

V. Conclusion

5.1 Results

In this research, we try to figure out whether firms around the world maintain target leverage, and adjust toward it gradually. If do and if we can find that adjustment speeds among countries are divergent, can we find any country-level factors to explain it? We use a sample of all non-financial firms in thirty-two countries during the period 1995 to 2004. There are three estimation methods we use to evaluate the adjustment speed (Fama and MacBeth (1973), fixed-effect panel regression, and Flanney and Rangan (2006)'s base specification). When analyzing the effect of additional two main capital structures (pecking order and market timing), we use two kinds of leverage measures. The first one is defined as both long-term and short-term debts divide by total assets, and the second one is long-term debts divide by net assets, where net assets equal to total assets minus current and other liabilities. Our findings are:

1. Partial adjustment model toward the target leverage fit our data well.
2. Among three estimation method, Fama and MacBeth (1973) estimates show quite slow adjustment speed, while the other two estimation methods produces pretty high adjustment speeds (world mean adjustment speed of FM estimates is 12.53%, compared to 60.10% and 34.47% for other two estimation methods). This may because Fama and MacBeth (1973) estimates fail to capture our data's panel character.
3. In every model, adjustment speed toward optimal leverage ratio varies from countries to countries.
4. In order to capture the pecking order and market timing effects, we add financing deficit variable (*FINDEF*) and Baker and Wurgler (2002)'s external finance weighted average market to book asset ratios variable (*EFWA*) to our model. Using first leverage measure, *FINDEF* variable has significantly positive sign, while *EFWA* variable has ambiguous signs and only in few countries with significance. But the adjustment speed doesn't change a lot after including both variables. According to Frank and Goyal (2003), we view them as generalized version of the trade-off theory. When second leverage measure is used, adding *FINDEF* variable lowers the adjustment speed a lot and with significance in all countries. This shows that the definition of leverage ratio matters.
5. When using second leverage measure with *FINDEF* variable in the model, the

magnitude of decrease on adjustment speed significantly correlated with the coefficient on *FINDEF* variable.

6. In last part, we use country-level factors mentioned by La Porta et al. (1998) to test the relationship between adjustment speeds and country-level factors. Our results show that firms in emerging countries or in countries with more completed accounting standards tend to adjust faster toward their optimal leverage. Firms in more developed countries or in countries with stronger law enforcement, higher corporate tax rate, or more completed accounting standards tend to have less decrease on adjustment speed when including *FINDEF* variable in the model (using second leverage measure—long-term debts divide by net assets). We also know that legal tradition and accounting standards have significant negative relationships with the coefficient on *FINDEF* variable. Thus, we conclude that firms in more developed countries or countries with stronger law enforcement or more completed accounting standards tend to have less decrease on adjustment speeds because they have less information asymmetries.

5.2 Limitation and Further Research

There are several limitations in our research:

1. The accounting systems vary among countries. Therefore, the valuation of assets (at historical cost or current value) may differ substantially across countries. As mentioned by Nobes and Parker (1991), German accounting places greater emphasis on “conservatism” and less on “true and fair” consideration. Therefore, assets values of German firms may be understated relative to those of other countries. This is hard to correct for this, hence, our results on book values must be interpreted with the appropriate caution.
2. Because the selection criteria used by Compustat Global Vantage database, firms in our sample represents the high market value firms, usually the largest firms in each country. And largest firms are believed to have lower adjustment costs, therefore, ought to have quicker adjustment speed moving back to the desired leverage.
3. Only listed firms are includes in Compustat Global Vantage database. Thus, our result may fail to capture a typically non-listed firm’s capital structure in each country.
4. Some of the country-level factors, like law enforcement, ownership concentration,

and accounting standard, are easily to obtain, so we use the data provided by La Porta et al. (1998) which is the average of 1982 to 1995. However, our sample period is 1995 to 2004; this may cause some error in describing the real situation of countries.

In this research, we use static trade-off model to show that the adjustment speed toward target leverage has significantly relationships with market condition and accounting standards. Besides for static trade-off model, some recent researches also discuss the dynamic trade-off model. Further research can also use dynamic trade-off model to test our hypotheses. And since the definition of leverage ratio matters, using different leverage measures and try to figure out why they have different results are also suggested. Moreover, there are still other country-level factors not including in our analysis, such as interest rate, the industry structure of each country, can be used to analyze the influence of firm's capital structure..