

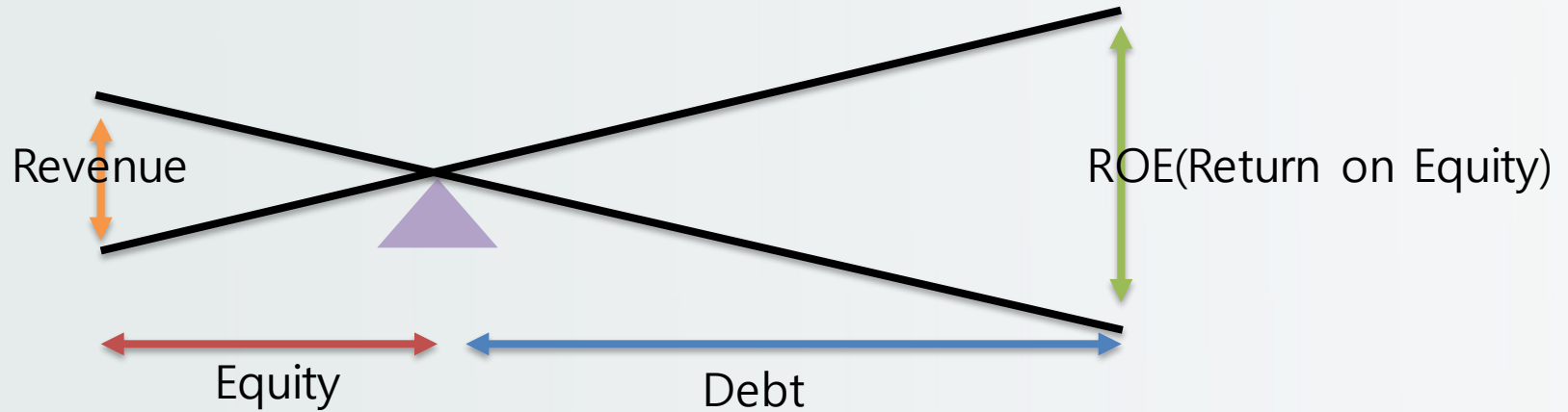
# Research Proposal

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# Background

- Company wants to pursue maximize their firm-value



- Company can maximize their firm-value with high-debt
- What factors affect on Capital Structure?
  - The cost of Capital, Credit ratings, Growth rate, Tax exposure and so on
  - Collateral value of asset



# Research Question

What is the relationship between Asset liquidity and Capital structure in each business life cycle(i.e., start-up, growth, mature, shake-out, decline)?



# Literature Review

- Debates on impact of liquidity of a firm's assets on optimal leverage
  - Asset liquidity increases optimal leverage (Shleifer and Vishny, 1992)
  - The value of real assets influence on capital restructuring (Flor, 2007)
- Positive Relationship between Asset liquidity and leverage
  - Asset liquidity increases optimal leverage (Sibilkov, 2009)
  - Asset redeployability is important driver of leverage of firms (Campello and Giambona, 2013)
- Contribution
  - Many researchers has studied this relationship by industries, by countries and by firm-sizes,
  - But has not studied in each business life cycle stages!



# Hypothesis

- At aggregate level, there is positive relationship between asset liquidity and leverage. Asset liquidity increases the amount of capital that firm can borrow and optimal leverage.
- Firms in early business life cycle stage have stronger positive relationship than firms in decline stage.



# Data

- SEC – EDGAR (<https://www.sec.gov/edgar>)
  - Company financial statements, annual reports data from 1984
  - Offer transaction data and merger and acquisition data
- Others
  - Morningstar, Bloomberg (Financial Statistics)



# Computation & Methodology

## ➤ Computation

### Liquidity Index

Using the two methods motivated  
By Hernan O. and Gordon M.(2014)

1. The number of potential buyers for a firm's asset minus the number of rival firms in the industry that have debt ratings.
2. The average book leverage net of cash of rival firms in the industry

### Business Life Cycle

Using Cash Flow patterns  
(Dickinson, 2011)

The combination of a firm's net operating, investing, and financing cash flow and using the sign(positive or negative)

## ➤ Methodology

### Multiple Linear Regression

Testing the relationship between liquidity index and capital structure

Testing with sub-categories of capital structure(i.e. leverage, secured debt, unsecured debt)



# References

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