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Decoupling by clienteles and by time in the financial markets: The case of two-stage stock-financed mergers

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ABSTRACT

A two-stage stock-financed merger occurs when an acquiring firm first issues shares, and then engages in a cash acquisition shortly afterward. Such deals allow us to test two important hypotheses derived from decoupling: by clienteles via segmentation and by time. The acquirer's value is maximized by selling shares to investors preferring to hold them, and use the raised cash to pay the target shareholders (the decoupling by clienteles hypothesis). Two-stage deals also provide an option to the acquirers by allowing them to decouple their own shares from the correlated target's shares by issuing at an earlier date and wait for good acquisition opportunities (the time decoupling hypothesis). We find empirical evidence in support of both hypotheses.

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1. Introduction

We introduce 'the principle of decoupling' as a value-increasing corporate strategy. It has wide ranging applications from capital budgeting to restructuring, to leveraged recapitalization, and to mergers. We apply the principle to mergers, by showing that the firm value could be optimized by separating *the clienteles* (via segmentation) participating in the financing of the merger from *those participating in the* purchase of the target. The second application is the decoupling of the same security (or two highly correlated securities) into its availability at different time periods.[2] The securities that are highly correlated to other securities would be transformed from having high contemporaneous correlation to low correlation under time shift. When applied to mergers, the time decoupling strategy enables acquirers to issue their own stocks for cash in one period, and to use the cash to acquire a target from the same industry (highly contemporaneously correlated) in a later period. We obtain empirical verifications of both mechanisms in this paper.

Of the cash-only mergers by publicly traded acquirers during the period January 1985 to July 2008, 15.3% may actually have been financed by stock issues in the preceding 12 months through seasoned equity offerings (SEOs) or initial public offerings (IPOs). These mergers can be viewed as *two-stage stock-financed cash mergers*: stocks issued for cash, which in turn was used to finance acquisitions a few months later. Such mergers can be of great value to academic research because they call attention to the

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[2] An example of the same security/commodity under time shift is oil; oil available in September is not worth the same as oil to be available next March (as indicated by the oil futures contracts).

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fact that, underlying many financial transactions, there are actually two separate but related decisions. The first is the financing decision (source of funds) and the second is the investment decision (use of funds). These stock-financed cash acquisitions provide us with convenient data to disentangle the confounding effects of these two decisions, and to tests two important hypotheses: *the decoupling by clienteles* (*or the segmentation*) and *the decoupling by time hypotheses*.

If the capital markets are segmented,[3] the acquiring firms could exploit this market preference. An acquirer may perform this mental calculation: "*Would it be better to offer stocks to a target's shareholders who may not want our stock* (*or else they would have already owned them, and even if they do, they may not want more of them*)*? Or, would it be better to issue stock to those who want to hold it* (*and thus are willing to pay a higher price*) *and use the cash raised to pay the target's shareholders in a two-stage stock-financed cash acquisition?"* Thus a prediction of the market segmentation hypothesis is that the more specific the clientele[4] the firm attracts (e.g., stated purpose for use of funds is to make acquisitions), the more positive is the market response to the new equity issued.

The second financing principle we introduce in this paper is the idea of time decoupling. Our motivation is in response to these challenges: 1) if many stock acquisitions are motivated by acquirers with overvalued shares acquiring targets with lesser or no overvaluation, how could an acquirer with overvalued shares do the same to acquire same-industry firms when all firms in the industry are likely to be similarly overvalued? 2) How could an acquirer make essentially a stock offer for a diversifying acquisition in periods when its share price is low?[5] The solution is to use the principle of time decoupling. We hypothesize and test that acquirers applying the time decoupling principle are able 1) to make relatively more same-industry acquisitions when their industries' share prices are depressed, and 2) make relatively more diversifying acquisitions when their own stocks are depressed.

Our empirical results support both hypotheses. Consistent with the prediction of the decoupling by clienteles hypothesis, we find the wealth effect to the shareholders of the acquiring firms in two-stage stock-financed cash acquisitions are statistically greater than that of stock-financed acquisitions. For example, we find that while there is a positive announcement effect (within 3 days around the announcement) of +0.568% for the matching simple stock-financed M&A sample, the stock-financed cash merger sample has a significantly higher announcement effect of +1.099%. Furthermore, when, during the issuance, the firms specifically state that they will use the funds for acquisitions, they receive a better market reaction.

In another test, we show that, consistent with the decoupling by clienteles hypothesis, market discount to the stock issuance (an SEO) announcement by the firm catering to the desired clientele is less than the market discount demanded by the non-clientele to hold the same stocks. The relative market discount given to the less-willing clienteles (i.e., the shareholders of the target firms in a typical stock deal) is +8.04% (+4.60%) versus −0.48% (+0.36%) for the more sympathetic investors in an SEO, based on 2-digit (3-digit) SIC industry median comparisons.

We present several empirical tests in support of the time decoupling hypothesis. One implication of this hypothesis is that for favorable decoupling to materialize, valuation of equity issues are to occur in periods when the acquiring firm's industry valuation is high, and it is greater than the valuation in the periods when the acquisition offer is made. We find that the median industry (using 3-digit SICs) market-to-book value of the two-stage acquirers during the quarter of the IPO/SEO exceeds the median industry market-to-book during the acquisition quarter in 56.5% of the time (significant at the 1% level). The results from Rhodes-Kropf et al.'s (2005) decomposition also suggests that two-stage acquirers are announcing deals in the quarters when their sector-wide valuation is significantly lower than it is during the IPO/SEO issuance quarters.

The second test demonstrates an advantage of time decoupling in allowing acquirers to essentially use stocks to acquire same-industry firms in periods when the industry valuation is low. We find, of the same-industry acquisitions, +8.85% of two-stage acquisitions occurred in periods when the industry market to book was below its historical median, versus only +5.62% (+6.62%) of single-stage stock (cash) mergers.

Finally, our unique two-stage acquisitions sample yields another contribution to the literature. Because we separate the financing decision from the investment decision of an acquisition, a byproduct of the decoupling principle is to solve the confounding empirical problem of whether the market is responding (upon announcement of the deal) to the financing choice or to the investment choice (quality of the target). More specifically, in the case of stock deals, does the market respond to a revelation of an overvalued stock or to the poor choice of a target? As mentioned above, we find a positive stock reaction to the announcement of a typical two-stage deal. When examining the long-run returns (1 to 3 years after the deal) of the entire two-stage acquirers' sample and of a sub-sample of two-stage acquisitions, where the stocks that were issued earlier have had ample time to adjust downward for overvaluation, we find "cleaner" evidence that the managers tend to make a poor target choice (as reflected in overvaluation-free negative significant long-run returns).

There are several papers that discuss similar type of mergers. Celikyurt et al. (2010) and Hovakimian and Hutton (2010) focus specifically on IPOs that are conducted with a future merger in mind, but they do not analyze the SEO-financed acquisitions. Schlingemann (2004) examines cash-paid mergers, focusing on the ex-ante ability of an acquirer to finance the merger with equity, cash, or debt. He suggests that takeover announcements resolve only part of the uncertainty surrounding a firm's

[3] For instance, there may be some investors preferring to hold shares of one firm while others prefer to hold those of another firm, due to differences in the dividend policy (see Baker and Wurgler, 2004), idiosyncratic risks, leverage, or even "greenness," etc. Investors' segmentation principle has been applied also in the international finance literature. For example, some studies show that market segmentation can arise due to direct or indirect investment barriers such as ownership restrictions, regulatory barriers, taxes, and information constraints (see Bailey and Jagtiani, 1994; Domowitz et al., 1997). In addition, ADRs have abnormal returns around the time of cross-border listings, which also serve as evidence of market segmentation (see Foerster and Karolyi, 1999).

[4] In this case, by "clientele" we mean the subset of investors who believe that acquisition is a good corporate strategy for this particular firm.

[5] As we explain in the next section, we do not claim that the firms have a good market timing ability. Rather, we are considering the real option that many firms are creating for themselves when they decouple in time the financing and the investment decisions.