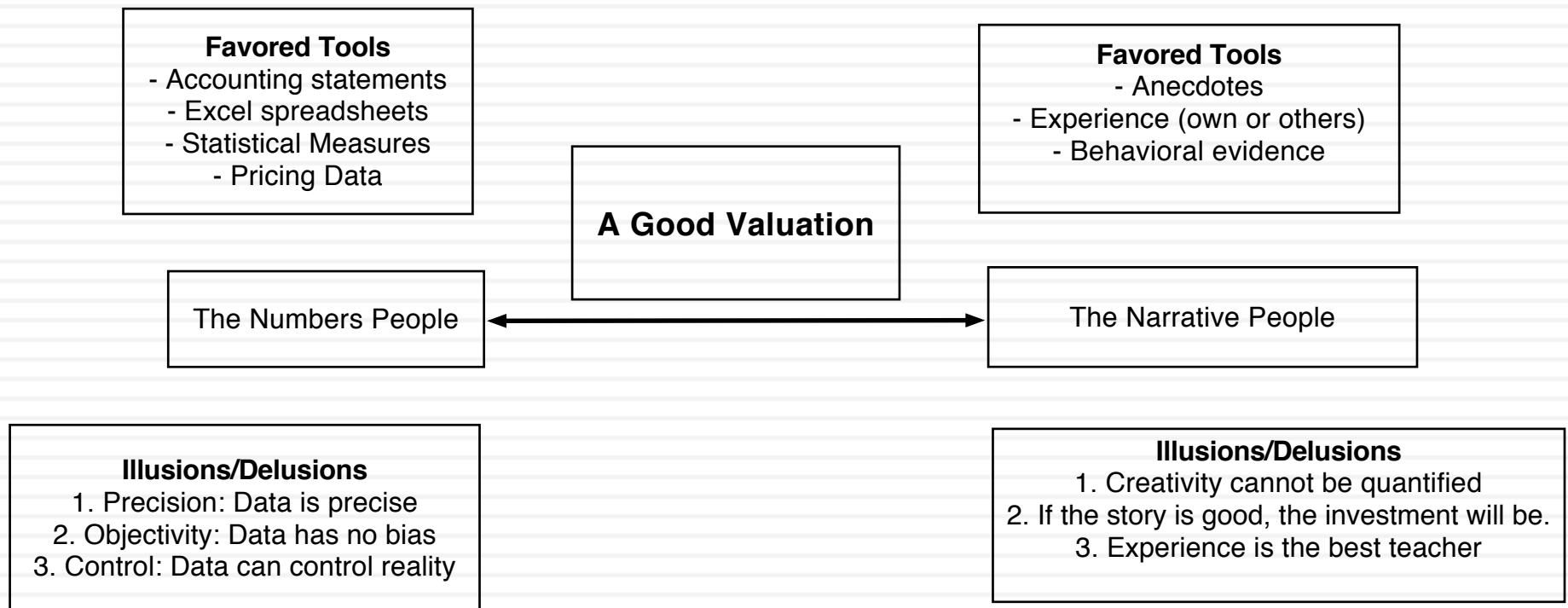




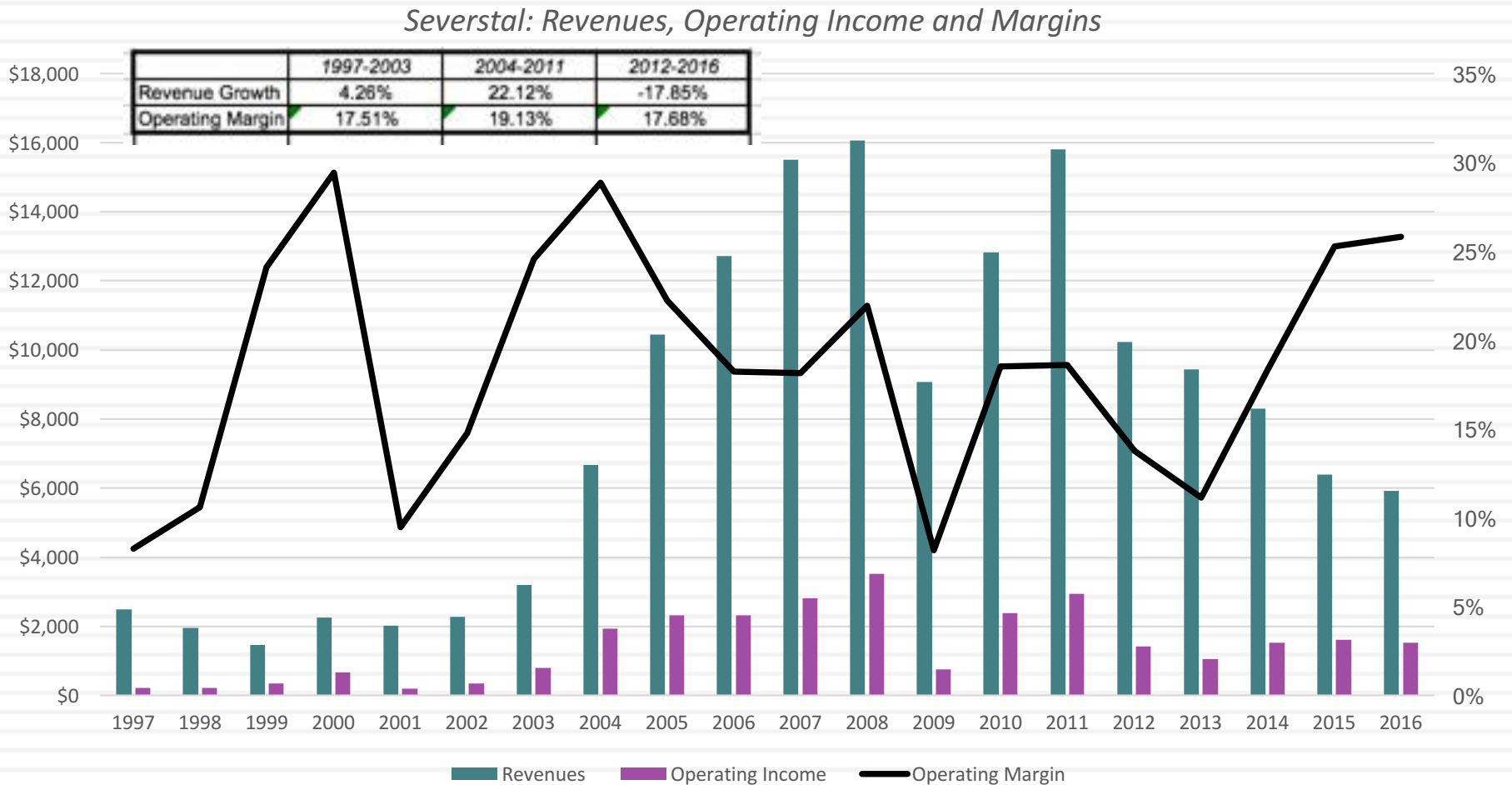
# A GUIDE TO MODELING FCFFSIMPLEGINZU.XLS



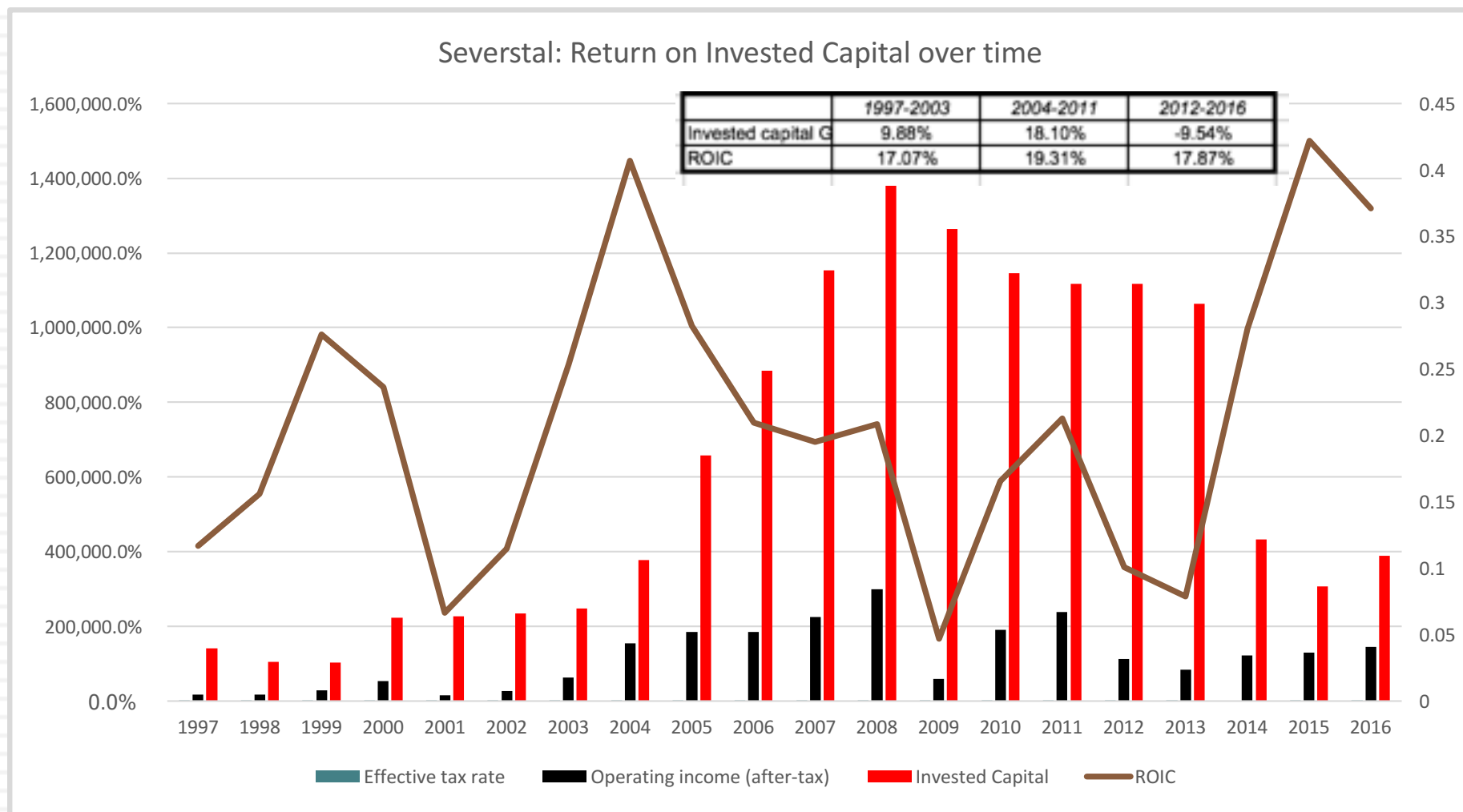
# The model is your tool... for telling a story



# Severstal: Reading the (historical) tea leaves



# Operating income, Reinvestment & Return on Capital -



# Fundamentals: Steel Companies in April 2017

<i>Broad Group</i>	<i>Historical growth in Revenues - Last 3 years</i>	<i>Expected growth in revenues - Next 2 years</i>	<i>Return on Capital (ROC or ROIC)</i>	<i>Pre-tax Operating Margin</i>	<i>Effective Tax Rate</i>	<i>Debt to Capital Ratio (Market)</i>	<i>Debt/EBITDA</i>	<i>Dividend Payout</i>
Emerging Markets	-3.34%	9.51%	4.70%	5.35%	14.58%	12.50%	4.38	100.30%
Global	-2.96%	8.03%	3.65%	4.56%	15.17%	12.05%	3.89	70.32%
Severstal	-14.40%	5.61%	47.64%	25.81%	5.65%	3.75%	1.07	56.82%

Shrinking faster & expected to grow slower than peer group

Immensely more profitable than the rest of the sector

Has less debt than other steel companies

While holding back more cash

# The Severstal Story: A Reality Based Steel Company!

- Severstal is a company in a bad business (shrinking revenues, margin pressures) that has worked at divesting the portions of its business that have the lowest margins (North America), reducing its debt load and focusing on its high margin domestic business
- In my story, the company will continue to emphasize high margins over growth and while country and commodity price risk lurk, it will be able to weather the storms with its domestic profits. Growth with return to low single digits and margins will stabilize at close to its current high levels (because of the company's competitive advantages in Russia).

# Severstal: Valuation (April 2017)

	1997-2003	2004-2011	2012-2016	2016	Global Steel
Revenue Growth	4.26%	22.12%	-17.85%	-7.50%	-5.04%
Operating Margin	17.51%	19.13%	17.68%	25.81%	3.19%
ROIC	17.07%	19.31%	17.87%	32.58%	2.79%
Sales/Inv Capital	1.22	1.20	1.22	1.52	0.99

Revenue growth of **3% a year** for 5 years, moving back up to 2.5% in year 10

Pre-tax operating margin decreases to **19.13%** over time.

Sales to capital ratio of **1.20**

**Stable Growth**  
 $g = 2.5\%$   
 Cost of capital = 8.5%  
 $ROC = 8.5\%$ ;  
 $Reinvestment\ Rate = 2.5\% / 8.5\% = 29.41\%$

Terminal Value<sub>10</sub> =  $868 / (.085 - .025) = \$14.460$

	Base year	1	2	3	4	5	6	7	8	9	10
Revenue growth rate		3.00%	3.00%	3.00%	3.00%	3.00%	2.90%	2.80%	2.70%	2.60%	2.50%
Revenues	\$ 5,916	\$ 6,093	\$ 6,276	\$ 6,465	\$ 6,659	\$ 6,858	\$ 7,057	\$ 7,255	\$ 7,451	\$ 7,644	\$ 7,835
EBIT (Operating) margin	25.81%	25.14%	24.48%	23.81%	23.14%	22.47%	21.80%	21.13%	20.47%	19.80%	19.13%
EBIT (Operating income)	\$ 1,527	\$ 1,532	\$ 1,536	\$ 1,539	\$ 1,541	\$ 1,541	\$ 1,539	\$ 1,533	\$ 1,525	\$ 1,513	\$ 1,499
Tax rate	17.20%	17.20%	17.20%	17.20%	17.20%	17.20%	17.76%	18.32%	18.88%	19.44%	20.00%
EBIT(1-t)	\$ 1,264	\$ 1,269	\$ 1,272	\$ 1,274	\$ 1,276	\$ 1,276	\$ 1,265	\$ 1,252	\$ 1,237	\$ 1,219	\$ 1,199
- Reinvestment		\$ 148	\$ 152	\$ 157	\$ 162	\$ 166	\$ 166	\$ 165	\$ 163	\$ 161	\$ 159
FCFF		\$ 1,121	\$ 1,120	\$ 1,117	\$ 1,114	\$ 1,110	\$ 1,100	\$ 1,088	\$ 1,074	\$ 1,058	\$ 1,040

	Terminal year
Revenues	\$ 8,031.35
EBIT (Operating) margin	19.13%
EBIT (Operating income)	\$ 1,536.40
Tax rate	20.00%
EBIT(1-t)	\$ 1,229.12
- Reinvestment	\$ 361.51
FCFF	\$ 867.61

PV(Terminal value)	\$ 6,066.96
PV (CF over next 10 years)	\$ 6,987.62
Value of operating assets =	\$13,054.58
- Debt	\$ 2,013.00
- Minority interests	\$ 15.00
+ Cash	\$ 1,173.00
+ Non-operating assets	\$ 266.00
Value of equity	\$12,465.58
Number of shares	837.72
Estimated value /share	\$ 14.88
Price	\$ 13.84
Price as % of value	93.01%

Cost of capital =  $10.34\% (.852) + 4.00\% (.148) = 9.32\%$

Cost of capital decreases to 8.5% from years 6-10

**Cost of Equity**  
10.24%

**Cost of Debt**  
Bond rating: BB+  
 $(2.5\% + 2.5\%)(1 - .20) = 4.00\%$

**Weights**  
E = 85.2% D = 14.8%

In April 2017, the stock was trading at \$13.84/share.

**Riskfree Rate:**  
Riskfree rate = 2.5%

**Beta**  
0.89

D/E = 17.36%

**ERP**  
8.70%

Region	Weight	ERP
Russia	64.52%	9.24%
Western Europe	19.91%	6.81%
Middle East	5.70%	7.03%
Africa	5.07%	12.00%
Asia	2.36%	7.12%
Latin America	1.49%	10.21%
North America	0.95%	5.69%
<b>Severstal</b>	<b>100.00%</b>	<b>8.70%</b>

Business	Weights	Unlevered Beta
Steel	74.83%	0.7355
Metals & Mining	25.17%	0.9178
<b>Severstal</b>	<b>100%</b>	<b>0.7814</b>