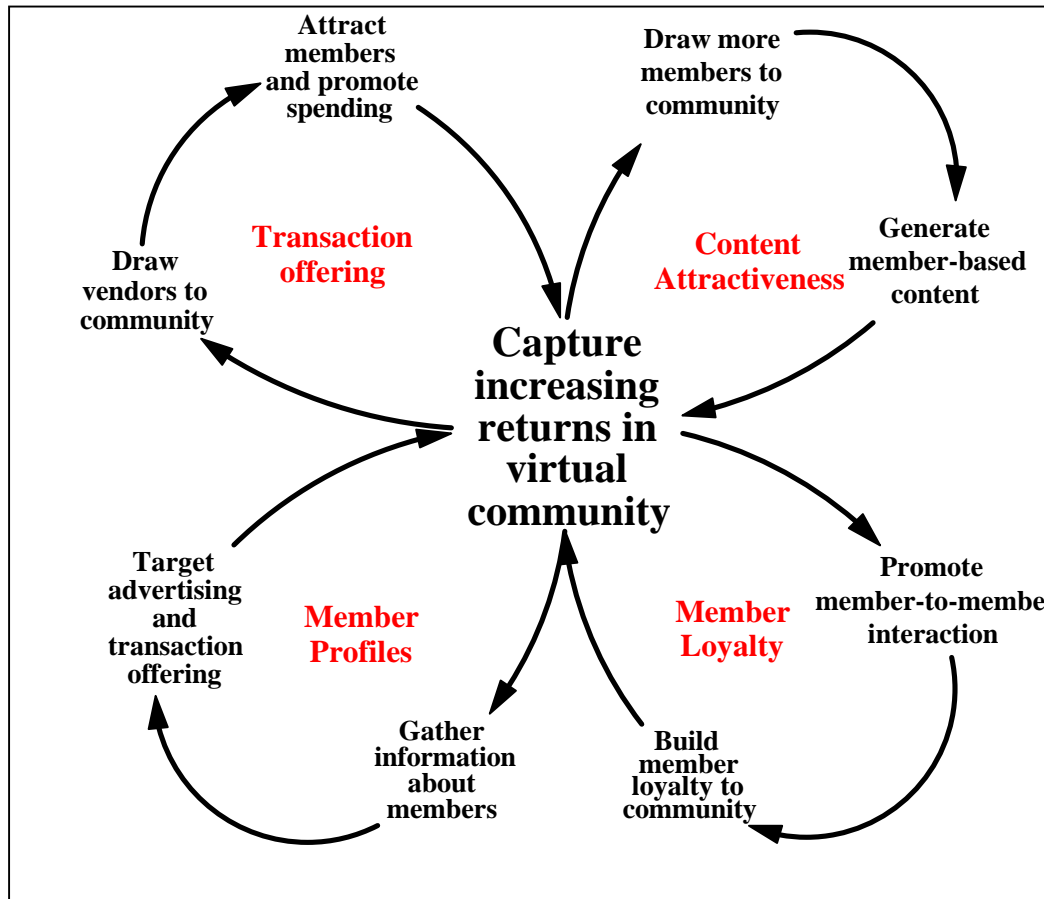


Figure 1 - Hagel & Armstrong's Model on Online Communities



From Hagel/Armstrong, Net Gain, Expanding Markets through Virtual Communities, 1997, page 56.

Figure 2

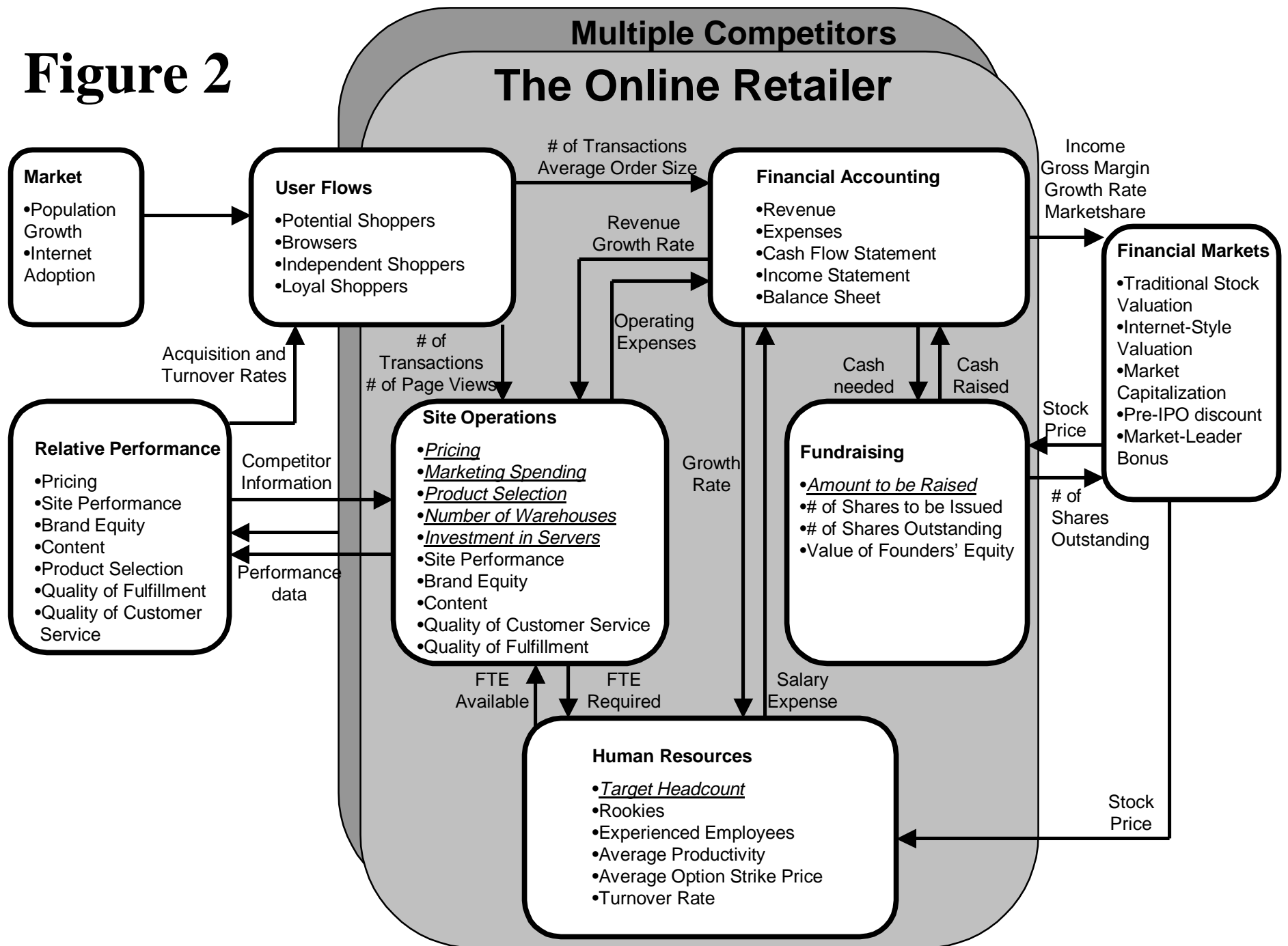
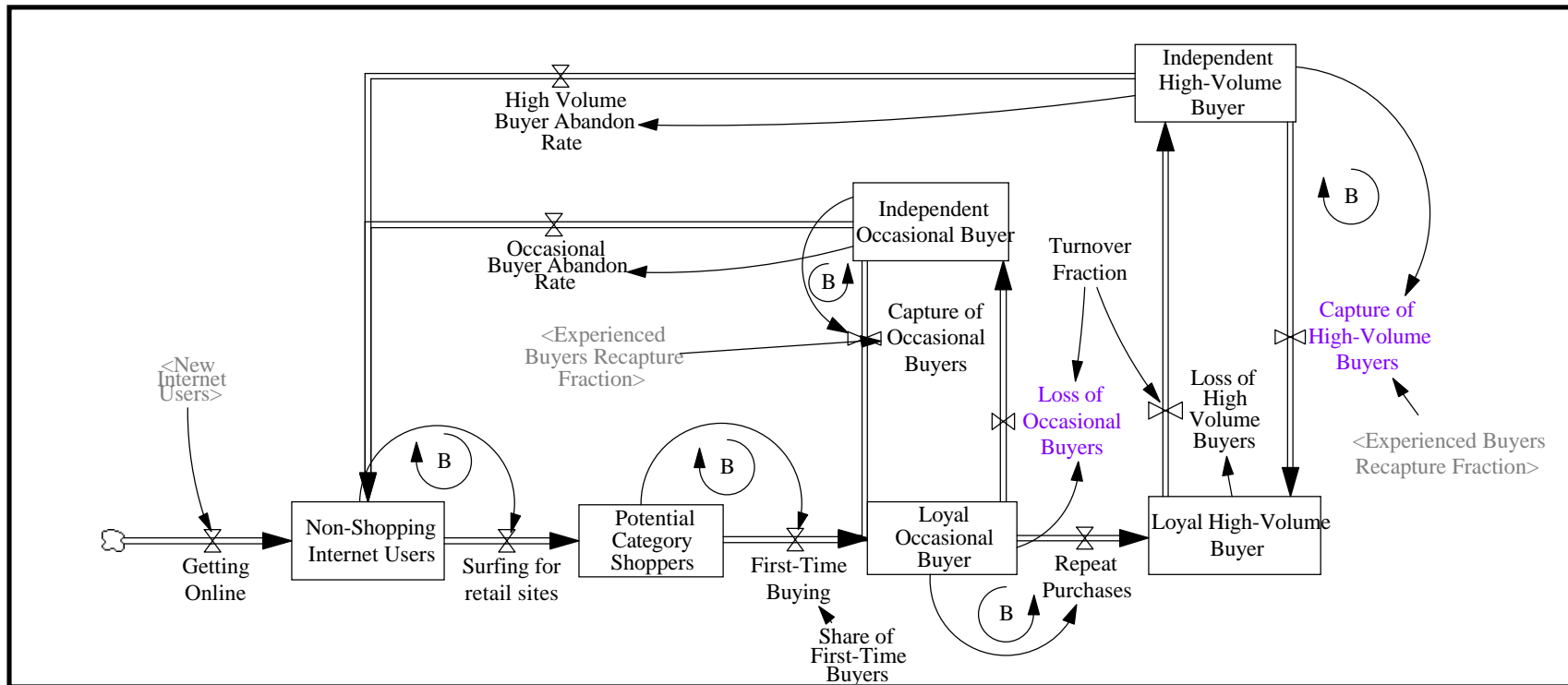
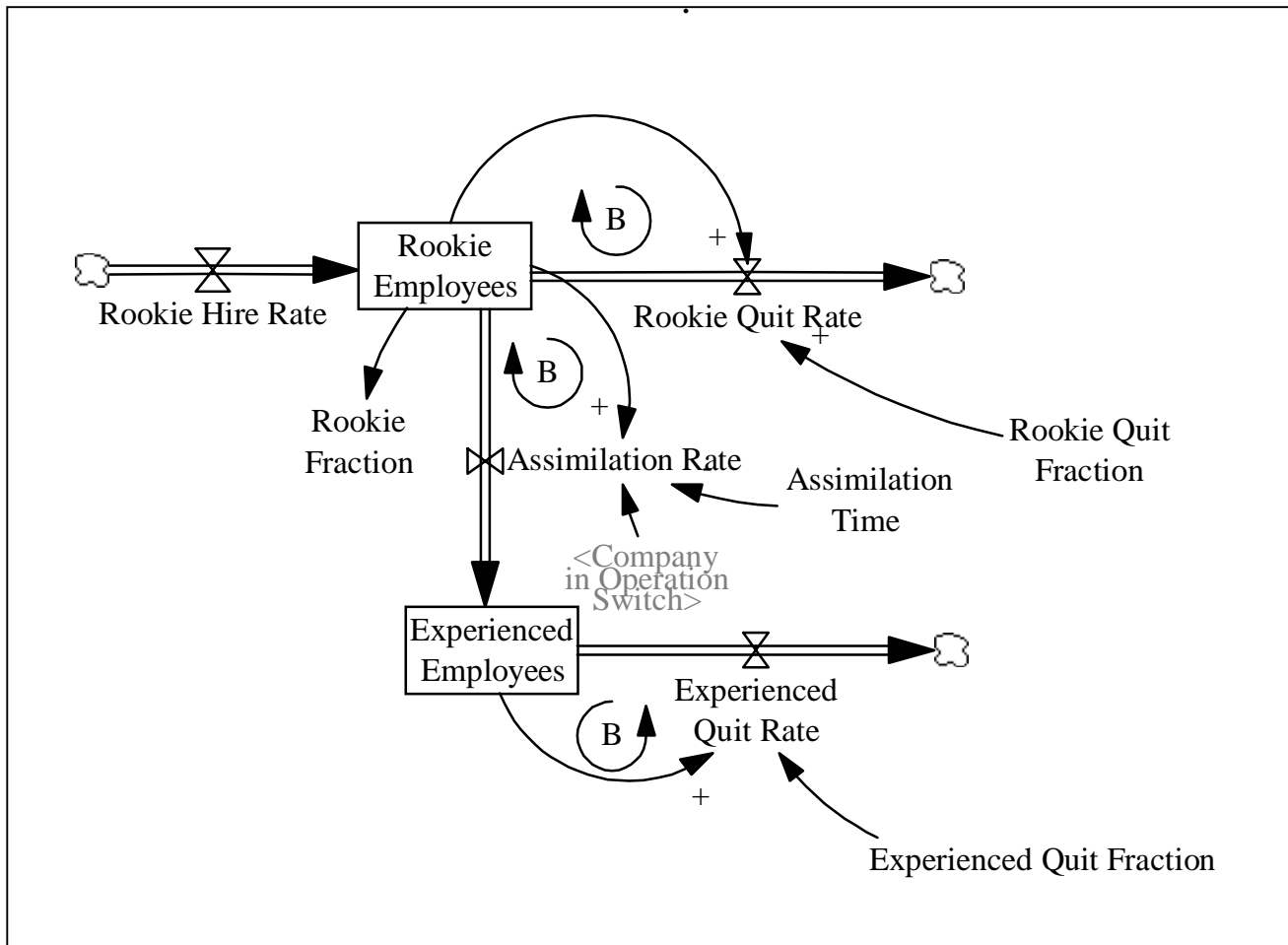


Figure 3 - User Flows



This stock-and flow structure describes the acquisition and retention of users by the different companies in the market. Note that the Loyal Buyer Stocks exist separately for each company.

Figure 4 - The Hiring and Training Cycle



Source: Inspired by Figure 12-11 in Sterman, Business Dynamics, Systems Thinking and Modeling for a Complex World, page 491. See also James Lyneis, Corporate Planning and Policy Design A System Dynamics Approach, Chapter 13, 1980.

Figure 6 - The Internet-Style Valuation

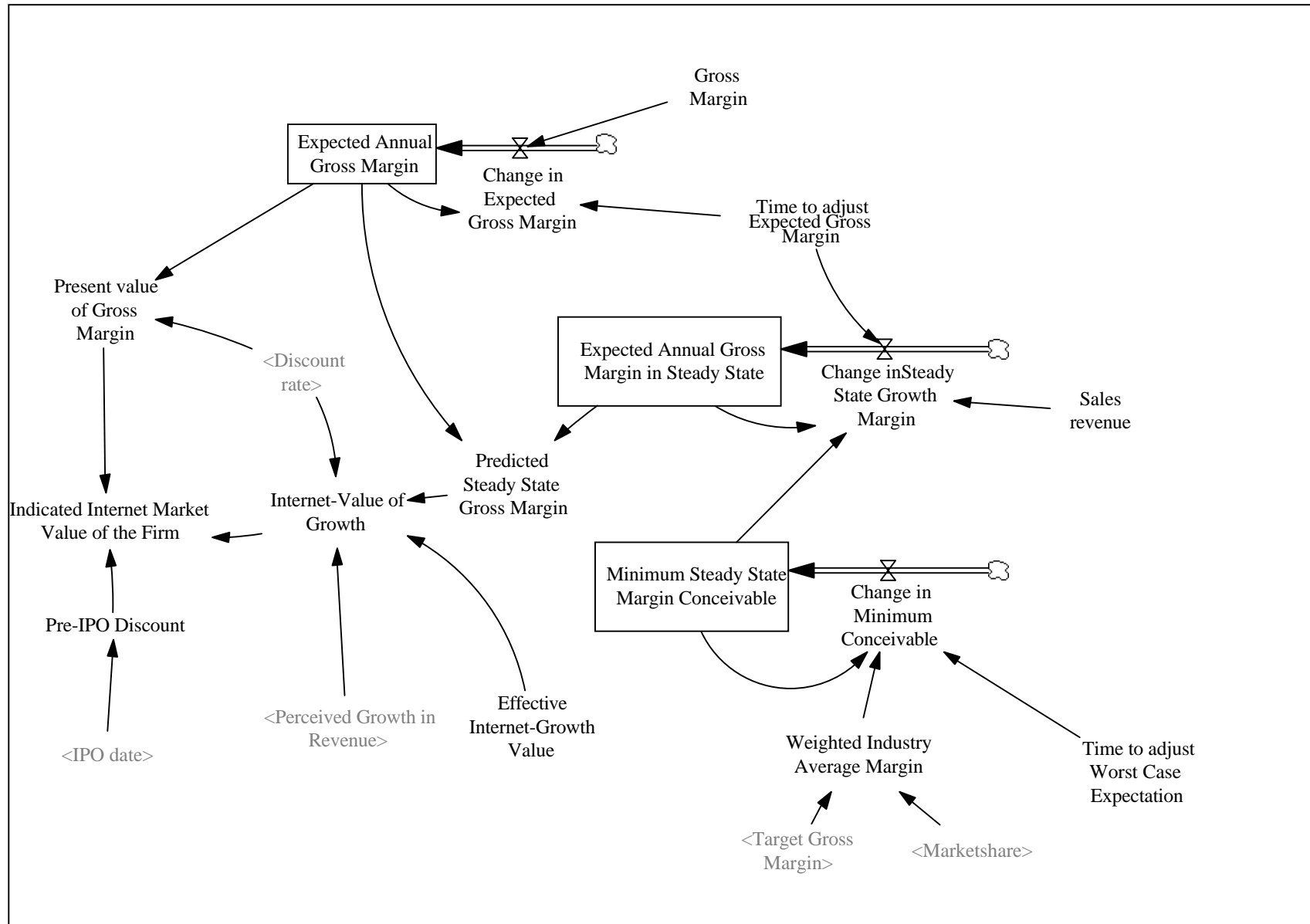


Figure 7 - Two Modes of Stock Valuation

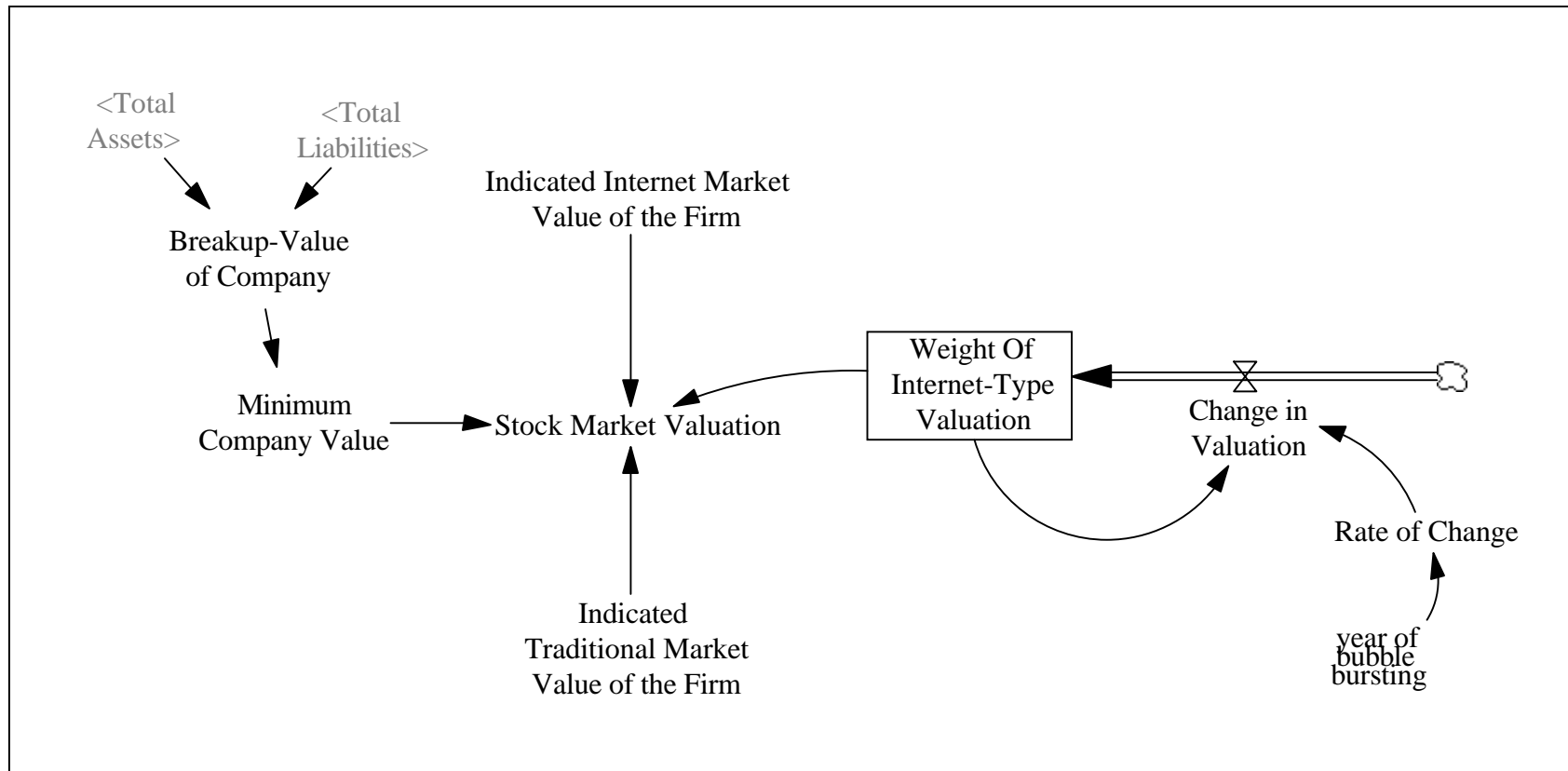
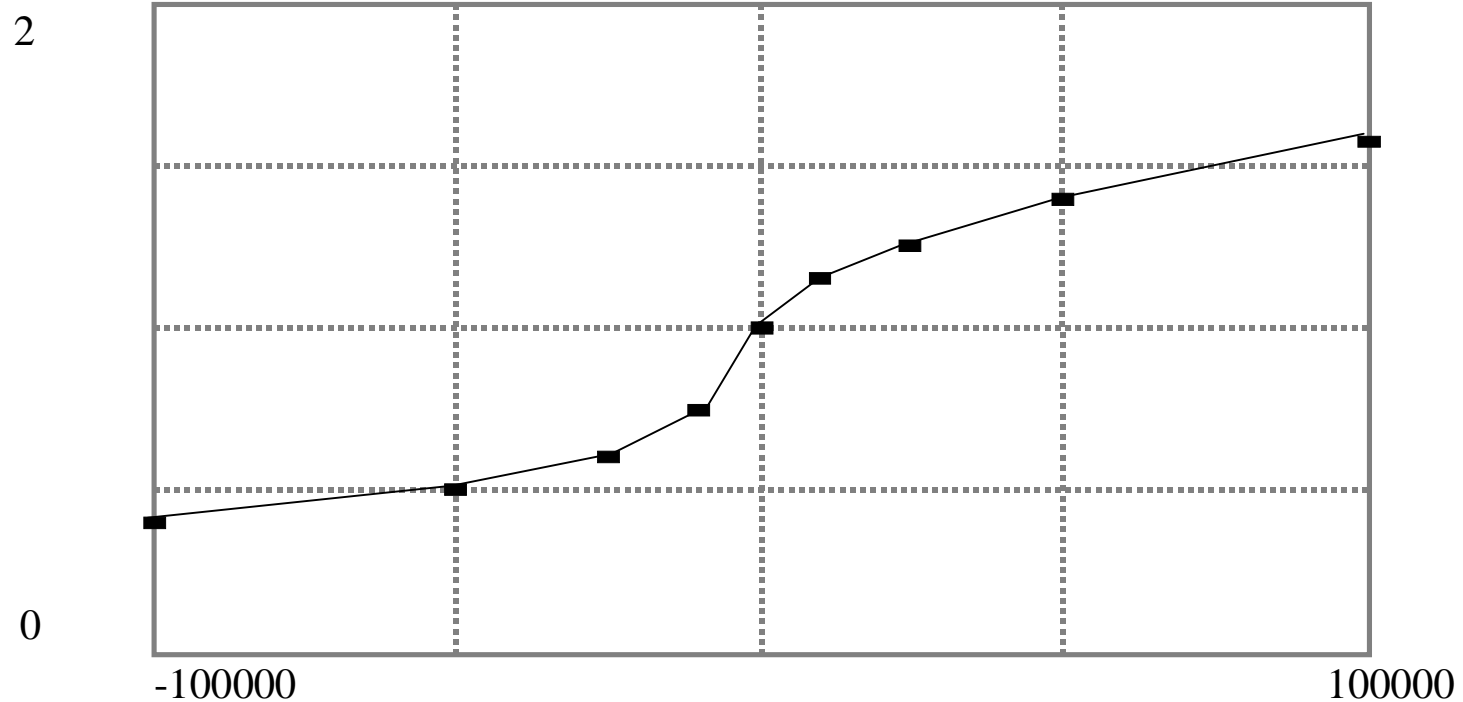


Figure 8 - Testing Robustness

Graph Lookup - Effect of Option Performance on Financial Attractiveness of the Job



This graph describes the impact of the current difference between option strike price and stock price on Financial Attractiveness of the Job. A positive value increases attractiveness, a negative value decreases attractiveness

Figure 9 - Testing Robustness

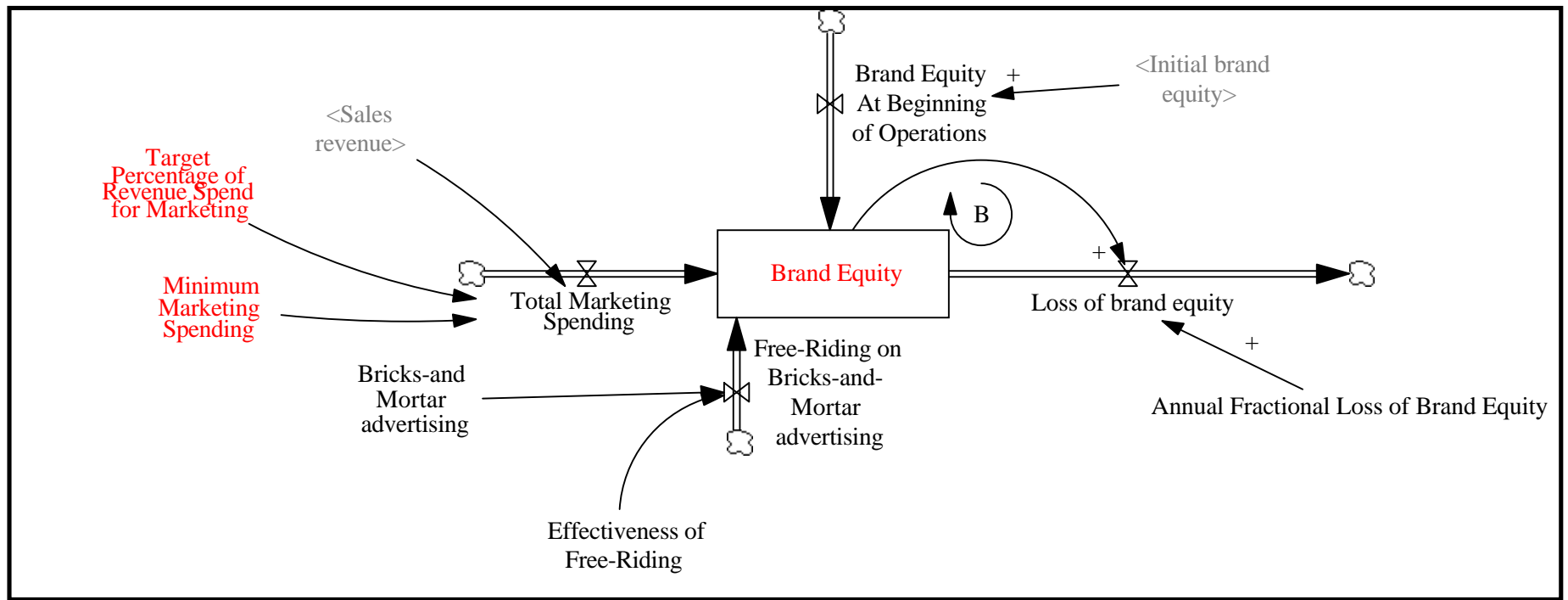
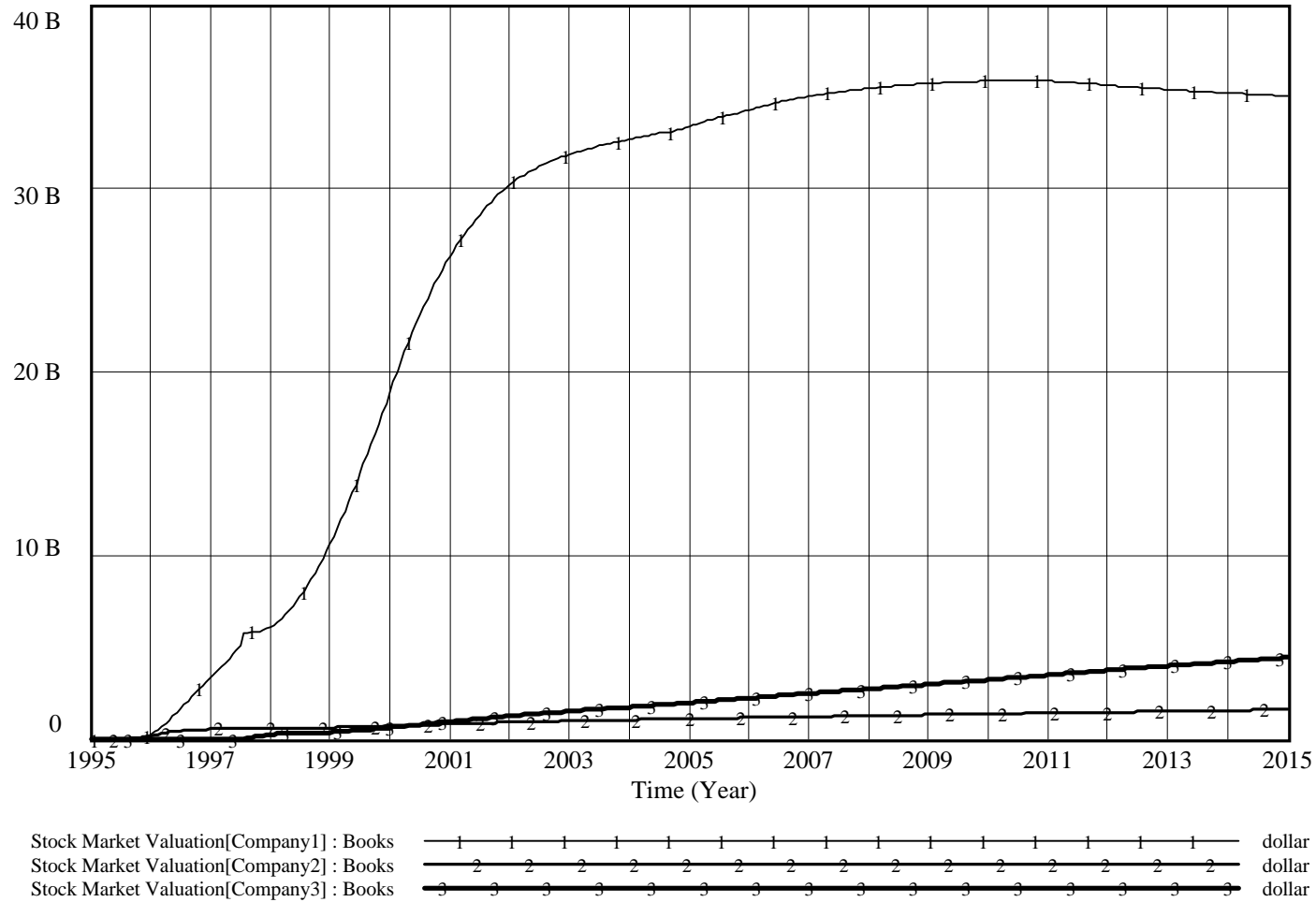


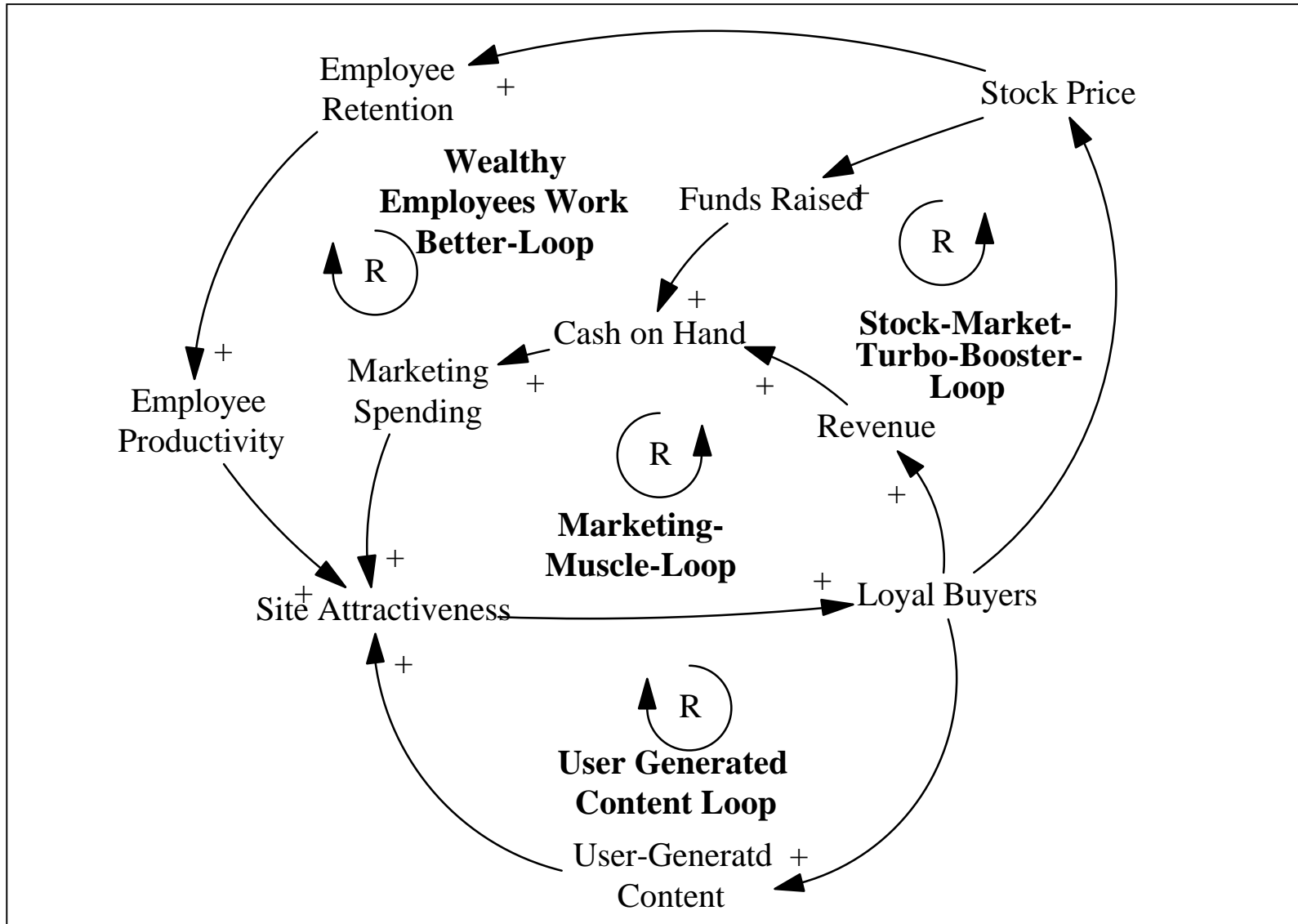
Figure 11 - Base Case 1 (Books)

Graph for Stock Market Valuation



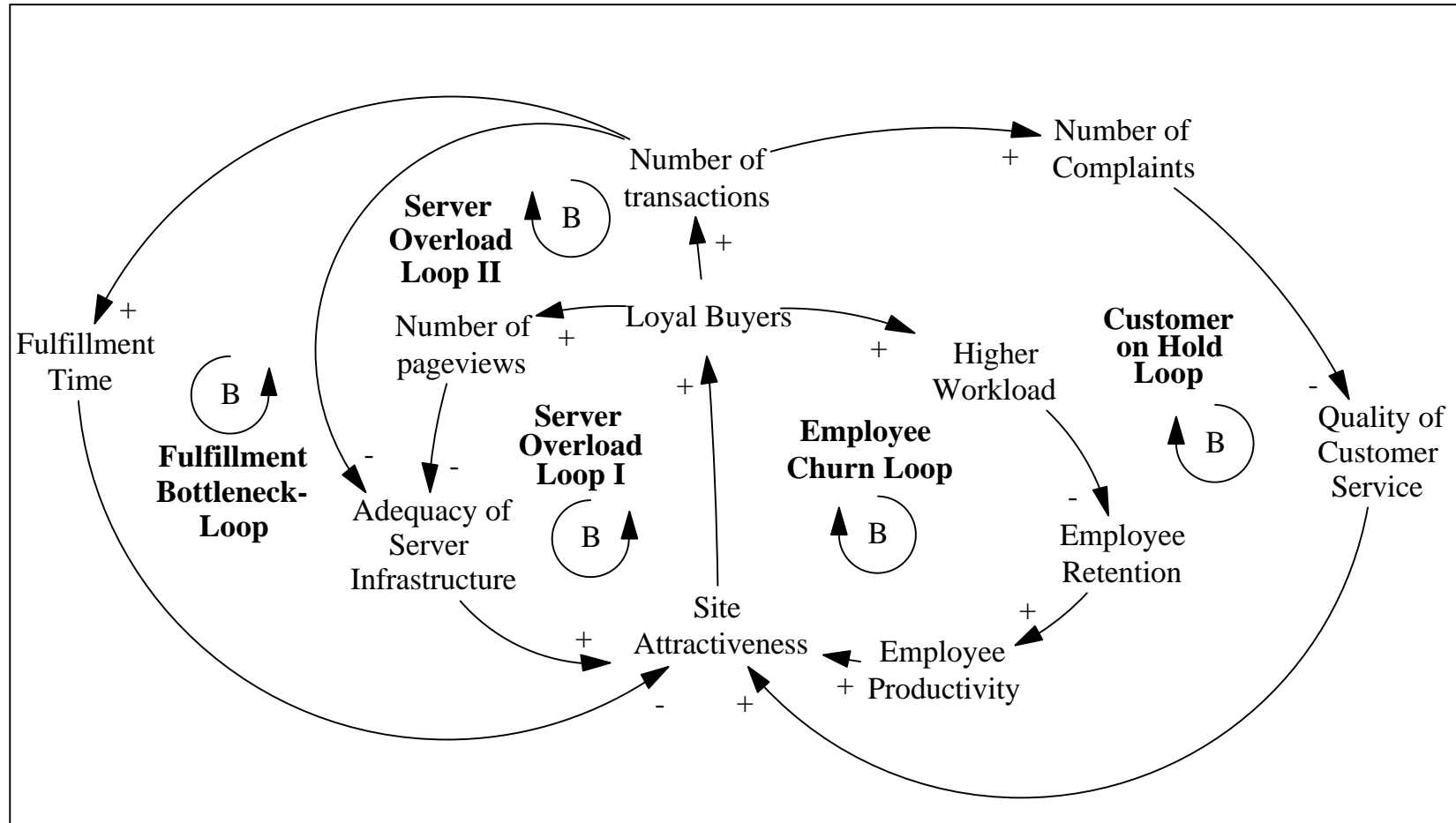
The base case produces a familiar result: the aggressive early-mover dominates, other players, including the bricks-and-mortar player struggle to catch up.

Figure 13 - Growth Loops



This graph describes some of the key growth loops in online retailing.

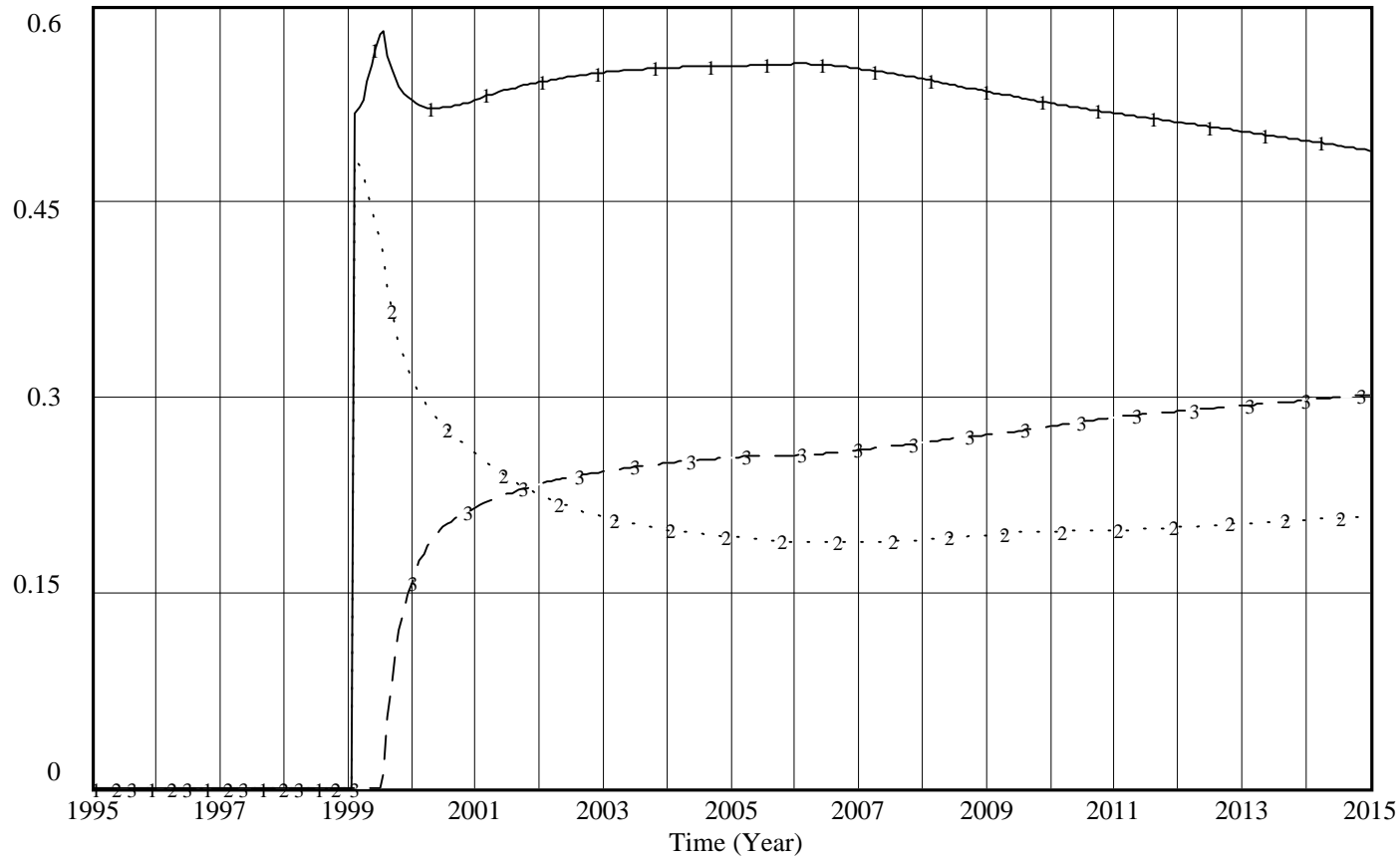
Figure 14 - Balancing Loops



This graph shows some of the limits to rapid growth.

Figure 20 - Base Case 2 (Pet Supplies)

Graph for Marketshare

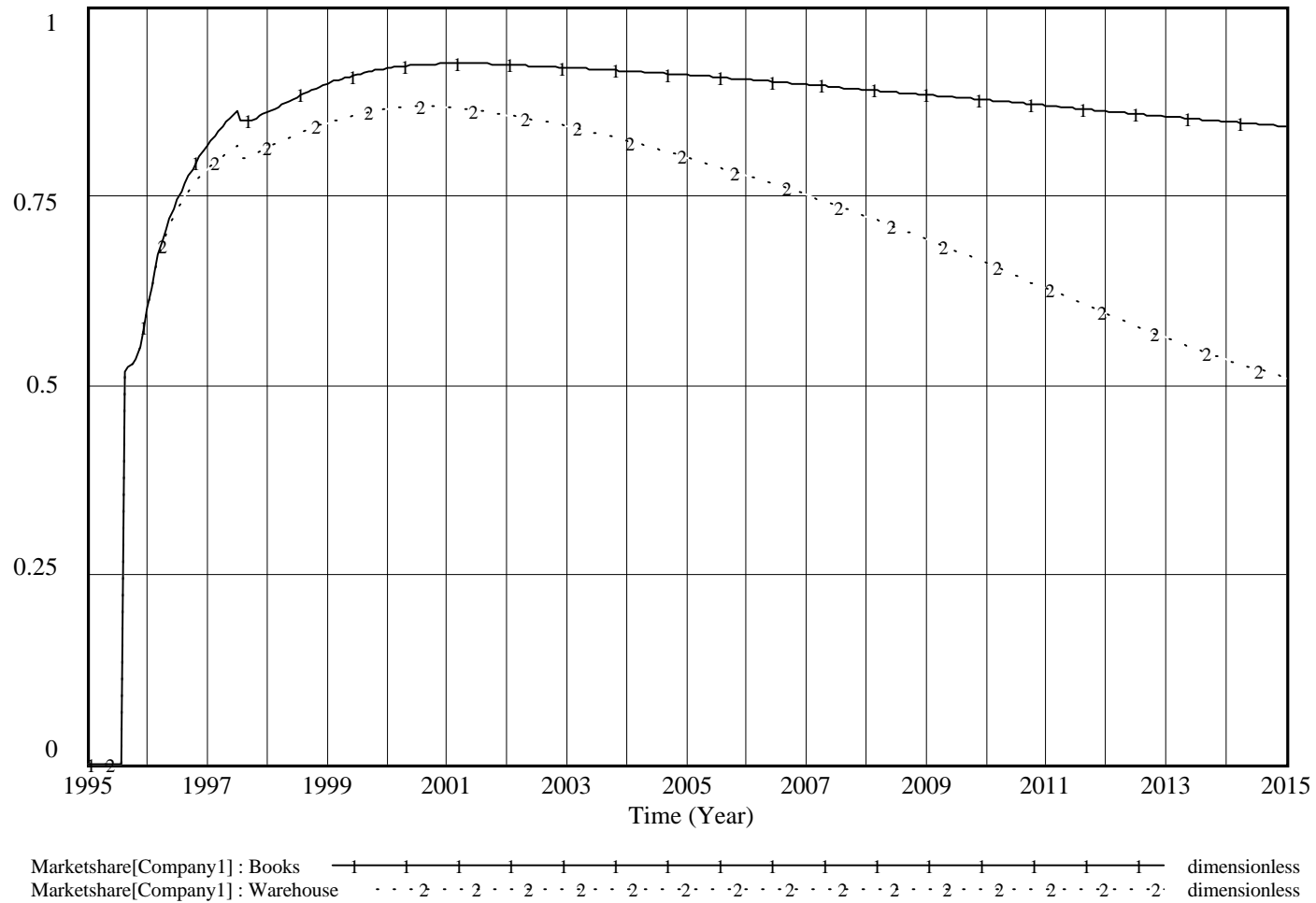


Marketshare[Company1] : Pets ———— dimensionless
 Marketshare[Company2] : Pets dimensionless
 Marketshare[Company3] : Pets - - - - dimensionless

The base case produces a familiar result: the aggressive early-mover dominates, other players, including the bricks-and-mortar player struggle to catch up.

Figure 28 - Poor Warehousing

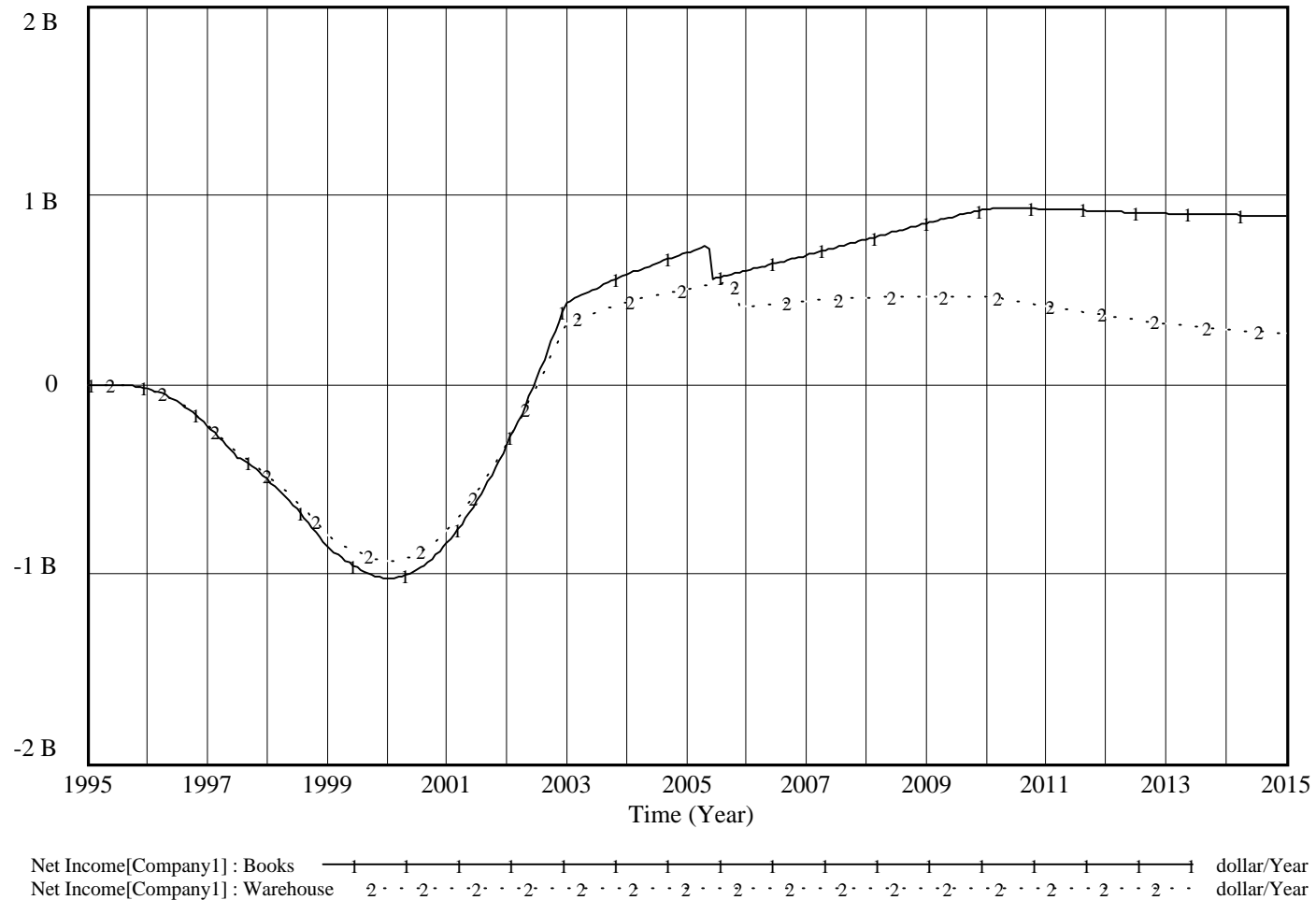
Graph for Marketshare



If the warehouse performance of Company 1 is reduced, its market share will suffer.

Figure 29 - Poor Warehousing

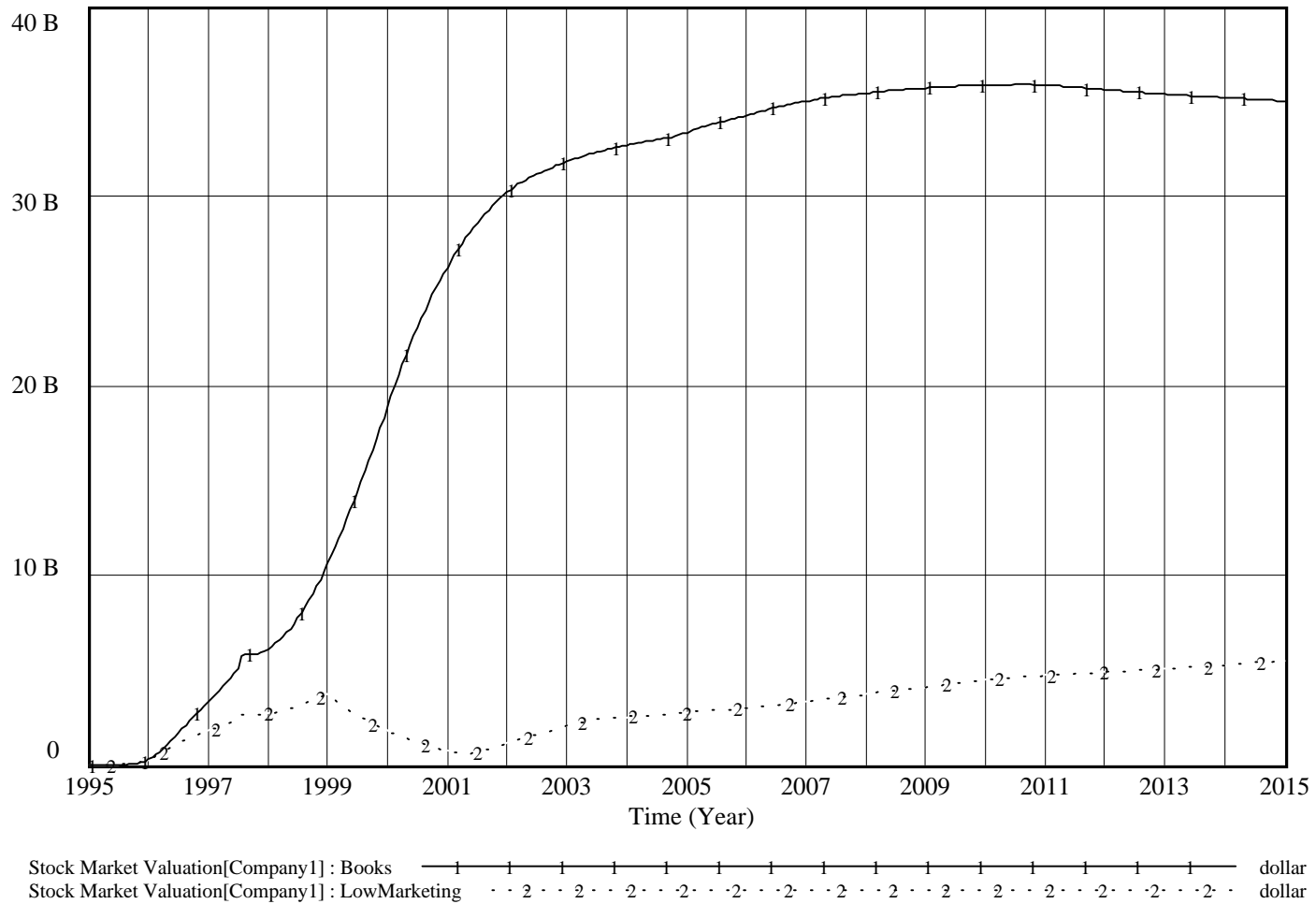
Graph for Net Income



The reduced warehousing leads to small savings in the short term, but huge reduction in profits in the long term. Note: the fall in net income in 2005 is caused by the exhaustion of the tax-credit for prior losses.

Figure 31 - Low Marketing

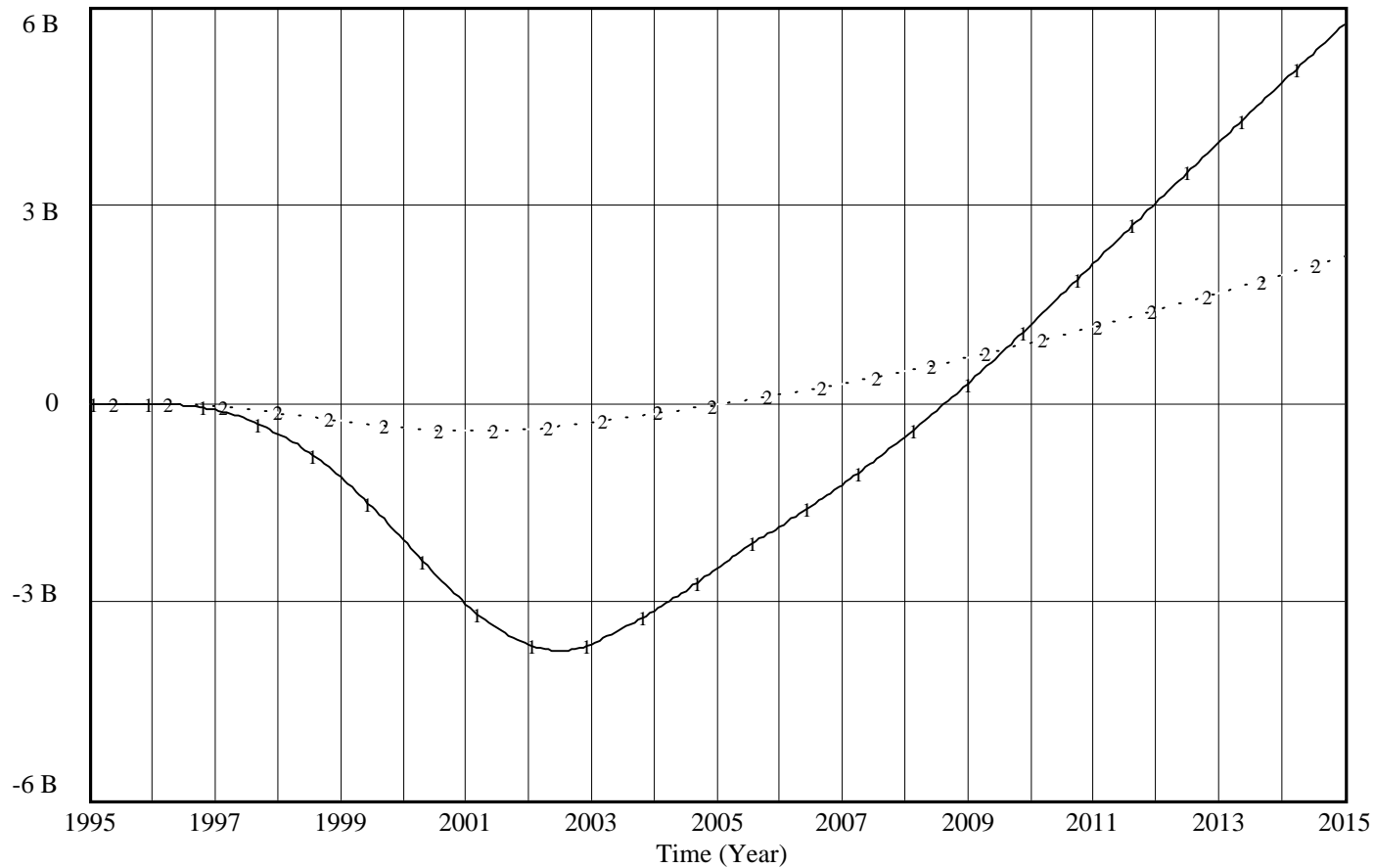
Graph for Stock Market Valuation



High Marketing spending is vastly superior as far as stock valuation is concerned.

Figure 32 - Low Marketing

Graph for Cumulative Retained earnings

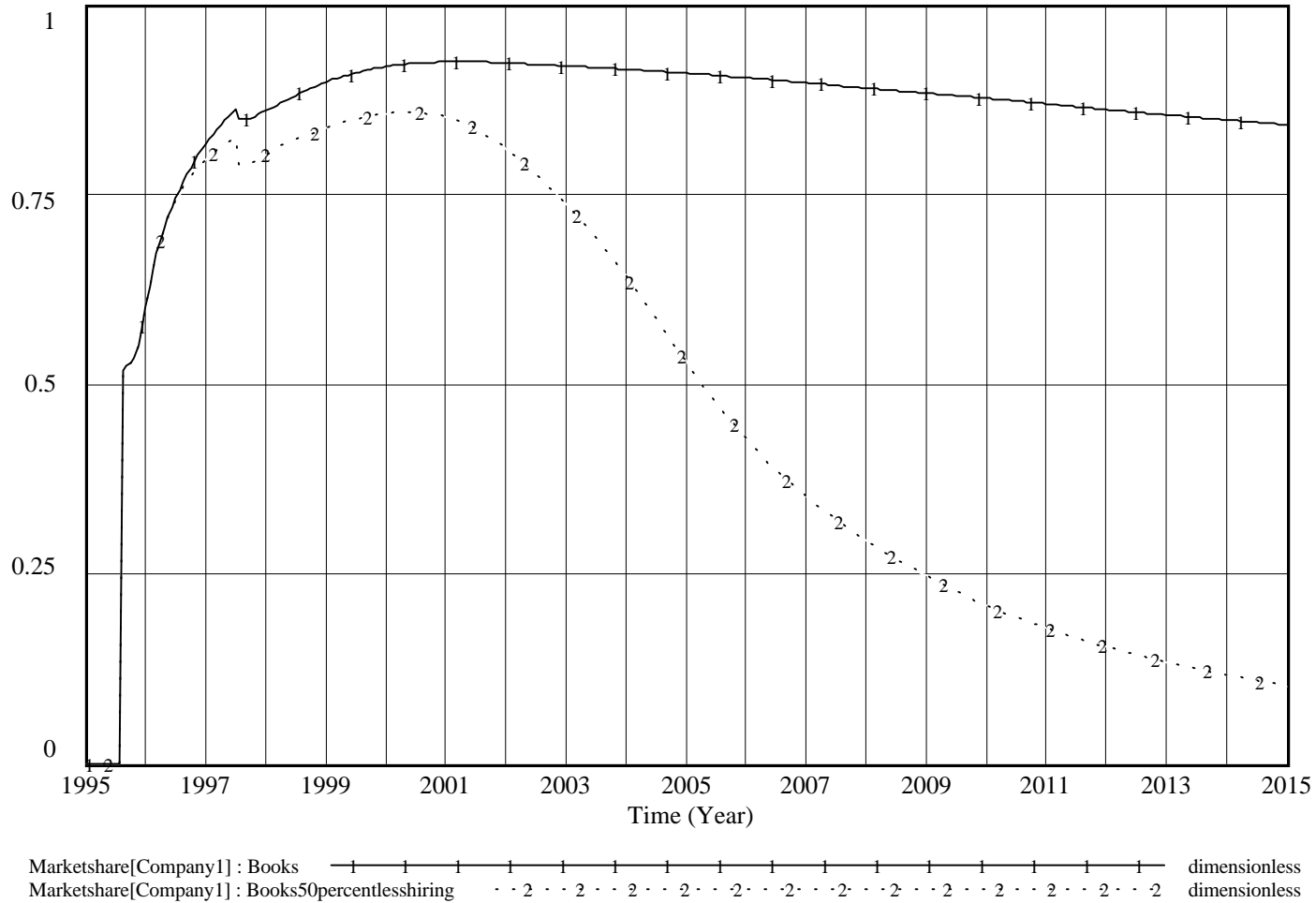


Cumulative Retained earnings[Company1] : Books ———— dollar
Cumulative Retained earnings[Company1] : LowMarketing dollar

Retained earnings In the short-and-medium term, the low marketing strategy produces better retained earnings as it avoid a huge billion dollar investment upfront. Only in the long run does the high marketing spending pay of.

Figure 33 - 50% Hiring

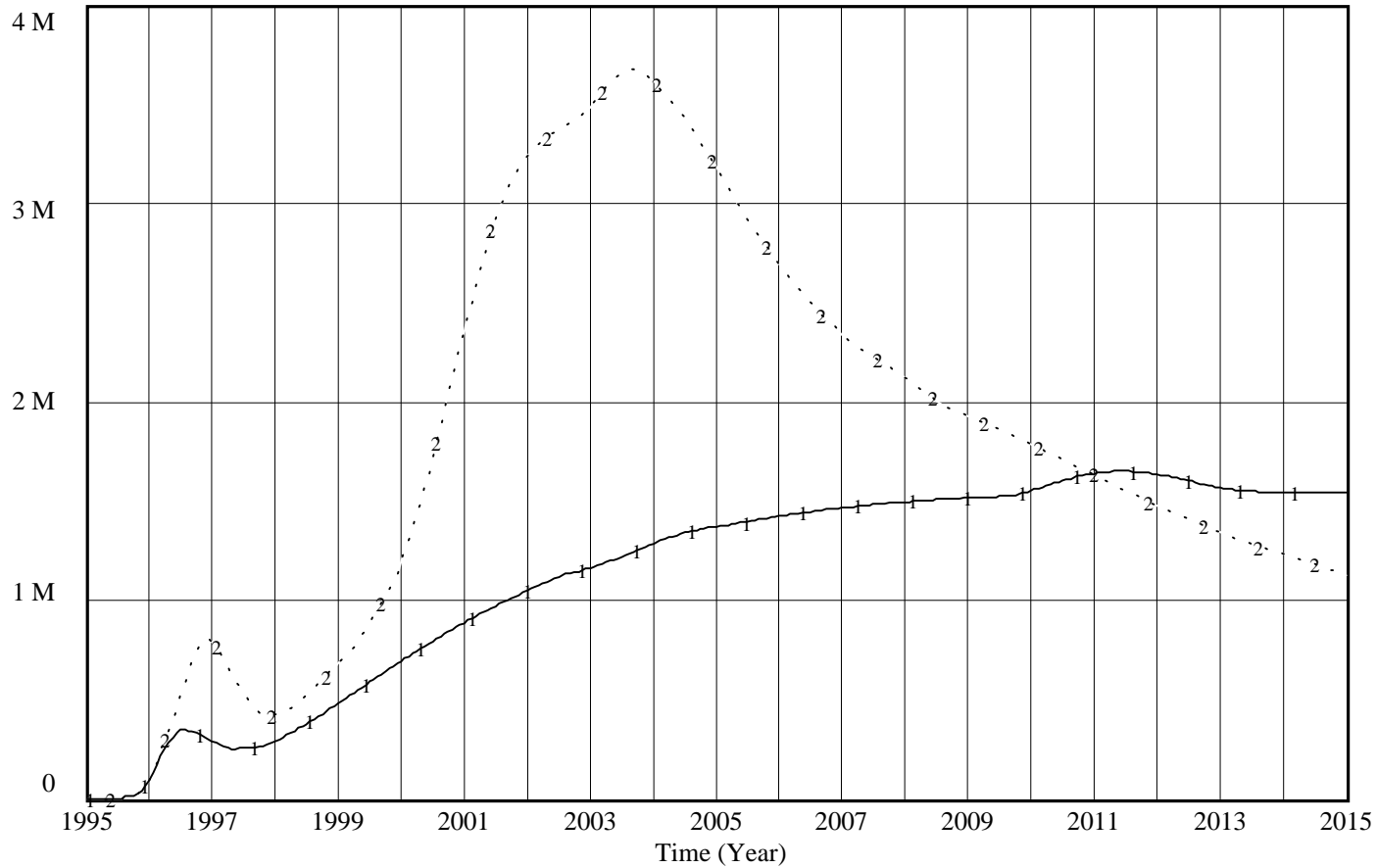
Graph for Marketshare



The aggressive early-mover (Company 1) loses its dominant market position if hiring is neglected.

Figure 34 - 50% Hiring

Graph for Loss of Occasional Buyers

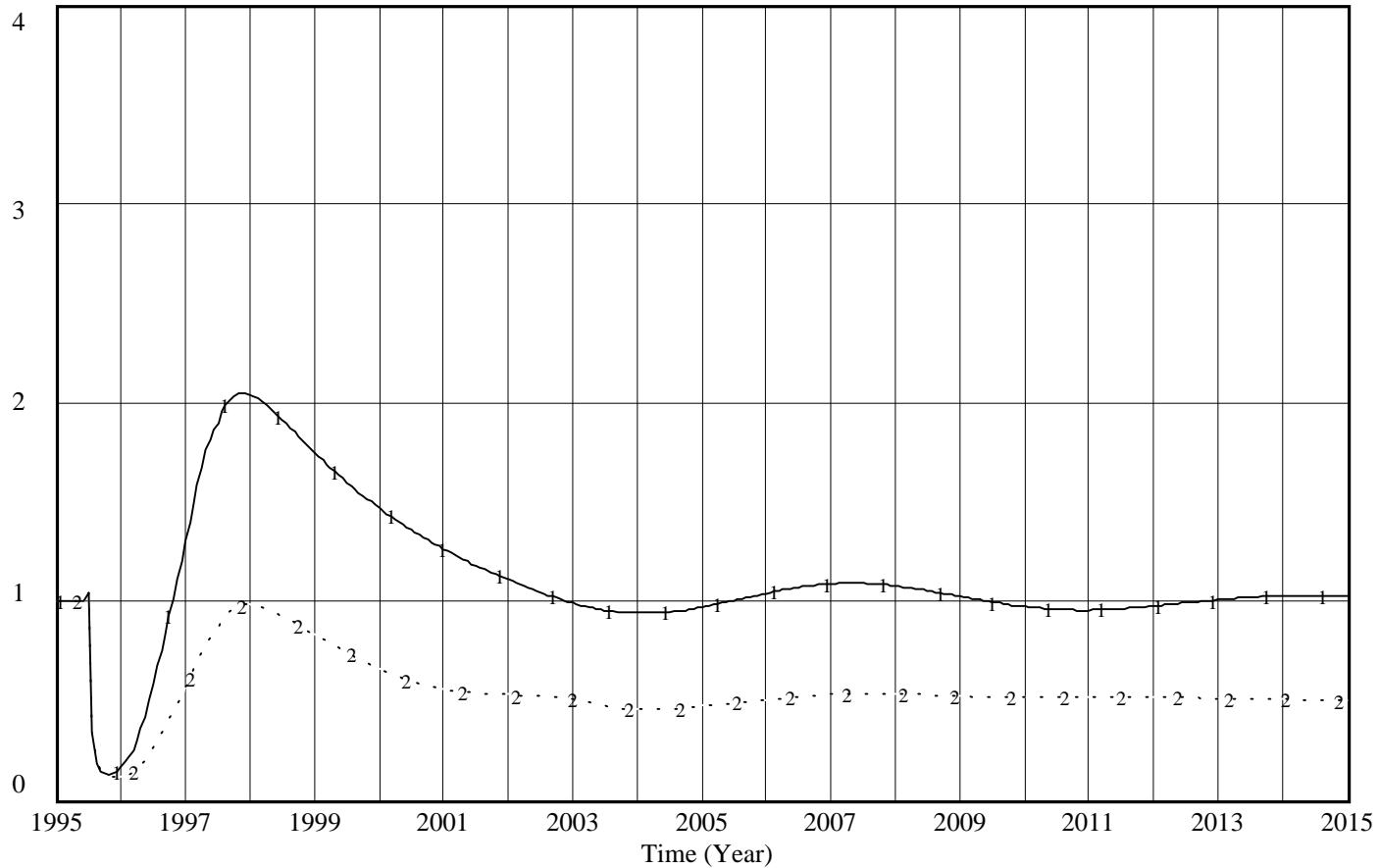


Loss of Occasional Buyers[Company1] : Books People/Year
 Loss of Occasional Buyers[Company1] : Books50percentlesshiring People/Year

The impact of reduced hiring is most visible in the area of turnovers. Millions of customers, just acquired at immense costs are lost due to poor performance.

Figure 35 - 50% Hiring

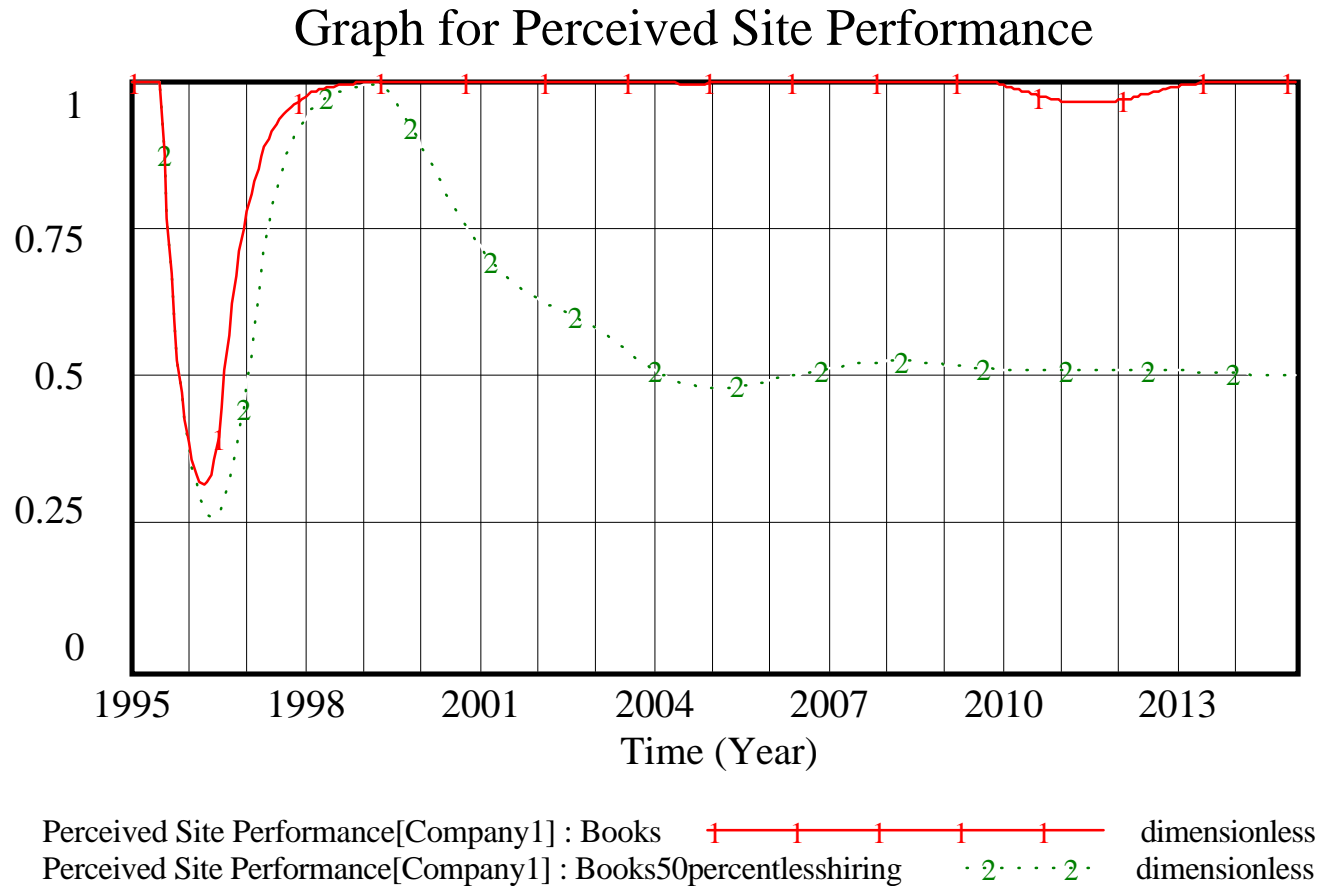
Graph for Adequacy of Staffing



Adequacy of Staffing[Company1,engin] : Books ———— dimensionless
 Adequacy of Staffing[Company1,engin] : Books50percentlesshiring ······ dimensionless

Reduced hiring leads to permanent understaffing of engineers.

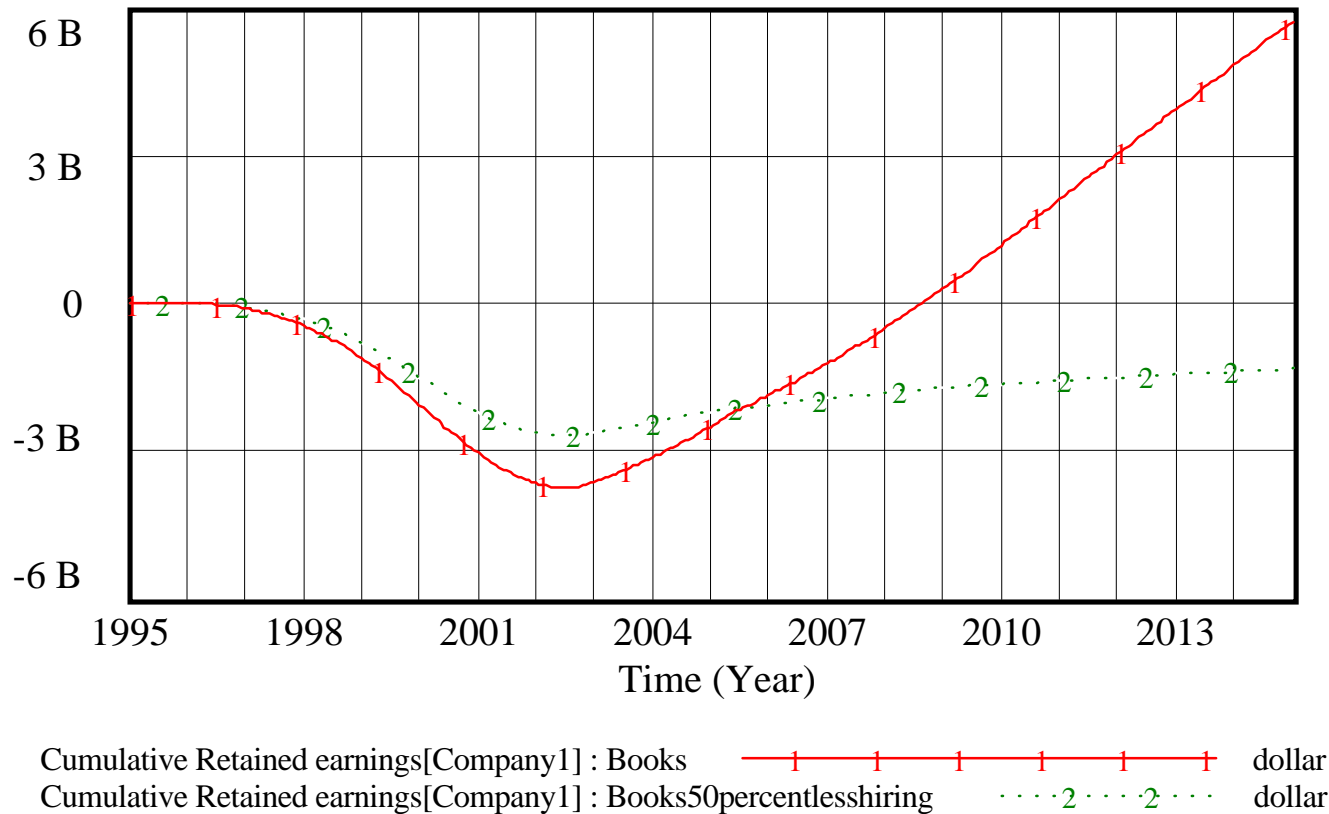
Figure 36 - 50% Hiring



Without adequate staffing, Site performance falls significantly.

Figure 37 - 50% Hiring

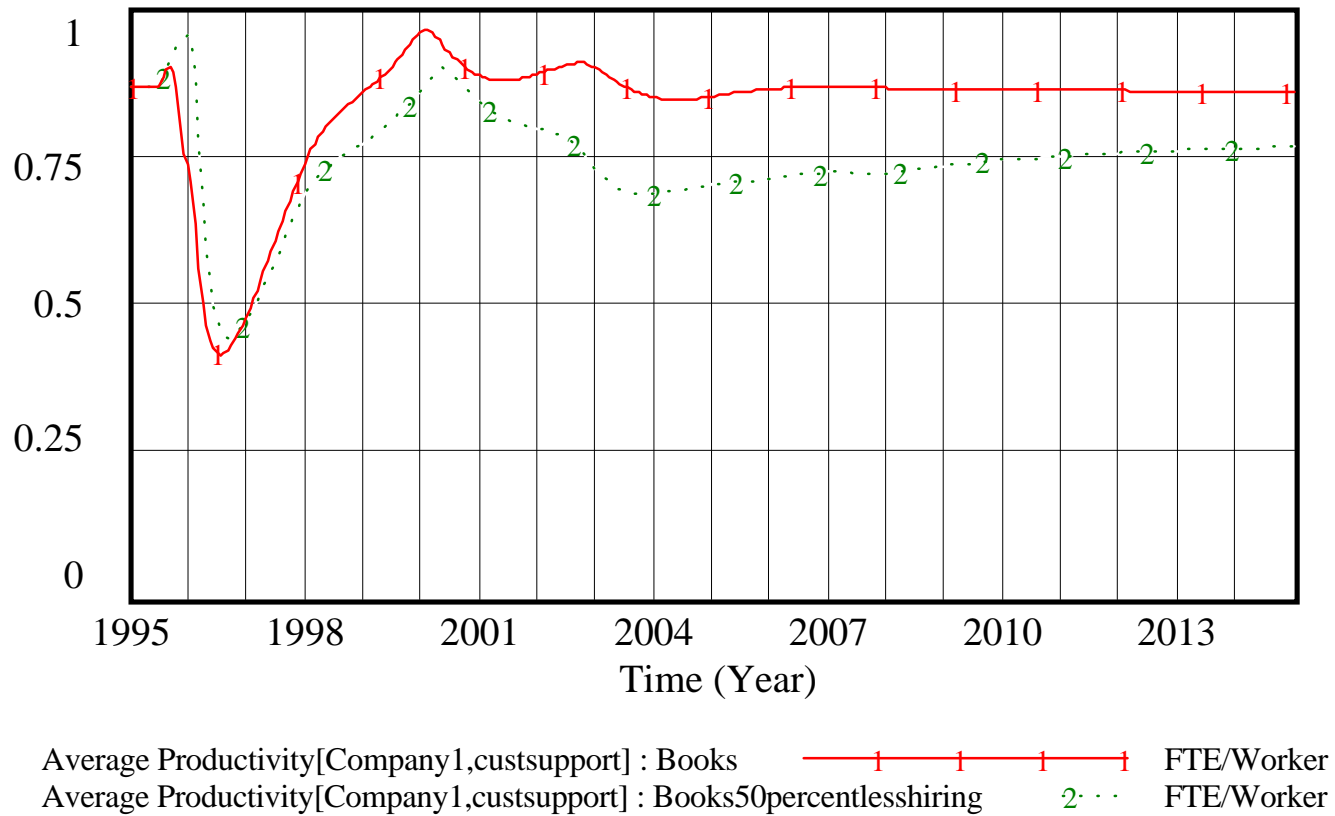
Graph for Cumulative Retained earnings



In the short-run, the savings through understaffing appear to outweigh the damage done, but in the long run the company fails to achieve profitability.

Figure 38 - 50% Hiring

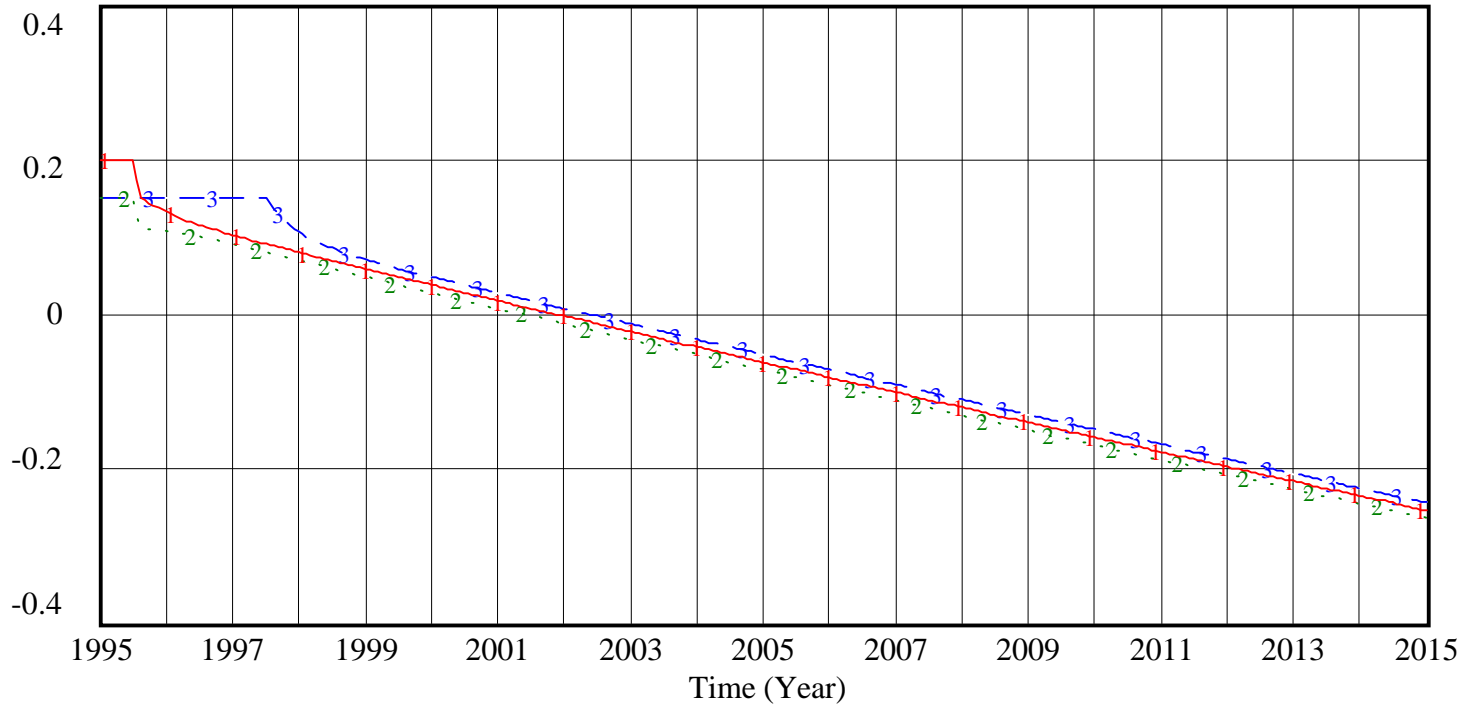
Graph for Average Productivity



The high turnover leads to a reduction in average profitability that further aggravates the personnel shortage.

Figure 39 - Price War

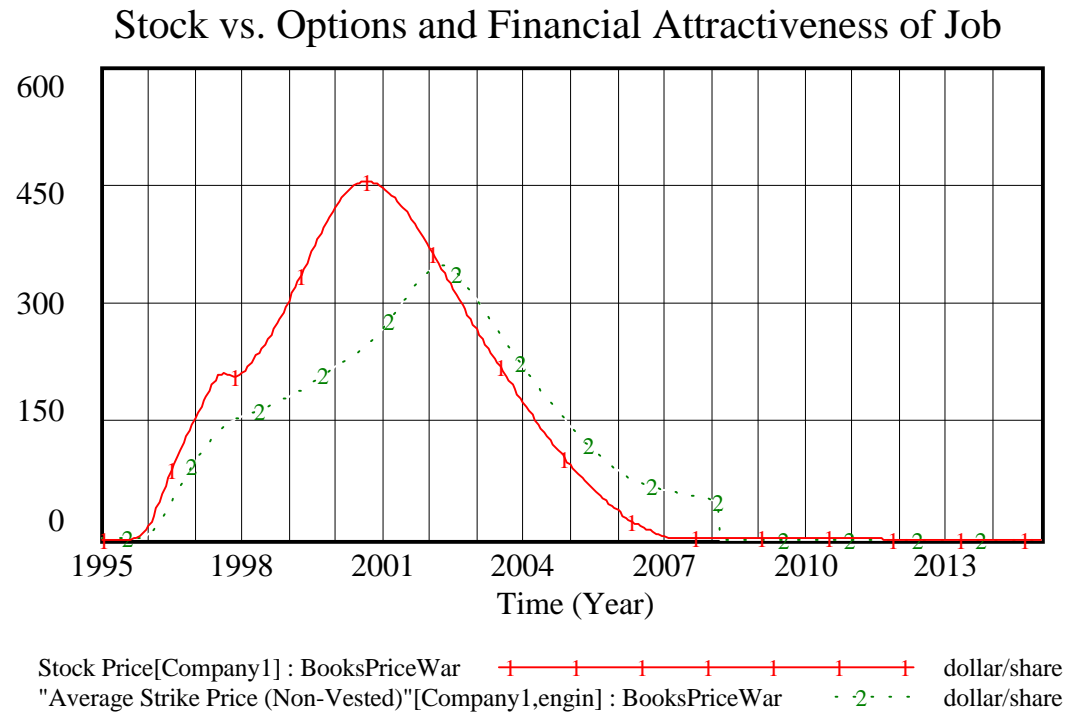
Graph for Target Gross Margin



Target Gross Margin[Company1] : BooksPriceWar ———— dimensionless
 Target Gross Margin[Company2] : BooksPriceWar dimensionless
 Target Gross Margin[Company3] : BooksPriceWar — — — — — dimensionless

This graph shows how the competitors drive down gross margin in this scenario.

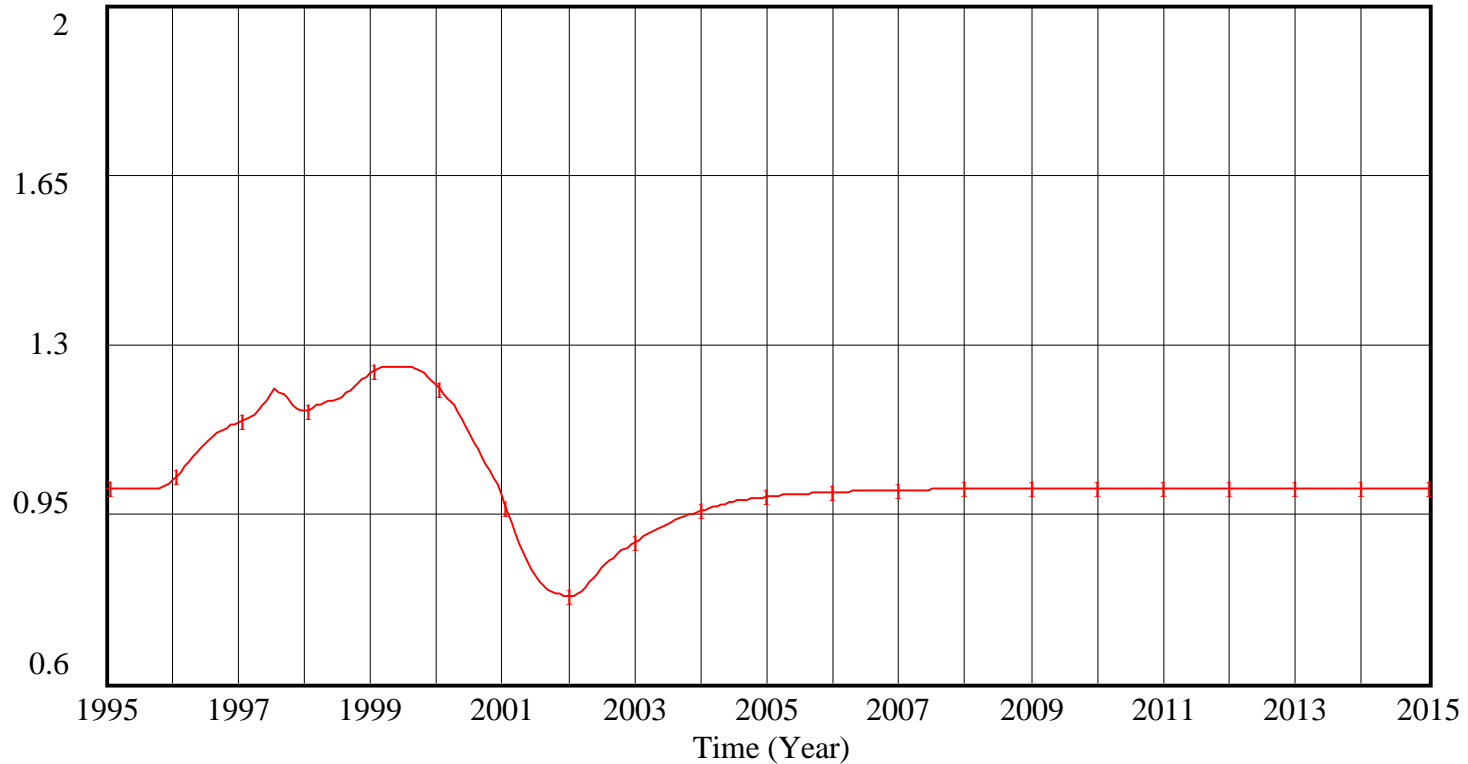
Figure 41 -Price War



The average option strike price trails the stock price with a delay. If the stock price is higher, employees are happy and loyal. If the stock price falls the option price, employees are increasingly likely to jump ship..

Figure 42 - Price War

Graph for Financial Attractiveness of Job



Financial Attractiveness of Job[Company1,engin] : BooksPriceWar ———— dimensionless

This is the impact of the stock and option performance (Figure 40) on financial attractiveness of the job..

