

WACC Components in Bloomberg

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WACC Components in Bloomberg

Introduction to Bloomberg:

Bloomberg is a financial software that analysts use to find real-time data on a company. It is often used to screen for, value, and compare companies. In this tutorial, we will use it to find the components of the WACC for a given company.

Introduction to WACC:

A firm's weighted average cost of capital (or WACC) is a discount rate that takes into account the cost of debt and equity for the company as well as the tax shield effects of interest and the capital structure. Therefore, it is used as the cost of capital in financial models that find a company's present value for all capital providers (not just equity holders). The WACC equation is:

WACC = [Cost of equity * weight of equity] + [Cost of Debt * Weight of debt * (1 - Tax rate)]

To find the cost of equity (a part of the WACC equation), use the CAPM formula:

Cost of Equity = Risk - Free Rate + (Beta * Market Risk Premium)

This tutorial will walk you through how to use Bloomberg to find the elements of the WACC equation for a given company. Then, it will show you how to use these figures to calculate the WACC. All data listed in screenshots and in the tutorial is as of March 25, 2022. Use this table of contents to jump to sections that may be helpful for you:

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To learn more about Bloomberg, check out the other Cutler Center tutorials related to Bloomberg using this <u>link</u>.

Part 1 - Launching Bloomberg:

To launch Bloomberg, you must come into the Cutler Center and sit at one of the computers with a colored keyboard like the one pictured here. These are Bloomberg terminals.



Turn on the computer and log in using your Babson credentials. Find this icon on the desktop. If you do not see this icon, you may not be on a Bloomberg terminal. Click this icon to launch Bloomberg. Once it

loads, press enter / go. If

you have a login, type it in here. If you do not, click on the "Create a New Login" button below the "Contact Us" button and follow the steps.



Contact UsCreate a New Login



Once you are logged in to Bloomberg, several windows will open. In the window labeled "New Tab," you can search various functions. We will be using this window.



At the top of the screen, there is a blinking cursor. This is your search bar. You can type in companies and functions here. Start by typing in a company to focus on. For this tutorial, we will focus on Apple. You can either type in Apple and choose the correct company from the options or type in the ticker (AAPL) and press "GO."

Once you have searched for Apple, it will appear on the top left just above your search bar. This means that everything that you search will be in terms of Apple until you search for a new company.

< > APPLE INC Equity V SEAR	▼ Related Functions Menu 🛛		
AAPL US \$ 174.885	+0.815	Q174.88/174.89F	2×7
📶 🕂 At 10:51 d Vol	25,893,924 0 173.88P	H 175.28D L 173.03D	Val 4.51B
			<cancel> X</cancel>

WACC Components in Bloomberg

Part 2 - WACC Function:

There is a function dedicated to the WACC on Bloomberg. Simply use the same search bar that you used to search for Apple and search for "WACC." After hitting "GO," this page will populate:

AAPL US \$ 174.87 +0.80	K174.88/174.89Q	2×5				
API US Equity 1) Create Report 2 Output to Ex	P H 1/5.280 L 1/	3.03D Val	4.561B			Weighted Average Cost of Capital
	Apple Inc			Period MR 2022	201	
	Cost of Capital - Cur	rent Market	Value	Capital Structure (Millions of I	SD)	
	cost of capital cal	rent harket	Tatac		507	
		Weight	Cost W x C	Market Cap	2.880.565.2 95.9%	
	3) Equity	95.9%	9.6% 9.2%	ST Debt	16.169.0 0.5%	
	4) Debt Cost (A-T)	4.1%	2.3% 0.1%	LT Debt	106.629.0 3.6%	
	5) Preferred Fauity	0.0%	0.0% 0.0%	Pref. Faty	0.0 0.0%	
	WACC		9.3%	Total	3.003.363.2 100.0%	
	6) History			Economic Value Added (Millions	s of USD)	
	WACC EVA ROI	C EVA Spr	ead	7) Net Operating Profit	116903.00	
	■ MACC 9.3322			8) Cash Operating Taxes	11402.75	
	11.00			NOPAT	105500.25	
	10.50					
	16.00			9) Total Investment Capital	194730.00	
	9.50			Capital Charge	18170.67	
	9.00-					
	8.50			Economic Value Added	87329.59	
	V N			ROIC	54.18%	
				EVA Spread	44.85%	
	AU 201 201 205	2016 2017 2018	2017 2020 2021 2022			

This screen contains all the information necessary to understand where the WACC comes from and the WACC itself (in this case 9.3%). This is a quick way to obtain the WACC for any company through Bloomberg.

Part 3 - Components of Cost of Equity:

Some professors, however, may require you to find the components of WACC using different Bloomberg functions. To find the cost of equity using Bloomberg, you can simply use the cost of equity from the WACC screen (above). You can also find the components of the cost of equity using the following functions:

Beta

To find Apple's beta, simply search "BETA" in the search bar. The following screen will populate:



The beta on this screen is circled on the right side of the screenshot. Bloomberg provides a raw beta and an adjusted beta, depending on your preference. It also shows how the beta was calculated with the graph in the middle so you can better understand the number. In this case, the raw beta is 1.057.

Risk-Free Rate

The risk-free rate is not specific to Apple, but rather it is consistent across the market. 10 or 30 year US Treasury bonds are often used as the risk-free rate. To find the yields for these bonds, simply type "US Treasury Bond" into the search bar. The following screen will populate.

From this screen, you can find the 10 or 30 year bond yields and use it as your risk free rate. The 10-year rate on this screen has a yield of 2.486%.

Top Results Fixed Income (500) Func	ions (82) Index	/Stats (500) Companies (25) More		10 91 -
Bonds SRCH »					
R I Issuer Name	Ticker	Coupon	Maturity Date Currency		Amt Out
42 Jul United States Treasury Not	T	1.875	02/15/2032 USD		99.1MMM
43) United States Treasury Not	Т	1.500	02/29/2024 USD		60.91MMM
44 United States Treasury Not	т	1.875	02/28/2027 USD		62.08MMM
45) United States Treasury Not	т	2.250	02/15/2052 USD		60.28MMM
46 United States Treasury Not	т	1.875	11/15/2051 USD		90.24MMM
47) United States Treasury Not	т	1.750	03/15/2025 USD		56.07MMM
Goldman Sees Higher U.S. Treas	ury Yields, Cur	ve Inversio	on (1)	BN	11:13
CNBC: BREAKING 10-year Treas	Irv vield rises	to 2-year l	high of 2.5% as inves-	NS1	11:17 🖳
*U.S. 10-YEAR YIELD RISES TO 2	.50%, HIGHEST	SINCE MAY	2019		
Goldman Sees Higher U.S. Treas	ury Yields, Cur	ve Inversio	on (1)		
Yield Curve Is Flattening Again In bond markets across the world curve is a summary of the spread	Which Means W , yield curves a ls between the	/hat?: Quic are twistin yields on s	kTake Background g and turning and fl short-, medium- and lo	attenin ng-ter	ng. The m
Current United States 10 Year Go Price 194-21 1 Day Chg 0333 Yield 2.486 Type FIXED	vernment Note	- CT10 Gov	t Government Bond		

Market Risk Premium

Similar to the risk-free rate, the market risk premium is also consistent across the market. Often, companies or professors will have a standard market risk premium to use, but you can find Bloomberg's estimate by typing "Market Risk Premium" in the search bar. The resulting page will give further information on the market risk premium as well as Bloomberg's estimate (circled in blue), which is 5.41%.



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Part 4 - Components of Cost of Debt:

Like the cost of equity, the cost of debt can also be found on the WACC page using Bloomberg. However, if your professor requires you to calculate the cost of debt for your company or you want to understand where this number is coming from, you can use the following function:

Type "SECF" into the Bloomberg search bar. This stands for "security finder."

Just like with the "WACC" and "BETA" functions, Bloomberg will search for this in for Apple.

Once the screen loads, choose the category "fixed income" from the dropdown menu in the top left corner. The screen will then populate with this information (right).

This screen has over 1000 securities. To filter it further, click the orange rectangle under "name" in the top left of the screen. Type in "Apple Inc." This will filter it to Apple's securities. You can also type in the ticker as

/Sear	(h) (8) F	vport -									
Cohema	CH2 70/E	.xpore ·									
categor	Fixed Income	•									
Care	Caut Lass Dfd	CDC	CDC	false Muni	Futur	Ont	IDC	TDC V(a)	Can Ca	Muni Teauas	
Corp	dovi Loan Piu	005	005		ruu	Upi	1K3		Gen Go	WL MUHI ISSUER	
U EXCII	Ided Matured/Called, No	n-verime	a Bol	nds 60 Advance	ed Searc	n SKU	н»	ou column se	ittings		
R 🧟	Name	Ticker G	oupon	Maturity BB R.	. Mty Typ	e Anno	unce	Amt Issued(M	Ask Px	Bid Yield to M., Bid M	odified Du.
	Capital One Financial Core	COF	2 2 2 2	02 (01 (2020 000)	CALLADI	F 03/01/	2022	1000.00	06.047	3 764	6.00
D .	Electricite de France SA	EDE	5.275	DEDDETLIAL DD	DEDD ///	01/14/	2022	1250.00	100.067	5.730	1.69
2	HCA Inc	HCA	4 375	03/15/2042 BBR=	CALLARI	E 03/02/	2017	500.00	06.848	4 658	13.04/
0	Econetrol SA	FCODET	5 875	05/28/2045 BB+	RILLET	05/20/	2014	2000.00	86 732	7 088	11 47/
0	Commerzbank AG	CM7B	7.000	PERPETUAL BB-	PERP/CA	07/02/	2019	1000.00	101,177	7.648	2.48
0	HSBC Holdings PLC	HSBC	4,700	PERPETUAL BBB-	PERP/C	03/02/	2021	1000.00	89,900	5,823	7,06
70	NAK Naftogaz Ukraine via K.,	NAFTO	7.125	07/19/2024 NR	BULLET	07/12/	2019	600.00	30,000	122,860	0,790
8	Progressive Corp/The Gene	PGR C_	2.500	03/15/2027 A	CALLABL	E 03/02/	2022	500.00	96.965	3,205	
	Progressive Corp/The Gene	PGR G	2.500	03/15/2027 A	CALLABL	E 03/02/	2022	500.00	96.965	3.205	4.61
0	Progressive Corp/The	PGR	2.500	03/15/2027 A	CALLABL	E 03/02/	2022	500.00	96.965	3.205	
D	Sberbank of Russia Via SB C.	. SBERRU	5.250	05/23/2023 NR	BULLET	05/16/	2013	1000.00	19.978	292.342	0.40
	Webuild SpA	IPGIM	5.875	12/15/2025 BB-	CALLABL	E 12/03/	2020	750.00	102.210	5.547	2,818
3 . 1	NWD Finance BVI Ltd	NWDEVL	5.250	PERPETUAL NA	PERP/C/	. 06/16/	2020	1000.00	99.293	8.896	3.684
I	Sigma Holdco BV	SIGHCO	5.750	05/15/2026 CCC+	CALLABL	E 04/17/	2018	685.00	82.400	11.818	3,38
	Macquarie Bank Ltd	MQGAU	3.231	03/21/2025 A	BULLET	03/15/	2022	1000.00	100.037	3.314	2.814
a	Gtlk Europe Capital DAC	GTLKOA	4.349	02/27/2029 CC	BULLET	10/15/	2021	600.00	21.333	37.348	3.774
0 . I	Deutsche Bank AG	DB	6.000	PERPETUAL BB-	PERP/C	. 02/11/	2020	1250.00	96.459	6.978	2.928
3 .	UBS Group AG	UBS	4.875	PERPETUAL BB+	PERP/C/	01/06/	2022	1500.00	96.353	5.811	4.21
ð ,	Metalloinvest Finance DAC	METINR	3.375	10/22/2028 CC+	CALLABL	E 10/13/	2021	650.00	20.547	35.017	3.868
0 .	Credit Bank of Moscow Via	CRBKMO	3.875	09/21/2026 CC+	CALLABL	E 09/10/	2021	500.00	10.000	77.700	2.21
D .	CNAC HK Finbridge Co Ltd	HAOHUA	3.000	09/22/2030 BBB+	BULLET	09/14/	2020	1000.00	90.239	4.431	7.32
Δ,	Diamond Sports Group LLC /.	USPORT	5.375	08/15/2026 NR	CALLABL	E 07/09/	2019	3050.00	39.635	32.354	3.080
	wizz Air Finance Co BV	WIZZEN	1.350	01/19/2024 BBB-	CALLABL	E 01/13/	2021	500.00	98.188	2.956	1.74
Υ.	china Grand Automotive Ser	CHIGRA	0.025	04/08/2022 NR	BULLEI		2019	252.86	80.768	1001.266	0.020
Sugg	ested Functions ETF	Find ETFs	that	align with your	strategie						

"AAPL." Press enter. The following screen will populate:

<s< th=""><th>ea</th><th>rch></th><th></th><th>98) E:</th><th>xport</th><th>•</th><th></th><th></th><th></th><th></th><th></th><th>1</th><th>-24 of 69</th><th>results</th><th>5 🖸 Sec</th><th>urity Finder</th></s<>	ea	rch>		98) E:	xport	•						1	-24 of 69	results	5 🖸 Sec	urity Finder
Cat	ego	ory Fixe	d Incom	e	-											4
Co	rp	Govt	Loan	Pfd	CDS	CDS	Idx	Mur	ni	Futr	Opt	IRS	TRS Vol	Gen Go	vt Muni Is	suer
60) F	vc	luded (45)	Mature	d/Caller	d Non-	Vorifie	ad Bo	nds 6	 2) Δc	vanced	Sear	ch I SR	CH » (1) Colu	mn Sott	inas	
007		Alamo	/ Hatai c	ay catter	Tickor.	Coupon	Ma Ma	turitu	DD D	Mby Tyr	ocui		Amt Tocued (M	Ack Dy	Rid Viold to M	Rid Modified Du
	`+						ria		DD K	Pity Typ	, ,	Announce	AITIC ISSUED(M	ASK PX	Bid field to Pi	Bid Piodified Du.
m	a	Apple Inc			AAPI	2.700	08/05	/2051	AA+	CALLARI	E 07	/29/2021	1800.00	86.620	3.455	19.23
ก		Apple Inc			AAPL	2.400	05/03	/2023	AA+	BULLET	04	/30/2013	5500.00	100.501	1.977	1.06
30		Apple Inc			AAPL	1.700	08/05	/2031	AA+	CALLABI	E 07	/29/2021	1000.00	89,369	3.047	8.47
49		Apple Inc			AAPL	2.550	08/20	/2060	AA+	CALLABI	E 08	/13/2020	1750.00	81.698	3.444	22.55
5)		Apple Inc			AAPL	1.400	08/05	/2028	AA+	CALLABI	E 07	/29/2021	2300.00	90.897	3.020	5.973
6)		Apple Inc			AAPL	1.200	02/08	/2028	AA+	CALLABI	E 02	/01/2021	2500.00	90.625	2.991	5.564
7)		Apple Inc			AAPL	2.200	09/11	/2029	AA+	CALLABI	.E 09	/04/2019	1750.00	95.121	2.966	6.780
8)		Apple Inc			AAPL	3.450	05/06	/2024	AA+	BULLET	04	/29/2014	2500.00	102.152	2.433	1.99
9).		Apple Inc			AAPL	3.450	02/09	/2045	AA+	BULLET	02	/02/2015	2000.00	99.124	3.557	15.57
10 .		Apple Inc			AAPL	2.400	08/20	/2050	AA+	CALLABI	E 08	/13/2020	1250.00	82.878	3.375	19.430
11) .		Apple Inc			AAPL	2.650	02/08	/2051	AA+	CALLABI	E 02	/01/2021	3000.00	86.340	3.428	19.15
12)		Apple Inc			AAPL	3.350	02/09	/2027	AA+	CALLABI	.E 02	/02/2017	2250.00	102.158	2.902	4.229
13)		Apple Inc			AAPL	4.650	02/23	/2046	AA+	CALLABI	.E 02	/16/2016	4000.00	117.584	3.585	14.893
14		Apple Inc			AAPL	3.250	02/23	/2026	AA+	CALLABI	.E 02	/16/2016	3250.00	101.752	2.808	3.409
15)		Apple Inc			AAPL	1.650	02/08	/2031	AA+	CALLABI	.E 02	/01/2021	2750.00	89.526	3.039	8.08
16) .		🖉 Apple Inc			AAPL	2.850	02/23	/2023	AA+	CALLABI	.E 02	/16/2016	1500.00	100.939	1.885	0.71
17) .		Apple Inc			AAPL	1.650	05/11	/2030	AA+	CALLABI	.E 05	/04/2020	1750.00	90.486	3.013	7.42
18) .		Apple Inc			AAPL	4.500	02/23	/2036	AA+	CALLABI	E 02	/16/2016	1250.00	113.583	3.338	10.209
19)		Apple Inc			AAPL	2.950	09/11	/2049	AA+	CALLABI	E 09	/04/2019	1500.00	91.646	3.458	18.189
20) ,		Apple Inc			AAPL	3.000	11/13	/2027	AA+	CALLABI	.E 11	/06/2017	1500.00	100.469	2.941	4.869
21) ,		Apple Inc			AAPL	3.850	05/04	/2043	AA+	BULLET	04	/30/2013	3000.00	104.867	3.557	14.31
220		Apple Inc			AAPL	2.375	02/08	/2041	AA+	CALLABI	E 02	/01/2021	1500.00	86.584	3.376	14.66
230		Apple Inc			AAPL	1.125	05/11	/2025	AA+	CALLABI	E 05	/04/2020	2250.00	95.477	2.683	3.01
24)		Apple Inc			AAPL	3.200	05/13	/2025	AA+	BULLET	05	/06/2015	2000.00	101.414	2.755	2.91

This page shows all of the fixed income securities that Apple currently has outstanding and their value. You can export this to Excel using the "Export" button at the top of the screen. You can then find a weighted average of the yield on these bonds.

Doing this analysis will lead to a cost of debt of about 2.65%.

Part 5 - Components of Capital Structure and Tax Rate:

The best place to find capital structure information on Bloomberg is the WACC page from part 2, which contains a capital structure section dedicated to the relative weights of equity, debt, and preferred stock. If you would like to find it a different way, however, use the following functions:

Capital Structure (Millions of USD)											
	Markat Can	2 990 545 2	05.0%								
	ST Debt	2,880,505.2	95.96								
	LT Debt	106,629.0	3.6%								
	Pref. Eqty	0.0	0.0%								
	Total	3,003,363.2	100.0%								

With Apple still as the company highlighted in the top left corner of the screen type "FA" into the search bar. This stands for Financial Analysis, and a screen will populate with many financial figures for Apple.

A	APL US \$ ↑ 177	.62 +2.0)2 ~~*	Q17.	7.62/177.0	63K	8×1	
-	📶 <u> </u>	Vol 19,967	,815 <mark>0</mark> 17	6.69Z H	178.130	176.34D	Val 3.53	8B
AA	APL US Equity 96) Act	ions 🝷 97) Exp	oort 🔹 98) Se	ettings			🖸 Financia	al Analysis
39)	ADJ Apple Inc ASC 842	Periodicity	Annuals	Cur FRC	(USD) 🔻	\bigwedge		₽
1)	Key Stats 2) I/S 3) B/3	S 4) C/F 5)	Ratios 6) Se	egments 7) A	Addl 8) ESG	9) Custom		
	11) BBG Adj Highlights 12) E	3BG GAAP Highligl	nts 13) Compa	ny Model 14)	Earnings 15) E	nterprise Value	6) EV Ex Oper	ating 🔻 🕨
In	Millions of USD	2018 Y	2019 Y	2020 Y~	2021 Y	Current/LTM	2022 Y Est	2023 Y Est
12	Months Ending	09/29/2018	09/28/2019	09/26/2020	09/25/2021	12/25/2021	09/30/2022	09/30/2023
<u>u</u>	Market Capitalization	1,073,390.5	972,268.9	1,906,150.9	2,413,423.4	2,896,864.0		
<u>u</u>	- Cash & Equivalents	237,100.0	205,898.0	191,830.0	190,516.0	202,596.0		
<u>u</u>	+ Preferred & Other	0.0	0.0	0.0	0.0	0.0		
ш	+ Total Debt	114,483.0	108,047.0	122,278.0	136,522.0	122,798.0		
Ш	Enterprise Value	950,773.5	874,417.9	1,836,598.9	2,359,429.4	2,817,066.0		
<u>u</u>	Revenue, Adj	265,595.0	260,174.0	274,515.0	365,817.0	378,323.0	396,399.5	418,878.9
ы	Growth %, YoY	16.2	-2.0	5.5	33.3	28.6	8.4	5.7
ы	Gross Profit, Adj	101,839.0	98,392.0	104,956.0	152,836.0	162,751.0	171,113.8	180,624.8
Ш	Margin %	38.3	37.8	38.2	41.8	43.0	43.2	43.1
Ш	EBITDA, Adj	81,565.0	76,477.0	78,844.0	121,933.0	128,218.0	132,613.6	137,080.1
al	Margin %	30.7	29.4	28.7	33.3	33.9	33.5	32.7
ы	Net Income, Adj	59,337.7	55,280.5	57,346.2	94,455.6	100,423.9	100,981.7	105,088.2
ы	Margin %	22.3	21.2	20.9	25.8	26.5	25.5	25.1
ш	EPS, Adj	2.97	2.97	3.28	5.60	6.03	6.16	6.56
ы	Growth %, YoY	30.2	0.2	10.2	70.8	63.6	10.0	6.6
ы	Cash from Operations	77,434.0	69,391.0	80,674.0	104,038.0	112,241.0		
ы	Capital Expenditures	-13,313.0	-10,495.0	-7,309.0	-11,085.0	-10,388.0	-11,417.8	-12,457.5
ы	Free Cash Flow	64,121.0	58,896.0	73,365.0	92,953.0	101,853.0	109,106.3	117,590.3
<<	< < > >> Earnin	gs: 04/28/22	EVTS » Dowr	nload Models	MODL »			
	Suggested Functions BR	C Research Port	tal: Single Secu	ırity	DSCO	Search across t	ranscripts, filir	ngs & more

Click on the "Custom" tab (circled in the picture above). An empty form will populate the screen. Add figures to the form by typing them in the "Enter Field" orange rectangle in the top right corner of the screen. Enter the following two terms:

- Current Market Cap
- Short and Long Term Debt

Your form should now look like this:

AAPL US Equity 96) Actions 🔹 97) E	Export 🔹	98) Setting	js			🖸 Financia	l Analysis				
39 ADJ Apple Inc ASC 842 ? Periods 10 Annuals 🔹 🗸 Cur FRC (USD) 🔹											
1) Key Stats 2) I/S 3) B/S 4) C/F	5) Ratios	6) Segmen	ts 7) Add	l 8) ESG	9) Custom						
11) Create Custom 12) wacc	11) Create Custom 12) wacc										
<enter field=""> 31) Fields 32) 💾 Sav</enter>	e 33) ≽ 🤅	Send 34) < S	Share								
In Millions of USD except Per Share	Y	2017 Y	2018 Y	2019 Y	2020 Y~	2021 Ý	Current				
12 Months Ending	.6 09/3	0/2017 09/	29/2018 (09/28/2019	09/26/2020	09/25/2021	03/29/2022				
LI Current Market Cap	,4 796	5,064.9 1,09	90,307.5	988,887.0	1,920,272.7	2,428,612.0	2,889,357.0				
II Short and Long Term Debt	.0 115	5,680.0 1	14,483.0	108,047.0	122,278.0	136,522.0	122,798.0				

Use the current figures (circled in blue above) to calculate the weight of debt and equity for Apple.

Weight of equity = 2,889,357/(2,889,357 + 122,798) = 95.93%

Weight of debt = 122,798/(2,889,357 + 122,798) = 4.07%

These weights match what was reported on the WACC screen.

You also need to know the effective tax rate to calculate the WACC. To find this, use the same FA screen. If you have switched screens, type FA into the search bar to get back to financial analysis. Then click on the ratios tab (5). Find the "effective tax rate." The current effective tax rate is 13.30%.

ĄΑ	PL US Equity 96) Actions + 97)	Exp	oort 🔹 98) Se	ettings			🖸 Financia	ıl Analysis
39)	ADJ Apple Inc ASC 842 ? Periods	1	10 Annuals	Cur FR	C (USD) 🔹			4
	Key Stats 2) I/S 3) B/S 4) C/F	- 5)	Ratios 6) Se	egments 7) A	ddl 8) ESG	9) Custom		
۹.	1) Profitability 12 Growth 13 Credit	- 14) Credit Ex Oper	ating Leases	15) Liquidity	6) Working Capit	al 17) Yield A	nalysis 🔻 🕨
n I	Millions of USD except Per Share		2016 Y	2017 Y	2018 Y	2019 Y	2020 Y~	2021 Y
	Months Ending		09/24/2016	09/30/2017	09/29/2018	09/28/2019	09/26/2020	09/25/2021
	Returns							
а	Return on Common Equity		36.90	36.87	49.36	55.92	73.69	147.44
al	Return on Assets		14.93	13.87	16.07	15.69	17.33	28.06
а	Return on Capital	4	23.45	21.55	26.38	27.73	31.01	50.09
al	Return on Invested Capital		20.08	17.99	22.94	24.76	28.20	46.25
	Margins							
а	Gross Margin	16	39.08	38.47	38.34	37.82	38.23	41.78
а	EBITDA Margin		32,71	31.19	30.80	29.39	28,72	33,33
ы	Operating Margin	8	27.84	26.76	26.69	24.57	24.15	29,78
а	Incremental Operating Margin	'8	-61.99	9.71	26.28	-128.54	16.44	46.73
ы	Pretax Margin		28.46	27.96	27.45	25.27	24.44	29.85
а	Income before XO Margin		21.19	21.09	22,41	21.24	20.91	25,88
ы	Net Income Margin	:5	21.19	21.09	22.41	21.24	20.91	25.88
al	Net Income to Common Margin		21.19	21.09	22.41	21.24	20.91	25.88
	Additional		05.54	24.54	40.04	45.04		(40.00
	Effective Tax Rate	Y	25.56	24.56	18.34	15.94	14.43	(13.30
	Dvd Payout Ratio	1	26.19	25.90	22.64	25.07	24.03	15.26
	Sustainable Growth Rate		27.24	27.32	38.19	41.90	55.98	124.95

Part 6 - Tying it all Together:

From our above analysis, we have obtained the following figures for Apple:

- Beta: 1.057
- Risk-free rate: 2.486%
- Market risk premium: 5.41%
- Cost of debt: 2.65%
- Weight of debt: 4.07%
- Weight of equity: 95.93%
- Effective tax rate: 13.30%

From these figures, we can find Apple's weighted average cost of capital. First, we will find the cost of equity using the CAPM formula:

Cost of Equity = Risk Free Rate + (Beta * Market Risk Premium) Cost of equity = 2.486% + (1.057 * 5.41%)

Cost of equity =
$$8.20\%$$

You might notice that this is different from the cost of equity shown on the WACC screen of Bloomberg, but this difference likely comes from a difference in the market risk premium and/or risk-free rate used.

We can now solve for the WACC:

$$WACC = [Cost of equity * weight of equity] + [Cost of Debt * Weight of debt * (1 - Tax rate)]$$
$$WACC = [9.6\% * 95.93\%] + [2.65\% * 4.07\% * (1 - 13.3\%)]$$
$$WACC = 9.21\% + .09\%$$
$$WACC = 9.3\%$$
Note that we used the Discrete of equity for experiments the choice

Note that we used the Bloomberg cost of equity for consistency. Using the above calculation, we found the WACC of Apple that is consistent with the WACC function from Bloomberg using other Bloomberg functions.