IN PRACTICE WEBCAST: VALUING CONTROL

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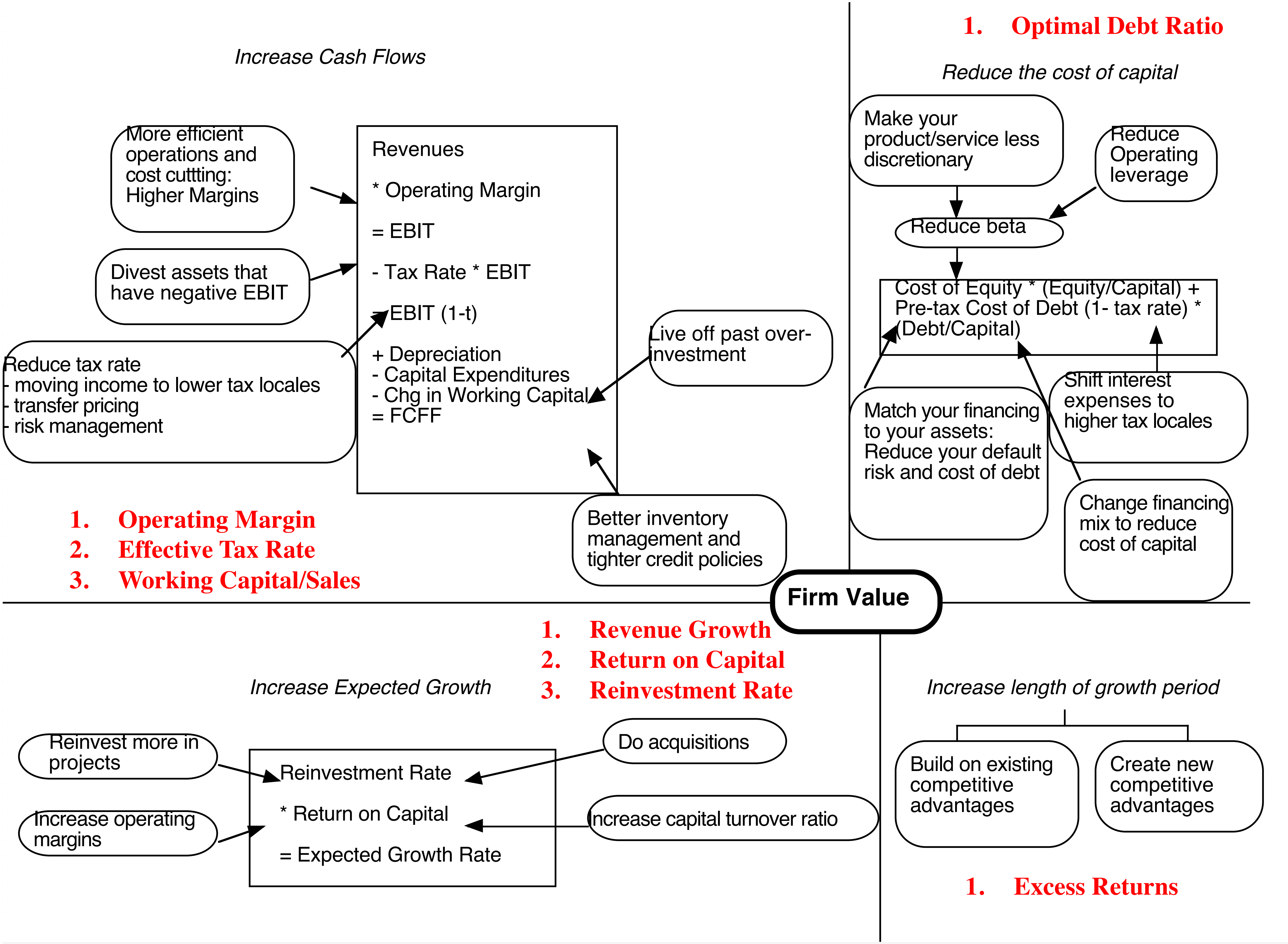
The Value of Control

- The value of controlling a firm derives from the fact that you believe that you or someone else would operate the firm differently (and better) from the way it is operated currently.
- The expected value of control is the product of two variables:
  - the change in value from changing the way a firm is operated
  - the probability that this change will occur



1. Optimal Debt Ratio
Increase Cash Flows
Reduce the cost of capital
More efficient operations and cost cuttting: Higher Margins
Revenues
* Operating Margin
= EBIT
- Tax Rate * EBIT
= EBIT (1-t)
+ Depreciation
- Capital Expenditures
- Chg in Working Capital
= FCFF
Divest assets that have negative EBIT
Reduce tax rate
- moving income to lower tax locales
- transfer pricing
- risk management
Live off past over-investment
Better inventory management and tighter credit policies
1. Operating Margin
2. Effective Tax Rate
3. Working Capital/Sales
Make your product/service less discretionary
Reduce Operating leverage
Reduce beta
Cost of Equity * (Equity/Capital) + Pre-tax Cost of Debt (1- tax rate) * (Debt/Capital)
Match your financing to your assets: Reduce your default risk and cost of debt
Shift interest expenses to higher tax locales
Change financing mix to reduce cost of capital
Firm Value
1. Revenue Growth
2. Return on Capital
3. Reinvestment Rate
Increase Expected Growth
Reinvest more in projects
Increase operating margins
Reinvestment Rate
* Return on Capital
= Expected Growth Rate
Do acquisitions
Increase capital turnover ratio
Increase length of growth period
Build on existing competitive advantages
Create new competitive advantages
1. Excess Returns

Gerdau: Status Quo ($)

Avg Reinvestment rate =60%

Reinvestment Rate
60%

Return on Capital
16.81%

Current Cashflow to Firm
EBIT(1-t) : $1423
- Nt CpX 465
- Chg WC 240
= FCFF $ 717
Reinvestment Rate = 705/1423
= 49.6%

Expected Growth in EBIT (1-t)
.60*.1681=.1009
10.09%

Stable Growth
g = 4%; Beta = 0.80;
Country Premium= 1.5%
Cost of capital = 7.82%
ROC= 7.82%; Tax rate=34%
Reinvestment Rate=g/ROC
=4/ 7.82= 51.18%

Terminal Value$_5$= 1168/(.0782-.04) = 30,603

$ Cashflows

Op. Assets $23,522
+ Cash: 550
- Debt 4,369
- Minor. Int. 7,525
=Equity 12,178
-Options 0
Value/Share $16.24
R$ 31.50

Year	1	2	3	4	5
EBIT (1-t)	$1,566	$1,724	$1,898	$2,089	$2,300
- Reinvestment	$940	$1,034	$1,139	$1,254	$1,380
FCFF	$626	$690	$759	$836	$920

Term Yr
2392
-1224
= 1168

Discount at $ Cost of Capital (WACC) = 9.34% (.76) + 4.98% (0.24) = 8.31%

On June 1, 2007
Gerdau Price = R$ 36.5

Cost of Equity
9.34%

Cost of Debt
(4.8%+1.25%+1.5%)(1-.34)
= 4.98%

Weights
E = 76% D = 24%

Riskfree Rate
$ Riskfree Rate= 4.8%

+

Beta
0.76

X

Mature market premium
4 %

+

Lambda
0.60

X

Country Equity Risk Premium
2.50%

Unlevered Beta for Sectors: 0.64

Firm's D/E Ratio: 31%

Country Default Spread
1.25%

X

Rel Equity Mkt Vol
2.00

Genting Berhad: My valuation (July 2016)

Genting's revenue growth has been sluggish and their operating margins have been sliding since 2009

	Company	*Industry*
Revenue growth	1.30%	6.22%
Operating Margin	18.26%	13.38%
Sales to Capital	0.35	0.82
ROIC	4.84%	9.44%

Revenue growth of 5% a year for 5 years, tapering down to 2.39% in year 10

Between 2009 and 2015, Genting's pre-tax margin averaged 27.9% but had dropped from 30% + in 2009 to 18.3% this year.

Pre-tax operating margin increases to **20%** over time.

Sales to capital ratio of 0.82 for incremental sales

Stable Growth
g = 2.39%
Cost of capital = 6.89%
ROC= 6.89%;
Reinvestment Rate= 2.39%/6.89% = 34.69%

Terminal Value= 2832/(.0689-.0239) = 62,924

	Base year	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	**Terminal year**
Revenue growth rate		5.00%	5.00%	5.00%	5.00%	5.00%	4.48%	3.96%	3.64%	3.33%	3.14%	**2.39%**
Revenues	RM 18,436	RM 19,358	RM 20,326	RM 21,342	RM 22,409	RM 23,530	RM 24,583	RM 25,556	RM 26,487	RM 27,369	RM 28,228	**RM 28,903**
EBIT (Operating) margin	18.26%	18.43%	18.61%	18.78%	18.95%	19.13%	19.30%	19.48%	19.65%	19.83%	20.00%	**20.00%**
EBIT (Operating income)	RM 3,366	RM 3,568	RM 3,782	RM 4,008	RM 4,248	RM 4,501	RM 4,745	RM 4,978	RM 5,205	RM 5,426	RM 5,646	**RM 5,781**
EBIT(1-t)	RM 2,537	RM 2,690	RM 2,851	RM 3,021	RM 3,202	RM 3,393	RM 3,573	RM 3,745	RM 3,912	RM 4,074	RM 4,234	**RM 4,335**
- Reinvestment		RM 1,124	RM 1,180	RM 1,239	RM 1,301	RM 1,366	RM 1,285	RM 1,186	RM 1,135	RM 1,075	RM 1,049	**RM 1,504**
FCFF		RM 1,565	RM 1,670	RM 1,782	RM 1,900	RM 2,026	RM 2,288	RM 2,559	RM 2,776	RM 2,998	RM 3,186	**RM 2,832**
Cost of capital		7.67%	7.67%	7.67%	7.67%	7.67%	7.51%	7.36%	7.20%	7.05%	6.89%	**6.89%**
PV(FCFF)		RM 1,454	RM 1,441	RM 1,428	RM 1,414	RM 1,400	RM 1,471	RM 1,532	RM 1,551	RM 1,564	RM 1,555	

Value of operating assets	RM45,525
- Debt	RM17,968
- Minority interests	RM21,888
+ Cash	RM24,355
+ Non-operating assets	RM4,187
Value of equity	RM34,211
Number of shares	3,716.98
Estimated value /share	RM 9.20

Cost of capital = 9.42% (.658) + 4.31% (.342) = 7.67%

Cost of capital decreases to 6.89% from years 6-10

On July 2, 2016, the shares were trading at RM 8.19/share.

Cost of equity = 9.42%

Cost of Debt *Rated Baa1*
(2.39%+1.35%+2%)(1-.25) = 4.31%

Weights
E = 65.8% D = 34.2%

Riskfree Rate:
Riskfree rate = 2.39%

\+ **Beta** 1.04 X **Risk Premium** 6.92%

Business	*Weights*	*Unlevered Beta*
Hotel/Gaming	96.37%	0.7300
Farming/Agriculture	3.63%	0.7600
Company	100.00%	0.7311

D/E = 56.74%

Country	*Revenues*	*Weight*	*ERP*
Singapore	6808	41.05%	6.00%
Malaysia	6455	38.93%	7.79%
United Kingdom	1350	8.14%	6.59%
Rest of the World	1970	11.88%	7.45%
Total	16583	100.00%	6.92%

An Assessment of Gerdau: Where is there most promise?

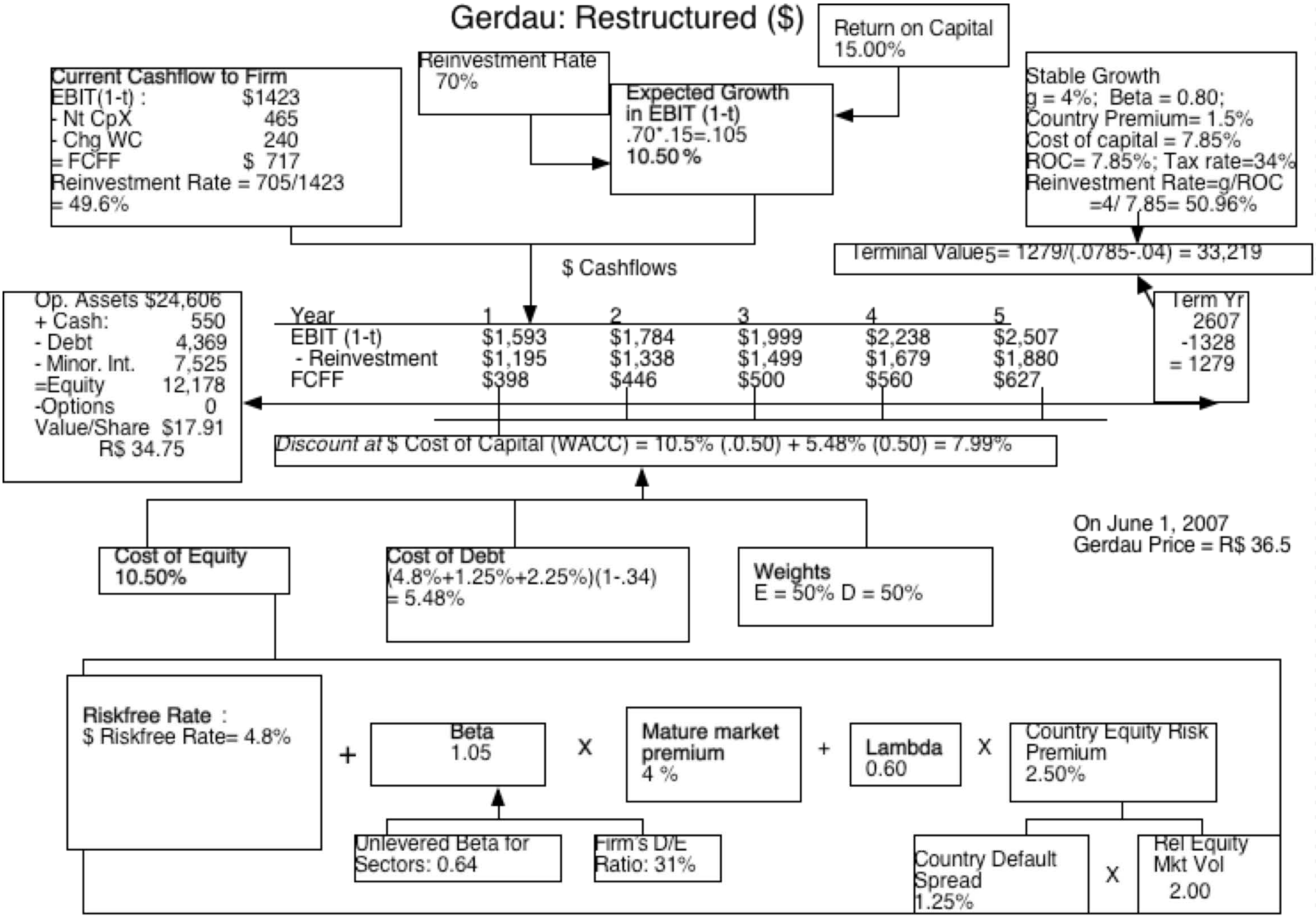
- If you were running Gerdau, where do you see the most promise in value enhancement?

1. Increase cash flows from existing assets (Current margin = 19.5%; Tax rate = 34%; Non-cash WC = 18.33%)
2. Increase growth rate during high growth period (Reinvestment rate = 60%, Return on capital = 16.81%; Growth rate = 10.09%)
3. Increase length of growth period (5 years)
4. Reduce cost of capital (Debt ratio = 24%)

Gerdau : Optimal Capital Structure

Debt Ratio	Beta	Cost of Equity	Bond Rating	Interest rate on debt	Tax Rate	Cost of Debt (after-tax)	WACC	Firm Value (G
0%	0.63	9.82%	AAA	6.80%	34.00%	4.49%	9.82%	$25,205
10%	0.68	10.01%	AAA	6.80%	34.00%	4.49%	9.46%	$26,280
20%	0.73	10.24%	AA	7.05%	34.00%	4.65%	9.12%	$27,341
30%	0.81	10.54%	A	7.85%	34.00%	5.18%	8.93%	$27,990
40%	0.91	10.93%	A-	8.05%	34.00%	5.31%	8.69%	$28,864
50%	1.05	11.49%	BBB	8.30%	34.00%	5.48%	8.48%	$29,626
60%	1.26	12.32%	B-	14.05%	34.00%	9.27%	10.49%	$23,453
70%	1.60	13.71%	CC	17.55%	34.00%	11.58%	12.22%	$19,875
80%	2.31	16.54%	CC	17.55%	33.45%	11.68%	12.65%	$19,144
90%	4.62	25.78%	CC	17.55%	29.73%	12.33%	13.68%	$17,603

Gerdau: Restructured ($)



An Assessment of Genting Berhad

- If you were running Genting Berhad, where do you see the most promise in value enhancement?

1. Go for more revenue growth: Revenue growth is only 5%. Increasing it may push up value.
2. Increase operating margins to the average(27.9%) generated over the last decade.
3. Change mix of debt, type of debt, to lower cost of capital. (Genting is close to its optimal debt ratio currently, with an actual debt ratio of 34% and an optimal debt ratio of 30%)
4. Sell of assets (especially real estate) that have higher alternative value uses.

- Of these, the action with the most potential for value change is to push to improve operating margins.

Genting Berhad Restructured My valuation (July 2016)

Genting's revenue growth has been sluggish and their operating margins have been sliding since 2009

	Company	*Industry*
Revenue growth	1.30%	6.22%
Operating Margin	18.26%	13.38%
Sales to Capital	0.35	0.82
ROIC	4.84%	9.44%

Between 2009 and 2015, Genting's pre-tax margin averaged 27.9% but had dropped from 30% + in 2009 to 18.3% this year. Tne sales to capital ratio in 2009-2015 was to 1.01.

Stable Growth
g = 2.39%
Cost of capital = 6.89%
ROC= 6.89%;
Reinvestment Rate= 2.39%/6.89% = 34.69%

Revenue growth of 5% a year for 5 years, tapering down to 2.39% in year 10

Pre-tax operating margin increases to 27.9% over time.

Sales to capital ratio of 1.01 for incremental sales

Terminal Value= 3950/(.0689-.0239) = 87,779

	Base year	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	Terminal year
Revenue growth rate		5.00%	5.00%	5.00%	5.00%	5.00%	4.48%	3.96%	3.64%	3.33%	3.14%	**2.39%**
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EBIT (Operating) margin	18.26%	19.22%	20.19%	21.15%	22.11%	23.08%	24.04%	25.01%	25.97%	26.94%	27.90%	**27.90%**
EBIT (Operating income)	RM 3,366	RM 3,721	RM 4,103	RM 4,514	RM 4,956	RM 5,430	RM 5,911	RM 6,391	RM 6,879	RM 7,372	RM 7,876	**RM 8,064**
EBIT(1-t)	RM 2,537	RM 2,805	RM 3,093	RM 3,403	RM 3,736	RM 4,093	RM 4,451	RM 4,808	RM 5,170	RM 5,535	RM 5,907	**RM 6,048**
- Reinvestment		RM 913	RM 958	RM 1,006	RM 1,057	RM 1,109	RM 1,043	RM 963	RM 922	RM 873	RM 851	**RM 2,098**
FCFF		RM 1,892	RM 2,135	RM 2,396	RM 2,679	RM 2,984	RM 3,408	RM 3,845	RM 4,248	RM 4,661	RM 5,055	**RM 3,950**
Cost of capital		7.67%	7.67%	7.67%	7.67%	7.67%	7.51%	7.36%	7.20%	7.05%	6.89%	**6.89%**
PV(FCFF)		RM 1,757	RM 1,841	RM 1,920	RM 1,993	RM 2,062	RM 2,190	RM 2,302	RM 2,373	RM 2,432	RM 2,468	

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Value of operating assets =	RM	64,186.54
- Debt	RM	17,968.00
- Minority interests	RM	21,888.00
+ Cash	RM	24,355.00
+ Non-operating assets	RM	4,187.00
Value of equity	RM	52,872.54
Number of shares		3,716.98
Estimated value /share	RM	14.22

Cost of capital = 9.42% (.658) + 4.31% (.342) = 7.67%

Cost of capital decreases to 6.89% from years 6-10

Cost of equity = 2.39% +1.04 (6.92%) = 9.42%

Cost of Debt *Rated Baa1*
(2.39%+1.35%+2%)(1-.25)
= 4.31%

Weights
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On July 2, 2016, the shares were trading at RM 8.19/share.

Riskfree Rate:
Riskfree rate = 2.39%

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Beta
1.04

X

Risk Premium
6.92%

Business	*Weights*	*Unlevered Beta*
Hotel/Gaming	96.37%	0.7300
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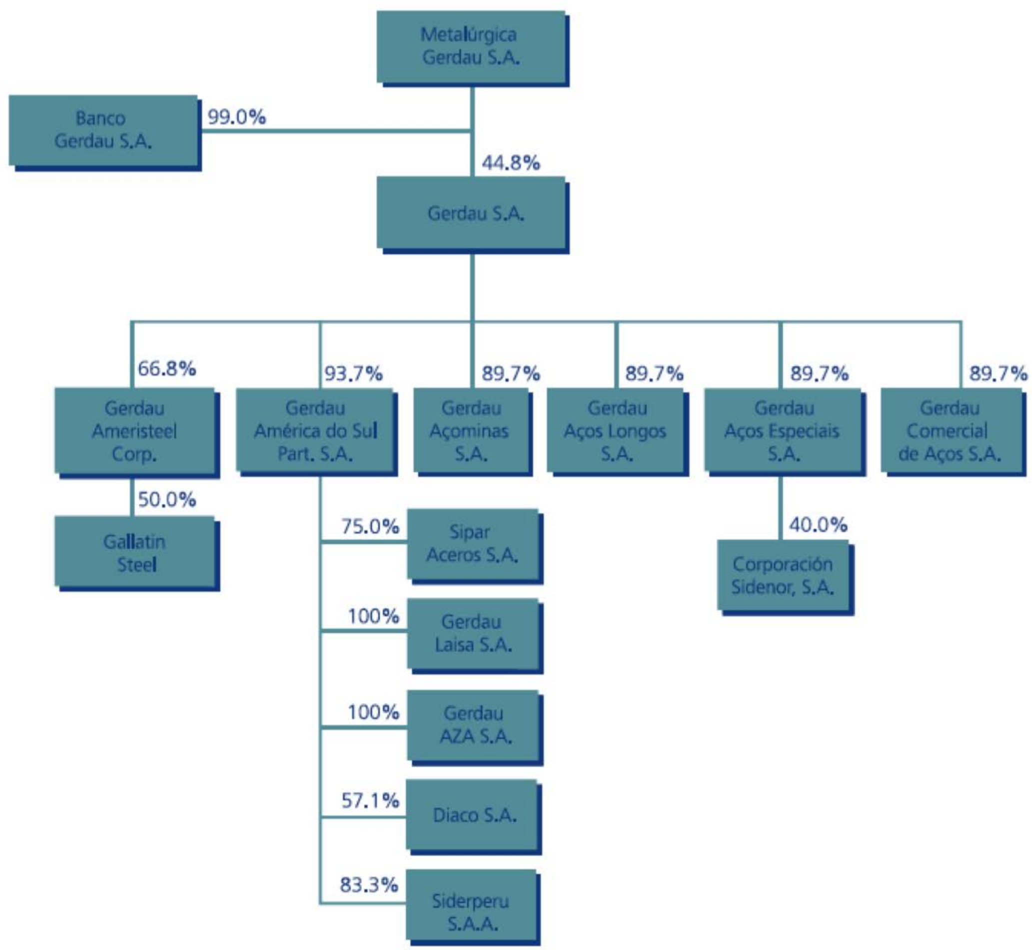
The Probability of Changing Control

- The probability of changing management will be different across different companies and will vary across different markets.
- In general, the more power stockholders have and the stronger corporate governance systems are, the greater is the probability of management change for any given firm.
- The probability of changing management will change over time as a function of legal changes, market developments and investor shifts.

Gerdau's Cross Holdings…



Genting Berhad: Change Probability

- As a Malaysian company, with a web of companies holding shares in each change, change will be difficult, unless one of the leading stockholders signs on, or management has a change of heart.
- The probability of change is low, but not zero. There is also the possibility that an acquirer may find the company attractive for its turn around potential.

Bottom Line

- There is only a moderate value of control at Gerdau Steel in 2007, because the company was for the most part, well run. Even if you believed that there was value to controlling Gerdau, the expected value of control would have been close to zero, since the holding structure of Gerdau would have made it almost impossible to change the way the firm was run.
- At Genting Berhad, in 2016, the value of control and the expected value of control are both much higher.