FIRM LIFE-CYCLE SYNERGIES IN MERGERS AND ACQUISITIONS

Tina Oreski
Swiss Finance Institute and USI Lugano

Introduction

? Does target firm's life-cycle affect acquirer's M&A decision?

This paper shows that target firm's life-cycle affects company's acquisition decision. I propose a novel measure for the firm life-cycle, based on the portfolio of company's products, and I find that transactions are more likely between firms in the same life-cycle.

Moreover, deals in which the acquirer and the target belong to the same life-cycle yield higher stock returns and stronger future asset growth compared with the rest of the transactions.

The analysis reveals that firm life-cycle synergies constitute a fundamental factor in merger and acquisition deals.

Hypothesis

H1 Acquirers consider target firms' life-cycle in M&A.

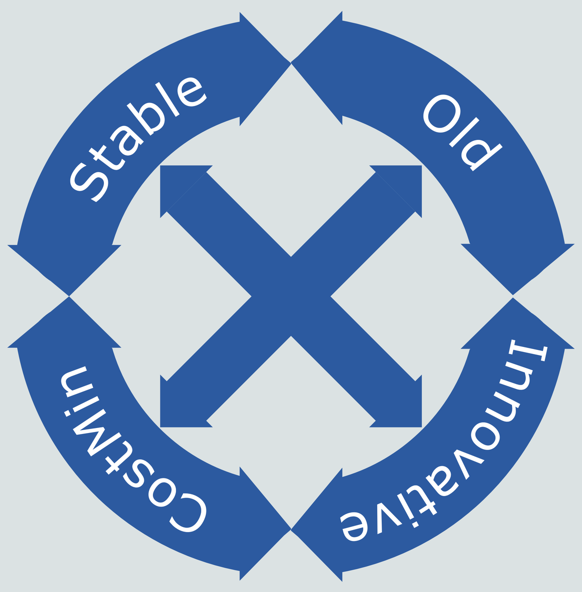
H2 Acquirers that select target in the same life-cycle benefit from the life-cycle synergies.

To adapt themselves and to achieve competitive advantage, companies constantly gather information about the most important firms surrounding them. Chen et al. (2020) provide evidence that those are the companies in the same life-cycle, suggesting that companies obtain the deepest understanding of the firms in the same life-cycle, which helps them predict the potential synergies with a target.

Proxy

Relative firm life-cycle proxy

I propose a new measure for the firm life-cycle, dividing the companies depending on: 1) the life-phases of all the products in the firm, and 2) their ranking among other companies within the matching industry. Exploiting the textual analysis of 10-K financial statements, each company is mapped to one of the four life-stages: innovative, costMin, stable, and old.



Results

Same life-cycle acquires same life-cycle

The results in line with the two hypotheses should pinpoint that the probability of a firm to become a target depends on its life-cycle, and that acquirers aim for companies in the same life-cycle as their own.

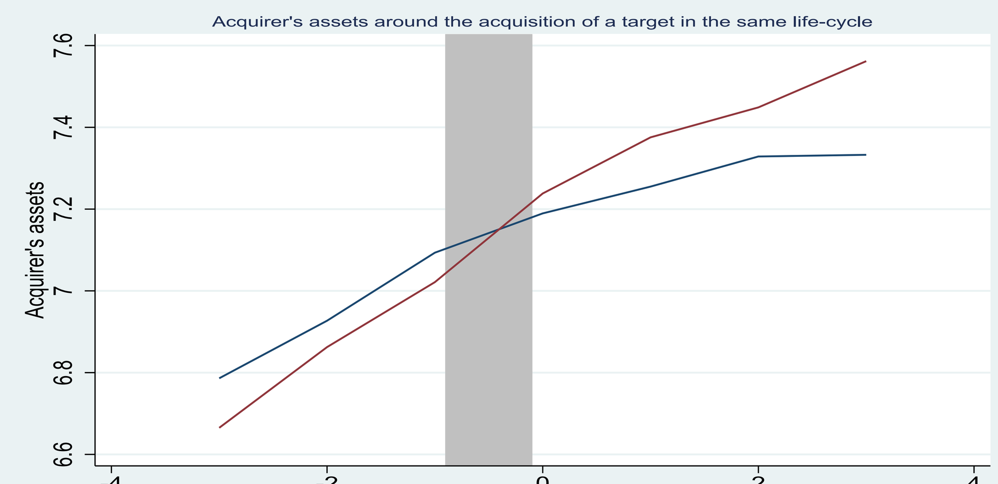
On a sample of 3104 US public mergers in 1995-2017 period, I first document that target firms spread through all the stages, yet innovative and old companies obtain the highest probability of becoming targets, while stable and innovative companies are associated with the highest probability of becoming acquirers.
This finding is in line with Hypothesis 1.

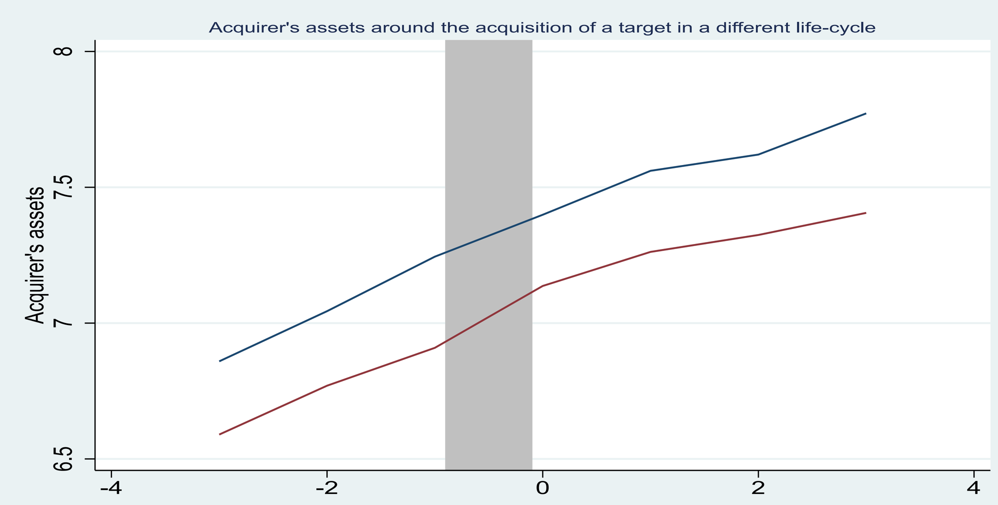
The next step centers on the Hypothesis 2 and the acquirer-target pairs. Table 1 presents the heatmap of the acquirer-target life-cycle pairs. The odds of transaction for companies in the same life-cycle are more than twice as large as the odds for companies that belong to different life-cycle.

Further analysis reveals that acquirers that buy a target in the same life-cycle benefit through financial and real ex-post outcomes. Those deals earn, on average, 72 basis points higher combined announcement returns. Moreover, Figure 1 and 2 depict the difference in acquiror's size after acquiring a target in the same life-cycle compared to a target in a different life-cycle. The red line represents effective acquisitions and the blue line represents withdrawn acquisitions. The acquiror's size increases significantly after the acquisition compared with the companies that bought a target in a different life-cycle.
The findings establish that the life-cycle synergies deliver real post-acquisition gains, **supporting the Hypothesis 2.**

Acquirer's life-cycle	innovative	costMin	stable	old
innovative	374	110	205	98
costMin	141	348	212	161
stable	238	203	474	162
old	69	100	94	115

Target firm's life-cycle





Conclusions

Firm life-cycle synergies constitute a fundametal factor in M&A deals.

H1 H2

This paper is the first to emphasize the importance of target firms' life-phase on M&A, thereby contributing to the literature in two main ways. First, the novelty of the life-cycle proxy is that a company's portfolio of products is compared only to the similar firms. Second, the paper underscores a new dimension of asset complementarities in public M&A deals.

Tina Oreski, tina.oreski@usi.ch, https://www.sfi.ch/en/people/tina-oreski