

NEW EVIDENCE ON THE DYNAMIC
TRADE-OFF THEORY OF CAPITAL STRUCTURE

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In this paper, I provide new evidence regarding the dynamic trade-off theory of capital structure. Although this theory has been widely studied from a theoretical point of view, empirical evidence is not conclusive about their validity in data. Here, I provide with new estimates that can help to understand how dynamic trade-off theory fits into the real world.

The trade-off theory of capital structure states that, when choosing their financial structure, firms trade-off the costs and benefits of alternative options. In this sense, there would be an optimal leverage ratio towards which the firm would like to converge. In this dynamic version, this theory implies the existence of a time-varying target leverage ratio.

The main empirical problem is the unobservability of such a target. The econometrician cannot directly observe the target leverage and has to identify it through several assumptions. The most common way to do this is by considering a partial adjustment model in which the target is a (linear) function of some exogenous variables. This partial adjustment model is the starting point of this paper.

The first contribution of the paper is the application of a new estimator to the partial adjustment model. This model has been commonly estimated via the within-groups estimator in the literature. This estimator is known to suffer from some bias when applied to dynamic panel data with fixed T (as it is the case in these exercises). For this reason, I propose to use the random effects estimator explored in Alvarez and Arellano (2003).

Using this estimator, I obtain a much lower speed of adjustment than the one found in previous empirical literature. This is an important finding that goes against the

A second contribution of the paper relates to the proposal of different specifications for the partial adjustment model. Concretely, I consider two extensions to the partial adjustment model. The first one is an asymmetric adjustment model in which converging towards the target leverage ratio occurs at a different speed depending on whether actual leverage is above or below that target. This specification has a lot of sense if firms have more or less difficulties in issuing or buying back debt.

Second, I also estimate a lumpy adjustment model in which the firm only acts with some probability each period. This can be thought of a variation of the standard (s, S) investment model. The probability of acting could depend on the distance to the target leverage ratio.