



**COST OF CAPITAL STUDY**

**YIELD CAPITALIZATION  
2019 ASSESSMENT YEAR**

APPENDIX C

**FREIGHT AIRLINES**

<b>EQUITY RATE</b>		<b>9.25%</b>	
<b>CAPITAL ASSET PRICING MODEL</b>			PAGE
CAPM Ex Ante	8.93%		6
<b>DIVIDEND GROWTH MODELS</b>			
Value Line, based on Dividends Growth	7.50%		7
Value Line, based on Earnings Growth	9.00%		8
Value Line, based on Return on Equity	11.50%		9
	<b>RANGE</b>	7.5% - 11.5%	
<b>DEBT RATE</b>		<b>4.50%</b>	10
<b>COST OF SECURED DEBT (LEASE) RATE</b>		<b>4.25%</b>	10
<b>MARKET CAPITAL STRUCTURE</b>			
		Tax Shield	
Equity	60%	x 9.25% =	5.55%
Operating Leases	20%	x 4.25% x 76.00% =	0.65%
Debt	20%	x 4.50% x 76.00% =	0.68%
Marginal Tax Rate	24%		
<b>WEIGHTED AVERAGE COST OF CAPITAL</b>		<b>6.88%</b>	

Washington State Department of Revenue

**FREIGHT AIRLINES**

WASHINGTON STATE DEPARTMENT OF REVENUE

2019 ASSESSMENT YEAR

FREIGHT AIRLINES

Capital Structure at Book Value

Company	Ticker	Beta	Fin'l Strength	Price Stability	Growth Persist	Earnings Predict	P/E Ratio	Div'd Yield	Common Stock	%	Preferred Stock	%	Long Term Debt	%	Total Debt & Equity	%
UPS	UPS	0.95	A	100	80	75	13.0	4.00%	3,479,865,980	14.9%	-	0.0%	19,931,000,000	85.1%	23,410,865,980	100.0%
Fed Ex	FDX	1.20	A++	80	65	60	10.1	1.61%	19,058,795,061	55.6%	-	0.0%	15,243,000,000	44.4%	34,301,795,061	100.0%
Atlas Air	AAWW	1.45	B+	20	25	55	5.8	-	1,825,867,406	45.3%	-	0.0%	2,205,000,000	54.7%	4,030,867,406	100.0%
CH Robinson	CHRW	0.85	A	75	40	75	16.3	2.33%	1,574,425,300	54.0%	-	0.0%	1,341,000,000	46.0%	2,915,425,300	100.0%
Expeditors Int'l	EXPD	0.90	A+	70	25	80	20.3	1.41%	2,183,264,461	100.0%	-	0.0%	1,000,000	-	2,184,264,461	100.0%
Air Transport Services	ATSG	1.15	B	20	55	20	-	-	395,111,400	22.4%	-	0.0%	1,371,598,000	77.6%	1,766,709,400	100.0%
<b>Mean</b>	<b>1.08</b>	<b>B+</b>	<b>61</b>	<b>48</b>	<b>61</b>	<b>13.1</b>	<b>2.34%</b>	<b>4,752,888,268</b>	<b>48.7%</b>	<b>0.0%</b>	<b>6,682,099,667</b>	<b>61.6%</b>	<b>68,609,927,608</b>	<b>100%</b>	<b>100%</b>	
<b>Weighted Mean</b>								<b>28,517,329,608</b>	<b>41.6%</b>	<b>0.00%</b>	<b>40,092,598,000</b>	<b>58.4%</b>				
<b>Median</b>	<b>1.05</b>					<b>13.0</b>	<b>1.97%</b>		<b>49.7%</b>	<b>0.0%</b>		<b>54.7%</b>				
<b>Harmonic Mean</b>	<b>1.05</b>						<b>1.99%</b>		<b>33.2%</b>	<b>0.0%</b>		<b>57.37%</b>				
<b>Max</b>	<b>1.45</b>						<b>4.00%</b>		<b>100.0%</b>	<b>0.0%</b>		<b>85.1%</b>				
<b>Min</b>	<b>0.85</b>						<b>1.41%</b>		<b>14.9%</b>	<b>0.0%</b>		<b>44.4%</b>				
<b>Say</b>	<b>1.05</b>								<b>45%</b>	<b>0.0%</b>		<b>55%</b>	<b>100%</b>	<b>100%</b>		

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**SUPPORT FOR CAPITAL STRUCTURE  
MARKET VALUE**

WASHINGTON STATE DEPARTMENT OF REVENUE

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FREIGHT AIRLINES

Capital Structure at Market Value

Company	Ticker	Stock Price	Common Shares	Common Stock	%	Preferred Stock	%	Operating Lease	%	Long Term Debt	%	Total Debt & Equity
UPS	UPS	97.53	859,226,168	83,800,328,165	70.3%	-	0.0%	11,764,309,028	9.9%	23,633,000,000	19.8%	119,197,637,193
Fed Ex	FDX	161.33	261,043,625	42,114,168,021	47.6%	-	0.0%	29,674,688,865	33.6%	16,600,000,000	18.8%	88,388,856,886
Atlas Air	AAWW	42.19	25,590,293	1,079,654,462	19.9%	-	0.0%	1,766,802,224	32.6%	2,565,443,000	47.4%	5,411,899,685
CH Robinson	CHRW	84.09	137,504,393	11,562,744,407	85.5%	-	0.0%	618,935,833	4.6%	1,341,352,000	9.9%	13,523,032,240
Expeditors Int'l	EXPD	68.09	172,590,076	11,751,658,275	92.9%	-	0.0%	900,230,646	7.1%	-	-	12,651,888,921
Air Transport Services Group	ATSG	22.81	59,060,000	1,347,158,600	27.9%	-	0.0%	2,080,972,974	43.1%	1,395,300,000	28.9%	4,823,431,574
			<b>Mean</b>		<b>57.4%</b>		<b>0.0%</b>		<b>21.8%</b>		<b>25.0%</b>	
			<b>Weighted Mean</b>	<b>151,655,711,930</b>	<b>62.2%</b>	<b>-</b>	<b>0.00%</b>	<b>46,805,939,570</b>	<b>19.18%</b>	<b>45,535,095,000</b>	<b>18.7%</b>	<b>243,996,746,500</b>
			<b>Median</b>		<b>59.0%</b>		<b>0.00%</b>		<b>21.26%</b>		<b>19.8%</b>	
			<b>Harmonic Mean</b>		<b>41.8%</b>				<b>11.0%</b>		<b>19.2%</b>	
			<b>Max</b>		<b>92.9%</b>		<b>0.0%</b>		<b>43.1%</b>		<b>47.4%</b>	
			<b>Min</b>		<b>19.9%</b>		<b>0.0%</b>		<b>4.6%</b>		<b>9.9%</b>	

Source:

Stock Price: Yahoo

Market Value Debt: Bond Analysis

**Target**

**60%**

**0%**

**20%**

**20%**

**100%**

**SUPPORT FOR MARKET MULTIPLES**

WASHINGTON STATE DEPARTMENT OF REVENUE

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FREIGHT AIRLINES

Company	Ticker	Stock Price	Revenues	Multiple	Cash Flow	Multiple	Earnings	Multiple	Book Value	Multiple
UPS	UPS	97.53	83.55	1.2	9.89	9.9	7.24	13.5	4.05	24.1
Fed Ex	FDX	161.33	246.12	0.7	27.32	5.9	15.31	10.5	73.01	2.2
Atlas Air	AAWW	42.19	104.70	0.4	15.70	2.7	7.15	NMF	71.35	0.59
CH Robinson	CHRW	84.09	119.65	0.7	5.45	15.4	4.73	17.8	11.45	7.34
Expeditors Int'l	EXPD	68.09	47.05	1.4	3.75	18.2	3.25	21.0	12.65	5.38
Air Transport Services G	ATSG	22.81	18.09	1.26	3.32	6.9	0.36	63.4	6.69	3.4
		<b>Mean</b>		<b>0.9</b>		<b>9.8</b>		<b>25.2</b>		<b>7.2</b>
		<b>Median</b>		<b>0.9</b>		<b>8.4</b>		<b>17.8</b>		<b>4.4</b>
		<b>Harmonic Mean</b>		<b>0.8</b>		<b>6.6</b>		<b>17.3</b>		<b>2.1</b>
		<b>Max</b>		<b>1.4</b>		<b>18.2</b>		<b>63.4</b>		<b>24.1</b>
		<b>Min</b>		<b>0.40</b>		<b>2.7</b>		<b>10.5</b>		<b>0.59</b>
		<b>Std Dev</b>		<b>0.41</b>		<b>5.93</b>		<b>21.69</b>		<b>8.62</b>
		<b>Coefficient of Variation</b>		<b>0.44</b>		<b>0.60</b>		<b>0.86</b>		<b>1.20</b>
		<b>Percentile .25</b>		<b>0.7</b>		<b>6.1</b>		<b>13.5</b>		<b>2.5</b>
		<b>Percentile .75</b>		<b>1.2</b>		<b>14.0</b>		<b>21.0</b>		<b>6.9</b>
		<b>Say</b>		<b>1.0</b>		<b>11.0</b>		<b>18.0</b>		<b>NMF</b>

# ENTERPRISE VALUE MULTIPLES

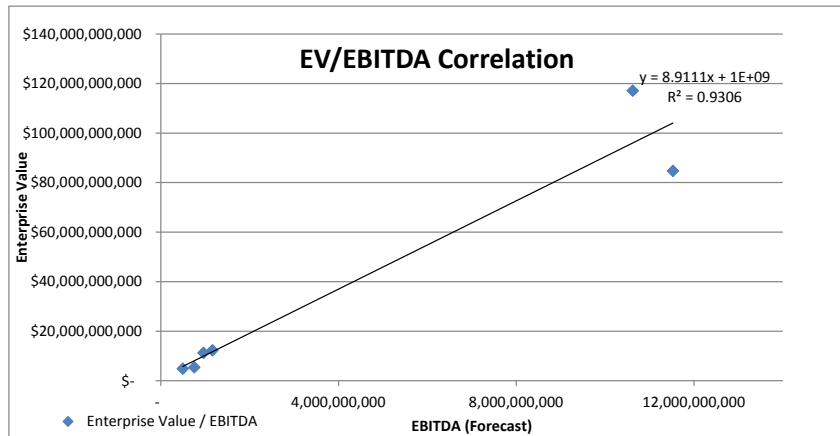
WASHINGTON STATE DEPARTMENT OF REVENUE

2019 ASSESSMENT YEAR

FREIGHT AIRLINES

Guideline Companies	Ticker	EV+OL	EBITDA + OL	EV / EBITDA	Annual Change Rate	EBITDA	EV / EBITDA	Revenue	EV / Sales	CF	Debt Service	EV / CF
			historic	historic	(Growth)	forecast	forecast	forecast				
UPS	UPS	\$ 117,074,637,193	10,190,000,000	11.49	4.23%	10,621,076,312	11.02	75,697,851,831	1.55	8,497,746,802	1,063,485,000	12.24
Fed Ex	FDX	\$ 84,674,856,886	11,258,000,000	7.52	2.39%	11,526,789,090	7.35	71,305,000,000	1.19	7,131,711,835	747,000,000	10.75
Atlas Air	AAWW	\$ 5,411,899,685	723,444,000	7.48	4.23%	754,013,684	7.18	2,970,000,000	1.82	401,767,600	115,444,935	10.46
CH Robinson	CHRW	\$ 12,203,032,240	1,128,820,000	10.81	2.95%	1,162,127,353	10.50	17,346,600,000	0.70	749,398,942	60,360,840	15.07
Expeditors Int'l	EXPD	\$ 11,243,888,921	940,377,000	11.96	2.00%	959,209,654	11.72	8,500,425,000	1.32	647,212,785	-	17.37
Air Transport Services Group	ATSG	\$ 4,823,431,574	493,860,000	9.77	0.00%	493,860,000	9.77	-	-	196,079,200	62,788,500	18.63
	<b>Mean</b>			<b>9.84</b>	<b>2.63%</b>		<b>9.59</b>		<b>1.32</b>			<b>14.09</b>
	<b>Median</b>			<b>10.29</b>	<b>2.67%</b>		<b>10.13</b>		<b>1.32</b>			<b>13.66</b>
	<b>Harmonic Mean</b>			<b>9.49</b>	<b>#NUM!</b>		<b>9.24</b>		<b>1.19</b>			<b>13.40</b>
	<b>Max</b>			<b>11.96</b>	<b>4.23%</b>		<b>11.72</b>		<b>1.82</b>			<b>18.63</b>
	<b>Min</b>			<b>7.48</b>	<b>0.00%</b>		<b>7.18</b>		<b>0.70</b>			<b>10.46</b>
	<b>Std Dev</b>			<b>1.95</b>	<b>1.59%</b>		<b>1.91</b>		<b>0.42</b>			<b>3.47</b>
	<b>Coefficient of Variation</b>			<b>0.20</b>	<b>0.60</b>		<b>0.20</b>		<b>0.32</b>			<b>0.25</b>
	<b>Say</b>			<b>10.00</b>	<b>3.00%</b>		<b>10.00</b>		<b>1.20</b>			<b>13.50</b>

EBITDA from Yahoo February 2016, as of 12-31-15



### Forecast EV/EBITDA By Rank

Guideline Companies	EV/EBITDA	
Atlas Air	7.18	<b>8.10 Low Average</b>
Fed Ex	7.35	<b>7.3 Low Median</b>
Air Transport Services Group	9.77	<b>7.5 Say</b>
CH Robinson	10.50	<b>11.08 High Average</b>
UPS	11.02	<b>11.0 High Median</b>
Expeditors Int'l	11.72	<b>11.0 Say</b>

## SUPPORT FOR YIELD CAPITALIZATION EQUITY COMPONENT CAPITAL ASSET PRICING MODEL

WASHINGTON STATE DEPARTMENT OF REVENUE

2019 ASSESSMENT YEAR

FREIGHT AIRLINES

### Ex Ante

$$K_e = R_f + \beta (R_p)$$

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**Ke = Cost of Equity** **8.93%**

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Rm =	rate of return	8.65%	
Rf =	risk free rate	3.00%	
Rp =	risk premium	5.65%	
B =	Beta	1.05	

page 2

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**Rp = Risk Premium** **5.65%**

to above

<b>Shannon Pratt and Roger Grabowski</b>	3.50% - 6.00%	
Cost of Capital, Applications and Examples, Fifth Edition, 2014		
<b>Dr. Aswath Damodaran</b>	5.96%	chart page 15
<a href="http://pages.stern.nyu.edu/~adamodar/">http://pages.stern.nyu.edu/~adamodar/</a>	<b>5.65%</b>	adjusted for Rf
2018 Implied Premium		
<b>John Graham and Campbell Harvey</b>	6.21%	10 year expected real return
Duke CFO magazine Global Business Outlook	5.89%-6.54%	95% Interval 10 year expected
4th Qtr 2018	<b>6.27%</b>	adjusted for Rf
	3.06%	Rf rate used in survey

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**Rf = Risk Free Rate** **3.00%**

to above

**Value Line Investment Survey, Selected Yields January 5, 2018, page 2573**  
 as of 12-27-18

US Treasury Securities year end data		
5 year		2.65%
10 year		2.81%
30 year		3.06%
30 year Zero		3.10%

**Federal Reserve Statistical Release (<http://www.federalreserve.gov/Releases/H15/Current/>)**

January 2, 2019 as of 12-29-18

Treasury Constant Maturities		
5 year		2.51%
10 year		2.69%
20 year		2.87%
30 year		3.02%
20 year TIPS		<u>1.09%</u>
30 year TIPS		<u>1.21%</u>
		1.78%
		1.81%
		TIPS inflation indication

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**Inflation** **2.00%**

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<b>Value Line Investment Survey, Economic Series January 5, 2019, page 1500</b>	
Consumer Price Index Annual Rate of Change 2021-2023	2.30%
<b>Federal Reserve Bank of Philadelphia</b>	
The Livingston Survey, December 21, 2018, page 4, 10	
Inflation median (measured by the CPI) over next 10 years	2.23%
<a href="https://www.philadelphiafed.org/research-and-data/real-time-center/livingston-survey">https://www.philadelphiafed.org/research-and-data/real-time-center/livingston-survey</a>	

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**Gross Domestic Product (GDP)** **3.90%**

<b>Federal Reserve Projected Long Run Real GDP Growth</b>	
Median Projection Value From Dec 19, 2018 Report	1.90%
<a href="https://www.federalreserve.gov/monetarypolicy/files/fomcprojtabl20181219.pdf">https://www.federalreserve.gov/monetarypolicy/files/fomcprojtabl20181219.pdf</a>	
<b>Congressional Budget Office Real GDP Economic Projections</b>	
The Budget and Economic Outlook 2019-2029	Table E-1, pg 147
Average Percentage Change From Year To Year	2019-2023 1.90%
<a href="http://www.cbo.gov/publication/54918">http://www.cbo.gov/publication/54918</a>	2024-2029 1.78%
<b>Federal Reserve Bank of Philadelphia</b>	
The Livingston Survey, December 15, 2018, page 4, 10	
Average Annual Real GDP Growth Rate for Next Ten Years	2.07%
<a href="https://www.philadelphiafed.org/research-and-data/real-time-center/livingston-survey">https://www.philadelphiafed.org/research-and-data/real-time-center/livingston-survey</a>	

## SUPPORT FOR YIELD CAPITALIZATION EQUITY COMPONENT

### DIVIDEND GROWTH MODEL

WASHINGTON STATE DEPARTMENT OF REVENUE

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FREIGHT AIRLINES

#### Based on Dividend Growth

$$K_e = (D_1 / P_0) + G_D$$

Ke = Cost of Equity  
 D1 = Expected Dividends  
 P0 = Current Stock Price  
 GD = Sustainable Growth -- Dividend  
 assumption Sustainable growth can not exceed inflation plus real GDP

Company	Ticker	Stock Price (Po)	Expected Dividend (D1)	Dividend Yield (D1/Po)	Dividend Growth (G)	Ke	Forecast Dividend Growth	Ke Forecast Growth	Sustainable Dividend Growth	Ke Sustainable Growth	Ke with Multi Stage Growth Adj
UPS	UPS	97.53	3.90	4.00%	7.14%	11.14%	3.80%	7.80%	3.80%	7.80%	8.39%
Fed Ex	FDX	161.33	2.60	1.61%	30.00%	31.61%	4.99%	6.60%	3.90%	5.51%	9.49%
Atlas Air	AAWW	42.19	0.00				0.00%		0.00%		
CH Robinson	CHRW	84.09	1.96	2.33%	4.26%	6.59%	4.94%	7.27%	3.90%	6.23%	7.87%
Expeditors Int'l	EXPD	68.09	0.96	1.41%	6.67%	8.08%	3.30%	4.71%	3.30%	4.71%	5.46%
Air Transport Services Group	ATSG	22.81	0.00				0.00%		0.00%		
			<b>Mean</b>	<b>2.34%</b>		<b>14.35%</b>		<b>6.60%</b>		<b>6.06%</b>	<b>7.80%</b>
			<b>Median</b>	<b>1.97%</b>		<b>9.61%</b>		<b>6.94%</b>		<b>5.87%</b>	<b>8.13%</b>
			<b>Harmonic Mean</b>	<b>1.99%</b>		<b>10.07%</b>		<b>6.36%</b>		<b>5.86%</b>	<b>7.48%</b>
			<b>Max</b>	<b>4.00%</b>		<b>31.61%</b>		<b>7.80%</b>		<b>7.80%</b>	<b>9.49%</b>
			<b>Min</b>	<b>1.41%</b>		<b>6.59%</b>		<b>4.71%</b>		<b>4.71%</b>	<b>5.46%</b>

Source: Value Line Projections 17-18 to 21-23

Say **7.50%**  
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## SUPPORT FOR YIELD CAPITALIZATION EQUITY COMPONENT DIVIDEND GROWTH MODEL

WASHINGTON STATE DEPARTMENT OF REVENUE

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FREIGHT AIRLINES

### Based on Earnings Growth

$$K_e = (D_1 / P_0) + G$$

Ke = Cost of Equity  
 D1 = Expected Dividends  
 P0 = Current Stock Price  
 G = Sustainable Growth -- Earnings  
 assumption Sustainable growth can not exceed inflation plus real GDP

Company	Ticker	Stock Price (Po)	Expected Earnings (D1)	Yield (D1/Po)	Earnings Growth (G)	Ke	Forecast Earnings Growth	Ke Forecast Growth	Sustainable Earnings Growth	Ke Sustainable Growth	Ke with Multi Stage Growth Adj	Ke Multi Stage FCFE
UPS	UPS	97.53	7.50	7.69%	3.59%	11.28%	4.18%	11.87%	3.90%	11.59%	8.45%	NMF
Fed Ex	FDX	161.33	16.00	9.92%	4.51%	14.42%	2.36%	12.28%	2.36%	12.28%	5.32%	14.41%
Atlas Air	AAWW	42.19	7.25	17.18%	1.40%	18.58%	5.39%	22.57%	3.90%	21.08%	5.17%	20.84%
CH Robinson	CHRW	84.09	5.15	6.12%	8.88%	15.00%	4.29%	10.41%	3.90%	10.02%	7.08%	8.60%
Expeditors Int'l	EXPD	68.09	3.35	4.92%	3.08%	8.00%	3.38%	8.30%	3.38%	8.30%	5.25%	5.28%
Air Transport Services Group	ATSG	22.81	0.00						3.90%			NMF
			<b>Mean</b>	<b>9.17%</b>		<b>13.46%</b>		<b>13.08%</b>		<b>12.65%</b>	<b>6.26%</b>	<b>12.28%</b>
			<b>Median</b>	<b>7.69%</b>		<b>14.42%</b>		<b>11.87%</b>		<b>11.59%</b>	<b>5.32%</b>	<b>11.50%</b>
			<b>Harmonic Mean</b>	<b>7.63%</b>		<b>12.39%</b>		<b>11.72%</b>		<b>11.48%</b>	<b>6.01%</b>	<b>9.45%</b>
			<b>Max</b>	<b>17.18%</b>		<b>18.58%</b>		<b>22.57%</b>		<b>21.08%</b>	<b>8.45%</b>	<b>20.84%</b>
			<b>Min</b>	<b>4.92%</b>		<b>8.00%</b>		<b>8.30%</b>		<b>8.30%</b>	<b>5.17%</b>	<b>5.28%</b>

Source: Value Line Projections 17-18 to 21-23

Say **9.00%**  
to page 1



**SUPPORT FOR YIELD CAPITALIZATION EQUITY COMPONENT  
DIVIDEND GROWTH MODEL**

WASHINGTON STATE DEPARTMENT OF REVENUE

2019 ASSESSMENT YEAR

FREIGHT AIRLINES

**Based on Return on Equity**

- Ke =** Cost of Equity  
**D1 =** Expected Dividends  
**E1 =** Expected Earnings  
**Po =** Current Price  
**G =** Sustainable Growth  
**b =** Retained Earnings % = (EPS - DPS) / EPS  
**ROE =** Return on Equity = (E1 / Po)

Company	Ticker	Stock Price (Po)	Expected Dividend (D1)	Expected Earnings (E1)	Dividend Yield (D1/Po)	Retained Earnings (b)	ROE (E1/Po)	Growth (b*ROE)	Ke Dividends	Ke Earnings
UPS	UPS	97.53	3.90	7.50	4.00%	48.0%	7.69%	3.69%	7.69%	11.38%
Fed Ex	FDX	161.33	2.60	16.00	1.61%	83.8%	9.92%	8.31%	9.92%	18.22%
Atlas Air	AAWW	42.19	0.00	7.25		100.0%	17.18%	17.18%		34.37%
CH Robinson	CHRW	84.09	1.96	5.15	2.33%	61.9%	6.12%	3.79%	6.12%	9.92%
Expeditors Int'l	EXPD	68.09	0.96	3.35	1.41%	71.3%	4.92%	3.51%	4.92%	8.43%
Air Transport Services Group	ATSG	22.81	0.00	0.00		100.0%	0.00%	0.00%		
<b>Mean</b>									<b>7.16%</b>	<b>16.46%</b>
<b>Median</b>									<b>6.91%</b>	<b>11.38%</b>
<b>Harmonic Mean</b>									<b>6.70%</b>	<b>12.78%</b>
<b>Max</b>									<b>9.92%</b>	<b>34.37%</b>
<b>Min</b>									<b>4.92%</b>	<b>8.43%</b>

Say

**11.50%**  
04/16/2019  
to page 1 9

**SUPPORT FOR DEBT RATING AND DEBT YIELD RATE**

WASHINGTON STATE DEPARTMENT OF REVENUE

2019 ASSESSMENT YEAR

FREIGHT AIRLINES

Company	Ticker	Mergent's Ratings	S&P Ratings
UPS	UPS	A1	A+
Fed Ex	FDX	Baa2	BBB
Atlas Air	AAWW	-	-
CH Robinson	CHRW	-	-
Expeditors Int'l	EXPD	-	-
Air Transport Services Group	ATSG	-	-
<b>Overall Average Debt Rating</b>		<b>A2</b>	<b>A-</b>

**Mergent's Bond Record January 2019, page 13**

Corporate	Aaa	Aa	A	Baa
October	4.14%	4.28%	4.46%	5.07%
November	4.22%	4.37%	4.53%	5.22%
December	4.02%	4.20%	4.37%	5.13%
<b>4th Qtr Average</b>	<b>4.13%</b>	<b>4.28%</b>	<b>4.45%</b>	<b>5.14%</b>
Public Utilities	Aaa	Aa	A	Baa
October		4.31%	4.45%	4.91%
November		4.40%	4.52%	5.03%
December		4.24%	4.37%	4.92%
<b>4th Qtr Average</b>		<b>4.32%</b>	<b>4.45%</b>	<b>4.95%</b>
Industrials	Aaa	Aa	A	Baa
October	4.14%	4.24%	4.45%	5.22%
November	4.22%	4.34%	4.53%	5.42%
December	4.02%	4.16%	4.36%	5.34%
<b>4th Qtr Average</b>	<b>4.13%</b>	<b>4.25%</b>	<b>4.45%</b>	<b>5.33%</b>

<b>Debt Yield Rate</b>	<b>4.50%</b>
<b>Cost of Secured Debt (Lease)</b>	<i>Based on 4th Quarter Aa rate</i> <b>4.25%</b>

to page 1

**DATA INPUT**

WASHINGTON STATE DEPARTMENT OF REVENUE

2019 ASSESSMENT YEAR

FREIGHT AIRLINES

			Historic Figures (2018)									
Guideline Companies		Stock Price 12/31/2018	Beta levered	Revenues Per Share	Cash Flow Per Share	Earnings Per Share	Dividends Per Share	Bk Value Per Share	Common Shares	Trailing P/E Ratio	Operating Margin	Income Tax Rate
Name	Ticker	Yahoo	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL
UPS	UPS	97.53	0.95	83.55	9.89	7.24	3.64	4.05	859,226,168	15.3	13.3%	21.3%
Fed Ex	FDX	161.33	1.20	246.12	27.32	15.31	2.00	73.01	261,043,625	10.8	13.5%	20.0%
Atlas Air	AAWW	42.19	1.45	104.70	15.70	7.15	-	71.35	25,590,293	8.8	21.5%	15.0%
CH Robinson	CHRW	84.09	0.85	119.65	5.45	4.73	1.88	11.45	137,504,393	19.2	6.1%	24.5%
Expeditors Int'l	EXPD	68.09	0.90	47.05	3.75	3.25	0.90	12.65	172,590,076	23.0	12.2%	25.0%
Air Transport Services Group	ATSG	22.81	1.15	18.09	3.32	0.36	-	6.69	59,060,000	-	38.8%	22.0%

Value Line February, 2019

2019

Washington State Department of Revenue

**DATA INPUT**

WASHINGTON STATE DEPARTMENT OF REVENUE

2019 ASSESSMENT YEAR

FREIGHT AIRLINES

Guideline Companies	Return on Shareholder Equity	Projected (Next Year) 2019									Dividend Per	
		Revenues Per Share	Cash Flow Per Share	Earnings Per Share	Dividends Per Share	Bk Value Per Share	Common Shares	Capital Spending per share	Return on Shareholder Equity	All Dividends to Net Profits	2020	2024
Name	V L	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL
UPS	NMF	88.10	10.25	7.50	3.90	4.05	859,226,468	7.75	NMF	50.0%	4.15	5.00
Fed Ex	21.5%	274.25	28.95	16.00	2.60	79.80	260,000,000	19.00	20.5%	16.0%	2.90	3.70
Atlas Air	9.5%	108.00	16.90	7.25	-	70.35	27,500,000	4.75	10.5%	0.0%	0.00	0.00
CH Robinson	41.5%	125.70	5.95	5.15	1.96	13.35	138,000,000	0.65	39.0%	38.0%	2.20	2.80
Expeditors Int'l	27.0%	50.15	3.85	3.35	0.96	14.00	169,500,000	0.35	25.0%	29.0%	1.02	1.20
Air Transport Services Group	5.5%										0.00	0.00

Value Line February, 2019

2019

	2018	2019
UPS	3.64	3.90
Fed Ex	2.00	2.60
Atlas Air	-	-

Washington State Department of Revenue

**DATA INPUT**

WASHINGTON STATE DEPARTMENT OF REVENUE

2019 ASSESSMENT YEAR

FREIGHT AIRLINES

LONGER TERM FORECASTS													
Guideline Companies	Share	Earnings % Change			Cash Flow % Change			Revenue % Change			Return on Shareholder Equity	Income Statement	
	% Annual change	2020	2024	% Annual Change	2020	2024	% Annual Change	2020	2024	% Annual Change		Operating Income	Current Assets
Name	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	M*	M*
UPS	3.80%	8.15	10.00	4.18%	11.10	13.40	3.84%	92.75	114.10	4.23%	NMF	7,024,000,000	16,210,000,000
Fed Ex	4.99%	17.80	20.00	2.36%	31.20	36.25	3.05%	290.70	327.10	2.39%	18.0%	5,250,000,000	13,341,000,000
Atlas Air	0.00%	8.00	10.40	5.39%	19.10	26.60	6.85%	115.70	142.30	4.23%	12.5%	295,000,000	630,000,000
CH Robinson	4.94%	5.35	6.60	4.29%	6.20	7.50	3.88%	131.95	152.60	2.95%	29.0%	912,000,000	2,753,000,000
Expeditors Int'l	3.30%	3.60	4.25	3.38%	4.15	4.90	3.38%	53.25	58.80	2.00%	21.5%	797,000,000	2,735,000,000
Air Transport Services Group	0.00%	0.00	0.00	0.00%	0.00	0.00	0.00%	0.00	0.00	0.00%		93,000,000	185,000,000

Value Line February, 2019

	%Change	2018	2019	%Change	2018	2019	%Change	2018	2019	%Change
	7.14%	7.24	7.50	3.59%	9.89	10.25	3.64%	83.55	88.10	5.45%
	30.00%	15.31	16.00	4.51%	27.32	28.95	5.97%	246.12	274.25	11.43%
2019 NMF		7.15	7.25	1.40%	15.70	16.90	7.64%	104.70	108.00	3.15%

Washington State Department of Revenue

**DATA INPUT**

WASHINGTON STATE DEPARTMENT OF REVENUE

2019 ASSESSMENT YEAR

FREIGHT AIRLINES

Guideline Companies	Balance Sheet				Cash Flow Statement	Other Financials		
	PP & E Gross	Intangibles (excl. GW)	Current Liabilities Total	Long Term Debt Less Current Maturities	Depreciation & Amortization	Carrying Value Debt	Fair Value Debt	Current Maturity Long Term Debt
	M*	M*	M*	M*/10-K	M*	10-K	10-K	10-K
UPS	54,488,000,000	2,076,000,000	14,087,000,000	19,931,000,000	2,207,000,000	22,736,000,000	23,633,000,000	2,805,000,000
Fed Ex	55,121,000,000	480,000,000	9,627,000,000	15,243,000,000	3,095,000,000	16,510,000,000	16,600,000,000	1,342,000,000
Atlas Air	5,323,000,000	57,000,000	818,000,000	2,205,000,000	266,000,000	2,568,840,000	2,565,443,000	264,835,000
CH Robinson	499,000,000	143,000,000	1,433,000,000	1,341,000,000	97,000,000	1,346,352,000	1,341,352,000	5,000,000
Expeditors Int'l	951,000,000	-	1,327,000,000	1,000,000	54,000,000	-	-	-
Air Transport Services Group	2,004,000,000	45,000,000	229,134,000	1,371,598,000	155,000,000	1,401,300,000	1,395,300,000	29,654,000

Value Line February, 2019

2019

**DATA INPUT**

WASHINGTON STATE DEPARTMENT OF REVENUE

2019 ASSESSMENT YEAR

FREIGHT AIRLINES

<b>Guideline Companies</b>		<b>Aircraft Rental Expense</b>
<b>Name</b>	<b>10-K</b>	
UPS	959,000,000	
Fed Ex	2,913,000,000	
Atlas Air	162,444,000	
CH Robinson	119,820,000	
Expeditors Int'l	89,377,000	
Air Transport Services Group	245,860,000	

Value Line February, 2019

2019

## 2019 Multi Stage Dividend Growth Model for DGM-d7 Freight Airline Industry

United Parcel Service  
UPS

	Year	Growth Rate	Payout Ratio	Earnings	Dividends	Terminal Value		price =
	0			7.24	3.64	(97.53)		97.53
2019	1	7.14%	50.28%	7.76	3.90	3.90		104.50
2020	2	6.41%	50.28%	8.25	4.15	4.15		111.19
2021	3	3.80%	50.28%	8.57	4.31	4.31		115.42
2022	4	3.80%	50.28%	8.89	4.47	4.47		119.80
2023	5	3.80%	50.28%	9.23	4.64	4.64		124.35
2024	6	3.80%	50.00%	9.58	4.79	4.79		129.07
2025	7	3.82%	50.00%	9.95	4.97	4.97		134.00
2026	8	3.84%	50.00%	10.33	5.16	5.16		139.14
2027	9	3.86%	50.00%	10.73	5.36	5.36		144.51
2028	10	3.88%	50.00%	11.14	5.57	150.11	155.69	150.11
2029	11+	3.90%	50.00%	11.58	5.79			

$K_e = 8.39\%$

source: Valueline

FedEx  
FDX

	Year	Growth Rate	Payout Ratio	Earnings	Dividends	Terminal Value		price =
	0			15.31	2.00	(161.33)		161.33
2019	1	30.00%	13.06%	19.90	2.60	2.60		209.73
2020	2	11.54%	13.06%	22.20	2.90	2.90		233.93
2021	3	4.99%	13.06%	23.31	3.04	3.04		245.61
2022	4	4.99%	13.06%	24.47	3.20	3.20		257.87
2023	5	4.99%	13.06%	25.69	3.36	3.36		270.75
2024	6	4.99%	18.50%	26.98	4.99	4.99		284.27
2025	7	4.77%	18.50%	28.26	5.23	5.23		297.84
2026	8	4.56%	18.50%	29.55	5.47	5.47		311.41
2027	9	4.34%	18.50%	30.83	5.70	5.70		324.91
2028	10	4.12%	18.50%	32.10	5.94	338.30	344.24	338.30
2029	11+	3.90%	18.50%	33.36	6.17			

$K_e = 9.49\%$

source: Valueline

CH Robinson  
CHRW

	Year	Growth Rate	Payout Ratio	Earnings	Dividends	Terminal Value		price =
	0			4.73	1.88	(84.09)		84.09
2019	1	4.26%	39.75%	4.93	1.96	1.96		87.67
2020	2	12.24%	39.75%	5.54	2.20	2.20		98.40
2021	3	4.94%	39.75%	5.81	2.31	2.31		103.27
2022	4	4.94%	39.75%	6.10	2.42	2.42		108.37
2023	5	4.94%	39.75%	6.40	2.54	2.54		113.72
2024	6	4.94%	42.42%	6.71	2.85	2.85		119.34
2025	7	4.73%	42.42%	7.03	2.98	2.98		124.99
2026	8	4.52%	42.42%	7.35	3.12	3.12		130.65
2027	9	4.32%	42.42%	7.67	3.25	3.25		136.29
2028	10	4.11%	42.42%	7.98	3.39	141.89	145.27	141.89
2029	11+	3.90%	42.42%	8.29	3.52			

$K_e = 7.87\%$



source: Valueline

Expeditors Int'l EXPD		Growth	Payout	Earnings	Dividends	Terminal		
	Year	Rate	Ratio			Value		
	0			3.25	0.90	(68.09)	price =	68.09
2019	1	6.67%	27.69%	3.47	0.96	0.96		72.63
2020	2	6.25%	27.69%	3.68	1.02	1.02		77.17
2021	3	3.30%	27.69%	3.81	1.05	1.05		79.72
2022	4	3.30%	27.69%	3.93	1.09	1.09		82.35
2023	5	3.30%	27.69%	4.06	1.12	1.12		85.07
2024	6	3.30%	28.24%	4.19	1.18	1.18		87.88
2025	7	3.42%	28.24%	4.34	1.22	1.22		90.89
2026	8	3.54%	28.24%	4.49	1.27	1.27		94.11
2027	9	3.66%	28.24%	4.66	1.31	1.31		97.56
2028	10	3.78%	28.24%	4.83	1.36	101.25	102.61	101.25
2029	11+	3.90%	28.24%	5.02	1.42			
						$K_e =$	5.46%	

source: Valueline

## 2019 Multi Stage Dividend Growth Model for DGM-e8 Freight Airline Industry

United Parcel Service  
UPS

	Year	Growth Rate	Payout Ratio	Earnings	Dividends	Terminal Value		price =
	0			7.24	3.64	(97.53)		97.53
2019	1	3.59%	50.28%	7.50	3.77	3.77		101.03
2020	2	8.67%	50.28%	8.15	4.10	4.10		109.79
2021	3	4.18%	50.28%	8.49	4.27	4.27		114.37
2022	4	4.18%	50.28%	8.84	4.45	4.45		119.15
2023	5	4.18%	50.28%	9.21	4.63	4.63		124.13
2024	6	4.18%	50.00%	9.60	4.80	4.80		129.31
2025	7	4.12%	50.00%	9.99	5.00	5.00		134.64
2026	8	4.07%	50.00%	10.40	5.20	5.20		140.11
2027	9	4.01%	50.00%	10.82	5.41	5.41		145.73
2028	10	3.96%	50.00%	11.25	5.62	151.50	157.12	151.50
2029	11+	3.90%	50.00%	11.68	5.84			

$K_e = 8.45\%$

source: Valueline

FedEx  
FDX

	Year	Growth Rate	Payout Ratio	Earnings	Dividends	Terminal Value		price =
	0			15.31	2.00	(161.33)		161.33
2019	1	4.51%	13.06%	16.00	2.09	2.09		168.60
2020	2	11.25%	13.06%	17.80	2.33	2.33		187.57
2021	3	2.36%	13.06%	18.22	2.38	2.38		191.99
2022	4	2.36%	13.06%	18.65	2.44	2.44		196.52
2023	5	2.36%	13.06%	19.09	2.49	2.49		201.15
2024	6	2.36%	18.50%	19.54	3.61	3.61		205.90
2025	7	2.67%	18.50%	20.06	3.71	3.71		211.39
2026	8	2.97%	18.50%	20.66	3.82	3.82		217.67
2027	9	3.28%	18.50%	21.34	3.95	3.95		224.82
2028	10	3.59%	18.50%	22.10	4.09	232.90	236.98	232.90
2029	11+	3.90%	18.50%	22.96	4.25			

$K_e = 5.32\%$

source: Valueline

Atlas Air  
AAWW

	Year	Growth Rate	Payout Ratio	Earnings	Dividends	Terminal Value		price =
	0			7.15	-	(42.19)		42.19
2019	1	1.40%	0.00%	7.25	0.00	0.00		42.78
2020	2	10.34%	0.00%	8.00	0.00	0.00		47.21
2021	3	5.39%	0.00%	8.43	0.00	0.00		49.75
2022	4	5.39%	0.00%	8.89	0.00	0.00		52.43
2023	5	5.39%	0.00%	9.36	0.00	0.00		55.25
2024	6	5.39%	0.00%	9.87	0.00	0.00		58.23
2025	7	5.09%	0.00%	10.37	0.00	0.00		61.19
2026	8	4.79%	0.00%	10.87	0.00	0.00		64.13
2027	9	4.49%	0.00%	11.36	0.00	0.00		67.01
2028	10	4.20%	0.00%	11.83	0.00	69.82	69.82	69.82
2029	11+	3.90%	0.00%	12.29	0.00			

$K_e = 5.17\%$

source: Valueline

CH Robinson  
CHRW

	Year	Growth Rate	Payout Ratio	Earnings	Dividends	Terminal Value		price =
	0			4.73	1.88	(84.09)		84.09
2019	1	8.88%	39.75%	5.15	2.05	2.05		91.56
2020	2	3.88%	39.75%	5.35	2.13	2.13		95.11
2021	3	4.29%	39.75%	5.58	2.22	2.22		99.19
2022	4	4.29%	39.75%	5.82	2.31	2.31		103.45
2023	5	4.29%	39.75%	6.07	2.41	2.41		107.88
2024	6	4.29%	42.42%	6.33	2.68	2.68		112.51
2025	7	4.21%	42.42%	6.60	2.80	2.80		117.25
2026	8	4.13%	42.42%	6.87	2.91	2.91		122.09
2027	9	4.06%	42.42%	7.15	3.03	3.03		127.05
2028	10	3.98%	42.42%	7.43	3.15	132.10	135.25	132.10
2029	11+	3.90%	42.42%	7.72	3.28			

$K_e = 7.08\%$

source: Valueline

Expeditors Int'l  
EXPD

	Year	Growth Rate	Payout Ratio	Earnings	Dividends	Terminal Value		price =
	0			3.25	0.90	(68.09)		68.09
2019	1	3.08%	27.69%	3.35	0.93	0.93		70.19
2020	2	7.46%	27.69%	3.60	1.00	1.00		75.42
2021	3	3.38%	27.69%	3.72	1.03	1.03		77.97
2022	4	3.38%	27.69%	3.85	1.07	1.07		80.60
2023	5	3.38%	27.69%	3.98	1.10	1.10		83.32
2024	6	3.38%	28.24%	4.11	1.16	1.16		86.13
2025	7	3.48%	28.24%	4.25	1.20	1.20		89.13
2026	8	3.59%	28.24%	4.41	1.24	1.24		92.33
2027	9	3.69%	28.24%	4.57	1.29	1.29		95.73
2028	10	3.80%	28.24%	4.74	1.34	99.37	100.71	99.37
2029	11+	3.90%	28.24%	4.93	1.39			

$K_e = 5.25\%$

source: Valueline

## 2019 Multi Stage Dividend Growth Model Using FCFE

Freight Airline Industry

Assumptions:

3.90%	GDP
13.0	Industry PE
29.0%	Target Dividend Payout Ratio
22.8%	Target ROE

United Parcel Service  
UPS

	Year	Growth Rate	ROE	Reinvestment Rate	Payout Ratio	Earnings	FCFE	Terminal Value	Cash Flow	
Historic	0		NMF	15.79%	84.21%	7.24			-97.53	price = 97.53
	2019	1	3.59%	NMF	NMF	7.50	NMF		0.00	
	2020	2	8.33%	NMF	NMF	8.13	NMF		0.00	
Stage 1	2021	3	7.69%	NMF	NMF	8.75	NMF		0.00	
	2022	4	7.14%	NMF	NMF	9.38	NMF		0.00	
	2023	5	6.67%	NMF	NMF	10.00	NMF		0.00	
	2024	6	6.11%	NMF	NMF	10.61	NMF		0.00	
	2025	7	5.56%	NMF	NMF	11.20	NMF		0.00	
Stage 2	2026	8	5.01%	NMF	NMF	11.76	NMF		0.00	
	2027	9	4.45%	NMF	NMF	12.29	NMF		0.00	
	2028	10	3.90%	NMF	NMF	12.77	NMF	172.47	172.47	
Stage 3	11+	3.90%	22.75%	17.14%	82.86%	13.26	NMF			
									<b>Ke = NMF</b>	

FedEx  
FDX

	Year	Growth Rate	ROE	Reinvestment Rate	Payout Ratio	Earnings	FCFE	Terminal Value	Cash Flow	
Historic	0		21.50%	19.81%	80.19%	15.31			-161.33	price = 161.33
	2019	1	4.51%	30.49%	69.51%	16.00	11.12		11.12	
	2020	2	6.25%	29.60%	70.40%	17.00	11.97		11.97	
Stage 1	2021	3	5.88%	28.86%	71.14%	18.00	12.81		12.81	
	2022	4	5.56%	28.26%	71.74%	19.00	13.63		13.63	
	2023	5	5.26%	27.73%	72.27%	20.00	14.45		14.45	
	2024	6	4.99%	24.90%	75.10%	21.00	15.77		15.77	
	2025	7	4.72%	22.34%	77.66%	21.99	17.08		17.08	
Stage 2	2026	8	4.45%	20.01%	79.99%	22.97	18.37		18.37	
	2027	9	4.17%	17.89%	82.11%	23.92	19.64		19.64	
	2028	10	3.90%	17.14%	82.86%	24.86	20.60	335.85	356.45	
Stage 3	11+	3.90%	22.75%	17.14%	82.86%	25.83	21.40			
									<b>Ke = 14.41%</b>	

Atlas Air  
AAWW

	Year	Growth Rate	ROE	Reinvestment Rate	Payout Ratio	Earnings	FCFE	Terminal Value	Cash Flow	
Historic	0		9.50%	6.15%	93.85%	7.15			-42.19	price = 42.19
	2019	1	1.40%	103.45%	-3.45%	7.25	-0.25		-0.25	
	2020	2	10.86%	89.07%	10.93%	8.04	0.88		0.88	
Stage 1	2021	3	9.80%	77.60%	22.40%	8.83	1.98		1.98	
	2022	4	8.92%	68.27%	31.73%	9.61	3.05		3.05	
	2023	5	8.19%	58.67%	41.33%	10.40	4.30		4.30	
	2024	6	7.33%	44.50%	55.50%	11.16	6.19		6.19	
	2025	7	6.48%	33.84%	66.16%	11.89	7.86		7.86	
Stage 2	2026	8	5.62%	25.51%	74.49%	12.55	9.35		9.35	
	2027	9	4.76%	20.70%	81.16%	13.15	10.67		10.67	
	2028	10	3.90%	17.14%	82.86%	13.66	11.32	184.61	195.93	
Stage 3	11+	3.90%	22.75%	17.14%	82.86%	14.20	11.76			
									<b>Ke = 20.84%</b>	

CH Robinson  
CHRW

	Year	Growth Rate	ROE	Reinvestment Rate	Payout Ratio	Earnings	FCFE	Terminal Value	Cash Flow	
Historic	0		41.50%	39.03%	60.97%	4.73			-84.09	price = 84.09
	2019	1	8.88%	18.05%	81.95%	5.15	4.22		4.22	
	2020	2	7.04%	18.02%	81.98%	5.51	4.52		4.52	
Stage 1	2021	3	6.58%	18.15%	81.85%	5.88	4.81		4.81	
	2022	4	6.17%	18.45%	81.55%	6.24	5.09		5.09	

	2023	5	5.81%	29.00%	18.72%	81.28%	6.60	5.36	5.36
	2024	6	5.43%	27.75%	18.19%	81.81%	6.96	5.69	5.69
	2025	7	5.05%	26.50%	17.60%	82.40%	7.31	6.02	6.02
Stage 2	2026	8	4.66%	25.25%	16.96%	83.04%	7.65	6.35	6.35
	2027	9	4.28%	24.00%	16.25%	83.75%	7.98	6.68	6.68
	2028	10	3.90%	22.75%	17.14%	82.86%	8.29	6.87	112.00
Stage 3		11+	3.90%	22.75%	17.14%	82.86%	8.61	7.14	118.87

**Ke = 8.60%**

# IMPLIED PREMIUMS FOR US MARKET

Updated January 2018

These implied premiums are calculated using the S&P 500.

Year	Earnings Yield	Dividend Yield	S&P 500	Earnings*	Dividends*	Change in Earnings	Change in Dividends	T. Bill Rate	T. Bond Rate	Bond-Bill	Smoothed Growth	Implied Premium (DDM)	Analyst Growth Estimate	Implied Premium (FCFE)	ERP/Riskfree Rate
1960	5.34%	3.41%	58.11	3.10	1.98			0.0266	2.76%	0.10%	2.45%				
1961	4.71%	2.85%	71.55	3.37	2.04	0.08602	0.02908	0.0213	2.35%	0.22%	2.41%	2.92%		2.92%	124.26%
1962	5.81%	3.40%	63.1	3.67	2.15	0.08786	0.052092	0.0273	3.85%	1.12%	4.05%	3.56%		3.56%	92.47%
1963	5.51%	3.13%	75.02	4.13	2.35	0.12752	0.094493	0.0312	4.14%	1.02%	4.96%	3.38%		3.38%	81.64%
1964	5.62%	3.05%	84.75	4.76	2.58	0.15225	0.100825	0.0354	4.21%	0.67%	5.13%	3.31%		3.31%	78.62%
1965	5.73%	3.06%	92.43	5.30	2.83	0.11197	0.094195	0.0393	4.65%	0.72%	5.46%	3.32%		3.32%	71.40%
1966	6.74%	3.59%	80.33	5.41	2.88	0.02228	0.019619	0.0476	4.64%	-0.12%	4.19%	3.68%		3.68%	79.31%
1967	5.66%	3.09%	96.47	5.46	2.98	0.00849	0.033662	0.0421	5.70%	1.49%	5.25%	3.20%		3.20%	56.14%
1968	5.51%	2.93%	103.86	5.72	3.04	0.04807	0.020858	0.0521	6.16%	0.95%	5.32%	3.00%		3.00%	48.70%
1969	6.63%	3.52%	92.06	6.10	3.24	0.06656	0.064873	0.0658	7.88%	1.30%	7.55%	3.74%		3.74%	47.46%
1970	5.98%	3.46%	92.15	5.51	3.19	-0.09716	-0.01608	0.0653	6.50%	-0.03%	4.78%	3.41%		3.41%	52.46%
1971	5.46%	3.10%	102.09	5.57	3.16	0.01153	-0.0074	0.0439	5.89%	1.50%	4.57%	3.09%		3.09%	52.46%
1972	5.23%	2.70%	118.05	6.17	3.19	0.10762	0.007128	0.0384	6.41%	2.57%	5.21%	2.72%		2.72%	42.43%
1973	8.16%	3.70%	97.55	7.96	3.61	0.28929	0.132398	0.0693	6.90%	-0.03%	8.30%	4.30%		4.30%	62.32%
1974	13.64%	5.43%	68.56	9.35	3.72	0.17481	0.031434	0.08	7.40%	-0.60%	6.42%	5.59%		5.59%	75.54%
1975	8.55%	4.14%	90.19	7.71	3.73	-0.17541	0.00297	0.058	7.76%	1.96%	5.99%	4.13%		4.13%	53.22%
1976	9.07%	3.93%	107.46	9.75	4.22	0.26395	0.131047	0.0508	6.81%	1.73%	8.19%	4.55%		4.55%	66.81%
1977	11.43%	5.11%	95.1	10.87	4.86	0.11525	0.1507	0.0512	7.78%	2.66%	9.52%	5.92%		5.92%	76.09%
1978	12.11%	5.39%	96.11	11.64	5.18	0.07074	0.065997	0.0718	9.15%	1.97%	8.48%	5.72%		5.72%	62.51%
1979	13.48%	5.53%	107.94	14.55	5.97	0.25014	0.152259	0.1038	10.33%	-0.05%	11.70%	6.45%		6.45%	62.44%
1980	11.04%	4.74%	135.76	14.99	6.44	0.03007	0.078059	0.1124	12.43%	1.19%	11.01%	5.03%		5.03%	40.47%
1981	12.39%	5.57%	122.55	15.18	6.83	0.01308	0.060763	0.1471	13.98%	-0.73%	11.42%	5.73%		5.73%	40.99%
1982	9.83%	4.93%	140.64	13.82	6.93	-0.0895	0.015751	0.1054	10.47%	-0.07%	7.96%	4.90%		4.90%	46.80%
1983	8.06%	4.32%	164.93	13.29	7.12	-0.03845	0.027608	0.088	11.80%	3.00%	9.09%	4.31%		4.31%	36.53%
1984	10.07%	4.68%	167.24	16.84	7.83	0.26688	0.098506	0.0985	11.51%	1.66%	11.02%	5.11%		5.11%	44.40%
1985	7.42%	3.88%	211.28	15.68	8.20	-0.06912	0.04738	0.0772	8.99%	1.27%	8.99%	4.03%	6.75%	3.84%	42.71%
1986	5.96%	3.38%	242.17	14.43	8.19	-0.07933	-0.0015	0.0616	7.22%	1.06%	5.54%	3.36%	6.96%	3.58%	49.58%
1987	6.49%	3.71%	247.08	16.04	9.17	0.111	0.119888	0.0547	8.86%	3.39%	9.66%	4.18%	8.58%	3.99%	45.03%
1988	8.20%	3.68%	277.72	24.12	10.22	0.50416	0.114919	0.0635	9.14%	2.79%	9.76%	4.12%	7.67%	3.77%	41.25%
1989	6.80%	3.32%	353.4	24.32	11.73	0.00829	0.148021	0.0837	7.93%	-0.44%	9.58%	3.85%	7.46%	3.51%	44.26%
1990	6.58%	3.74%	330.22	22.65	12.35	-0.06867	0.052617	0.0781	8.07%	0.26%	7.39%	3.92%	7.19%	3.89%	48.20%
1991	4.58%	3.11%	417.09	19.30	12.97	-0.1479	0.050304	0.07	6.70%	-0.30%	6.34%	3.27%	7.81%	3.48%	51.94%
1992	4.16%	2.90%	435.71	20.87	12.64	0.08135	-0.0259	0.053	6.68%	1.38%	4.67%	2.83%	9.83%	3.55%	53.14%
1993	4.25%	2.72%	466.45	26.90	12.69	0.28893	0.004103	0.035	5.79%	2.29%	4.73%	2.74%	8.00%	3.17%	54.75%
1994	5.89%	2.91%	459.27	31.75	13.36	0.1803	0.053385	0.05	7.82%	2.82%	7.23%	3.06%	7.17%	3.55%	45.40%
1995	5.74%	2.30%	615.93	37.70	14.17	0.1874	0.059981	0.035	5.57%	2.07%	5.65%	2.44%	6.50%	3.29%	59.07%
1996	4.83%	2.01%	740.74	40.63	14.89	0.07772	0.051	0.05	6.41%	1.41%	6.13%	2.11%	7.92%	3.20%	49.92%
1997	4.08%	1.60%	970.43	44.09	15.52	0.08516	0.042523	0.0535	5.74%	0.39%	5.45%	1.67%	8.00%	2.73%	47.56%
1998	3.11%	1.32%	1229.23	44.27	16.20	0.00408	0.04368	0.0433	4.65%	0.32%	4.60%	1.38%	7.20%	2.26%	48.60%
1999	3.07%	1.14%	1469.25	51.68	16.71	0.16738	0.031595	0.0537	6.44%	1.07%	5.75%	1.20%	12.50%	2.05%	31.83%
2000	3.94%	1.23%	1320.28	56.13	16.27	0.08611	-0.02653	0.0573	5.11%	-0.62%	3.71%	1.65%	12.00%	2.87%	56.16%
2001	3.85%	1.37%	1148.09	38.85	15.74	-0.30786	-0.03242	0.018	5.05%	3.25%	3.56%	1.73%	10.30%	3.62%	71.68%
2002	5.23%	1.83%	879.82	46.04	16.08	0.18507	0.021536	0.012	3.81%	2.61%	3.57%	2.29%	8.00%	4.10%	107.61%
2003	4.87%	1.61%	1111.91	54.69	17.88	0.18788	0.11194	0.01	4.25%	3.25%	5.35%	2.12%	11.00%	3.69%	86.82%
2004	5.58%	1.60%	1211.92	67.68	19.41	0.23752	0.085403	0.0218	4.22%	2.04%	4.90%	2.02%	8.50%	3.65%	86.49%
2005	5.47%	1.79%	1248.29	76.45	22.38	0.12958	0.153192	0.0431	4.39%	0.08%	6.16%	2.20%	8.00%	4.08%	92.94%
2006	6.18%	1.77%	1418.3	87.72	25.05	0.14742	0.119303	0.0488	4.70%	-0.18%	5.93%	1.97%	12.50%	4.16%	88.51%
2007	5.62%	1.89%	1468.36	82.54	27.73	-0.05905	0.106986	0.0331	4.02%	0.71%	5.03%	2.06%	5.00%	4.37%	108.71%
2008	7.24%	3.11%	903.25	65.39	28.05	-0.20778	0.01154	0.0159	2.21%	0.62%	2.11%	4.05%	4.00%	6.43%	290.95%
2009	5.35%	2.00%	1115.1	59.65	22.31	-0.08778	-0.20463	0.0014	3.84%	3.70%	0.28%	2.60%	7.20%	4.36%	113.54%
2010	6.65%	1.84%	1257.64	83.66	23.12	0.40251	0.036307	0.0013	3.29%	3.16%	3.33%	2.24%	6.95%	5.20%	158.05%
2011	7.72%	2.07%	1257.6	97.05	26.02	0.16005	0.125433	0.0003	1.88%	1.85%	2.75%	2.71%	7.18%	6.01%	319.68%
2012	7.18%	2.13%	1426.19	102.47	30.44	0.05585	0.169869	0.0005	1.76%	1.71%	2.93%	2.47%	5.27%	5.78%	328.41%
2013	5.81%	1.96%	1848.36	107.45	36.28	0.0486	0.191853	0.0007	3.04%	2.97%	5.01%	2.03%	4.28%	4.96%	163.16%
2014	5.57%	1.87%	2058.9	114.74	38.57	0.06785	0.06312	0.00053	2.17%	2.12%	2.55%	2.24%	5.58%	5.78%	266.36%
2015	5.20%	2.11%	2043.94	106.32	43.16	-0.0592	0.0943	0.0021	2.27%	2.06%	2.96%	2.46%	5.55%	6.12%	270.00%
2016	4.86%	2.01%	2238.83	108.86	45.03	0.0239	0.0433	0.0051	2.45%	1.94%	2.64%	2.41%	5.54%	5.69%	232.00%