Is there an Optimal Capital Structure for your Firm?

PHILIP BARRY

Credit Ratings, Capital Management and Corporate Treasury Conference
Auckland, 30 August 2010
Contents

1. Background
2. The Theory
3. The Evidence
4. What Really Matters
5. Lessons from the GFC
6. Conclusions
Background

- CFO's choice of the firm's financial structure matters

- Task is complicated, with limited helpful advice offered by academia

- A theory of optimal capital structure remains one of the great unsolved problems of modern corporate finance
Background ctd.

- Capital structure is a subset of financial strategy
- Financial strategy should support the execution of competitive strategy
- All about: the maximisation of firm value
Financial strategy choices fall into three areas:

- Capital structure – the mix of debt and equity
- Distribution policies – the dividend policies that achieve and support the chosen capital structure in the short, medium and long-term
- Financing arrangements – the nature of debt and equity securities issued (and alternative financing arrangements used)

My focus: what mix of debt and equity maximises the value of the firm in the current environment?
The Theory

Modigliano Miller (1958)

%  

Debt/Equity

K_e

K_a

K_d
The Theory ctd.
The Theory ctd.

With tax (no imputation credits)

Debt/Equity

%
The Theory ctd.

With bankruptcy and agency costs

Debt/Equity

%
The Evidence

Debt/(debt + equity)
NZ listed companies: average for 2002-2010

Equity based on market values
The Evidence ctd.

Equity based on market values

Debt/(debt + equity)
NZ listed companies: 2010

Agriculture
Building and Construction
Consumer
Energy
Forestry & Forest Products
Intermediate & Durables
Media & Telecommunications
Ports
Property
Transport

Equity based on market values
The Evidence ctd.

Debt/(debt+equity)
NZ listed companies - all sectors

Equity based on market values
The Evidence ctd.

• Caveats:
  – ratios can vary significantly within a sector
  – ratios can vary significantly for a single company over time
  – data covers listed companies only
What really matters?

• Maximising value requires striking the right balance between too much and too little financial flexibility:
  – too little financial flexibility means that the business:
    • may forego profitable investment opportunities through the inability to access funds when needed
    • faces an unacceptable risk of the costs of financial distress
  – too much financial flexibility:
    • raises the probability of agency costs, e.g. pursuit of unprofitable/unnecessary projects
What really matters? ctd.

• In practical terms, finding the right balance between debt and equity effectively involves determining:

  – the maximum level of debt that the business can sustain under normal operating conditions

  – without having an unacceptable risk of financial constraints reducing value by impacting on investment opportunities or causing financial distress

  – the ability to access equity markets is also key
What really matters? ctd.

• Assessing this debt level requires an assessment of a number of factors including:
  – expected operating conditions and earnings
  – factors that can cause “abnormal” operating conditions and how they impact to reduce earnings
  – the probability of these abnormal events and outcomes occurring
  – the probability of unexpected acquisition opportunities
  – what constitutes acceptable and unacceptable risk
What really matters? ctd.

- Factors that impact on financial flexibility:
  1. Source and uses of financial flexibility
  2. Debt covenants
  3. Credit rating criteria
What really matters? ctd.

1. Source and uses of financial flexibility
   • Draw-down of existing debt facilities
   • Defer/suspend dividends
   • New equity
   • Asset sales
   • Defer investment projects
   • Non-senior debt (eg hybrids/project finance/cross-border leases)
What really matters? ctd.

2. Debt covenants:
   • set parameters on key financial ratios. Breach may invoke a review or give rise to default
   • the primary financial strategy benchmark is to maintain a target credit rating.
   • an investment grade rating ensures access to a broad range of debt providers/investors.
   • the potential effects of dropping below an investment grade rating include:
     – Higher debt funding costs.
     – Funding constraints (lower appetite from capital markets and banks), more reliance on favourable borrowing “windows”.

www.tdb.co.nz
3. Credit rating criteria:

- provide a useful external reference point for the expected cost of borrowing in various scenarios and also the expected access to debt markets
- to ensure that a BBB+ credit rating is maintained
  - Meridian’s financial policies have targeted:
    - A gearing policy Debt / (Debt +Equity) <35%;
    - Interest cover EBITDA/Interest > 2.75X;
- S&P provides some high-level guidance on the bands for key ratios for energy utilities likely to be associated with specific ratings:
What really matters? ctd.

3. Credit rating criteria ctd:

<table>
<thead>
<tr>
<th></th>
<th>Funds from operations interest coverage (x)</th>
<th>Funds from operations to total debt (%)</th>
<th>Total debt to total capital (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>BBB</td>
<td>A</td>
</tr>
<tr>
<td>Transmission and distribution</td>
<td>3.25</td>
<td>2.0</td>
<td>15</td>
</tr>
<tr>
<td>Generators</td>
<td>6.75</td>
<td>4.25</td>
<td>42</td>
</tr>
<tr>
<td>Vertically integrated cos</td>
<td>4.25</td>
<td>2.75</td>
<td>27</td>
</tr>
</tbody>
</table>

Source: Standard and Poors: Ratings Methodology For Global Power Companies
Lessons from the GFC

- How has the GFC altered views on optimal capital structure?
  - more conservative levels of debt
  - wider range of assumptions for stress testing
  - more conservative financing structures
  - staggered durations
  - banks are more friendly again now
  - banks in good times tell you bonds are expensive
  - but CFO needs options in back-pocket
Lessons from the GFC ctd.

• Not everyone can access debt
• Key is what investors want
• Post-GFC there were a number of distressed recapitalisations
Lessons from the GFC ctd.

• Case 1. PGG Wrightson:
  – pre-GFC debt:EBITDA of 5-6 was ok
  – Post GFC investors demand debt:EBITDA of 2
  – Investors wouldn’t participate in the recapitalisation without reduced leverage

• Case 2. Fisher Paykel Appliances where debt blew out due to FX decline -P&L, not balance sheet, hedged?
Lessons from the GFC ctd.

- How able are you to access debt markets?
- Can you rely on banks to provide funds?
- What alternatives do you have to bank debt:
  - Bonds?
  - International debt markets?
  - Private placements?
- Will depend on your size and credit rating
Conclusions

- Capital structure matters
- Key is getting the balance right
- Don’t put all your financing eggs in one basket
- Keep your options open
- You as CFO/Treasurer have power (of information: don’t let others wield that power over you)