

## Taking the Mystery out of Investing using AT Math with Buffett, Graham, & Cusack

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### Abstract

In this paper, we apply AT Math to Warren Buffett's (Benjamin Graham's) system for investing. We will show how Buffett's system of picking stocks works and also how to allocate capital (stocks, bonds, Gold, Gold Stocks, Real Estate). We will show what to buy, how much to buy and when to buy and sell stocks based on AT Math. Please note there are no guarantees stated or implied in this paper. It is for educational purposes only. Consult an investment professional before investing.

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### 1. INTRODUCTION

In this paper, we apply AT Math to Warren Buffett's (Benjamin Graham's) system for investing. We will show how Buffett's system of picking stocks works and also how to allocate capital (stocks, bonds, Gold, Gold Stocks, Real Estate). We will show what to buy, how much to buy and when to buy and sell stocks based on AT Math.

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Before investing, you should save and hold cash for 12 months expenses. Until you save that much you can't afford to invest. Your credit cards must be paid off every month. The remained is for savings. You also need enough money(\$10,000) to burry yourself if you happen to die unexpectedly. Youm may have to invest to pay for your kids tuition and for you r daughters wedding.

I suggest, if you like to do research, to hold 10 different companies stocks. If you want to diversify away your risk, invest in at least 30 stocks, but your return may be lower. If you don't like to do research, but the S&P or DJIA indexed funds. They outperform professional money managers 4 times out of 5.

At the heart of AT Math is the Golden Mean

Parabola (GMP) which is at the heart of just about everything in the universe! The GMP I also call the Fair Coin Equation. It's minimum  $E=-1.25$  at  $t=1/2=50\%$ .

So what price do you pay for a cash flow? It is determined by the proxy the Price to Earnings Ratio:

$$50\% \times 1.25 = 6.25$$

$$12.5 + \text{Inflation at } 2.5\% = 14.5\%$$

$$14.5 + 1.4\% \text{ Dividend} = 15.9 = P/E \text{ ratio}$$

$$15.90 / 0.4233 = 1/2.6667 = 1/SF = E$$

$1/1590 = 6.29 \sim 6.26$  which is the average cycle of the stock market. Every 10 cycles or 70 years, we have a major crash (1929, 2008)

$$1929 + 62.9 = 1991 \text{ Recession}$$

$$1991.9 + 6.29 = 2009 \sim 2008 \text{ Dot com Recession}$$

So when do you buy?

The stock market runs in cycles of 7 . On a monthly basis, there is a minor correction after 7 cycles.

The stock price drops by 5% then usually rebounds. It repeats this cycle 7 times.  $7 \times 5\% = 35\%$  This is the same as the most recent CAPE (35%) When the stock price drops 5%, that is when the investor buys at a  $P/E = 16.4$

$5\% \times 8\%$  Historic return of the Stock Market = 40%

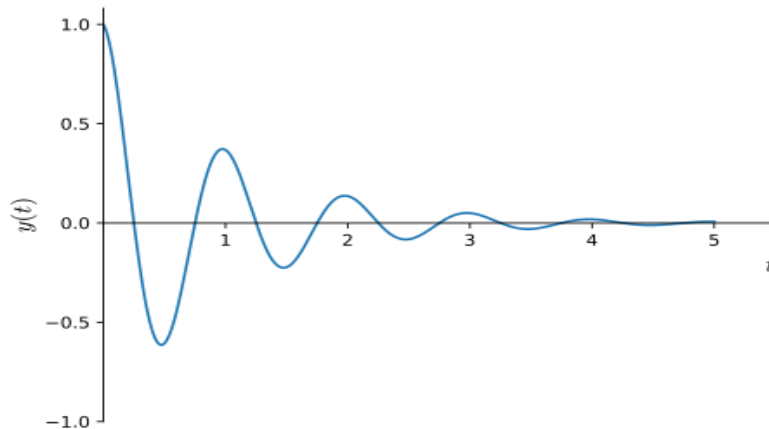
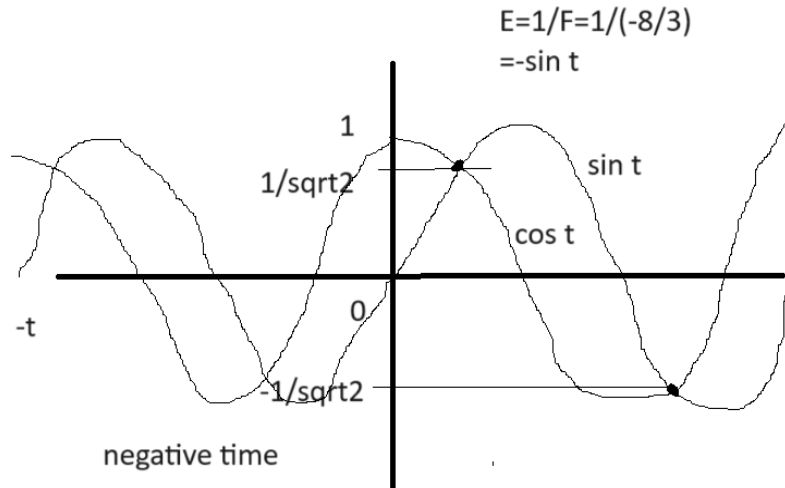
$$\begin{aligned} Ff &= \mu N \\ 2.667 &= 0.40(N) \\ N &= 15\% \end{aligned}$$

$$\begin{aligned} 4 &= t^2/2 \\ t &= \sqrt{82.828} \\ t/M &= 2.828/0.04 = 707 = 1/\sqrt{2} = E = \sin 45 = \cos 45 \end{aligned}$$

45

The reason for the 7 cycles is that  
 $M = 1/81 = 0.01234567$   
 $dM/dt = 1 \times 7 = 7 = t$   
 $dM/dt = t$   
 $dM = t \, dt$   
 Integrate  
 $M = t^2/2$

sin and cos are 90 degrees out of sync. One is the bonds, and the other is the stock market.  
 Maximum return is had at  $t = \pi/4$   $E = \sqrt{2}$   
 $PE = M = Mc^2$   
 $= t \, c^2 = 3^3 = 27$  CAPE



$$\begin{aligned} Y &= e^{-t} \cos(2\pi t) \\ Y &= e^{-0.2828} \cos(2\pi \times 0.2828) \\ &= 0.2796!28 \\ 1/696 &\sim 1/7 = 143 \\ [0.143n]^n &= \text{growth rate} = [0.143(28)]^{28} \\ &= 13.5 \\ 13.5 - 2.5 &= 11\% \text{ which is the ROIC} \end{aligned}$$

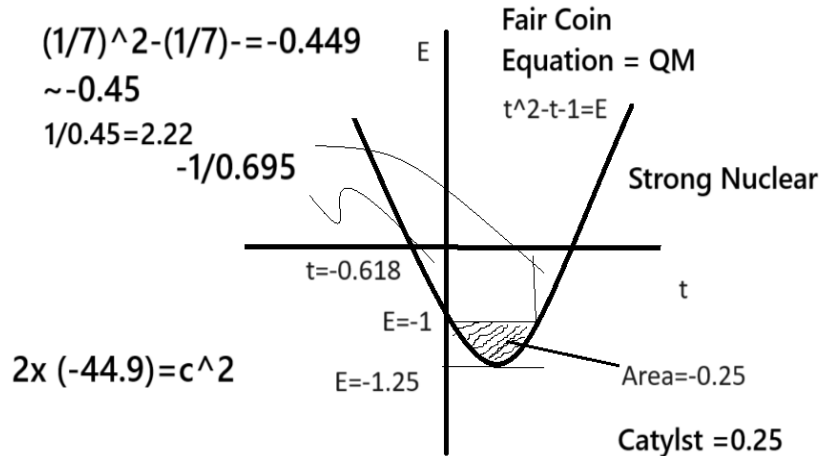
When selecting stocks, chose ones where you shop at prominent companies with excellent reputations. For example I shop at Amazon, Costco, Tim Horton's Restaurants, Other successful

companies with Hugh contract potential include companies such as Bombardier. Warren Buffett won't invest in Airlines because that industry has never made money since Kitty hawk. These companies such as these should be investigated further.

If there is a local company, say like a construction or development company, see if you can invest in it. Deby Construction is an example ion Saint John. Real Estate is underpriced in Saint john. There is an opening to invest in land (cottage country) and older houses that could be spruced up. An old house bought for 150,000 can be sold in a couple

of years for \$700,000 in the South End of Saint John. Real Estate must have a cash flow to pay the taxes and maintenance. That negative cash flow is hard to beat. Banks will tend to lead for Real Estate and not for other assets since real estate rarely losses value. Golf courses, Bed and Breakfasts, or any other use will

offset the negative cash flows. 95% of millionaires made their first million investing in real estate. That may no longer hold with technology. Warren Buffett didn't invest in Technology because it was outside his circle of knowledge. He was being a contrarian by accident. All the other money was chasing tech stocks.

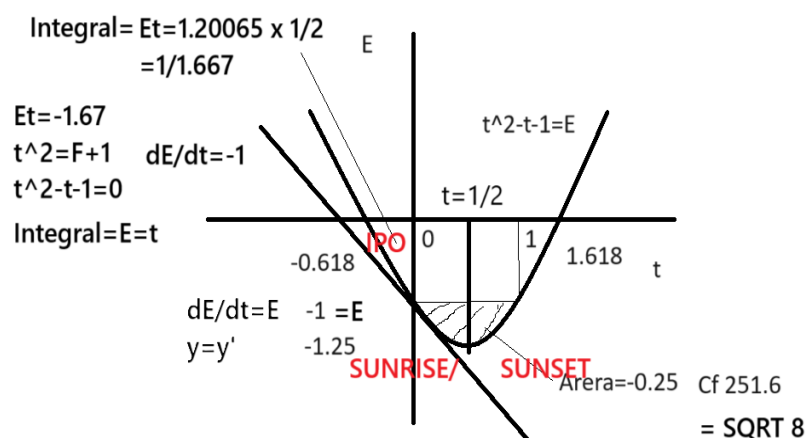


So an investor should buy stocks that have a P/E ratio of 15.9; a drop of the market of 5% when inflation is at 2.5%. He can expect a return of 11% for 6.25 years. He should sell every 6.25 years before the correction. He should disinvest from the market entirely after 10 cycles.

As for allocation, the prudent investor should not have all his eggs in one basket. He should play the countercyclical move by holding (20%) Gold (which you must pay to store) as an inflation hedge (80% x 2.5% = 20%), Common Stock of (40%), 10 Year Bonds

or GIC's of (20%) and Gold Stocks (20%) which are tied to the market countercyclically and have the potential to hedge at a higher return in bull markets as well as bear markets. The investor should also hold Real Estate can be held in the common stocks (eg REIT) which has a cash flow to pay property taxes which has a better chance than stocks to produce a high ROIC while rarely going to zero.

Warren Buffett says good investment opportunities are few and far between. I concur. You must be patient to find that good investment.



Apple's average return on stocks has skyrocketed to 154,000%, achieving an all-time high for its holders in January 2021. Diginex Limited Ordinary Shares (DGNX) has had the

highest return since January 1, 2025 by a US stock, returning 1,493.2%. Since going public in May 1997, Amazon.com Inc. has generated a total return of 249,208%

$$\begin{aligned}
 &9.11 \times 7 = 63.77 = 1568 / 0.4233 = 26.99 / 4 = 6.74 \\
 &= 0.1482 \sim 1493.2\% \\
 &1568 \sim 154000\% \\
 &249,208\% \sim 250\% = \text{Area} \\
 &35/7 = 5 = E \text{ implies } y = y' \\
 &t^2 - t - 1 = 2t - 1 \\
 &t = 3 \quad E = 5 \quad y = y'
 \end{aligned}$$

Cusack US economy equation results in stock market crash  $y = y'$  at 70 years

What you are really buying when you buy stocks is estimated cash flows. They are uncertain. Bonds are more certain (less risky), but when there is a crash in the stock market (eg. 1929), even countries such as prewar Germany default on their bonds to their citizens.

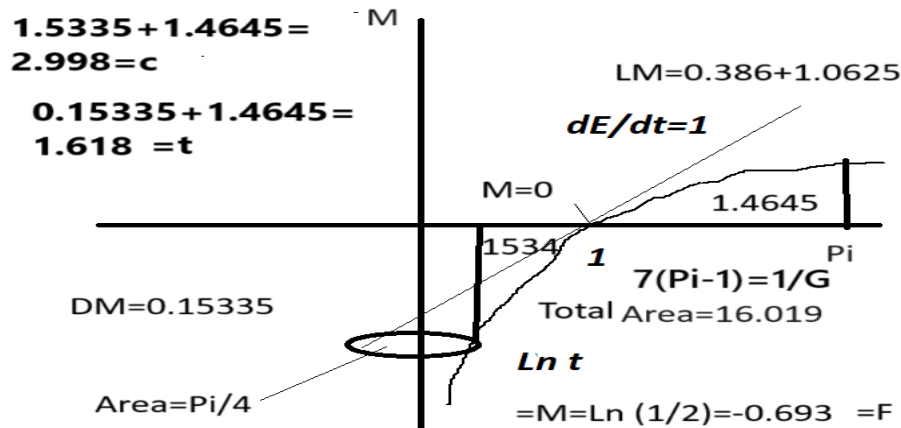
When you buy stocks, if you are going to buy a lot in one stock, it is better to buy preferred stock with voting rights. When you buy bonds, the tax-free stocks are preferable if you pay income tax.

I recommend you read: Benjamin Graham, Philip Fisher, John Burr Williams, and Charles Munger. These are the men who schooled Warren Buffett.

According to Buffett's Biography, Warren worked from an early age delivering newspapers. He set a goal to be a millionaire by age 35. In fact, he had \$25 million. Getting started early saving money is the key. School isn't worth investing in unless your family is wealthy.

The average dividend is 1.4%. The investor must pay taxes on them. So if you don't need that income right away, buy stocks that reinvest instead of paying dividends. The stock price will escalate and you don't have to pay income taxes until you sell your stocks.

The Jews have a system where when a boy reaches 13, his paternal uncles must give him 10% of their net worth at the bar mitzvah. The wise ones don't invest anything until they are a bit older. It gives them a way up. The Jews also only buy from themselves (lawyers, doctors, retail, bakeries etc.) but sell to everyone. This keeps the money circulating among Jews with the circle expanding all the time. It grows bigger with time. They are a nation within a nation. I wondered why the Irish don't do that too? Someone said, they do. But 10% of nothing is nothing!



At  $i = 6.96\%$ , one dollar PV will be worth 1.6016 times. This is the area under the  $\ln$  function above. This is a growth stock. Growth stocks should be avoided because they are risky unless you are young and can tolerate losses.

Fair Price  $= 5\% / 2 = 2.5\%$

$2.5\% + \text{Market Average } 11\% / 2 = 8\%$  ROI for the stock market.

With the state of the US electing Donald Trump, the USA at the time of writing (July 2025) is no longer a safe investment venue. Civil War may break out. Canada relies on the USA for its market. Trump says they don't need anything Canada sells. Canada may go bankrupt (again 1993).

London, England isn't a safe place either given Russia's bellicose statements. Nowhere in Europe is a safe bet right now with the war expanding in Ukraine.

China, a communist country is about to become an enemy of the West if they invade Taiwan. Tokyo is

sure to be attacked by China if there is an invasion of Taiwan. Japan, South Korea and the USA are allies and enemies with bellicose China.

The only viable investment is gold in time like these. However scientists have discovered how to change coal into gold, literally.

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