As for the first topic, academic research reports conflicting evidence. When used by large conglomerates in the 80’s as a mean of refocusing, asset selling was largely beneficial. As the research in John and Ofek 1995 documents, most selling firms’ operating performance increased in the three years following the sale and the market correctly anticipated it at the time the deals became known to investors. John and Ofek 1995 reports indeed a positive correlation between abnormal return at announcement date and operating performance increase following the deal. On the other hand though, Lang, Paulsen and Stulz in their 1995 work covering the same years as John and Ofek 1995, document a positive abnormal return only for firms that paid out their cash proceedings either to debt holders or to equity holders. According to their results in the 1995 article, abnormal returns for firms retaining the sales’ proceeds were negative, suggesting that investors were aware of existing agency problems that might hinder the most profitable use of the cash obtained from the transaction. This is confirmed by Datta and al., 2003, that explores the role of monitoring by private creditors in explaining the gains from asset sales. The relative cost advantage of private lenders in monitoring and enforcing managerial behaviour helps reduce the moral hazard linked to the reinvestment of the proceeds. This implies a more favourable judgement by the stock market for the sale when at least part of the debt of the selling firm comes from a private lender who is encouraged in controlling the managers’ behaviour by the amount of funds it has at stake in the firm.

Empirical evidence for the ’90 is not conclusive as well. Bates 2005 analyzes a sample of large sales occurring in the ’90s. It finds that abnormal returns at announcement date on stocks of selling firms whose managers declared that the proceedings were going to be retained are lower than abnormal returns on stocks of firms that claimed they were going to pay off the cash to either debt holders or equity holders. But while the abnormal return for the retaining firms is increasing in the sellers’ investment opportunities at announcement date, indicating that investors were able to distinguish among firms that have - at least on paper - the opportunity to

use wisely the money they got from the deal and firms that are not in that position, the share of equity owned by insiders, which is supposed to measure incentive alignment, has no correlation with the selling firms' abnormal returns. Moreover, when calculating the performance of selling firms' stocks over a two years horizon, Bates 2005 finds that the shares of firms retaining the proceeds on average do better than the shares of firms that paid out the cash. Both the above results suggest to the author that, besides the managers' desire to pursue projects that benefit themselves rather than shareholders, retention decisions might be justified by capital markets frictions that make raising external capital costly: Besides the conflicts of interests among managers and shareholders, capital markets accessibility for the selling firms matters when investors judge asset sales.

As for the second issue, the empirical results coming from the academic literature are limited because of the difficult task of gauging the value of the asset due to its highly idiosyncratic nature. Pulvino 1998 overcomes this problem by focusing its analysis on commercial aircraft transactions. These trades involve standard assets (used narrow-body airplanes) and, unlike typical asset sales, for which very scarce public information is available, are well documented deals due to legal requirements. Pulvino 1998 reports that, other things equal, financially constrained airlines receive lower prices than unconstrained rivals when selling an used airplane. This occurs especially when the whole industry is in recession and competition for acquiring the assets is low. In these cases, capital constrained airlines tend to sell it to industry outsiders who, due to the specific industry nature of the assets that are sold, are less productive users. They are therefore willing to pay a lower price that financially weak sellers are not able to refuse.

The danger of fire sales (but also the effort to avoid them) is highlighted by the Schinglemann, Stulz and Walkling 2002 paper results which suggest that firms take into account the liquidity of the market of their assets when deciding what to sell, preferring sales of most liquid well performing assets over sales of worst performing but less liquid ones in order not to sell at a detrimental price.

The above results suggest that, both the selling firm and its industry peers' access to the capital markets influence the outcome of the sale. When the asset that is going to be sold is of interest of high valuation industry specialists that are financially encumbered, it might then end to an industry outsider, who is willing to pay less than its best in use price because it is less able to extract value from it.

All the above analysis have been conducted on US samples only.

To our knowledge, no research has been conducted on other countries. With this paper we intend to fill this gap and provide further evidence on the topic due to the peculiarities of the sample that we have chosen to examine.

Our starting sample consists of 353 sales of Continental European listed firms during a timeframe that starts in 2000 and ends in 2012.

We focus on Continental Europe in order to explore two range of questions.

First: shareholders' protection mechanisms in Continental Europe are considered to be weaker than US ones, thus exposing shareholders to managerial incentive alignment problems even more than in the US. Does this have an impact on asset sales abnormal returns? And does the peculiar nature of Continental Europe countries' governance mechanisms mean that models that explain abnormal returns in the US cannot be successfully applied to European samples?

Second: from 2008 on the euro area has been exposed to a deep financial crisis that has made credit scarcer. Did the change in credit conditions had an impact on the reaction of the market at the sale announcement from the pre-crisis period? Are models that explain the abnormal return of asset sales at less critical times still able to do the same during the crisis period?

In order to shed some light on the above questions, we will first illustrate the sample selection and data collection process (covered in section 2). Then we will depict the abnormal returns' estimation procedure and the results of it. Data availability problems and some specific

features of our sample (e.g. infrequent trading stocks and small markets are included in the analysis) made us adapt the standard procedure for calculating abnormal returns in order to reach robust results on which we built the subsequent analysis. After that we will compare our results to what the previous academic literature has obtained (all covered in section 3), delineate the financial and operational characteristics of the selling firms (section 4) and check if a model built on the previous literature's results is able to convincingly explain the variance in our data (section 5). Section 6 concludes.

2. Sample selection

From the extensive database of M&A transactions contained in Thomson One Banker database at first we selected a large sample of asset sales announced during the 2000-2012 years. The deals involve firms incorporated in several continental European countries - Austria, Belgium, Denmark, Finland, France, Germany, Italy, Netherlands, Norway, Portugal, Spain, Sweden and Switzerland - whose price was at least 1 million US\$. Either the seller or the seller parent – in case the seller were a private company - had to be a non-financial firm listed in a European stock market. No restrictions were imposed on the buyers, which could be both listed and private firms. Both industry insiders and outsiders were included among them.

We restricted the definition of asset sale to either the divestiture of the controlling share – at least 50% +1 – in a subsidiary or the selling of a division to a buyer that does not belong to the seller group. Moreover, we discarded real estate sales as they can be part of sale and lease back transactions we were not interested in.

Both equity and asset swaps were excluded as well.

We also excluded transactions concerning firms that were negotiating arrangements with creditors in order to avoid bankruptcy at the sale date.

As we wanted to check if the sale proceeds declared use is relevant in explaining abnormal returns, we looked for management statements concerning the divestiture by means of the Dow Jones Factiva database. Factiva contains news and business information from the

selected countries and allowed us to access the press coverage of the deals. Thanks to that, we were able to detect transactions that were due to either antitrust or political reasons - sales pressured by Governments because of conflicts with local firms were present especially in the energy sector. Those transactions were excluded from the sample as not part of a deliberate managerial strategy.

In order to qualify for further investigation, the overall price paid by the buyer had to be at least 5% of the seller's total assets value at the end of the year preceding the time the sale became effective. This threshold is not in line with other studies concerning asset sales, which use a screen based on transactions absolute size. On the other hand a hurdle based on the divestiture relative size is the standard approach used in the M&A literature, where the deal value divided by the acquirer market value is considered material above a threshold of either 1% or 5% - see for example Moeller et al. 2004.

Including in the sample large transactions in absolute terms that are not substantial because sellers are even larger would not have been sensible. On the other hand, discarding sales that are not large in absolute terms but that are meaningful to the seller, due to its small size, would imply a loss of crucial information especially in our sample, where both large and small firms are covered.

As we were interested in investigating the role of the proceeds use, we wanted to check if the sale represented a potentially sizable cash injection for the seller.

Therefore for each transaction we established the upfront cash portion of the deal either from Thomson One Banker or by hand collecting information from the Factiva Database. Data concerning the value total assets of the seller had at fiscal year end the year before the sale became effective was obtained from Compustat. In order to isolate the asset sale announcement effect we discarded all the deals that were announced when other news regarding the seller were also released. This screen severely restricted our sample, because many of the sales were announced at the same time as financial results were communicated to the press.

Table 1 provides a summary of the transactions in the sample delineated by the stated use of proceeds.

Transactions were split according to the use of proceeds that the seller's managers stated at the date of the sale. Following Bates, 2005 when more than one way of using the proceeds was mentioned, we considered the one listed first as the main one and classified the deal accordingly.

205 deals out of 353 were conducted in order to raise cash that was intended to be reinvested in the firm in order to fund the remaining activities (Retention & Focus) while for 94 transactions the seller's managers mentioned paying off debt holders as the main reason for the sale (Debt Payoff). In 27 cases the proceeds from the sale were to be paid off to equity holders (Equity Payoff). In five cases the transaction was linked to the intention of raising money to fund new businesses' acquisitions (Retention & New Businesses), and in 22 cases the use of proceeds coming from the sale was not clearly stated.

119 deals out of 353 were announced during the 2008 – 2012 years, therefore we classified them as pertaining to the crisis period. The large majority of them (80 out of 119) were conducted in order to reinvest the proceeds in the selling firm. For 25 out of 119 deals, the selling firm managers declared that the proceedings were to be paid off to debt holders, while in 8 deals the cash was intended to be reimbursed to equity holders.

Besides the general information that can be gathered from Table 1, we remark that, like in Bates 2005, the mean and median of the relative size of the deals we classified as debt reducing are statistically different from the mean and median relative size of the deals whose proceeds were to be reinvested in the remaining businesses of the seller. But, the relative size of deals that are classified as debt reducing is on average smaller than the relative size of deals whose proceedings are meant to be reinvested in the firm after the sale.

3. Abnormal return estimation

As mentioned, in order to calculate abnormal returns, prices were collected from Compustat Global, that furnishes also daily dividend and split adjusted data. Moreover, instead of simply carrying forward the previous day's price without any further information, in case of closing price data unavailability, Compustat codes the closing price being invalid. While not relevant for liquid stocks, this information is crucial when working with thin trading ones because it allows accurate trade to trade return calculations.

Continental Europe stock market indexes are not available through Compustat and therefore information came from Datastream. In order to avoid nonsynchronous trading problems, total return indexes were selected according to Datastream default choice for local market large cap indexes, which guarantees the liquidity of their constituents.

As mentioned, a sizable portion of the stocks in our sample are thinly traded, which means the event study standard technique needs to be adapted in order to provide meaningful results. Dimson, 1979, Brown, Warner, 1985 and Maynes, Rumsey, 1993 among others have suggested different solutions. We follow Bartholdy and al., 2007 that offers a precise guideline for the European case based on tests conducted on the Danish stock market.

Returns are therefore calculated on a trade-to-trade basis only when valid closing prices are available. Trade-to-trade returns for the corresponding market index are calculated over the same periods. This choice implies that when meaningful prices for the stock considered are lacking we are not able to perform the estimation process and therefore have to discard the associated observation. As a result, our sample size decreases to about 300 observations as shown in Table 2.

As Campbell and al., 2010 notices, while for US samples an established procedure for abnormal return estimation exists, studies regarding international samples use different approaches. Therefore we choose to estimate abnormal returns using three different methods: a market model that discards observations if beta values are not significant at least at the 5% level (market model v1), a market model that includes all betas (market model v2), and a model that

simply computes the difference between the return of each stock and the market index return over the same period.

The market model coefficients are estimated by using trade-to-trade returns over an estimation window of (-251, -50) days before the announcement date, as in Bates, 2005. In order to aid comparison with the previous literature, the market model is estimated only if at least 25 observations are available.

Test statistics for detecting abnormal performance have also been adjusted in order to account for thin trading. We chose to apply the t-test with standardised abnormal returns as suggested by Brown and Warner, 1985.

Tables 2 show the results of our estimation over a -1,+1 event window. Results are similar considering a 0,0 event window (not reported here but available at request). We calculated results for the whole sample over the entire timeframe we considered but also examined various subsamples' results. In particular we checked if the stated use of proceeds (retention aimed at internal reinvestment, retention aimed at funding acquisitions, payoff to debt holders, payoff to equity holders, use of proceeds not clearly specified) implied differences in the abnormal returns. We also created two different subsamples, covering the years preceding the crisis (2000-2007) and the crisis years (2008 – 2012).

As for the stated use of proceeds, due to others subsamples' limited size, only the retention aimed at internal reinvestment and the debt payoff subsamples show meaningful results. Below we comment on the abnormal returns we estimated for the equity payoff subsample too because it is usually considered in the literature as well, but our results cannot be considered completely reliable.

In general, consistent with the most recent literature (Bates, 2005) we find that asset sales announcements in our sample show on average a positive abnormal return for the selling firm stock, whose magnitude is close to 3%. This occurs independently of the model we chose for the estimation. On average, the positive effect is highly significant both at the whole sample

level and for each subsample except for the debt payoff subsample during the crisis period (to which only 22 observations belong though).

Moreover, in contrast with results reported in the literature, the equity payoff subsample shows a low albeit positive abnormal return during the crisis, which is not statistically different from zero. However, as mentioned above this might be due to the extremely limited number of observations pertaining to this subsample (6 or 7 depending on the estimation model).

In order to ascertain the presence of a difference in the magnitude of the announcement effects depending on the stated use of proceeds, we then tested the difference of the means and medians for the reinvestment and the debt payoff subsamples after checking for homoschedasticity.

During the years preceding the crisis, the difference in means between the retention subsample (average abnormal return about 2% independent of the estimation model) and the debt payoff subsample (whose average abnormal return ranges from 3,5% to 4% depending on the estimation model considered) is different from zero and negative but only at a 10% level (as in Bates 2005). The difference in medians though is different from zero and negative at a 1% level. This result might be attributable to agency problems: reinvesting implies a lower abnormal return at the announcement date as shareholders anticipate managers will not necessarily choose efficient projects or are not able to scrutinize management due to information asymmetries, problems that do not arise when the proceeds are paid out to debt holders.

These results are not confirmed when considering the crisis years: both the difference in means and medians of the retention and of the debt payoff subsamples are not statistically different from zero. That is due to the fact that the abnormal return level for retention deals during the crisis increased to more than 4% from 2% in the years before the crisis, while it remained fairly constant (or even slightly decreased) for sales whose stated use of proceeds was debt reimbursement. We tested the difference in means and medians in the reinvestment sample over the two timespans (2000-2007 vs. 2008-2012) and find them statistically different from

zero (at a 10% level for the difference of the subsamples' means but at a 5% level for the difference of the subsamples' medians), confirming that the market reaction during the crisis years was systematically different than the market reaction before the crisis.

Accordingly to the analysis conducted so far, the stated use of proceeds influence the magnitude of the reaction investors show when a sale is announced – which is consistent with an agency theory explanation of the implications of an asset sales - but only during the years preceding the crisis.

In the 2008-2012 period this result is not confirmed. Investors seem to evaluate in a more favourable way retention deals, whose abnormal return at announcement date is not statistically different from the abnormal return of debt payoff ones. A worsening in capital markets accessibility makes investors view sales in a more favourable way, at least when firms are declaring that they are going to retain the proceeds on average reducing the fears of investors of agency conflicts?

4. Financial and operating characteristics of selling firms

In order to clarify the above results, we collected data to control for financial and operating characteristics of the selling firms.

According to the backers of the agency theory explanation of asset sales, the selling firms' management values firm size and it has little incentive to trade assets unless it needs to raise funds and cannot do so cheaply on the capital markets – especially when selling an asset provides funds with potentially fewer restrictions on managerial discretion. The implication of that is that sellers are typically plagued by managerial discretion problems – and their performance is worse than their peers' (which is confirmed by their empirical results but also by John and Ofek, 1995).

We then wanted to have industry matched data to compare our sample firms' characteristics with their peers' and we obtained them through the WorldScope database. In a few cases, WorldScope data were integrated with hand collected information coming from the

selling firms annual reports, that were downloaded from the Global Report section of the Bureau Van Dijk's Amadeus database.

We identified the selling firm primary SIC code from the Compustat Global database. We then selected each firm's peers by requiring them to be listed, to belong to the same industry as our seller and to be based in Continental Europe as well.

In order to be included in the same industry, the peer had to have the same primary SIC code of the seller firm. The peers' historical SIC code was retrieved from the Compustat Global database as well. We did not use primary SIC codes provided by the WorldScope database because WorldScope simply reports as primary code the SIC code pertaining to the segment whose total sales are the highest among segments' sales in the financial year considered. In the Compustat Global database SIC codes are attributed in a more nuanced way that takes into account the whole nature of the business of the firm. While in most cases the SIC codes retrieved by using the WorldScope database and the SIC codes obtained through the Compustat Global one are the same, when the selling firm is a conglomerate – which is sometimes the case in our sample - a less mechanical way of classifying its overall activity is more suitable for our purposes.

When less than three peers were identified, we discarded our observation as no meaningful industry matched data was available, as the industry matching indexes were calculated by subtracting the median value of the index we calculated for the peers' set from the value of the same index calculated for the selling firm.

Table 3-5 summarize the data we collected referred to the last fiscal year preceding the announcement date. Due to subsample size reasons, while still considering the whole sample, at this point of our analysis we concentrated on the retention and debt payoff subsample, whose data that are also shown in the tables.

Compared to their peers, considering their operations only, the selling firms in our sample are on average less profitable and less able to generate cash (their operating income before depreciation and amortization over total asset less the same index calculated for their

peers is on average -0,0248 while their cash flow over total asset less their peers is -0,0188). They are also more indebted: the difference between their debt level over total asset and their peers' is on average 0,0679, increasing to 0,1761 for the selling firms in the debt payoff subsample.

Unlike firms in the retention subsample, firms in the debt reimbursement subsample hold less cash and show less investment opportunities than their peers as well. Consistent with Bates 2005 we measured investment opportunities as the ratio of market value of assets over their book value. The selling firms' belonging to the debt payoff subsample have a market to book value of asset ratio that, after subtracting their peers' one, is -0,04503 –significant at the 10% level only though. The selling firms' capital expenditures during the last fiscal year preceding the announcement date are in line with their peers' though, independent from the subsample examined.

When comparing financial and operating characteristics of the firms belonging to the reinvestment and the debt payoff subsamples, we noticed that while both kind of firms have the same level of operating profitability and of liquidity production from their operations, firms in the debt reimbursement subsample are more indebted, hold less cash and have less investment opportunities. This is true both during the period preceding the financial crisis and during the crisis period and suggests that the value associated to a distribution to debt holders may not be attributable solely to agency costs of managerial discretion avoidance but can also be motivated by the benefits of adjusting suboptimal debt levels that in turn, according to Myers 1977 and Hennessy, 2004 mitigates the distortion in the level and composition of corporate investment due to excess leverage.

5. Multivariate analysis of abnormal returns

In order to explain the abnormal returns whose estimation procedure we depicted in section 3 and to answer to the questions we proposed in the introduction we performed a regression analysis that linked our sample firms' operating and financial characteristics to the

market reaction at the deal announcement. The main results of our analysis are reported in tables 7-12.

The regression analysis was performed first on the entire sample over the entire time horizon of our analysis, then on the retention and debt payoff subsamples over the same timeframe. After that we verified the explanatory power of the model we tested considering two different time frames: the pre-crisis period and the crisis years. This analysis was performed first on a subsample encompassing all the deals that were announced during the years included in the corresponding timeframes and then on two different subsamples, separately comprising retention deals and debt payout deals.

We regressed the abnormal return calculated over a 3-day horizon both using the OLS estimated market model and the difference between the selling firm's stock return and the corresponding large cap index's return over the following variables, suggested to us by the previous literature's results:

- 1) the industry matched leverage, calculated as total debt over total assets at the end of the last fiscal year preceding the deal announcement ($t1a_d_totdebtota$). We expect a positive correlation with the market reaction at announcement date if the selling firm's managers are maintaining the they will payout the proceeds to debt holders, as the higher the firm leverage the higher the benefits coming from reducing it. We expect a negative sign if the firm is retaining the proceeds. Highly levered firms that reinvest the cash coming from the deal are possibly wasting the money in managerial pet projects. As the benefits of incremental investment accrue primarily to debt holders, these firms have few incentives in investing in marginally positive NPV projects;
- 2) the industry matched investment in cash and marketable securities, calculated as cash and marketable securities over total assets at the end of the last fiscal year preceding the deal announcement ($t1a_d_cashota$). We expect a positive sign if the firm is paying out debt because this mean that the selling firm is not compelled to forgo interesting investment opportunities even if it decided to relinquish the cash to its debt holders.

Moreover, the fact that the selling firm has some financial flexibility is a sign that the sale was not forced by creditors and therefore guarantees that the selling price is adequate. On the other hand, we expect that the market prizes only the firms that chose to retain the proceeds in order to enhance a low level of financial slack. Therefore we expect a negative sign for the variable in this case: the higher the selling firm cash holdings before the sale, the less credible is that the money will not be used to enhance managers' interests;

- 3) the industry matched ability of generating cash through the firm's operations, calculated as net cash flow from operating activities over total assets at the end of the last fiscal year preceding the deal announcement ($t1a_d_netcflowopactota$). We expect a positive sign for this variable independent from the stated use of proceeds. A good capacity of producing cash from operations means that the firm is not in the condition of having to sell the asset under pressure due to its extreme financial needs;
- 4) the industry matched growth opportunities of the selling firm, calculated as the market to book value of assets at the closing date of the fiscal year immediately preceding the deal announcement ($t1a_d_mktbkassets$). We expect a positive sign for firms that retain the sale proceeds as they have valuable investment opportunities in which the financial means they obtained through the sale are to be invested while we expect a negative sign for firms that payoff debt because in order to adjust their leverage these firms are to forgo profitable projects;
- 5) the industry matched operating profitability of the selling firm, calculated as operating income before depreciation over total assets at the end of the last fiscal year preceding the sale announcement ($t1a_d_opincota$). We expect a negative sign for both the retention and the debt payoff subsample: the sale is a way of restructuring either the selling firm's operations (e.g. when the asset sold generates operating losses because it does not fit into the selling firm operating structure) or its financial structure (e.g. when

the selling firm is excessively levered) and its outcomes are most useful the less profitable the selling firm operations are.

We also controlled for the transaction size, calculated as the price of the deal over the selling firm's total assets ($\text{dealvalue}/\text{total assets}$).

While the model proposed appears not adequate to explain neither selling firms' abnormal returns during the crisis period - independent from the way they intend to use the cash they obtained from the deal - nor abnormal returns for the debt payout subsample – hinting at an omitted variable that drives the results that we obtain – its explanatory power for the retention subsample during the pre-crisis period is extremely high.

The abnormal return measured for stocks of selling firms that retain the sale proceeds both for the entire timeframe and for the 2000-2007 years is negatively correlated with the firm's net of industry leverage, the cash and marketable securities the firm has accumulated (net of industry), and its industry matched operating profitability. The coefficient for the net of industry net cash flow from operating activities is positive and significant as well.

The positive and significant coefficient for the leverage variable supports the view that shareholders discount retention decisions when a debt allocation might otherwise reduce the agency costs of debt in over levered firms. The negative sign of the cash coefficient suggest that the flexibility benefits associated with retaining proceeds are declining the more liquidity the selling firm has already accumulated, while the negative correlation of the abnormal return with the operating income indicates that the sale is perceived as an effective mean of restructuring, and it is more valuable for less profitable firms. As mentioned above, the positive coefficient of the variable that indicate the ability of the firm to generate cash might hint at the conditions of the sale. Firms that are more able to generate cash from their operations are less urged towards trading at any cost and more successful at obtaining higher prices from their counterparties for the asset they are selling. The coefficient of the variable measuring the investment opportunities of the selling firm has the expected sign, but it is not statistically significant.

As for the debt payout subsample, at least some of the coefficients' signs are as expected. The abnormal returns are positively correlated with leverage, suggesting that over levered firms benefit most from paying out the proceeds of the trade to debt holders. The returns are also positively correlated with the cash accumulated by the selling firm and with the industry matched net cash flow from operating activities, showing that the firm is not selling the asset pushed by the urge of getting money at all costs. However the statistical significance of the coefficients is too low for them to be considered reliable.

As for the crisis subsample, further investigation is needed as the results we obtained from the analysis are not statistically significant and their signs are not what we expected.

6. Conclusions

With this paper, we filled a gap in the literature on asset sales, that focuses almost exclusively on US based selling firms, by examining a sample of deals that were initiated by firms listed in Continental Europe markets. We also extended the analysis of asset sales to the financial crisis period, in order to check if the stock market reaction at the deals announcement in an economic context where credit conditions have worsened show a change.

Our results are partly consistent with the previous academic literature, in the sense that abnormal returns of asset sales are on average positive for sellers. During the years preceding the crisis, firms that paid out the trade proceedings to their creditors were rewarded by investors with a higher abnormal return than firms that retained the cash they got from the sale, hinting at managerial agency problems anticipated by investors of selling firms that claimed they will internally reinvest the proceedings. However, during the crisis year we did not find evidence of a difference in abnormal returns between the two subsamples. That might be due to the fact that increased external funding costs made asset sales a relatively more convenient way to obtain funding and this saving counterbalanced the risks coming from managerial opportunistic behavior.

As for the variables that drive the stock market reaction at the deal announcement date, we checked if the variables usually linked to asset sales abnormal returns', that control for the selling firms' financial and operating characteristics maintain their validity also when applied to a different context.

While the multivariate analysis we conducted on the retention subsample over the pre-crisis period showed a very high predictive power, the same model applied to the debt payoff subsample over the same timeframe was of very limited help in explaining our results. Moreover, the crisis years analysis is completely unconvincing, both for the retaining and for the debt payoff subsamples. A more detailed examination is therefore needed in order to shed light on the issue.

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Tables

Table 1: Descriptive statistics – relative transaction size

	All Transactions		Retention & Focusing		Debt payoff		Equity payoff		Not clearly stated		Retention & New Bus.	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median
Transaction value to total asset (all sample)	23,80% (353)	13,33% (353)	23,13% (205)	13,28% (205)	16,21% (94)	12,22% (94)	51,13% (27)	29,17% (27)	23,73% (22)	14,03% (22)	46,92% (5)	6,11% (5)
Transaction value to total asset (precrisis sample)	24,01% (234)	13,23% (234)	21,91% (125)	13,20% (125)	16,93% (69)	13,04% (69)	62,33% (19)	36,35% (19)	16,96% (18)	12,34% (18)	74,23% (3)	13,18% (3)
Transaction value to total assets (crisis sample)	23,39% (119)	14,07% (119)	25,05% (80)	14,42% (80)	14,19% (25)	10,47% (25)	24,50% (8)	26,13% (8)	33,49% (4)	54,17% (4)	5,96% (2)	5,96% (2)

(Number of observations are in parenthesis)

Table 2: Abnormal returns (-1,1)

	All Transactions			Retention & Focus			Debt Payoff			Equity payoff		
	Mean	t stat	Nobs	Mean	t stat	nobs	Mean	t stat	nobs	Mean	t stat	nobs
<i>Years 2000-2012</i>												
CAR(-1,1) Market Model v1	0,03242***	5,670	255	0,0288***	3,763	149	0,0414***	3,711	70	0,0389*	1,894	19
CAR(-1,1) Market Model v2	0,03445***	6,556	306	0,0299***	4,290	178	0,0392***	4,290	82	0,0577***	2,599	23
CAR(-1,1) Return over market index	0,03329***	6,354	308	0,0309***	4,507	179	0,0347***	3,457	82	0,0588***	2,603	23
<i>Years 2000-2007 (Precrisis period)</i>												
CAR(-1,1) Market Model v1	0,0291***	4,299	161	0,0201*	2,023	87	0,0423***	3,668	49	0,0538***	2,728	13
CAR(-1,1) Market Model v2	0,0293***	4,878	201	0,0199**	2,366	109	0,0382***	3,712	60	0,0759***	2,992	16
CAR(-1,1) Return over market index	0,0279***	4,631	203	0,0201**	2,424	110	0,0355***	3,473	60	0,0748***	2,961	16
<i>Years 2008-2012 Crisis period</i>												
CAR(-1,1) Market Model v1	0,0380***	3,690	94	0,0410***	3,447	62	0,0394	1,501	21	0,0060	0,1336	6
CAR(-1,1) Market Model v2	0,0441***	4,392	105	0,0457***	3,824	69	0,0420	1,670	22	0,0163	0,378	7
CAR(-1,1) Return over market index	0,0437***	4,376	105	0,0483***	4,112	69	0,0325	1,278	22	0,0164	0,384	7

Stars have the usual meanings: *** significant at the 1% level; ** significant at the 5% level; * significant at the 10% lev

Table 3: Selling firms financial and operating characteristics (last annual report before the transaction was announced): peers matched data

The Δ symbol indicate that the data in the table are industry matched. This is obtained by subtracting the median value of the indexes calculated for each selling firm's peer from the selling firm corresponding index value.

Years 2000-2012	Whole sample			Retention & Focus			Debt payoff		
	Mean	Median	Nobs	Mean	Median	Nobs	Mean	Median	Nobs
Δ Cashflow/Total assets ^o	-0,0188***	-0,002	296	-0,0275***	-0,0028	171	-0,024**	-0,0103	77
Δ Net cashflow from operating activities/Total assets ^{*o}	-0,0091	-0,00118	343	-0,0072	0,0052	199	-0,0226**	-0,1412	93
Δ Interest coverage ratio ^{oo}	-24,931	-1,2210	345	-36,740	-0,8090	197	-17,1431	-2,72955	94
Δ Total debt / Total assets	0,0679***	0,0524	353	0,0418***	0,02618	205	0,1761***	0,16546	93
Δ Cash / Total assets ^{**o}	0,00564	-0,0151	354	0,00932	-0,01212	205	-0,0366***	-0,03343	94
Δ Capex/Total assets ^{oo}	0,00561	-0,0008	353	0,00858	0,0002	204	0,00561	-0,00312	94
Δ Market to book value of assets ^{**o}	0,055129	-0,0484	349	0,08601	-0,0587	201	-0,04503*	-0,0622	93
Δ Operating income before depreciation/Total assets	-0,0248***	-0,0060	354	-0,02976**	-0,00654	205	-0,0338***	-0,0154	94

^oCashflow was estimated as: operating income before depreciation plus depreciation/depletion and amortization less interest expenses on debt , cash dividend paid and income taxes paid

^{*} Net cashflow from operating activities comes from the consolidated cash flow statement, which is not available for some firms (e.g. Spanish firms before 2005)

^{oo}Interest coverage was calculated as operating income before depreciation divided by interest expenses on debt

^{**o}Cash is the level of cash and marketable securities held by the firm

^{oo}Capex is the investment in tangible assets for the year from the cash flow statement

^{**o} Market to book value of assets was estimated as: market capitalization at the end of the fiscal year preceding the sale plus book value of debt divided by book value of total assets

Table 4: Selling firms financial and operating characteristics (last annual report before the transaction was announced)

Years 2000-2012	Whole sample			Retention & Focus			Debt payoff			Difference in means (Retention – Debt Payoff)	Difference in medians (Retention – Debt Payoff)
	Mean	Median	Nobs	Mean	Median	Nobs	Mean	Median	Nobs		
Cashflow/Total assets [°]	0,022	0,004	298	0,014	0,005	172	0,016	0,003	78	N	Y, diff>0 (5%)
Net cashflow from operating activities/Total assets ^{*°}	0,044	0,059	345	0,039	0,062	200	0,038	0,050	93	N	N
Interest coverage ratio ^{°°}	-18,287	4,895	345	-30,332	5,260	197	-11,094	3,343	94	Y, diff<0 (1%)	Y, diff>0 (1%)
Total debt / Total assets	0,275	0,258	353	0,234	0,224	205	0,395	0,413	93	Y, diff<0 (1%)	Y, diff<0 (1%)
Cash / Total assets ^{*°*}	0,126	0,073	354	0,141	0,089	205	0,066	0,051	94	Y, diff>0 (1%)	Y, diff>0 (1%)
Capex/Total assets	0,052	0,036	353	0,052	0,035	204	0,051	0,038	94	N	N
Market to book value of assets ^{*°}	1,192	0,929	349	1,276	0,975	201	0,903	0,828	93	Y, diff>0 (1%)	Y, diff>0 (1%)
Operating income before depreciation/Total assets	0,0712	0,0385	354	-0,0346	0,0427	205	-0,00336	0,0243	94	Y, diff<0 (5%)	Y, diff>0 (5%)

[°]Cashflow was estimated as: operating income before depreciation plus depreciation/depletion and amortization less interest expenses on debt, cash dividend paid and income taxes paid

^{*°} Net cashflow from operating activities comes from the consolidated cash flow statement, which is not available for some firms (e.g. Spanish firms before 2005)

^{°°} Interest coverage was calculated as operating income before depreciation divided by interest expenses on debt

^{*°*} Cash is the level of cash and marketable securities held by the firm

^{*°°} Market to book value of assets was estimated as: market capitalization at the end of the fiscal year preceding the sale plus book value of debt divided by book value of total assets

Table 5: Selling firms financial and operating characteristics (last annual report before the transaction was announced)

Years 2000-2007 (Precrisis)	Whole sample			Retention & Focus			Debt payoff			Difference in means (Retention – Debt Payoff)	Difference in medians (Retention – Debt Payoff)
	Mean	Median	Nobs	Mean	Median	Nobs	Mean	Median	Nobs		
Cashflow/Total assets [°]	0,029	0,053	184	0,020	0,054	97	0,018	0,038	54	N	Y, diff>0 (1%)
Net cashflow from operating activities/Total assets ^{*°}	0,048	0,062	225	0,041	0,057	120	0,041	0,061	68	N	N
Interest coverage ratio ^{°°}	3,864	4,931	230	11,384	5,45	121	-15,972	3,380	69	Y, diff>0 (5%)	Y, diff>0 (5%)
Total debt / Total assets	0,276	0,257	233	0,227	0,224	125	0,392	0,416	68	Y, diff<0 (1%)	Y, diff<0 (1%)
Cash / Total assets ^{*°*}	0,118	0,071	234	0,127	0,084	125	0,068	0,052	69	Y, diff>0 (1%)	Y, diff>0 (1%)
Capex/Total assets	0,055	0,041	234	0,042	0,058	125	0,055	0,038	69	N	N
Market to book value of assets ^{*°}	1,294	0,960	229	1,402	1,043	121	0,919	0,841	68	Y, diff>0 (1%)	Y, diff>0 (1%)
Operating income before depreciation/Total assets	0,058	0,042	234	-0,008	0,0414	125	-0,002	0,0267	69	N	N

[°]Cashflow was estimated as: operating income before depreciation plus depreciation/depletion and amortization less interest expenses on debt, cash dividend paid and income taxes paid

^{*°} Net cashflow from operating activities comes from the consolidated cash flow statement, which is not available for some firms (e.g. Spanish firms before 2005)

^{°°} Interest coverage was calculated as operating income before depreciation divided by interest expenses on debt

^{*°*} Cash is the level of cash and marketable securities held by the firm

^{*°°} Market to book value of assets was estimated as: market capitalization at the end of the fiscal year preceding the sale plus book value of debt divided by book value of total assets

Table 6: Selling firms financial and operating characteristics (last annual report before the transaction was announced)

Years 2008-2012 (Crisis)	Whole sample			Retention & Focus			Debt payoff			Difference in means (Retention – Debt Payoff)	Difference in medians (Retention – Debt Payoff)
	Mean	Median	Nobs	Mean	Median	Nobs	Mean	Median	Nobs		
Cashflow/Total assets [°]	0,011	0,035	113	0,006	0,043	85	0,012	0,023	24	N	N
Net cashflow from operating activities/Total assets ^{*°}	0,035	0,050	119	0,037	0,072	80	0,032	0,036	25	Y, diff>0 (5%)	Y, diff>0 (1%)
Interest coverage ratio ^{°°}	-63,193	4,666	114	-99,75	5,222	76	2,366	2,071	25	Y, diff<0 (5%)	N
Total debt / Total assets	0,270	0,262	119	0,243	0,231	80	0,401	0,401	25	Y, diff<0 (1%)	Y, diff<0 (1%)
Cash / Total assets ^{*°*}	0,142	0,078	119	0,162	0,090	80	0,059	0,055	25	Y, diff>0 (1%)	Y, diff>0 (5%)
Capex/Total assets	0,043	0,028	118	0,042	0,025	79	0,039	0,031	25	N	N
Market to book value of assets ^{*°}	0,997	0,886	119	1,086	0,940	80	0,859	0,774	25	N	Y, diff>0 (5%)
Operating income before depreciation/Total assets	0,005	0,036	119	0,005	0,0451	80	-0,007	0,024	69	N	N

[°]Cashflow was estimated as: operating income before depreciation plus depreciation/depletion and amortization less interest expenses on debt, cash dividend paid and income taxes paid

^{*°} Net cashflow from operating activities comes from the consolidated cash flow statement, which is not available for some firms (e.g. Spanish firms before 2005)

^{°°} Interest coverage was calculated as operating income before depreciation divided by interest expenses on debt

^{*°*} Cash is the level of cash and marketable securities held by the firm

^{*°°} Market to book value of assets was estimated as: market capitalization at the end of the fiscal year preceding the sale plus book value of debt divided by book value of total assets

Table 7 Regression analysis over the whole sample

Source	SS	df	MS	Number of obs =	291
Model	.487204086	6	.081200681	F(6, 284) =	11.33
Residual	2.03605922	284	.007169223	Prob > F =	0.0000
				R-squared =	0.1931
				Adj R-squared =	0.1760
Total	2.52326331	290	.008700908	Root MSE =	.08467

abnretmktmdl1	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
dealvalueoverta	.086992	.0153834	5.65	0.000	.056712	.117272
t1a_d_totdebtota	-.0428002	.0330988	-1.29	0.197	-.1079504	.0223499
t1a_d_cashota	-.0614841	.0404988	-1.52	0.130	-.1412	.0182318
t1a_d_mktbkassets	-.0029498	.0053953	-0.55	0.585	-.0135696	.00767
t1a_d_opincota	-.2137568	.0362966	-5.89	0.000	-.2852014	-.1423123
t1a_d_netcflopactota	.1193281	.0525833	2.27	0.024	.0158257	.2228305
_cons	.0125338	.0065835	1.90	0.058	-.0004249	.0254925

Table 8 Regression analysis of the retention subsample over the 2000-2012 timeframe

Source	SS	df	MS	Number of obs =	169
Model	.485268557	6	.080878093	F(6, 162) =	12.72
Residual	1.02987977	162	.006357283	Prob > F =	0.0000
				R-squared =	0.3203
				Adj R-squared =	0.2951
Total	1.51514833	168	.00901874	Root MSE =	.07973

abnretmktmdl1	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
dealvalueoverta	.0995992	.0192637	5.17	0.000	.0615589	.1376394
t1a_d_totdebtota	-.0983464	.0462468	-2.13	0.035	-.1896707	-.007022
t1a_d_cashota	-.1336648	.0483494	-2.76	0.006	-.2291412	-.0381883
t1a_d_mktbkassets	.0003657	.0057566	0.06	0.949	-.0110018	.0117333
t1a_d_opincota	-.2620126	.0402606	-6.51	0.000	-.3415159	-.1825092
t1a_d_netcflopactota	.174451	.0644098	2.71	0.007	.0472599	.301642
_cons	.0046179	.0077538	0.60	0.552	-.0106937	.0199296

Table 9 Regression analysis of the debt payout subsample over the 2000-2012 timeframe

Source	SS	df	MS			
Model	.070829833	6	.011804972	Number of obs =	81	
Residual	.594632681	74	.008035577	F(6, 74) =	1.47	
Total	.665462514	80	.008318281	Prob > F =	0.2006	
				R-squared =	0.1064	
				Adj R-squared =	0.0340	
				Root MSE =	.08964	

abnretmktmdl1	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
dealvalueoverta	.1627546	.0804096	2.02	0.047	.002535	.3229743
tla_d_totdebtota	.0498922	.0664257	0.75	0.455	-.0824638	.1822483
tla_d_cashota	.1669506	.1440863	1.16	0.250	-.1201475	.4540487
tla_d_mktbkassets	-.0660712	.0308874	-2.14	0.036	-.1276156	-.0045268
tla_d_opincota	-.0176479	.1061045	-0.17	0.868	-.2290658	.19377
tla_d_netcfloowopactota	.0164128	.1259448	0.13	0.897	-.2345376	.2673632
_cons	.007232	.020871	0.35	0.730	-.0343544	.0488184

Table 10 Regression analysis of the sample over the 2000-2007 timeframe

Source	SS	df	MS			
Model	.35595848	6	.059326413	Number of obs =	187	
Residual	1.0545913	180	.005858841	F(6, 180) =	10.13	
Total	1.41054979	186	.007583601	Prob > F =	0.0000	
				R-squared =	0.2524	
				Adj R-squared =	0.2274	
				Root MSE =	.07654	

abnretmktmdl1	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
dealvalueoverta	.0755321	.0177886	4.25	0.000	.040431	.1106332
tla_d_totdebtota	-.0354821	.0375451	-0.95	0.346	-.1095673	.0386031
tla_d_cashota	-.0770982	.0479928	-1.61	0.110	-.1717991	.0176028
tla_d_mktbkassets	.0027086	.0052625	0.51	0.607	-.0076756	.0130928
tla_d_opincota	-.2406629	.0368589	-6.53	0.000	-.313394	-.1679318
tla_d_netcfloowopactota	.0980921	.0593733	1.65	0.100	-.0190652	.2152493
_cons	.008628	.0075944	1.14	0.257	-.0063575	.0236136

Table 11 Regression analysis of the sample over the 2008-2012 timeframe

Source	SS	df	MS	Number of obs =	104
Model	.197693293	6	.032948882	F(6, 97) =	3.55
Residual	.900779174	97	.009286383	Prob > F =	0.0032
				R-squared =	0.1800
				Adj R-squared =	0.1292
Total	1.09847247	103	.010664781	Root MSE =	.09637

abnretmktmdl1	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
dealvalueoverta	.1063834	.0284775	3.74	0.000	.0498635	.1629033
tla_d_totdebtota	-.0320145	.0636699	-0.50	0.616	-.1583816	.0943526
tla_d_cashota	-.007256	.0783448	-0.09	0.926	-.1627486	.1482367
tla_d_mktbkassets	-.0395613	.0195211	-2.03	0.045	-.0783053	-.0008173
tla_d_opincota	-.1126036	.0908352	-1.24	0.218	-.2928864	.0676792
tla_d_netcflopactota	.0934713	.1103387	0.85	0.399	-.1255205	.312463
_cons	.0167202	.0122999	1.36	0.177	-.0076918	.0411322

Table 12 Regression analysis of the sample over the 2000-2007 timeframe, retention subsample only

Source	SS	df	MS	Number of obs =	100
Model	.417866405	6	.069644401	F(6, 93) =	16.23
Residual	.399012145	93	.004290453	Prob > F =	0.0000
				R-squared =	0.5115
				Adj R-squared =	0.4800
Total	.81687855	99	.008251298	Root MSE =	.0655

abnretmktmdl1	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
dealvalueoverta	.0497903	.0244856	2.03	0.045	.0011667	.0984139
tla_d_totdebtota	-.112484	.0523886	-2.15	0.034	-.2165174	-.0084506
tla_d_cashota	-.2098666	.0591245	-3.55	0.001	-.3272761	-.092457
tla_d_mktbkassets	.005837	.0050894	1.15	0.254	-.0042695	.0159435
tla_d_opincota	-.3135254	.0363293	-8.63	0.000	-.3856681	-.2413827
tla_d_netcflopactota	.1422024	.0748329	1.90	0.060	-.006401	.2908058
_cons	-.0000547	.0084835	-0.01	0.995	-.0169013	.016792

Table 13 Regression analysis of the sample over the 2000-2007 timeframe, debt payout subsample only

Source	SS	df	MS	Number of obs =	59
Model	.02072538	6	.00345423	F(6, 52) =	0.51
Residual	.352047837	52	.006770151	Prob > F =	0.7978
Total	.372773217	58	.006427124	R-squared =	0.0556
				Adj R-squared =	-0.0534
				Root MSE =	.08228

abnretmktmdl1	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
dealvalueoverta	.0839997	.0838601	1.00	0.321	-.0842778	.2522773
tla_d_totdebtota	.0595864	.070699	0.84	0.403	-.0822815	.2014543
tla_d_cashota	.1128854	.1471386	0.77	0.446	-.1823699	.4081406
tla_d_mktbkassets	-.0357819	.032627	-1.10	0.278	-.1012527	.0296889
tla_d_opincota	.0876313	.1133236	0.77	0.443	-.1397692	.3150318
tla_d_netcflopactota	-.0336386	.1213844	-0.28	0.783	-.2772143	.209937
_cons	.0184611	.0224974	0.82	0.416	-.0266833	.0636054

Table 14 Regression analysis of the sample over the 2008-2012 timeframe, retention subsample only

Source	SS	df	MS	Number of obs =	69
Model	.190982612	6	.031830435	F(6, 62) =	4.11
Residual	.479791394	62	.007738571	Prob > F =	0.0015
Total	.670774007	68	.009864324	R-squared =	0.2847
				Adj R-squared =	0.2155
				Root MSE =	.08797

abnretmktmdl1	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
dealvalueoverta	.1290801	.0282138	4.58	0.000	.0726814	.1854787
tla_d_netcflopactota	.006732	.1154041	0.06	0.954	-.2239575	.2374216
tla_d_totdebtota	-.0376283	.0768663	-0.49	0.626	-.1912819	.1160252
tla_d_cashota	-.0251872	.0822958	-0.31	0.761	-.1896942	.1393198
tla_d_opincota	.0266596	.1152015	0.23	0.818	-.203625	.2569441
tla_d_mktbkassets	-.0295815	.0199956	-1.48	0.144	-.0695522	.0103891
_cons	.0140243	.0133181	1.05	0.296	-.0125982	.0406468

Table 15 Regression analysis of the sample over the 2008-2012 timeframe, debt payoff subsample only

Source	SS	df	MS	Number of obs =	22
Model	.135492932	6	.022582155	F(6, 15) =	2.16
Residual	.15703161	15	.010468774	Prob > F =	0.1065
				R-squared =	0.4632
				Adj R-squared =	0.2485
Total	.292524542	21	.01392974	Root MSE =	.10232

abnretmktmdl1	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
dealvalueoverta	.1498874	.2624471	0.57	0.576	-.4095053	.70928
tla_d_netcflopactota	.1992226	.7064108	0.28	0.782	-1.306456	1.704902
tla_d_totdebtota	.2087975	.1867022	1.12	0.281	-.1891488	.6067438
tla_d_cashota	1.504388	.6652468	2.26	0.039	.0864477	2.922328
tla_d_opincota	-.7777939	.4532836	-1.72	0.107	-1.743945	.1883573
tla_d_mktbkassets	-.0908591	.0891146	-1.02	0.324	-.2808023	.0990842
_cons	.0035516	.0502554	0.07	0.945	-.1035653	.1106684