The Costs of Financial Distress

While debt brings the benefits of lower tax payments in the form of interest tax shields, it also brings the costs of financial distress.

For example, take a car dealing business with a very high level of leverage. Say it has a debt-to-equity ratio of 10 to 1 (1,000%), then its debt-to-assets ratio is 10 to 11 which means that 91.91% of its assets are funded by debt and only 9.09% of its assets are funded by equity.

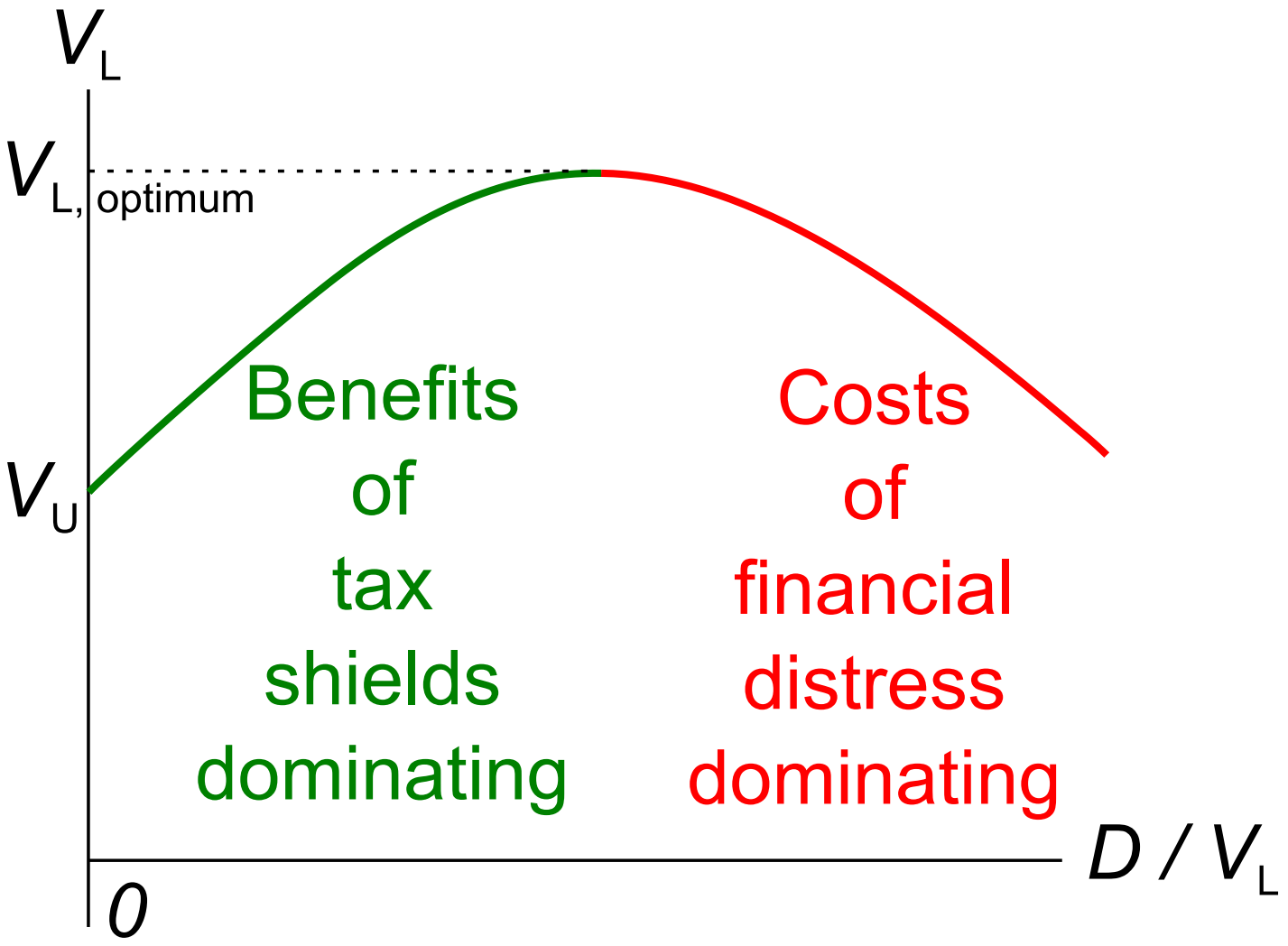
The car dealing firm will have a high interest expense which is a fixed cost. If the firm has a bad year with low sales, it will make a loss larger than its small amount of book equity, leading to bankruptcy.

- The danger of bankruptcy will make the firm's employees afraid of losing their job when the firm goes bankrupt, so they will leave.
- Customers will be wary of buying cars since the warranty will be worthless if the firm goes bankrupt.
- Suppliers will be wary of selling cars to the dealer on credit because if the dealer goes bankrupt then they may not be able to pay back the loan. So the supplier will demand cash on delivery and will not extend more generous credit terms.

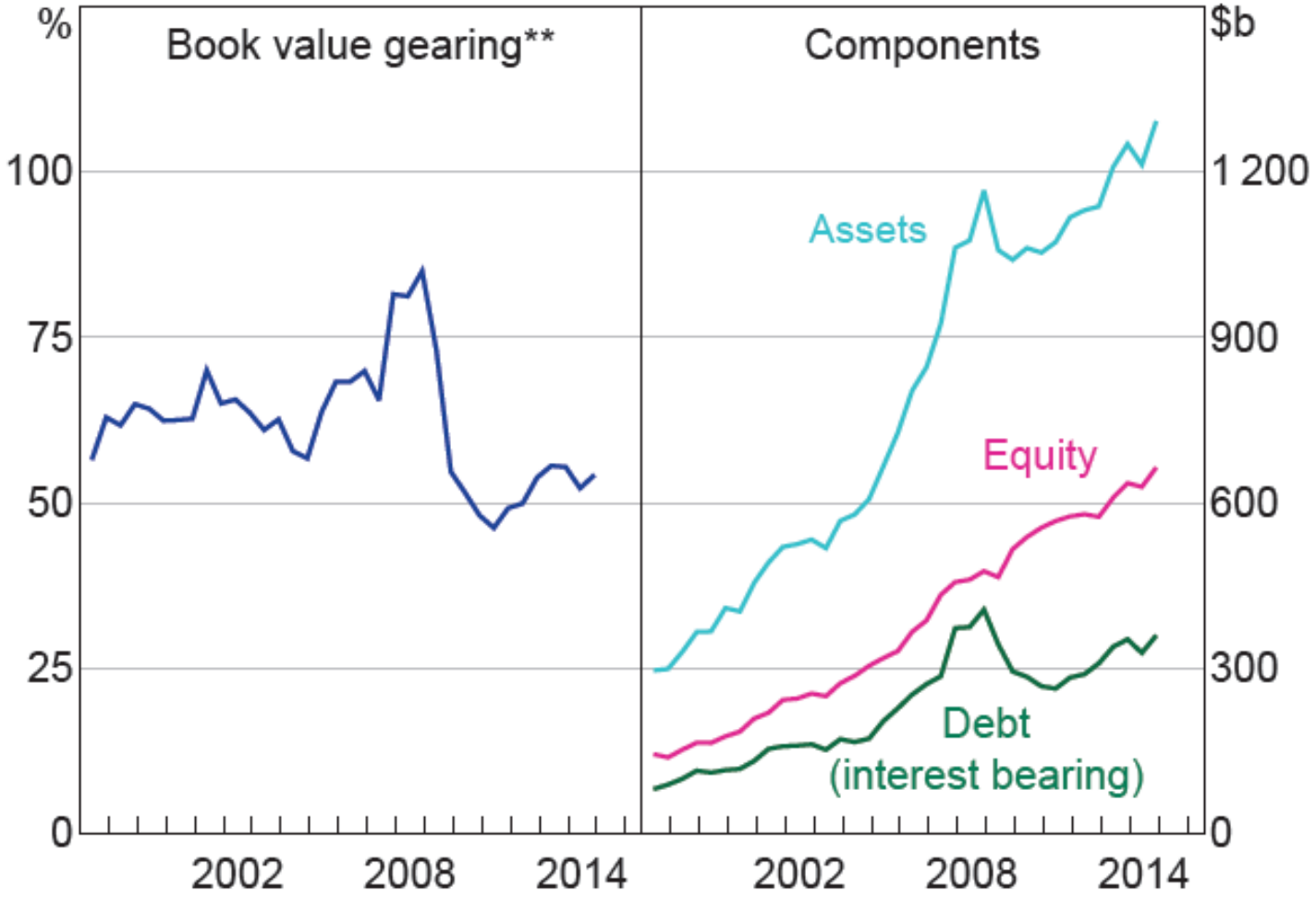
All of these are real business costs of financial distress which become worse as the proportion of debt grows.

The costs of financial distress moderate the benefits of interest tax shields.

Firms try to achieve a gearing (or leverage) ratio that balances these costs and benefits. This is $V_{L,optimum}$ in the graph below.


V_L
$V_{L,\text{optimum}}$
V_U
Benefits of tax shields dominating
Costs of financial distress dominating
D / V_L
0

Listed Corporations' Gearing Ratio*



* The gross gearing ratio is defined as the ratio of the book value of gross debt to the book value of equity; excludes foreign-domiciled companies

** Data from 1997 includes real estate companies

Sources: Morningstar; RBA; Statex