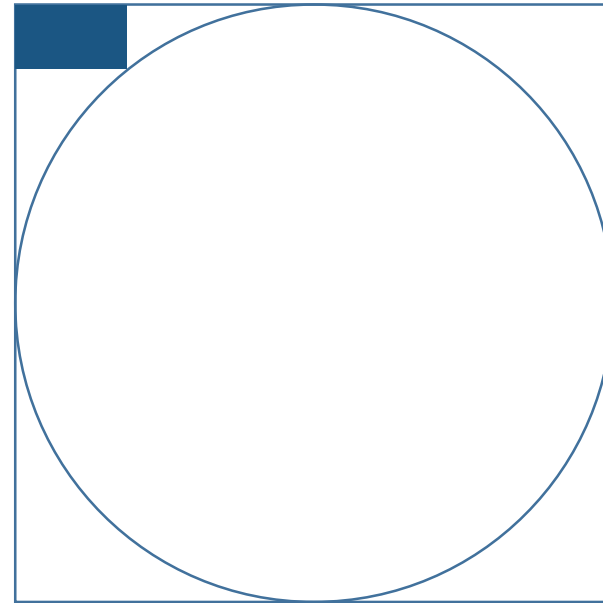


Brain teaser

Problem:

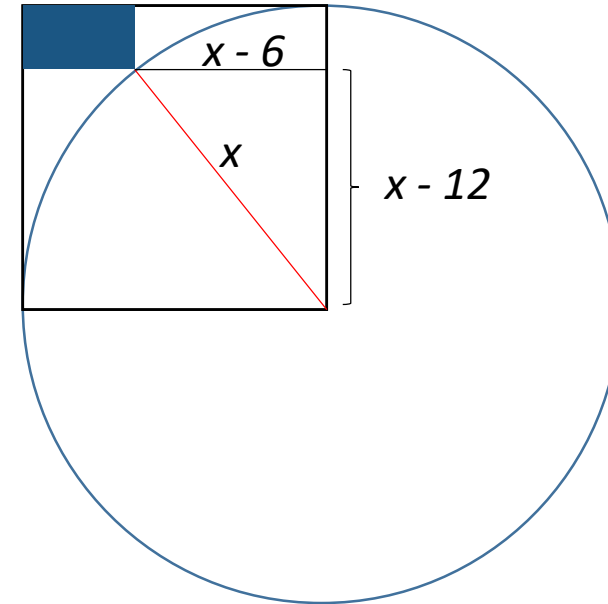
- In this picture, the small rectangle is of dimension 6×12 . What is a radius of the circle?



Brain teaser

Answer:

- $x = \text{Sqrt}[(x-6)^2 + (x-12)^2]$
 $= 30$
or 6, but that is rejected



Introduction to Investing & Trading

What is Investing, Really? What is Trading?

September 19, 2016

Some Quick Reminders!

Don't Forget These Dates!!!

- Reminder – QFS Portfolio Team Application Due 9/21 at 11:59PM EST
 - If you find yourself unsure of what team you want to apply to come check out our Open House tomorrow (9/20) night at 6:30 PM in KMC 4-80!
 - Application was sent out by email and is available on our website and Facebook page – we will let you know if you have an interview by 5pm on Friday 9/23
- Mentorship Program Applications will go out later this week – we hope to have mentors assigned by the second week of October just so you could start getting to know your mentor
- As always, if you have any questions, feel free to email Paras Shah at pcs311@stern.nyu.edu or contact the QFS E-Board at quantfsnyu@gmail.com

Market Update

Market week in review

Event	Description
Inflation Data	Inflation data beat expectations on Friday – reported core CPI (which excludes energy & food costs) growth YoY was 2.3%, compared to 2.2% consensus and 2.2% prior
Retail Sales	Retail Sales just flat out sucked in every category – indicated a decline in overall sales YoY, kind of interesting because people are clearly spending more, just not in retail stores
Oil Inventory Report	Oil inventories decreased, leading to higher crude oil prices. Prices are approaching the \$50 dollar mark. Markets got optimistic on oil after the reported draw in oil inventories but later analysis indicated that it was a one-time demand issue related to Hurricane Harmine, so oil prices are down 8% or so this past week
All Eyes on the FED	Federal Reserve meets this week – interesting to see decision because fundamentals indicate that they should hike rates, but markets only price a 10-15% chance that they will

What is Investing?

What is my business worth?

- Let's assume that the market price of Clif Bars is \$2 – that is, I can go out and sell them for \$2 from everyone
 - How can I be profitable doing this?
- Who would be willing to sell me Clif Bars for a low price?
 - Say you buy Clif Bars at \$1 / bar and sell 10 bars a day at \$2... How much do you earn in profits for a year?
- **How much would you sell me this business for?**



Business Value – What is it really?

How to Approach Valuation

- What's the value of any business? What do you think makes sense to you?
- Present Value & Discounting – Is money today worth more or less than money one year from now? Why?
- Different Methods:
 - DCF?
 - Multiples?
 - Anything creative you can think of?

Waterfall - SOTP		
	Low	Base
Flagship Business Value	(\$406)	\$90
Core / Legacy Business Value	2,777	4,204
Plus: Cash	269	776
TEV	\$2,640	\$5,071
Less: Foreign Value Unpledged	35.0% (425)	(817)
Value Attributable to Secured Claims	\$2,214	\$4,254
Credit Facilities / ABLs	3,273	3,273
Domestic + Foreign Credit Facility	78	78
7% 1st Lien	1,009	1,009
9% 1st Lien	290	290
Total 1st Lien Claims	\$4,650	\$4,650
1st Liens % Coverage	47.6%	91.5%
Discounted	15.0%	79.5%

What Factors Matter?

What sorts of big picture things should you be thinking about?

- How sustainable is your business? Why can't competitors come in and take away your demand?
- Can you grow your business and does growing give you scale advantages? How well does your Clif bar business translate to coffee?
- How profitable can I be owning this business?
 - Earn return by letting the business sit and generating cash
 - Also earn return by selling the business at a higher price
 - How do you think about hurdle rate for return given the risks?



So What is Investing?

Buying something worth \$1 for less than \$1!

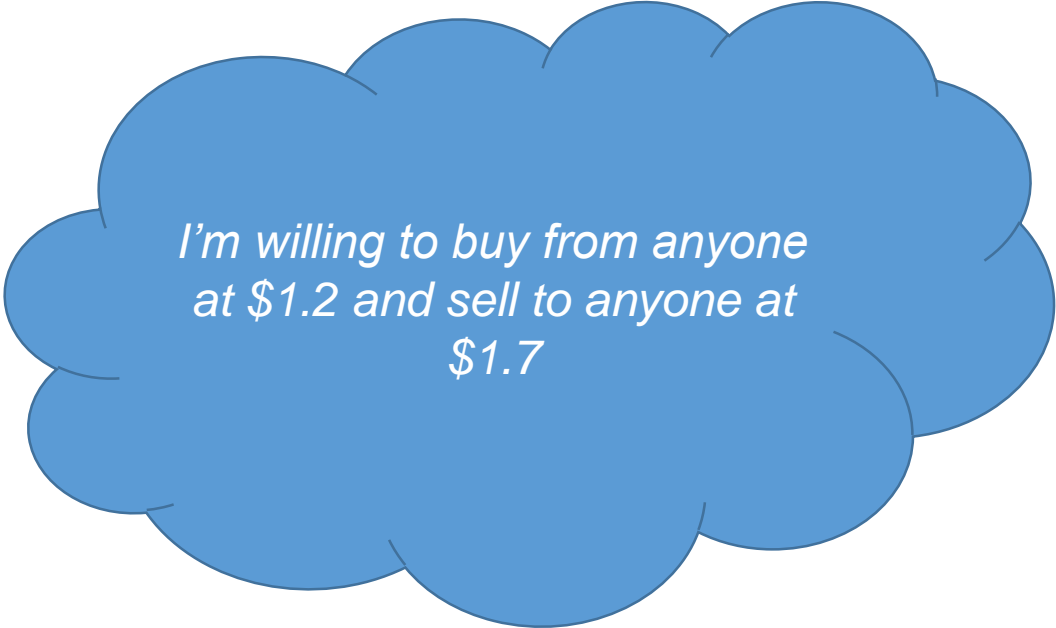
- Business is worth the present value of its future cash flows – if I can buy a business for less than that, I will earn a return
- What about new businesses that don't generate cash flow?
- These are worth something too! We price investments based on how we think they will perform in the future, rather than what they are producing today...what are the inherent limitations with this?
 - We SUCK at guessing. Markets (and people) tend to overvalue growing businesses and undervalue declining ones
 - It is important to remember that...

Every business has a fair price

So What is Trading

And how does this differ from Investing?

- You are always both a buyer and a seller
- You could be trading for a variety of reasons – to hedge, to profit & take directional risk, to make markets
- Directional (Prop) Trading – expressing a fundamental view on how something will change generally short-term prices of a security
- Hedging – minimize risk in something else you own. What are some examples you can think of where you would want to do so?
- Market Making – what is this? Who “makes” markets? How are these traders profitable? Are they typically allowed to take prop risk?



*I'm willing to buy from anyone
at \$1.2 and sell to anyone at
\$1.7*

What can you Trade?

If you can think it, Wall Street will sell it to you

- Stocks, bonds, interest rate products, credit, commodities, rice, wheat, frozen pork bellies, frozen orange juice concentrate, lean hogs, cows, you name it
- **All That Matters Across all of Investing & Trading is Diligence:**
 - Reading everything about a company or a product and the markets it operates in
 - Speaking to EVERYONE in the know
 - What is the market missing that you aren't? Why is your idea so unique that others have not thought of it already?
 - Do you know all the risks associated with your trades? No such thing as a “risk-free” trade – what is your likely payoff if your investment works out? What about if it fails? What is the likelihood that it will work out?
 - Don't want to be “picking up pennies in front of a steamroller”

What Investing & Trading is NOT

Some common misconceptions

- It is NOT gambling or guessing
- It is NOT chart-driven unless you are trading technical strategies (and even then, there needs to be a fundamental overlay into the technical strategy)



What Investing & Trading is

A few important rules / tips

- Facts & Data Driven:
 - Your opinions are important, but at the end of the day, they need to be realistic opinions of what factual events you think might occur. The markets don't care what your opinion is or what your feelings / personal thoughts are, they care about facts
- Know and avoid your personal institutional biases...how big is your appetite for risk? What catches your eye in the world of investing / trading that you know may not actually make sense as a position?
 - If you own shares in a company and the stock tanks 20% for no good reason and you panic, what do you do?
 - If someone tells you to buy a stock that has been going up and is “hot” and going to make you a lot of money, what do you do?
- Do your own work – Your investment decisions affect you and only you. Be aware of that

Questions on Anything?

Contact us!



Email:
terry.wu@stern.nyu.edu



Email:
paras.shah@stern.nyu.edu

Or email...
quantfsnyu@gmail.com