INVESTING &RETIREMENT BASICS

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I WANT EVERYONE TO BE A MILLIONAIRE!

DISCLAIMER

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All information comes from reading, listening, research, and experience.

The views and opinions expressed in this presentation are those of the author and do not necessarily reflect the views of any other entity.

NOBODY CARES MORE ABOUT YOUR MONEY THAN YOU DO

except maybe the IRS!

SO TAKE CARE OF IT!

"Taxes are the price we pay for a civilized society", Oliver Wendell Holmes

Pay your fair share, but not more

DEVELOP A BUDGET

- Determine monthly expenses
- Pay yourself first
- Build a 6-12 month cash reserve for emergencies
- Save for expenses (known and unknown)

INVESTMENT VEHICLES

- Checking Accounts
- Savings Accounts
- Money Market Accounts
- CD's (Certificates of Deposit)
- Savings Bonds
- Mutual Funds (and dividends)
- ETF's (Exchange Traded Funds)
- Stocks (and dividends)
- Bonds
- T-Bills

AVOID DEBT

Debt is bad...

...except when it is good

- Live debt-free
 - Save early, save often
 - Pay "cash" whenever possible
 - Pay total credit card balance every month
- Minimize debt load
 - Pay-down debt with highest interest rates first
 - Monthly housing expense shouldn't exceed 28% of gross monthly income; all payments (including housing) shouldn't exceed 36%
- Leverage debt
 - Invest when rate of return exceeds interest rate of debt
 - Pay off/down debt when debt rate exceeds investment rate of return
- Maintain cash-flow

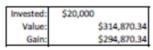
POWER OF COMPOUNDING

	Early Funding			Late Funding			Continuous Funding	
	Amount	Year-End		Amount	Year-End	П	Amount	Year-End
Year	Saved	at 8%		Saved	at 8%		Saved	at 8%
1	\$2,000	\$2,160.00					\$2,000	\$2,160.00
2	\$2,000	\$4,492.80					\$2,000	\$4,492.80
3	\$2,000	\$7,012.22					\$2,000	\$7,012.22
4	\$2,000	\$9,733.20					\$2,000	\$9,733.20
5	\$2,000	\$12,671.86					\$2,000	\$12,671.86
6	\$2,000	\$15,845.61					\$2,000	\$15,845.61
7	\$2,000	\$19,273.26					\$2,000	\$19,273.26
8	\$2,000	\$22,975.12					\$2,000	\$22,975.12
9	\$2,000	\$26,973.12					\$2,000	\$26,973.12
10	\$2,000	\$31,290.97					\$2,000	\$31,290.97
11		\$33,794.25		\$2,000	\$2,160.00		\$2,000	\$35,954.25
12		\$36,497.79		\$2,000	\$4,492.80		\$2,000	\$40,990.59
13		\$39,417.62		\$2,000	\$7,012.22		\$2,000	\$46,429.84
14		\$42,571.03		\$2,000	\$9,733.20		\$2,000	\$52,304.23
15		\$45,976.71		\$2,000	\$12,671.86		\$2,000	\$58,648.57
16		\$49,654.84		\$2,000	\$15,845.61		\$2,000	\$65,500.45
17		\$53,627.23		\$2,000	\$19,273.26		\$2,000	\$72,900.49
18		\$57,917.41		\$2,000	\$22,975.12		\$2,000	\$80,892.53
19		\$62,550.80		\$2,000	\$26,973.12		\$2,000	\$89,523.93
20		\$67,554.87		\$2,000	\$31,290.97		\$2,000	\$98,845.84
21		\$72,959.26		\$2,000	\$35,954.25		\$2,000	\$108,913.51
22		\$78,796.00		\$2,000	\$40,990.59		\$2,000	\$119,786.59
23		\$85,099.68		\$2,000	\$46,429.84		\$2,000	\$131,529.52
24		\$91,907.65		\$2,000	\$52,304.23		\$2,000	\$144,211.88
25		\$99,260.26		\$2,000	\$58,648.57		\$2,000	\$157,908.83
26		\$107,201.09		\$2,000	\$65,500.45		\$2,000	\$172,701.54
27		\$115,777.17		\$2,000	\$72,900.49		\$2,000	\$188,677.66
28		\$125,039.35		\$2,000	\$80,892.53		\$2,000	\$205,931.87
29		\$135,042.49		\$2,000	\$89,523.93		\$2,000	\$224,566.42
30		\$145,845.89		\$2,000	\$98,845.84		\$2,000	\$244,691.74
31		\$157,513.56		\$2,000	\$108,913.51		\$2,000	\$266,427.07
32		\$170,114.65		\$2,000	\$119,786.59		\$2,000	\$289,901.24
33		\$183,723.82		\$2,000	\$131,529.52		\$2,000	\$315,253.34
34		\$198,421.73		\$2,000	\$144,211.88		\$2,000	\$342,633.61
35		\$214,295.47		\$2,000	\$157,908.83		\$2,000	\$372,204.30
36		\$231,439.10		\$2,000	\$172,701.54		\$2,000	\$404,140.64
37		\$249,954.23		\$2,000	\$188,677.66		\$2,000	\$438,631.89
38		\$269,950.57		\$2,000	\$205,931.87		\$2,000	\$475,882.44
39		\$291,546.62		\$2,000	\$224,566.42		\$2,000	\$516,113.04
40		\$314,870.34		\$2,000	\$244,691.74			\$559,562.08
			•					

Invested:	\$20,000	
Value:		\$314,870.34
Gain:		\$294,870.34

\$60,000	
	\$244,691.74
	\$184,691.74

\$80,000	
	\$559,562.08
	\$479,562.08



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	\$244,691.74
	\$184,691.74

\$80,000	
	\$559,562.08
	\$479,562.08

2017 TAX BRACKETS

Single Income	Tax Rate	Married Income
<= \$9,325	10%	<= \$18,650
\$9,326 - \$37,950	15%	\$18,651 - \$75,900
\$37,951 - \$91,900	25%	\$75,901 - \$153,100
\$91,901 - \$191,650	28%	\$153,101 - \$233,350

Single, with gross income of \$95,000: \$932.50 + \$4,293.60 + \$13,487.25 + \$867.72 = \$19,581.07 for effective tax rate of 20.61%

Married, with gross income of \$95,000: \$1,865 + \$8,587.35 + \$4,774.75 = \$15,227.10 for effective tax rate of 16.03%

CAPITAL GAINS TAXES

Income type	Tax Rate
Short-term capital gain (<= 12 months)	Ordinary tax rate
Long-term capital gain (> 12 months)	0% if up to 15% bracket; 15% otherwise
Dividends	Long-term gain rate

PRE-TAX VS POST-TAX

Pre-Tax

money is invested prior to taxes being withheld. i.e. pay taxes later types: 401(k), IRA

Post-Tax

money is invested after taxes are withheld. i.e. pay taxes now types: Roth IRA, Roth 401(k)

Tax-free

Never pay taxes if allowable expense

Type: HSA

Example: Single, \$50k annual salary, 10% to 401(k), 28% withholding Pre-Tax Post-Tax

\$50,000 Gross Pay	\$50,000 Gross Pay
\$5,000401(k)	\$14,000 withholding
\$45,000 total	\$36,000 total
\$12,600 withholding	\$5,000 Roth 401(k)
\$32,400 Net Pay	\$31,000 Net Pay

INVESTMENT TYPES

401(K) & Roth 401(K) – through employer

- \$18,000 combined per year annual contribution limit
- Employer match is free money!
- When you leave, can be rolled over to next company or IRA or remain with previous employer
- Can withdraw company match to roll-over into IRA at any time
- Taxes are due (401k only) when money is withdrawn (NOT on roll-over)
- Money withdrawn prior to 59 ½ is subject to 10% penalty, unless separated at or after age 55
- After 70 ½ subject to Required Minimum Distribution (RMD)

Deductible IRA

- Subject to income limitations for tax deductibility
- Generally not used if you have access to 401(k)
- All investment and earnings are tax deferred
- Taxes are due when you withdraw money
- Money withdrawn prior to 59 ½ is subject to 10% penalty
- After 70 ½ subject to Required Minimum Distribution (RMD)

Non-Deductible IRA

- Major headache during distributions so generally don't do!
 - do a Roth IRA instead
 - Or contribute to 401k as after-tax contribution for mega back-door Roth (not discussed in this presentation)
- All earnings are tax deferred
- Taxes are due when you withdraw money
- Money withdrawn prior to 59 ½ is subject to 10% penalty
- After 70 ½ subject to Required Minimum Distribution (RMD)

Roth IRA

- \$5,500 per year contribution limit (\$6,500 if 50+)
- Contributions are not tax deductible since after-tax money is used
- All earnings are tax free after age 59.5
- Can withdraw *contributions* anytime after any Roth has existed for 5 tax years, tax and penalty free
- No RMD
- Can be passed to heirs inheritance tax-free and continues to grow tax-free
 - Different rules apply for inherited IRA's
- Early withdrawal penalty waived for first home (\$10k limit)
- 10% penalty if withdrawn before some Roth IRA exists for 5 years

Health Savings Account (HSA)

- \$6,500 per year contribution limit, *including* employer contribution
- All funds are tax free if used for allowable medical expenses And tax free means no FICA, income tax, etc.

PRIORITY TO SAVE / INVEST

- 401(k)
 - Enough to get 100% of company match (many have 90% of first 5%) \$50k salary; you contribute \$2,500, company contributes \$2,250
 3 year vesting period
- HSA account (for high deductible health plans)
 - \$6,500 per year (including company contribution)
 - Don't withdraw money until retirement unless you have to
 - Let it continue to compound tax free! (keep good records!!)
- Roth IRA, even for short-term needs
- 401(k) and Roth 401(k)
 - Split between both to hedge bet on future tax rates
 - But, your tax rate will probably never be lower than it is currently
- Stock market (mid to long-term) higher risk, higher reward
- Bonds (mid to long-term) less risk, less reward
- General savings (near term) in CD's, MM accounts no risk, no reward

INVESTMENT LIMITS - RECAP

401(k) & Roth 401(k)

• \$18,000 combined (or \$24,000 if 50+)

HSA account (for high deductible health plans)

• \$6,750 (\$3,400 single; additional \$1,000 if 55+)

Roth IRA

• \$5,500 (or \$6,500 if 50+)

After-tax contributions (use for back-door Roth): Difference between total of all contributions and \$54,000

Total of \$30,250 per year before "regular" – post-tax – investing (\$38,250 if 55+; \$37,250 if 50-54)

WITHDRAWAL RESTRICTIONS

- 401(k)
 - Age 55 & separated from company, or retirement
 - Must start withdrawals by age 70 ½
 - Taxable income for year withdrawn
- Roth 401(k)
 - Age 59 ½ and five calendar years after first contribution
- HSA account
 - As expenses are incurred or let compound until retirement to claim but you *must* maintain good records
- Roth IRA
 - Some Roth account must exist for 5 years before any withdrawals
 - Basis (deposits) withdrawn at any time after 5 year period
 - Growth, after age 59 ½
 - Exception, buying a house or paying for school (\$10k max) in which case it is taxable income that year
- IRA
 - After 59 ½
 - Must start withdrawals by age 70 ½
 - Taxable income for year withdrawn

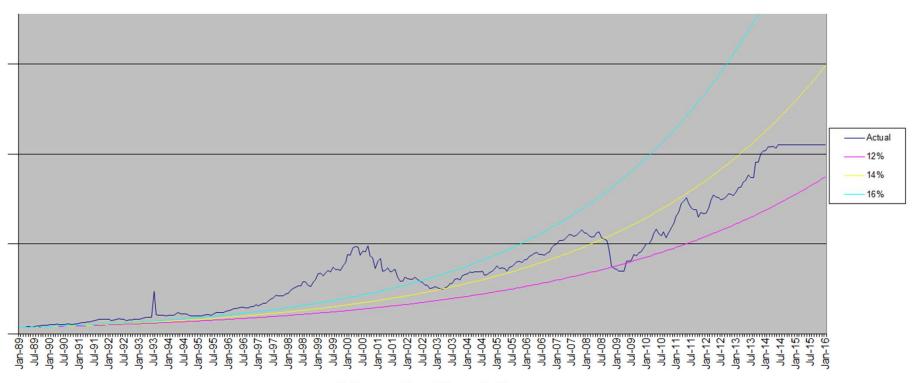
FUTURE ACTIONS

- If 59 ½ upon retirement immediately roll Roth 401(k) over to Roth IRA (consolidate accounts)
- If retiring early, don't roll over 401(k) into IRA because immediate withdrawals will not be allowed without 10% penalty
- Withdraw from 401(k) and IRA only up to tax bracket limits based on AGI;
 use HSA and ROTH withdrawals for remaining income needs.

WHAT TO INVEST IN

- Un-managed index funds
 - With lowest fees (expense ratios)
 - Typically Vanguard/Fidelity but others are catching up
- Total stock market index fund to get broad coverage
 - ETF is slightly preferred over mutual fund
 - Tickers (Vanguard examples) are
 - VTI (ETF) no minimum investment
 - VTSMX (MF) \$3k minimum
 - VTSAX (MF) \$10k minimum admiral shares, lower fees
- · Buy directly at Vanguard
- Buy stocks using any popular low-cost broker
 - eTrade
 - Scottrade
 - TDAmeritrade
 - Etc.

MONTHLY NET WORTH TRACKED OVER 25 YEARS



Month End Date

FINANCIAL BLOGGERS

- Financial Independence www.MadFientist.com
- Mr. Money Mustache www.MrMoneyMustache.com

Investing Clubs started at Ford but not restricted to Ford employees:

- Lunch Money Investment Club
 - www.Bivio.com/LMIC
- The Passive Club
 - www.Bivio.com/TPC