

WEIGHTED AVERAGE COST OF CAPITAL

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Balance sheet (Statement of Financial Position)

Assets		Equity	20,000
Current Assets	5,750	Capital stock	11,000
Cash	1,000	Retained earnings	9,000
Accounts receivable	1,500	Liabilities	2,000
Inventory	3,000	Current Liabilities	700
Prepaid expenses	250	Accounts payable	600
Long-term Assets	16,250	Taxes payable	100
Investments	5,000	Long-term Liabilities	1,300
Land	2,250	Long-term loans	300
Buildings	6,000	Company bonds	1,000
Machines & Equip.	3,000		
	22,000		22,000



SOURCES OF FINANCE

EQUITY

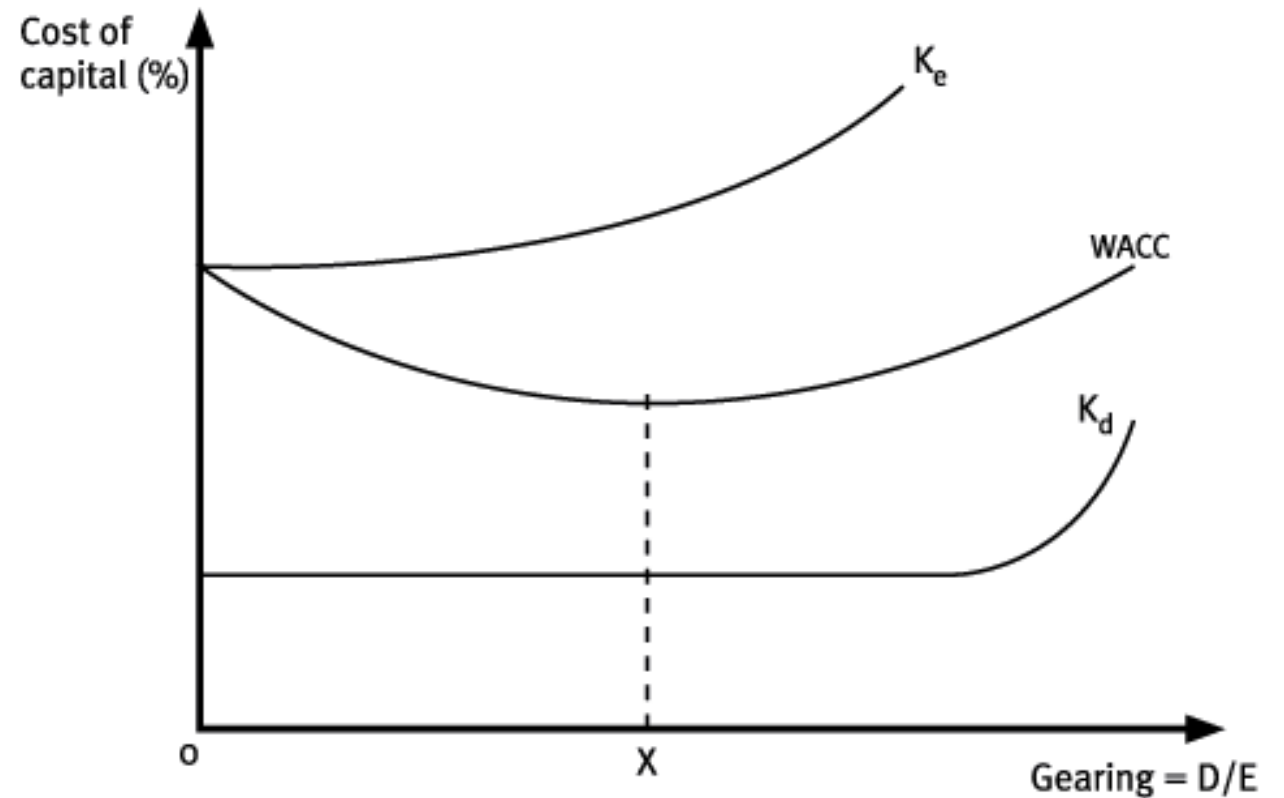
- **RETAINED EARNINGS /+ SALES, SALE OF ASSETS/**
- **ISSUE OF SHARES**

DEBT /LIABILITIES/

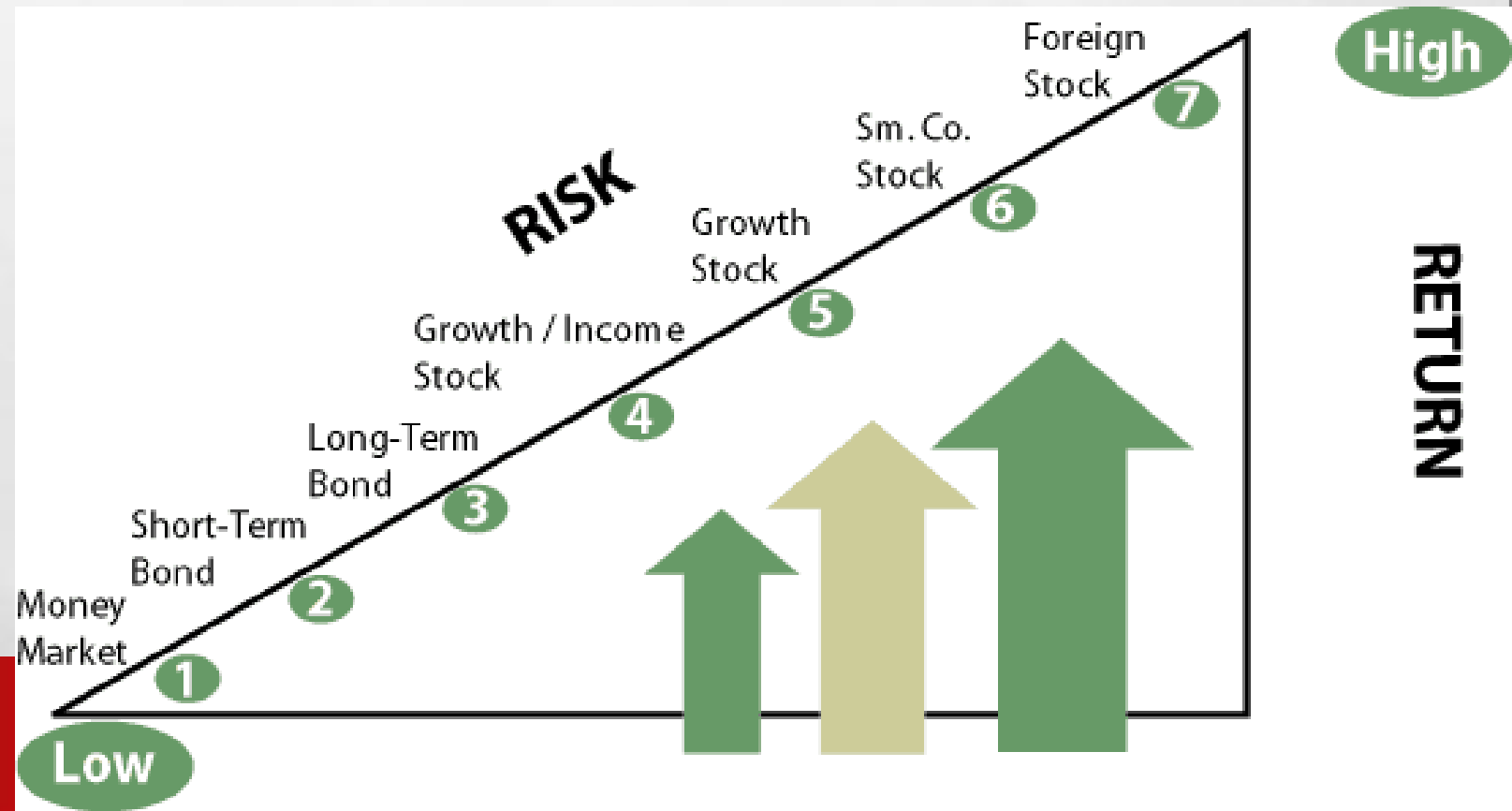
- **TRADE CREDIT**
- **FACTORING**
- **LEASING**
- **OVERDRAFT & BANK LOAN**
- **BONDS AND DEBENTURES**

OPTIMAL CAPITAL STRUCTURE

- **OPTIMAL CAPITAL STRUCTURE ACHIEVED WHEN WACC IS MINIMIZED – POINT X**
- **COST OF EQUITY RAISES AS DEBT LEVEL RAISES**
- **INTEREST PAYMENTS ON DEBT PROVIDE A TAX SHIELD EFFECT**



REQUIRED RETURN = RISK FREE RATE + RISK PREMIUM



WACC = COST OF EQUITY * PROPORTION OF EQUITY + COST OF DEBT AFTER TAX * PROPORTION OF DEBT

$$WACC = \frac{E}{D + E} (r_e) + \frac{D}{D + E} (r_d)(1 - t)$$

Where:

E = market value of equity

D = market value of debt

r_e = cost of equity

r_d = cost of debt

t = corporate tax rate

$$r_e = r_f + \beta(r_m - r_f)$$

where

r_e = Required Return on Equity

r_f = Risk-free Rate

r_m = Market Return

β = Stock Beta

$(r_m - r_f)$ = Equity Risk Premium

DATA SOURCES FOR CALCULATION

- **RISK FREE RATE /10Y GOVERNMENT BONDS** [HTTP://WWW.INVESTING.COM/MARKETS/](http://www.investing.com/markets/)



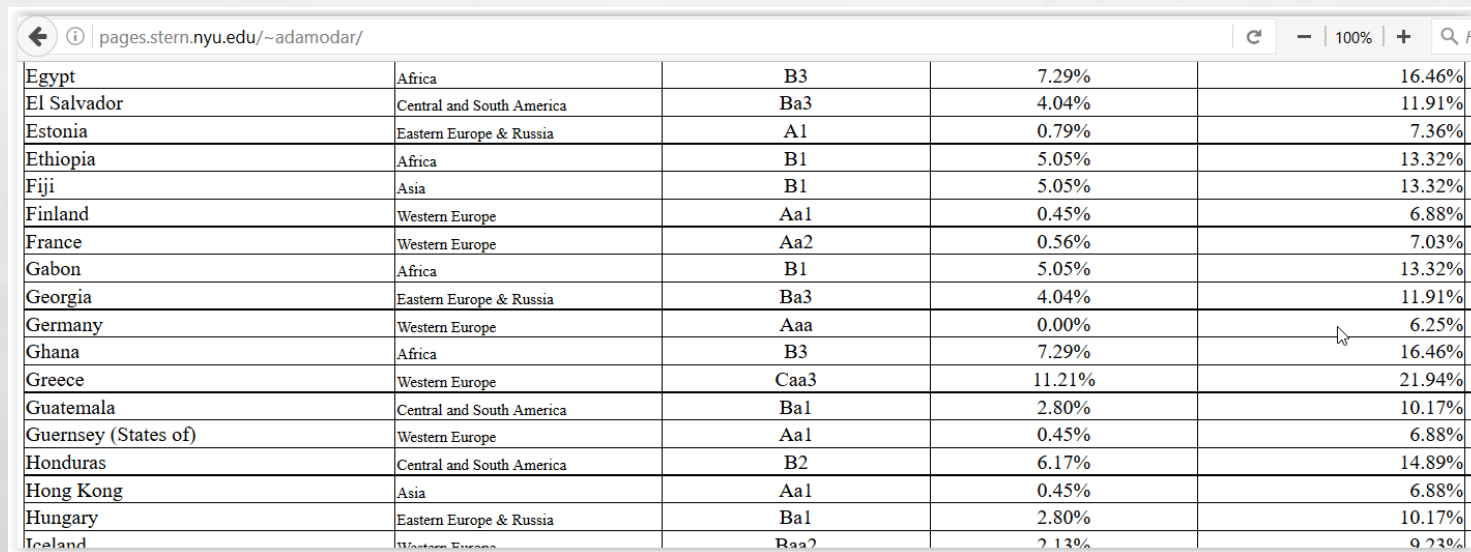
The screenshot shows the Investing.com website interface. The browser address bar displays 'www.investing.com/markets/'. The main navigation bar includes 'Investing.com' and a search box containing 'EUR/USD or AAPL'. Below the navigation bar, there are tabs for 'Markets', 'News', 'Analysis', 'Charts', 'Technical', 'Social Trading', 'Brokers', 'Tools', and 'Portf'. The 'Markets' tab is active, and the 'Bonds' sub-tab is selected. The 'World Bonds' section is displayed, showing a table of bond yields for various countries. The table has columns for Name, Yield, Prev., High, Low, Chg., Chg. %, and Time. The data is as follows:

Name	Yield	Prev.	High	Low	Chg.	Chg. %	Time
US 10Y Yield	2.314	2.319	2.314	2.314	-0.005	-0.23%	22/11
Canada 10Y	1.540	1.540	1.574	1.528	-0.030	0.00%	06:01:27
Brazil 10Y	11.910	11.910	11.970	11.800	-0.010	0.00%	22/11
Mexico 10Y	7.400	7.400	7.419	7.270	+0.050	+0.00%	01:15:04
Argentina 10Y	3.010	3.010	3.010	3.010	+0.020	+0.00%	01:15:04

DATA SOURCES FOR CALCULATION

- **MARKET RISK PREMIUM ASWATH DAMODARAN** [HTTP://PAGES.STERN.NYU.EDU/~ADAMODAR/](http://pages.stern.nyu.edu/~adamodar/)

DATA



The screenshot shows a web browser window with the URL pages.stern.nyu.edu/~adamodar/. The browser displays a table with five columns: Country, Region, Rating, Risk Premium, and Market Risk Premium. The table lists 20 countries and their corresponding market risk premiums.

Country	Region	Rating	Risk Premium	Market Risk Premium
Egypt	Africa	B3	7.29%	16.46%
El Salvador	Central and South America	Ba3	4.04%	11.91%
Estonia	Eastern Europe & Russia	A1	0.79%	7.36%
Ethiopia	Africa	B1	5.05%	13.32%
Fiji	Asia	B1	5.05%	13.32%
Finland	Western Europe	Aa1	0.45%	6.88%
France	Western Europe	Aa2	0.56%	7.03%
Gabon	Africa	B1	5.05%	13.32%
Georgia	Eastern Europe & Russia	Ba3	4.04%	11.91%
Germany	Western Europe	Aaa	0.00%	6.25%
Ghana	Africa	B3	7.29%	16.46%
Greece	Western Europe	Caa3	11.21%	21.94%
Guatemala	Central and South America	Ba1	2.80%	10.17%
Guernsey (States of)	Western Europe	Aa1	0.45%	6.88%
Honduras	Central and South America	B2	6.17%	14.89%
Hong Kong	Asia	Aa1	0.45%	6.88%
Hungary	Eastern Europe & Russia	Ba1	2.80%	10.17%
Iceland	Western Europe	Baa2	2.13%	9.23%

THANK YOU

