

Valuing and Financing Private Companies

Jim Nolen
Texas McCombs Finance Faculty



Who is Jim Nolen?

- **Jim Nolen has been on the finance faculty of the Texas McCombs School of Business since 1980**
 - Taught undergraduate and graduate classes in corporate finance, entrepreneurial finance, venture capital, private equity, and mergers and acquisitions.
 - Currently teach the Venture Fellows program and serve as the Associate Director for the HMTF Center for Private Equity Finance.

- **Have done financial consulting for the past 45+ years offering services including raising capital, business valuation, M&A advisory, and turnaround consulting for owner-managed businesses.**

- **Serve (or have served) on the Board of Directors (or Advisory Director) of:**
 - A \$1.5 Billion community bank
 - A \$35 million commercial general contractor
 - A \$300 million medical distribution company
 - A \$50 million recycling company
 - A \$30 million functional pre-employment testing company
 - An e-commerce / marketplace company
 - An enterprise SaaS software company
 - A venture capital company with \$50 million AUM

- **Teach in Executive Education seminars** for companies like Dell, Samsung, USAA, Southwest Airlines, PetSmart, BaylorScott & White, Siemen's Energy, National Instruments, and Zachry Construction.

Sources of Capital

Let's Start by Answering Some Basic Questions

1. **Would you rather own 100% of a \$10 million company or 10% of a \$100 million company?**
 - Do you want a whole grape or a slice of watermelon?

2. **As the owner of your business, are you trying to maximize the company's value or is it more of a lifestyle choice?**

3. **If you are trying to maximize value, one of the biggest value drivers (what investors and buyers are willing to pay you for the business) is growth.**
 - Can you fund your company's growth potential from profits and cash flow of the business and your personal resources or do you need to raise external funds to achieve the growth opportunities.

4. **If you need to raise outside capital, are you more comfortable borrowing money or taking on a partner?**
 - Does the company have a track record of profitability and cash flow to repay debt and collateral to support the loan?
 - Are you willing to share control and decision-making with an investor?

Basic Principles of Finance

- What is the most important variable for you know to manage your company? How many employees you need, how much capacity to build, how much working capital to finance, how much and what type of capital to raise are all a function of this number.
- Assets are a function of sales (demand). How much you carry in accounts receivable, inventory, and investment in property, plant and equipment (capacity), headcount – all depend on your sales volume.
- How much capital you need to raise is a function of the amount of assets you need to finance and what you can finance internally (retained earnings).
- **You finance short-term assets with short-term capital (usually short-term debt) and long-term assets with longer-term capital (long-term debt or equity).**

Growth and Cash Flow

- The capital intensity of your industry and the capital efficiency of your business determines how much assets increase or decrease when revenues increase or decrease. An **increase in assets** is a **use of funds** and a decrease in assets is a source of funds.
- Sales growth generally helps your income statement with profitability (margins) increasing since some of your expenses are fixed or semi-fixed costs that don't increase proportionately with revenues.
- However, if you grow revenues too fast, the increase in assets (on the balance sheet like receivables, inventory and plant & equipment) to support the sales growth can be higher than the increased profitability, leading to external financing requirements.
- **Example:** Let's say you grew revenues from \$1 million to \$2 million over the past year and with the revenue growth, your net profit margin increased from 5% to 6% of sales (6% of \$2M = \$120,000). But let's say that your business takes 80 cents in assets to produce a dollar of sales and thus the \$1 million increase in sales will cause assets to increase by \$800,000 to support the higher sales. Profits will cover \$120K of the \$800K, but where will the other \$680K come from? You have a financing problem!

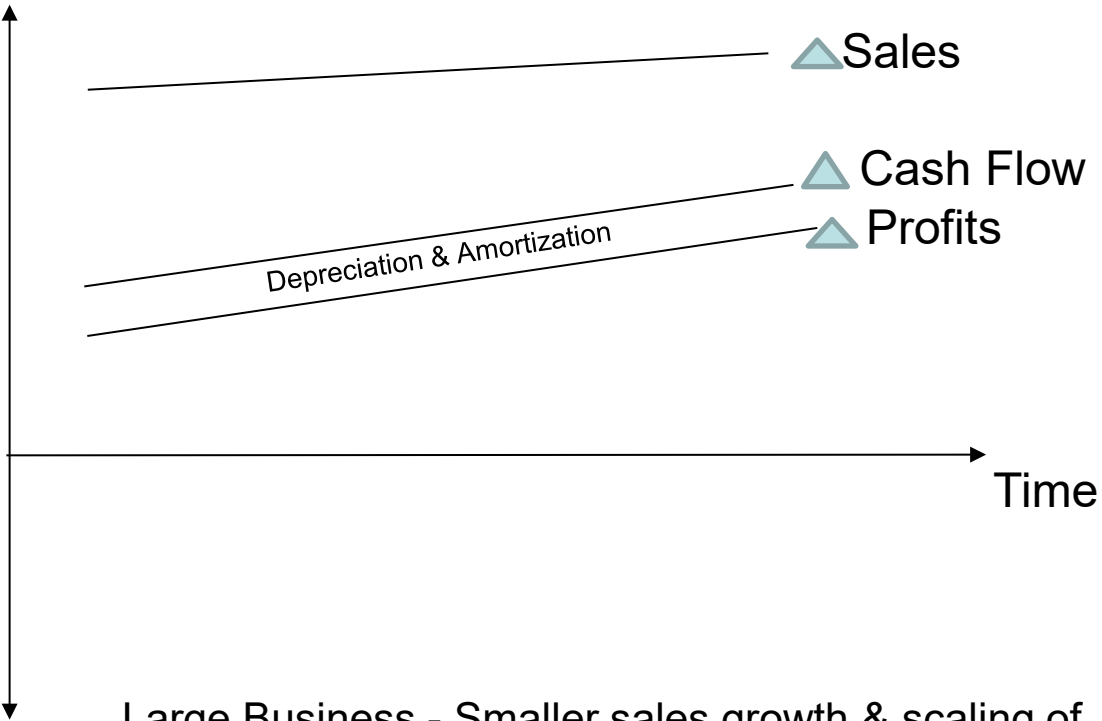
Small vs Large Business

Small Business



Small Business - Higher sales growth leads to higher profits as some costs are fixed. Cash flow often moves inversely with sales and profit. Receivables, inventory, property and equipment increase to support higher sales. Profits are insufficient to cover additional asset investment requiring external financing.

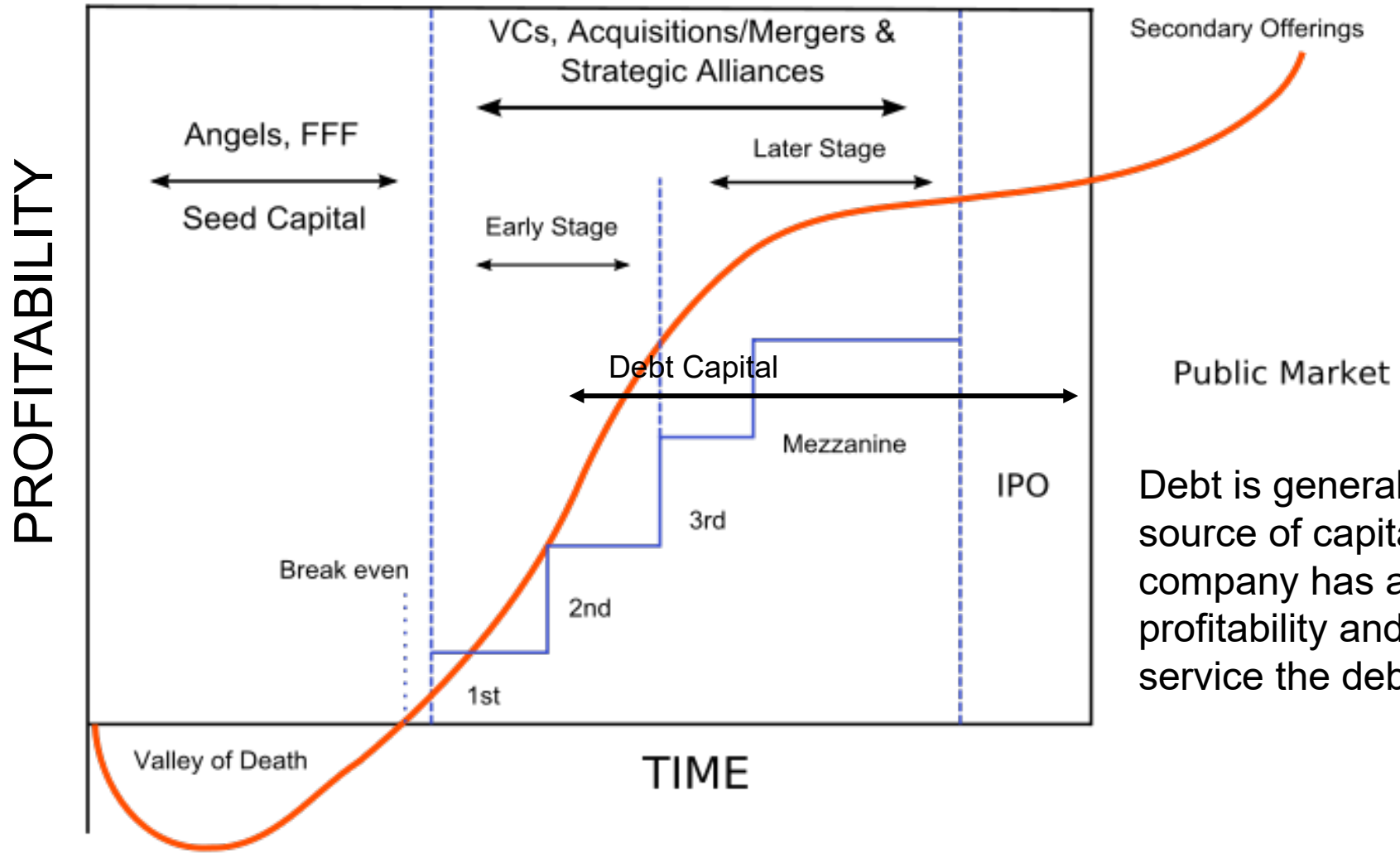
Large Business



Large Business - Smaller sales growth & scaling of fixed costs leads to higher profit margins. Cash flow is similar to profitability with the addback of non-cash expenses like depreciation and assets do not increase as much with slower sales growth.

The Debt and Equity Financing Cycle Based on Growth & Profitability

Startup Financing Cycle



Debt is generally not a realistic source of capital until the company has a track record of profitability and cash flow to service the debt payments.

Capital Sources for Small Businesses

- **Debt Capital**
 - Banks – Lines of Credit, Term Loans, Mortgages
 - MicroLenders – BiG, PeopleFund, Just Community, Lindio
 - Government Programs – SBA Loans
- **Non-Bank and Asset Based Lenders**
 - Fintech Companies – (Billd, Funding Circle)
 - Private Debt – Mezz Lenders, Hard Money Lenders, Revenue Based Lending (AB Credit)
 - Factoring and PO Financing Companies – (Fundera)
 - Leasing and Commercial Finance Companies – (LendingTree, Kabbage)
- **Equity Capital**
 - 3 F's – Friends, Family and Fools
 - Private Investors (Angels)
 - Strategic Partners
 - Venture Capitalists
 - Private Equity

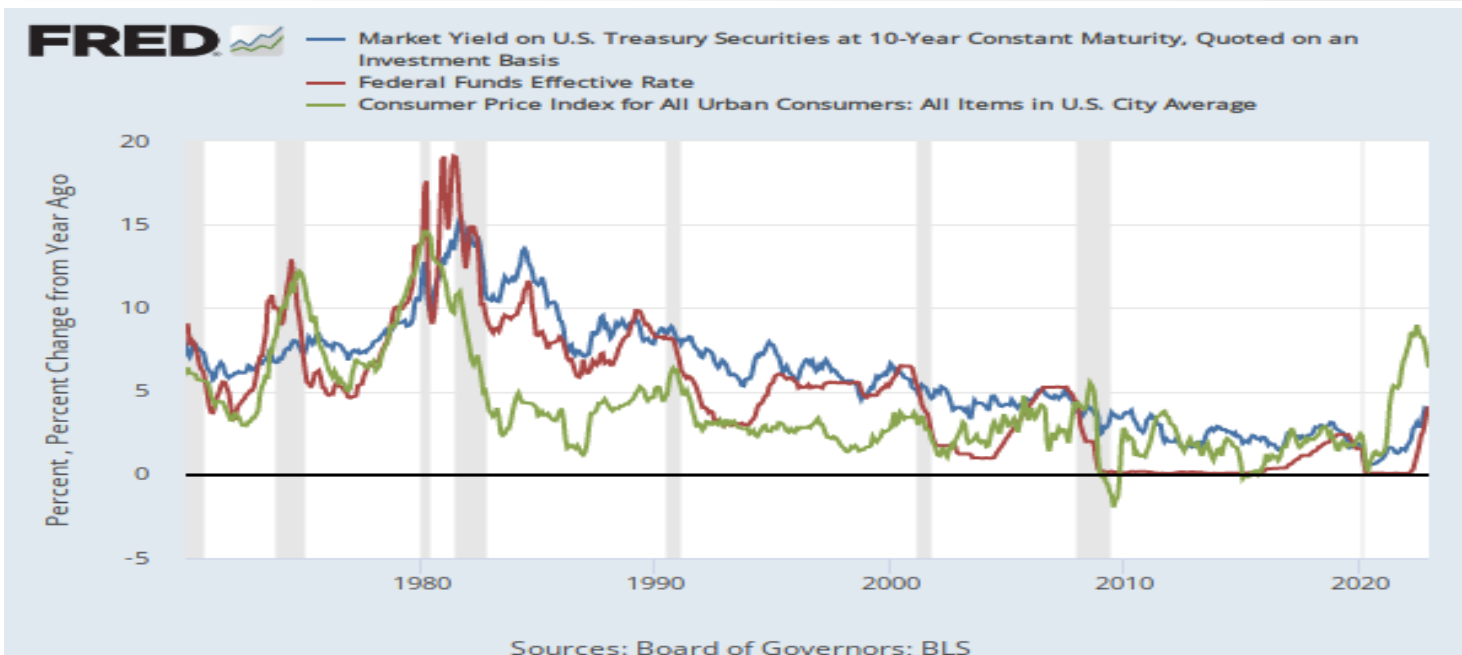
Types of Company Loans

- **Types of Debt Instruments**
 - Senior Debt (Secured Lending)
 - Short-term, Intermediate term, and Long-term
 - Subordinated Debt with Equity Kickers
 - Warrants or Options attached
 - Convertible Debt – Convertible into preferred or common equity
 - Revenue-based lending – Austin Innovation (minimum \$2MM in revenue)
- **Credit Enhancing (Guarantor or Government support)**

Many banks and other lenders may have a minimum and maximum loan amount. Do your research and pick the right lender and the right loan officer. For many small businesses, smaller community banks may be better options than large banks. Alternative lenders (fintech and non-profits) may be better choices for small microloan requests (under \$50,000). Ag lending is pretty specialized and may not be offered at all banks.

Within a bank, there are consumer bankers (auto and personal loans), mortgage bankers (real estate mortgage loans), business bankers (small business loans) and commercial bankers (large business loans).

Interest Rates in Perspective



Consumer and Business loan interest rates are based on the Fed's Federal Funds Rate. Since 2009 until 2021, the Fed Funds rate was close to zero and the prime rate of interest was as low as 3.25%. As inflation became a concern in 2022, the Fed started raising the Fed Funds rate aggressively with the prime rate of interest reaching 8.50%. Most small businesses pay an interest rate above prime (Prime +1% or 2%) and the rate may be floating instead of a fixed rate. Current prime rate is 7.75%.

Prime Rate History

1930 to Present



© 2023 MoneyCafe.com

But on a relative basis, even though the prime rate has more than doubled last year, it is not as bad as the early 1980s when prime hit 21% and in fact, is about the average rate over the past 50 years.

Bank Credit Underwriting

The Six “C’s” of Credit

- **Cash Flow**
 - Primary Source of Repayment (Cash Flow of the Business)
 - Secondary Source of Repayment (Guarantor Global Cash Flow Support)
 - Tertiary Source of Repayment (Liquidation of Collateral)
- **Collateral**
- **Character of the Borrower**
- **Credit History**
- **Capacity**
- **Conditions**

Character

- **Banks will often do a background check with your customers, suppliers, competitors or other banks for their assessment of your character.**

- **Knowledge of the industry and understanding of the key issues driving the company.**
 - Key Person Issue (mitigated by Key Man Life Insurance)

- **Willingness of the borrower to perform on obligations.**
 - Past borrowing history
 - Honesty
 - Attitude
 - Cooperativeness
 - Work Ethic

Credit History

Credit Reports

- TransUnion, Equifax, Experian and Dun & Bradstreet are credit bureaus which report your credit history (both business and personal).
- Credit Score - Considers the amount of credit you have and your payment history. FICO scores range from 300 – 850. “Good” is from 630-739. Excellent is above 740. Many banks will reject borrowers with scores less than 600.
- Tax liens; past due payroll, sales or property taxes; bankruptcy; charge-offs; slow payments; and excessive inquires are reasons for poor credit scores and loan rejections.
- Your credit history is your most valuable asset. For small loans, to lower the cost of underwriting the loan, banks may **credit score** the loan, and if you are less than a certain score (600-640) it is an automatic reject.

Cash Flow to Service the Debt

- **Primary Source of Repayment**

- Operating Cash Flow generated by the business to cover the existing and proposed debt service
 - Debt Coverage Ratio
 - EBITDA (Earnings before interest, depreciation, amortization & taxes)
 - Debt Service of the business
 - Principal and Interest Payments
 - If you have a floating rate of interest, the cash flow will be stress tested with higher interest rates.
 - Most banks want this debt coverage ratio to be at least 120% of the debt payments. The higher the better.

- **Secondary Sources of Repayment**

- Personal cash flow from outside sources like wages, investment income, etc. (Global Cash Flow)
- Personal (non-exempt) Assets of the Guarantors (homestead and retirement accounts may be exempt)

- **Tertiary Sources of Repayment**

- Liquidation of Collateral

Personal Guarantees

- **The Bank will usually require a personal guarantee of any major shareholder (>20%), owner or officer of the company.**
 - Joint and Several
 - Limited
 - Non-recourse
- **Guarantor's Credit Score**
- **Guarantor's Liquidity**
- **Guarantor's Exempt Assets (homestead and retirement accounts, some trusts)**
- **Guarantor's personal cash flow and contingent liabilities**

Collateral

- Security for the loan. If you default on the loan, the collateral can be sold to repay the loan. Banks will file a UCC security interest placing a lien on the assets (many times it is a blanket lien on all assets and the loans are cross-collateralized and cross-defaulted). Any deficiency in selling the collateral and the bank can pursue your personal guaranty.

- **Banks generally will discount the appraised, cost or market value of the assets as follows:**
 - Real Estate (70% - 80% of market value or cost)
 - Accounts Receivable (70% - 80% of eligible A/R)
 - Inventory (40% - 50% of cost)
 - Furniture, Fixtures & Equipment (50% to 80% of market value or cost)
 - Special Use Assets may be discounted more heavily
 - Guarantor's personal assets (stocks, bonds, cash, etc..)

- **Contracts, purchase orders, and backlogs** are not assets and are not listed on your balance sheet. Banks cannot perfect a lien on these items to serve as collateral. Contractor's receivables are progress payments on percentage of completion and could also be bonded, which can be problematic for a bank. Ag lending is cash flow lending and often under-collateralized with hard assets.

Capacity

- **Balance sheet's ability to accept the level of proposed debt (degree of leverage (debt employed)).**

- **Banks look at the level of debt relative to the level of equity employed by the business. They may also look at the level of debt to EBITDA (earnings before interest, taxes depreciation, and amortization). They may benchmark you against other companies in the industry.**

- **Banks prefer lower Debt to Equity ratios (compare to industry)**
 - Banks do not like lending to companies with a negative equity position (liabilities exceed assets)
 - A debt to worth ratio of 1:1 or lower might be preferred by the bank
 - A debt to worth ratio of 2:1 may become a financial covenant goal
 - A debt to worth ratio of 3:1 is becoming over-leveraged and may cause the bank some concern
 - A debt to worth ratio over 4:1 and over may result in a rejection of the loan application.

Conditions

- **Conditions refers to the financial condition of the firm as well as general economic conditions.**
- Banks look at trends and compare to industry standards.
 - RMA Industry Ratios – Risk Management Associates
- The outlook for the national and regional economies, interest rate forecasts, etc. are also considered. How sensitive is the business to economic declines and interest rates.
- If banks think the construction market is overheated and they are going to tighten lending in this area, then loans to general contractors and subcontractors can be more difficult to obtain. If restaurants, bars and hospitality companies have high failure rates, then lending to these industries may be more difficult. If weather issues are causing farmers' inability to clear operating lines and there are lots of carryover loans, then ag loans can become more difficult to obtain or require crop insurance.

Why loans are turned down

- **Some banks have a two-signature approval process (your loan officer and a credit officer) and some have a loan committee depending on the size of the loan and the bank's underwriting process.**

Loans are generally rejected because of:

- No credit history or bad credit history
- No track record to show historical debt repayment
 - All borrowers show the ability to repay on a forecasted basis. Can't rely on this.
- Insufficient collateral
- Poor financial record-keeping
- Too much leverage (debt) already. Negative Net Worth. Need more equity.
- Poor Liquidity – Current Assets can't cover Current Liabilities
- No secondary sources of repayment (if business cash flow dries up)
- Specialty nature of the collateral
- Asking for too long a maturity or unusually repayment terms
- High Maintenance Borrower who won't produce documents needed by the lender

If you are turned down for a loan

- If you are turned down for a loan, you can ask why you were turned down. Try to fix the problem before approaching another bank.

- Sometimes it might be an issue with the bank rather than your company, such as:
 - The bank is too concentrated in this type of loan
 - The bank has had bad experience in this industry – restaurants, bars
 - The bank doesn't understand your industry or business model
 - The loan is outside their market area and hard to service
 - The bank does not see a future relationship, the loan is just a “deal”.
 - The size of the loan – too small (not profitable for bank) or too big (legal lending limit).

Types of Bank Loans

■ Types of Bank Loans

- Revolving Line of Credit – working capital financing
 - Borrowing base – 75-80% of A/R and 40-50% of Inventory. One year maturity. Prime plus 1% to 3% with interest only and principal due at maturity.
- Term Loans – 3 to 5 year, Prime plus 1% to 3% to finance equipment, autos
- Mini-perms Loans & Mortgages – 10-25 year amortization, with 5-year balloon to finance real estate.
- SBA guaranteed loans and SBA 504 Loans

Other Issues with Bank loans:

- Personal Guarantees – joint & several liability
- Loan Covenants
 - Pre-payment penalties or Yield Maintenance
 - Minimum and Maximum financial ratios in loan covenants
 - Borrowing Base to monitor collateral
 - Lockbox
- Fees, floating interest rate – caps and floors

Ag Loans

- Ag lending used to be much easier. Farmers and ranchers were always deemed to be honest, hard-working individuals. While repayment of the debt was always dependent on generating cash flow from the crops or ranching, and weather, commodity pricing, etc. were always risk factors, the loan used to be well secured with **hard** collateral such as land that had been in the family for decades and farm equipment.

- But now, most farm and ranch loans are purely cash flow loans since the land and equipment may be leased rather than owned. The bank is generally making an undercollateralized loan by lending for inputs and then hoping the yield and price will repay the loan at harvest. USDA's FSA guarantees can help mitigate the lack of hard collateral, but it adds another layer of costs to the bank.
 - FSA will guarantee farm loans through a commercial lender up to \$2,236,000. Financial institutions benefit from the safety net the FSA provides by guaranteeing farm loans up to 95 percent against possible financial loss of principal and interest.

- Another risk factor is key person and succession planning. Many agriculture operations are small management teams who have been operating for many years and the bank may be concerned about what happens if they lose a key person in the organization. Key Man insurance can mitigate this.

Revolving Line of Credit

- To finance a project, crops or a contract, the typical loan is a **revolving line of credit**. Usually, a revolver is a one-year note which is subject to a borrowing base and secured by a blanket lien on receivables and inventory. (retainage is excluded as a receivable)
 - Borrowing base is usually 70-80% of receivables less than 60 days old and 40-50% of inventory. Loan Agreement may have loan covenants with a minimum current ratio, maximum debt to worth ratio, minimum net worth and minimum cash flow coverage ratio. The loan may also have lock box provision and/or a clean-up provision.
 - Borrower can borrow up to a pre-defined limit or the amount supported by the borrowing base. If the outstanding loan amount exceeds the borrowing base, then the principal balance must be paid down. Otherwise, interest is paid monthly with principal due at maturity (one year).
 - *The problem for small contractors is that they may need funds to start a project or contract and the contract or purchase order is not an asset the bank can get a security interest in. Even if you have invoiced for work and have a receivable, it is based on progress payments (percentage of completion) and the receivable might not be paid if you do not complete the job. Bonded jobs are also problematic as they can get a lien in front of the bank.*
 - *For ag loans, the loan proceeds were used for fertilizer, seed, fuel, and operating expenses which were consumed and thus not available as collateral.*

- **Asset Based Lenders, Factors and Finance Cos.**
 - Revolving Lines of Credit – financing of receivables and inventory
 - Factoring – Selling your accounts receivable
 - Purchase order financing companies (low advance rate and higher interest rate)
 - Floorplanning – financing inventory
 - Equipment Financing – Prime + 3-6%
 - Equipment Leasing (Capital Leases)

- **Private Debt – Mezzanine Lenders & Hard Money Lenders**
 - Individuals or companies may lend directly to your company usually at high interest rates (12-18%) and may take a profit participation or equity option in your company.

- **Specialty FinTech Company - usually on-line platforms**
 - Debt Crowdfunding sites - Prosper, Lending Club
 - Peer-to-Peer Lending – most are for small personal loans, not businesses
 - For construction financing, sites like Billd, Funding Circle, Fundera

- **Non-Profits and Community Based Organizations**
 - PeopleFund, BiG, etc.
 - On-line Alternative Lenders who do SBA microloan and community advantage loans

SBA Lenders

- The SBA does not lend money directly. For Express Loans, 7(a) Loans, you must find a lender who will lend to you with the SBA guarantee. For 504 loans, you and the bank must also find a Certified Development Company (CDC) who will underwrite the SBA debenture for up to 40% of the loan.

- For microloan and community advantage loans, these are usually obtained from non-profits or community-based lenders. Some may be on-line lenders (not local) and you should do your due diligence on these firms.

- **Banks who make SBA loans are classified as:**
 - Preferred Lenders – can make the loan without getting SBA approval first.
 - Approved Lender – Any financial institution or alternative lender who has registered with SBA

- For more information, go to:
<http://www.sba.gov>

SBA Loan Programs

Loan program	Loan size	Interest rate	Maturity	Use of proceeds
CAPLine (75% - 85% guarantee)	Up to \$5.5 Million	Same as 7(a)	1, 5 and 10 years	Seasonal Line of Credit, Contract Loans and Builders Line
Express Loans (50% guarantee)	Up to \$500,000	Negotiated between borrower and lender – maximum of P + 4.5 -6.5% SBA guarantee fee is 2-3%.	Up to 7 years for line of credit 10 years for equipment Up to 25 years for real estate	Line of Credit for Working Capital •Equipment purchases •Owner occupied Real Estate
7(a) loan (75% guarantee over \$150K) (85% guarantee up to \$150K)	\$50,000 - \$5.5 million	Negotiated between borrower and lender – maximum of P +2.75% SBA guarantee fee is 2-3%.	<ul style="list-style-type: none"> •Up to 25 years for real estate •Up to 10 years for business acquisition, equipment •5-7 years for working capital •Weighted average for mixed-use requests 	<ul style="list-style-type: none"> •Purchase machinery, equipment, supplies, furniture, fixtures •Make lease-hold improvements, expand or renovate facilities •Permanent working capital, purchase inventory •Acquire/Start a business •Acquire land and build a location •Refinance certain existing debt
CDC/504 loan	\$25,000 - \$5.5 million	Variable rate for Banks 50% Fixed interest on 40% SBA Debenture	<ul style="list-style-type: none"> •20-25 years for real estate •10 years for equipment 	<ul style="list-style-type: none"> •Purchase or renovate capital assets (land, buildings, equipment) •Refinancing permitted
Microloan (Non Profit / Community Org)	Maximum of \$50,000	Negotiated between borrower and intermediary 8-13%	No more than 6 years	<ul style="list-style-type: none"> •Purchase working capital •Purchase furniture, fixtures, supplies, materials, equipment
Community Advantage (Non Profit / Community Org.)	Maximum of \$250,000	Maximum of Prime +6%	<ul style="list-style-type: none"> Up to 25 years for real estate •Up to 10 years for business acquisition, equipment •5-7 years for working capital •Weighted average for mixed-use requests 	<ul style="list-style-type: none"> Purchase machinery, equipment, supplies, furniture, fixtures •Make lease-hold improvements, expand or renovate facilities •Purchase permanent working capital, inventory •Acquire/Start a business •Acquire land and build a location

Loan Documentation

- **When applying for a loan, you should bring at least the following information if you are an existing business requesting your first loan from that bank:**
 - Three years historical year-end balance sheet, income statement and tax returns on the business
 - An interim company financial statement not more than 60 days old
 - A current personal financial statement and two years personal income tax returns
 - A list of collateral to be used to secure the loan.
 - Aging of Accounts Receivable and Payables
 - List of Inventory
 - Equipment list
 - Rent Roll for real estate
 - Appraisals (if any) on equipment or real estate
 - A short description on how the loan proceeds will be used.
 - Business Debt Schedule showing your existing debt service and any contingent liabilities
 - Financial Projections – Monthly projections of revenues, expenses and cash flow showing the ability to repay the debt.
 - A resume on owners and key employees
 - Credit and Character references

Picking your Bank and Banker

- Talk to other small businesses and get a referral on a bank or loan officer they like to deal with.
- Always go to the main branch where the decisions are made.
- Banks are relationship lenders. They usually do not want to just do a “deal”.
 - Form relationships even before you make a loan request. If you have a deposit relationship, give your financial statements to a lender and invite them to visit your business so they get to know you and the business before you ask for a loan.
- Banks always want you to move your entire relationship (personal and business) over to their bank. Keeping deposits and using other bank services may influence your interest rate on the loan based on your entire relationship profitability to the bank.
 - Always try to make Banks compete for your business in order to get the best rate and terms.
 - Always have a secondary bank if you get crosswise with your primary bank
 - Always have a couple of loan officers within a bank that know your business so that if one leaves, you have someone else who knows your business.
- Banks don't like surprises. If you have a problem, don't hide it or let them find out from someone other than you. They really don't want to call your loan or foreclose on your assets as long as they have a borrower who is trying to work through the problem.

What can you negotiate with Lender?

- **Amount of money borrowed** should be based on use of proceeds, ability of the balance sheet to accept more debt (capacity) and ability of cash flow to service debt.
- **Interest rate – Usually tied to prime rate or SOFR (Secured Overnight Financing Rate)**
 - Rate is based on your profitability to the bank and credit risk. If you have excellent credit and carry large deposit balances, you can argue for a lower rate. Put banks in competition.
 - Floating (variable) rate, caps and floors, fixed rate
- **Amortization Period** – The period for which the P&I payments amount will be determined.
- **Maturity of the loan** – depends on use of proceeds, type of collateral and cash flow. Can do balloons or mini-perm loans
- **Personal Guarantees** – can do non-recourse, limited guarantees or burn-offs
- **Loan Covenants** – Typical covenants might be a maximum debt to equity ratio, minimum current ratio and minimum debt coverage ratio. All are negotiable.

■ How should I finance an acquisition?

- When acquiring a company, you can buy the stock (preferred by the seller) or you can buy the assets (preferred by the buyer). Buyer may form a Newco to buy the assets which can include business name, goodwill and non-compete. Also consider a Section 338(h)10 election to treat a stock sale as an asset sale for tax purposes.
- You don't have to buy all of the stock or all the assets. You could buy 51+% of the stock and have a right of first refusal on the remaining 49%. You could buy the business, but exclude the real estate, then lease the property from the seller with an option to buy.
- Buyers normally want a holdback of 10% of the purchase price for any issues discovered post closing
- You can bridge a valuation gap by structuring an **earnout**. Be careful as these often lead to disputes.
- Finance using Senior Debt by using the cash flow and collateral of the acquisition target. Leverage of up to 4x EBITDA is possible. Can also look to SBA 7(a) guarantee loans up to \$5 million.
- Subordinated debt – private debt for additional leverage of up to 1-2x EBITDA.
- Seller subordinated note receivable as part of the financing

Raising Equity

Equity Sources of Capital

Should I Raise Equity?

- If you are a control freak and do not want to have partners or sharing control and decision-making, then probably not.
- But selling shares in your company does not mean you are necessarily giving up control, but you also have a fiduciary duty to your shareholders.
- Remember, **shareholders elect directors, directors elect officers.** Selling shares in your company is giving some of the future economic benefits of ownership to other individuals, including any dividends paid or proceeds of selling the company.
- You could sell a minority interest in your company, take some money off the table since most of your wealth is concentrated in the company, and still have another bite of the apple down the road.

When Should I Use Equity?

- **Generally speaking, you want to delay taking equity as long as you can so that you can de-risk the company and get a higher valuation and thus, less dilution to the current founders and shareholders.**
 - Pre-Seed and Seed Capital Investors may be looking for 50-80% returns
 - A Round investors may be looking for 40-50% returns
 - B Round Investors may be looking for 25-40%
 - Growth Capital and Mezz Investors may want 12-25%
 - Public companies might have a cost of equity of 8-15%

- **Debt is generally cheaper than equity, but equity is more patient capital. You may not have a choice of using debt if:**
 - Your industry is very asset intensive and you can't finance growth internally, so bootstrapping is not an option.
 - You do not have a track record of profitability and cash flow to repay the debt so you can't borrow money.
 - You do not have sufficient collateral to secure debt or you have poor credit history.
 - You already have too much debt (debt to equity ratio is too high)
 - You need a longer maturity and horizon on the debt than the lender is willing to provide.

This would be usuary if a bank charged this rate.

Equity Sources of Capital

- Your own capital (IRAs and home equity), and the 3-F's (Friends, Family and Fools). - Common stock
- Angel Investors – High net worth individuals or family offices. Some on-line networks like AngelList and Angel Networks like CTAN (Central Texas Angels Network). May invest as subordinated convertible debt that can convert to preferred or common stock at a discount or valuation cap.
- Institutional Venture Capitalists – Looking for high growth (tech) companies that can scale and give them 5-10X their investment back in 5-7 years. Invest \$100,000-\$500,000 in pre-seed stage, \$1-\$2 million in seed stage, \$3-\$5 million in Series A, \$10-\$30 million in Series B, etc. Usually take convertible preferred stock (10-40% equity in the company) and take a board position.
- Private Equity – Provide growth capital, recapitalizations and minority and majority buyout. Usually want profitable companies with EBITDA minimum of \$3-\$10 million and investment amounts of at least \$10-\$20 million.
- **VC and PE firms are not appropriate for most small businesses that are not able to grow and scale with the profit margins these professional investors are seeking. Most small businesses cannot provide an exit for their investment giving them annual returns in the 20-50% range or 3-10x their investment back in 5-7 years.**

Difference in VC vs PE

- Both “private equity firms” and “venture capital firms” raise capital from outside investors, called Limited Partners (LPs) – pension funds, endowments, insurance firms, and high-net-worth individuals.
- Both firms invest that capital in private companies (or companies they take private) and attempt to sell those investments at higher prices in the future from an exit or monetization of their investment (IPO or sale to a strategic or financial buyer).
- **Company Types:** PE firms invest in companies across all industries (manufacturing, distribution, etc.), while VCs focus on high growth, high margin industries like technology, biotech, and software.
- **Percentage Acquired:** Private equity firms do **control investing**, where they acquire a majority stake (70% - 100% of companies), while VCs only acquire **minority stakes (10%-40%)** with convertible preferred stock with control provisions and a board seat.
- **Size:** PE firms tend to do larger deals than VC firms because they acquire higher percentages of companies and focus on bigger, more mature companies. Thus, PE funds are usually much bigger (\$200MM-\$20B) than VC funds (\$20MM - \$800M).
- **Structure:** VC firms use **equity** (i.e., the cash they’ve raised from the LPs) to make their investments (usually in preferred stock), while PE firms use a combination of **equity and debt**. Both want to give incentives to management and VCs do so with option pools while PE firms may have the seller roll some of their investment into the Newco.
- **Stage:** PE firms acquire mature companies with cash flow, while VCs invest in earlier-stage companies that are growing quickly or have the potential to grow quickly and may not be cash flow positive (burn rate and fume date).
- **Risk:** VCs expect that most of their portfolio companies will fail, but if one company becomes the next Google, they can still earn great returns. PE firms can’t afford to take such risks because a single failed company could doom the entire fund.
- **Value Creation / Sources of Returns:** Both firm types *aim* to earn returns above those of the public markets, but they do so differently: VC firms rely on growth and companies’ valuations increasing, while PE firms can use [EBITDA growth, multiple expansion, and leverage and cash generation](#) (i.e., “financial engineering”).
- **Operational Focus:** PE firms may become more involved with companies’ operations because they have greater ownership. VCs usually are more high-level strategic focus from a board position and helping fill the management team.
- **People:** [Private equity tends to attract former investment bankers who are good at excel modeling](#), while [venture capital gets a more diverse mix](#): Product managers, business development professionals, consultants, bankers, and former entrepreneurs who are good at go to market strategy, product market fit, and assessing management teams.

Organizational Structure of Private Capital

- Most VC and PE firms are limited partnerships with a 10-year life (but can extend 2+ years for exits).
- The general partners (GPs) get a 1.5% - 2% annual management fee plus 20% carried interest (gain on exit) after the limited partners (LPs) have received their investment and fees back. Some funds may also have a hurdle rate before earning carry.
- Usually 1-5 senior partners with several junior partners and associates. (analyst, associate, senior associate, principal, partner, managing partner). Bigger firms may have operating partners or venture partners in addition to investment partners.
- VC's invest in seed and early stage (A and B rounds) or growth and later stage (C and D rounds, bridge and mezzanine).
- Early Stage VC's look for 10+x their investment back or to return the fund with an exit within 5-7 years (50-70% IRRs), but after accounting for losses, top tier firms generally have a portfolio returns of 20-30% and 3-5x their fund. Venture returns follow a **power curve distribution**. Only 1 in 100 (1%) portfolio companies will result in a \$1 Billion exit. Thus, a small VC firm with \$100MM in capital that will invest in 15-20 deals has little chance of hitting a unicorn.
- Private Equity funds do later stage (growth capital), buyouts and roll-ups and target 2-5x their investment (20-35% levered returns). Mezz debt funds target 15-18% returns with a current pay (coupon of 8-12%) plus an equity kicker (warrants) to purchase equity at a discounted price.

Angel Investors

- Former entrepreneurs, Family Offices, retired executives (may be hard to locate)
- Angel Networks like CTAN and HAN
- Usually invest \$25K up to \$2 million in pre-seed and seed deals
- May invest in a convertible note, SAFE or 10-20% equity
- May allow LLC (VCs want corporations), may or may not want a board seat

- **Pros-**
 - May be a subject matter expert in technology, network with other investors
 - May be more passive and hands-off than a VC

- **Cons-**
 - Might be a micro-manager
 - May interfere with next round of financing

Institutional VCs

- **Most VC firms may look at 600 – 1000 business plans per year.**
 - Most are weeded out quickly based on not meeting their investment strategy in terms of industry, company stage of development, amount of capital requested, etc.
- **They may allow 100 of those to meet with and “pitch” the firm**
 - More likely if you have an attorney, accountant, other funded entrepreneur refer you
 - They are evaluating the management team, market size, competitive advantage, cap table, valuation
- **After checking your background and technology, maybe 10 of the 100 will get a term sheet and then they are competing against other VC firms.**
- The VC may then end up funding 4-5 deals per year. If they have a \$200 million fund, they may end up with 10-20 portfolio companies (\$10-\$20 million per company including reserve for future rounds). If there are 3 to 4 partners, then each will sit on 5 – 8 boards.

What do investors want?

- **A large addressable and serviceable market**
- **An economic moat giving a sustainable competitive advantage (proprietary position)**
- **Market Validation (Product Fit) – LTV/CAC, Rule of 40**
- **Recurring revenues with sticky customers, rather than a job shop**
- **High gross profit margins**
- **Coachable Management Team**
- **Network Effects**
- **Capital Efficiency**
- **Low customer concentration and low partner/supplier dependency**
- **Risk-adjusted return on their investment**
- **An exit strategy and way to monetize their investment**

Venture Capital

Venture Capital - Very expensive money (5-10x their money back in 5-7 years – about 50-60% rate of return per year). Most want an investment to return their entire fund. Require board seats, set milestones, and are active in the business' strategy and personnel. Usually take convertible preferred stock and will have liquidation preferences, anti-dilution provisions and an option pool of 10%-20% of common equity. (More on this later)

- a. Most VCs are industry specific – B2B, B2C, CPG, IT, Healthcare, etc.
- b. Pre-Seed/Seed round – In Austin, \$1M-\$3M on a \$5M-\$8M (Bay area higher) Want MVP – Minimum Viable Product. Product in market with minimal customer validation metrics
- c. A Round - \$3M-\$8M on a \$7M-\$20M pre-money valuation – want recurring revenues (not profitability), have product market fit determined, and ready for scalable growth.
- d. B Round – growth capital – amount and values vary greatly. Syndicate of VCs. Management team formed and pathway to profitability.
- e. C Round – bridge capital – more dilution to founders, but usually at a higher valuation
- f. Exit via IPO, Merger, SPAC, etc. (not uncommon for founders to own 5%-15% of company)
- g. Arm-chair Valuation - If I invest \$2 million today, then I want \$20 million back in 5 years. I think the company can grow to \$50 million in revenues and \$10 million in EBITDA over the next 5 years (about 165% annual growth rate) and companies in this space trade at 2x revenues and 10x EBITDA. Thus, the company would be valued at \$100 million in year 5 and fund needs \$20 million, so need to own a fully diluted 20% of the company at exit.

Valuing Startups

- **Very early-stage companies (pre-seed or seed) with no track record are difficult to value.**
- **It is not uncommon for investors to do an unpriced round of financing. Instead of setting a value for the firm, they will put money into the company in the form of a convertible note or a SAFE (Simple Agreement for Future Equity).**
 - The convertible note is convertible to equity at the next round of financing, usually at a discount to the next round's priced valuation. A 20% discount is not uncommon. If no future priced round of financing occurs, then the debt carries an interest rate and maturity. The investor is a creditor until the debt is converted to equity and usually converts into preferred stock with the new investors although it could be converted into common equity.
 - A SAFE may contain terms that allows the investor to convert the SAFE based on a valuation cap to the next round of financing. The conversion can be based on a pre-money or post-money cap on the valuation for the next round of financing. For example, lets assume I invest \$2 million in a SAFE with a \$10 million pre-money valuation cap. Then, 18 months later you raise \$5 million in a Series A round at a \$15 million pre-money valuation (\$20 million post-money), the SAFE investors can convert their \$2 million based on the \$10 million cap (or a discount to the \$15 million pre-money valuation in the priced round).
 - Be careful because the last money in has all of the power. The new investors may says “ go back and tell your convertible debt holder or SAFE investors that they must forego their discount or valuation cap and can convert at the same price as the new money being invested or we won't invest”. Unless the old investors want to put up more money (which they don't), then they probably have to give up those terms and are upset over not getting a better deal they were offered.

Valuation – The Golden Rule

- **Pre-seed/Seed** – Angel investor may want 10-20% of the company. Investing \$500,000 in a pre-money value of \$2M or a \$500,000 convertible note convertible at a 20% discount to the next round of financing or with a \$6M valuation cap.
- **A Round** – First institutional round. In Austin, \$6 - \$8 million pre-money valuation on a \$3M capital raise or \$9M- \$11M post money (27%-33% equity) knowing there will be dilution in future rounds. In SF, you might get a \$15M pre-money on a \$6M capital raise or 28.5% of a \$21M post-money valuation. But your cash burn rate will be higher in SF.
- **B Round** – ideally you would like the pre-money to be a step-up over the post-money A round. Valuations vary greatly. You might be trying to raise \$10M on a \$30M pre-money valuation. Now the size of the VC matters. If they invested \$3M in the A round and now need \$10M for the B round, if their fund is only \$75M then \$13/\$75 would be 17% of their fund in one investment, which may have a limit of 10%. They must now find other VCs to syndicate. In 2023, we may see flat to down rounds or “dirty” term sheets.
- Most early-stage VCs would like every investment to have a chance of returning the fund. If you have a \$100M fund, then you are looking for your ownership percentage of the firm at exit to be worth \$100M. If the VC owns 20% at exit, then the exit needs to be \$500M. Do they think the firm can create a \$500M exit in 5-7 years? For a \$100MM fund in Austin, this would be great, but for a \$1B fund in SF, it barely moves the needle.

Key VC Terms

- **Pre-money valuation**
- Post-money valuation
- Milestones or benchmarks to funding
- Down Round and Pay-to-Play
- ARR, MRR, CAC, LTV, Churn, Cash Burn rate
- **Option Pool**
- Cap table - Ownership - Accredited Investors? Dead weight?
- Waterfall – Upon sale, how much would each series and type of investor receive.
- **Anti-dilution provision – Full ratchet, broad-based weighted average**
- **Liquidation preferences – 1x, 2x**
- **Protective or Control Positions**
- Founder Stock and Option Pool **Vesting Schedules** (common stock)
- Participating vs. Non- Participating Preferred Stock (VC's), Dividends – Cumulative?
- Network Effects, Proprietary Position,
- Capital Efficient business model, Extending the runway
- **Board Composition and number of positions (1/1/1 or 2/2/1)**
- Officer Positions – Replace CEO/CFO/CIO/CMO?

How are mature companies valued in your industry?

- **Multiple of revenues, ARR, MRR?** Do the multiples change based on growth rate and size of revenues?
- **Multiple of Earnings before Interest, Depreciation, Amortization and Taxes (EBITDA)?** Do the multiples change based on EBITDA as a percent of revenue, size/amount of EBITDA, and growth rate of EBITDA?
- **Multiple of Net Income or a Price/Earnings (P/E) ratio?** Do the multiples change based on net income as a percent of revenue, amount of net income, and growth rate of net income or Earnings per Share (EPS)?
- **Multiple of Free Cash Flow (FCF)?** Operating cash flows less CAPEX. Do the multiples change based on the amount and growth of FCF?
- Depending on your answer, it might make sense to use outside capital (debt or equity) to accelerate your growth of revenues, EBITDA, Net Income or Free Cash Flow to generate a higher value, especially if you intend to exit the business in the near future.

Private Equity

- Private Equity firms invest in mature companies rather than startups. Most of the time PE shops will do control investments (buyouts where they own controlling interest) but some may do non-control growth capital. Management buyouts where the PE firms backs the current management team as part of the succession plan.
- Most of the time the seller is represented by an intermediary (investment bank or business broker) who will put together a book on the company (including comps) and then conduct an auction. The broker may approach both financial and strategic buyers to bid on the company.
- The buyer will usually want the seller to roll over some of their shares (20-25%) and then the buyer will purchase the remaining interest in the company through a combination of debt, equity or seller financing.
- The buyer may want an employment contract, a non-compete agreement, and reps and warranties from the seller and their can be an escrow account for post-closing adjustments.
- Earnouts (performance-based contract) are a way to bridge valuation gaps but many end up in litigation.

Key Private Equity Terms

- Adjusted EBITDA
- Valuation Multiple
- Debt to EBITDA ratio
- Loan Covenants or Covenant Light
- Recapitalization
- Sponsor
- Auction or Process
- Proprietary Deal Flow
- Benchmark Returns
- Asset vs. Stock Purchase
- Roll-up or Bolt-on Acquisition
- Club Deal or Syndication
- Corporate Carve Out or Management Buyout (MBO)
- Enterprise Value (Equity + Net Debt) and Net Debt (Debt – Cash)
- Letter of Intent (LOI) vs. Purchase Sale Agreement
- Hair on the Deal – risk factors such as Key Person, Concentration of customers or suppliers, regulatory risk
- Section 338 (h) 10 election – treat stock sale as an asset sale

<http://www.allenlatta.com/glossary-of-private-equity-terms.html>

Venture Capital and Private Equity for Ag Related Companies

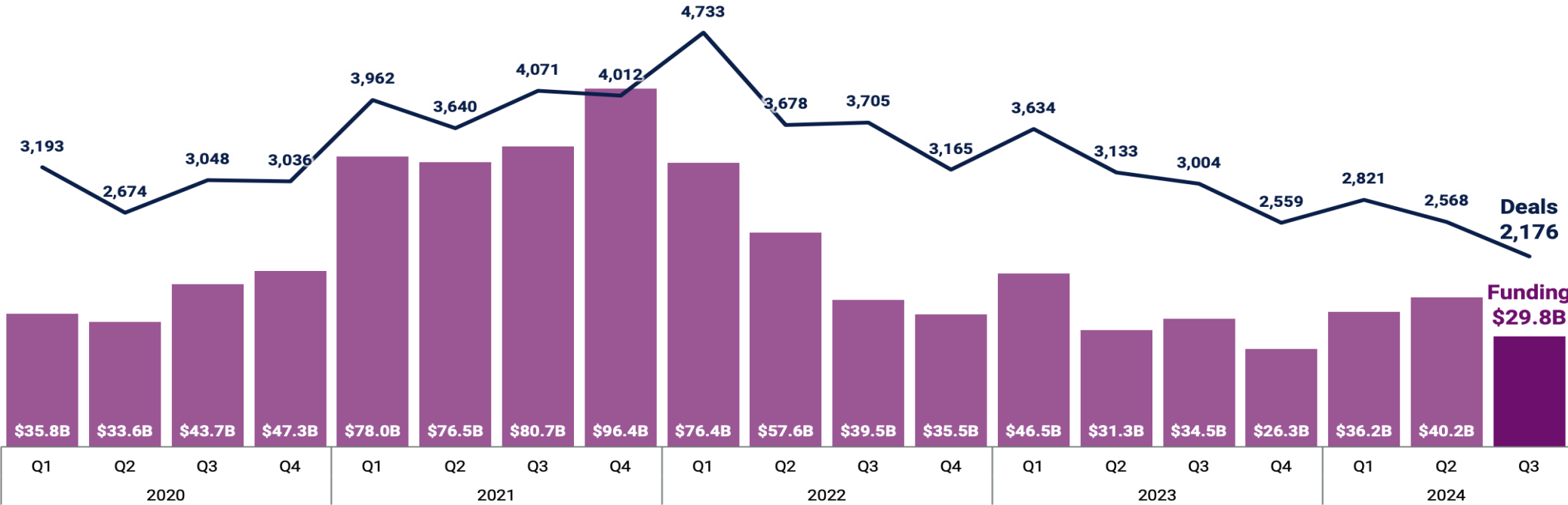
S2G Ventures	USA	VC fund platform focused on sustainable food production, aquaculture, and clean energy, backed by the Walton family	Multi-stage	35 (7 new investments)	Faeth Therapeutics , Atomo Coffee , Soli Organic
Siddhi Capital	USA	Food and beverage growth equity firm	Growth	35 (all new investments)	Ark Biotech , Liberation Labs , Mycotechnology
AgFunder	USA	Digitally native VC using media, network effects, and technology to invest in exceptional founders and transformational foodtech and agtech.	Seed to Series A	30 (25 new investments)	Black Sheep Foods , Faeth Therapeutics , Nobell Foods
Thrive - SVG	USA	Thrive Accelerator, which focuses on identifying and accelerating start-ups in the food and agtech sectors.	Early Stage Accelerator	239	Algi, Green Feed Solutions, Beekeeping Innovations
SOS Ventures	USA	companies operating in food supply chain solutions,	pre-seed, seed, series A-plus, and growth-stage	895	Tomtex
Paine Schwartz Partners	USA	sustainable food chain investing	Buyout & growth Equity	86 (\$5.8 billion AUM)	Monterrey Mushrooms, Urban Farmer, Elemental Enzymes

Quarterly Venture Funding

Fundings are slowed in 2023 and 2024 after historic 2021 levels

State of Venture | Geographic Trends | US Trends

Quarterly funding & deals



Business Valuation

Businesses are valued similar to a real estate appraisal.

- **Cost Approaches**

- Replacement cost of the assets – Value in Trade or Liquidation

- **Market Value Approaches**

- Precedent Transaction Comparables or Guideline Public Comparable company multiples
 - P/E ratio, Price/Book, Enterprise Value/Revenues, Enterprise Value/EBITDA

- **Income or Discounted Cash Flow Approaches**

- Present Value of the future Income or Free Cash Flow
- Leverage Buyout Value

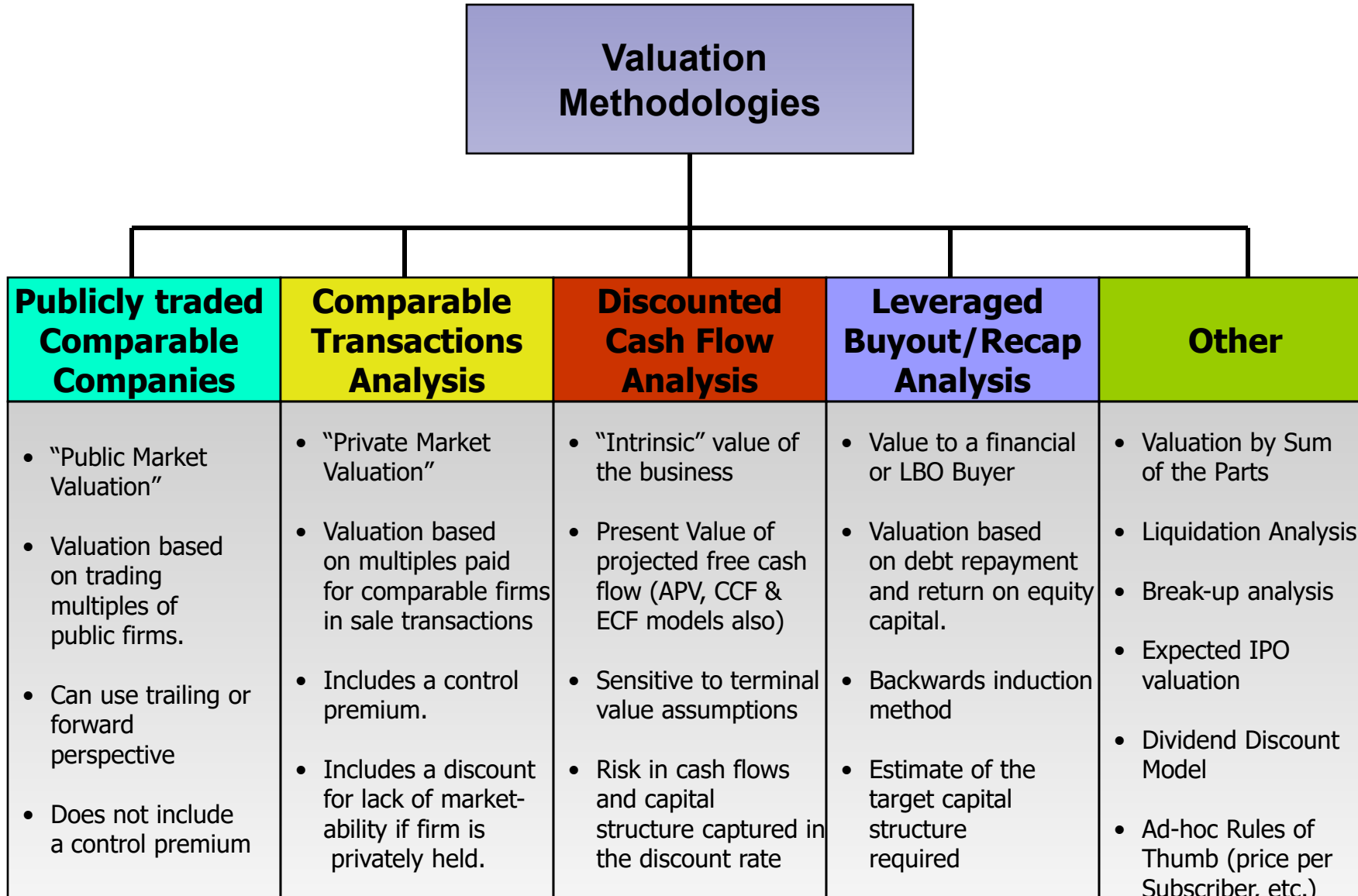
Business Valuation

- A business valuation may value the:
 - Value of the Assets being purchased, free and clear
 - Enterprise (Equity Value + Net Debt) (Net Debt = Debt - Cash)
 - Equity (market capitalization of the equity) (Price x # Shares)

- Purpose of the valuation
 - Liquidation Value
 - Going Concern Value

- Other Valuation methods
 - Stand-Alone Value plus Synergies (M&A)
 - Sum-of-the-parts valuation
 - Break-up valuation
 - LBO Valuation

Valuation Methodologies



Comparable Company Analysis

- Using similar public guideline companies or transaction multiples, a company can be valued based on a relative basis based on the price of similar companies. Multiples may include:
 - **Enterprise Value / Revenues**
 - **Enterprise Value / EBITDA** EBITDA will be adjusted for non-recurring income and expenses.
 - Enterprise Value / EBIT
 - Price / Earnings
 - Price / Book Value

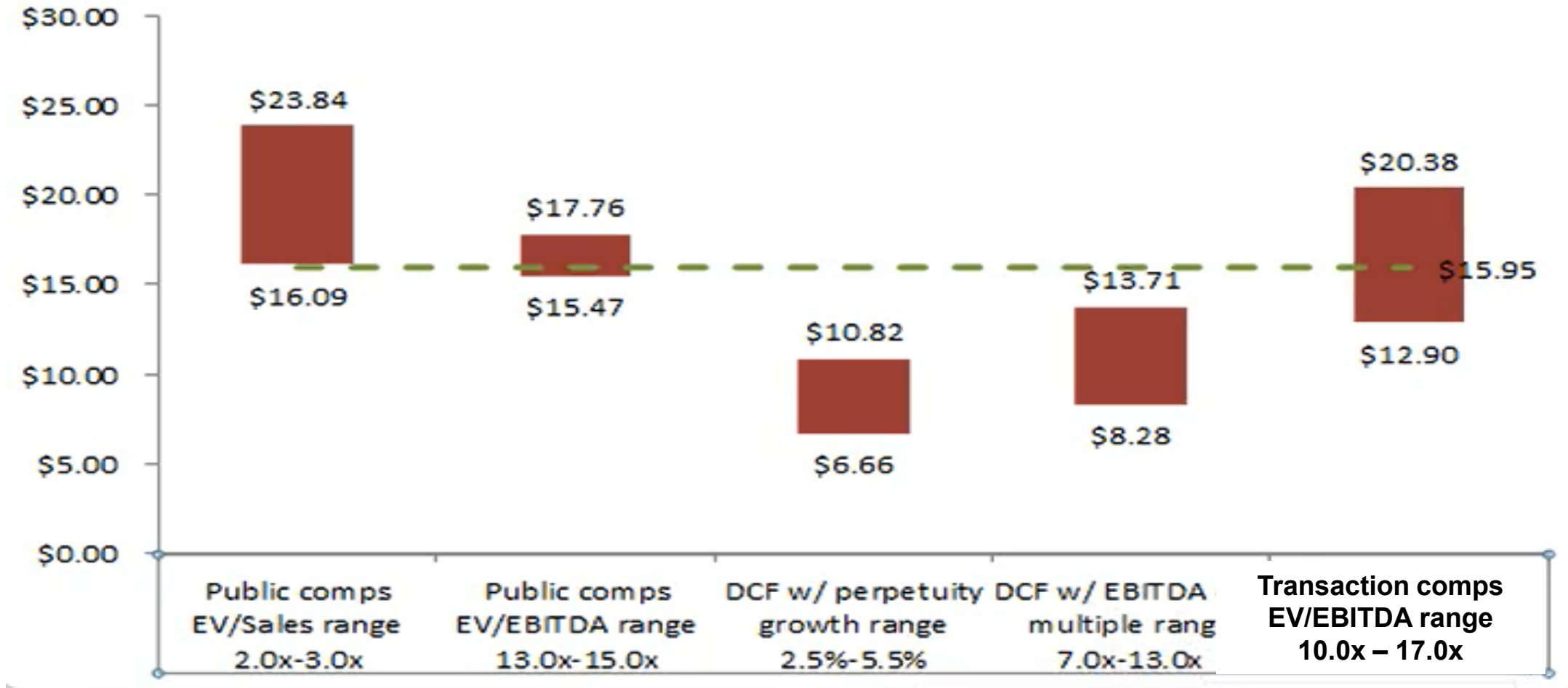
- A football field of the resulting values of each multiple may be drawn and the different valuations averaged.

- <https://www.eval.tech/valuation-multiples-by-industry>

Football Field

Range of Values based on Valuation Techniques

Valuation chart

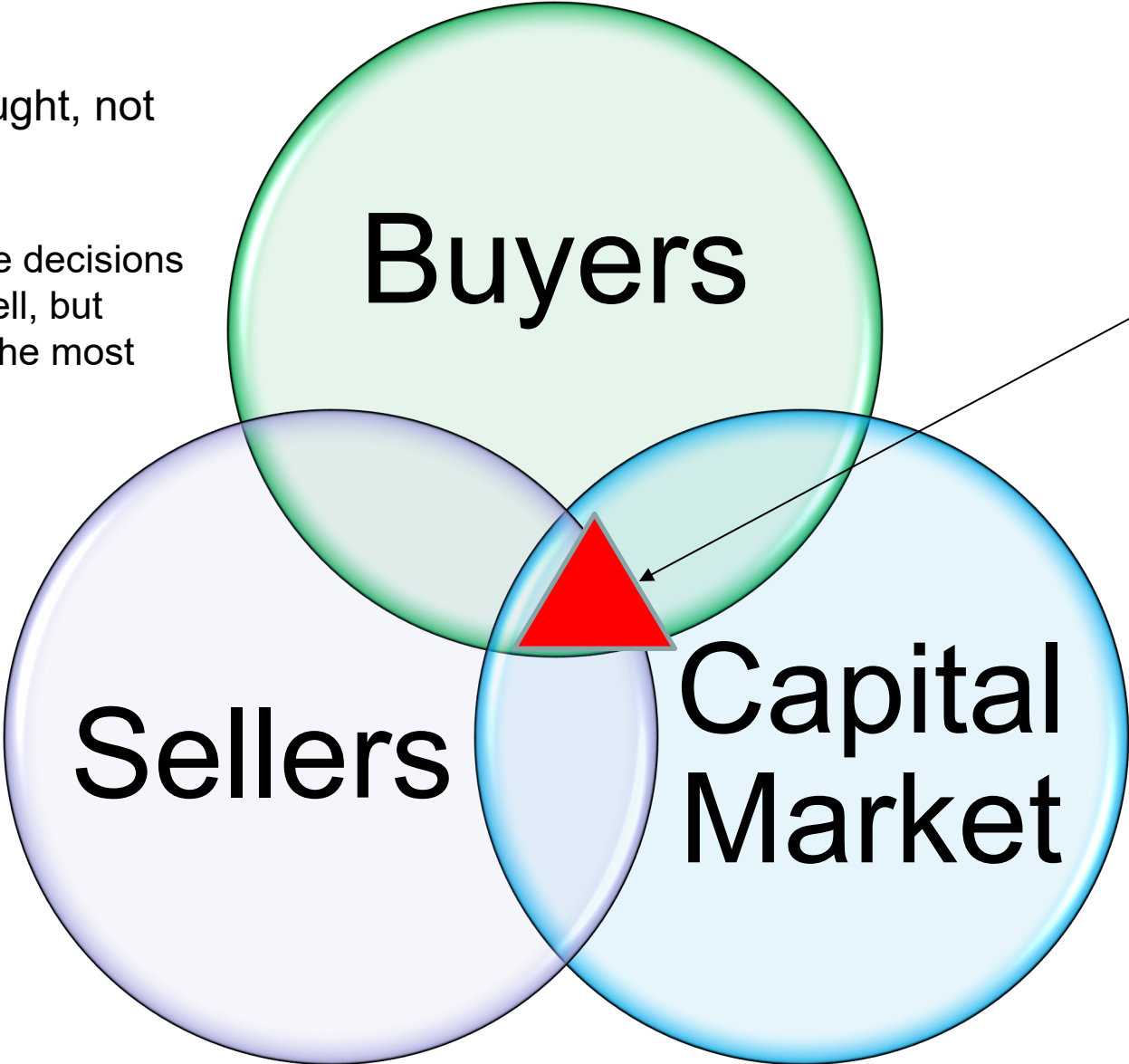


Components of the M&A Market

“Good companies are bought, not sold”.

Run your company and make decisions as if you were not going to sell, but prioritize decisions that add the most value to the firm.

Biggest challenge for sellers is explaining the positive or negative effects of COVID. PPP loan forgiveness should be eliminated from EBITDA.



Hot Market

- Lots of liquidity and many Buyers (financial and strategic) chasing deals
- Motivated Sellers coming off good financial performance with high valuations
- Low financing costs with easy terms to help facilitate transactions

Buyer Beware - Typical Risks in Small Business

- Key person risk / mis-evaluation of management team
- Poor accounting records (quality of earnings) – follow the cash
- Concentration of customers
- Concentration of suppliers
- Key employee retention/succession plan
- Customer retention
- Obsolete inventory
- Bad debts in the receivables
- Building/Equipment not up to code (not reinvesting in the business)
- Lack of systems and institutionalized knowledge
- Unknown liabilities (environmental, product, warranty, employment, taxes)
- Regulatory or Compliance risk
- Reputational risk / Branding mistakes
- Challenges to integrate the business
- Overleveraging the purchase
- Believing the problems are just with the seller rather than systematic.

Maximizing Value - Value Drivers

- You want the size of the pie to get larger with your decisions.
- The levers management can influence to change the value of the firm.
 - Profitability (increase revenues, decrease expenses, decrease taxes)
 - Asset Efficiency (working capital management and PP&E utilization)
 - Leverage (use of debt to increase returns to shareholders and lower WACC if the return on assets of the firm exceeds the cost of debt)
 - Growth (scaling, market share)
 - Organic (new products & projects, customers, territories) vs M&A strategy
 - Risk (affects the discount rate or WACC)
 - Business Risk- market risk (competition, sensitivity to economy, competition)
 - Financial Risk – use of debt
 - Time – sooner money is more valuable than later money due to opportunity costs and time value of money.

- **Income or Discounted Cash Flow Approaches**
 - Firm Free Cash Flow
 - Discount Rate

- **Market Value Approaches**
 - Guideline Public Multiples
 - Precedent Transaction Multiples

- **Other valuation approaches**
 - Dividend Discount Model
 - Sum-of-the-Parts
 - LBO Valuation
 - Replacement cost of the assets – Value in Trade or Liquidation

Cash Flows to Investors

The total value of a business (firm), V_F , equals the present value of the firm's free cash flows (FFCF) that the firm is expected to provide investors (both debt and equity), discounted by the firm's weighted average cost of capital (WACC)

$$V_F = \sum_{t=0}^{\infty} \frac{FCFF_t}{(1 + WACC)^t}$$

where:

t is the period in which the cash flow is received.

- **The cash flows that investors (both debt and equity) expect to receive from their investment in the Company are called the Company's free cash flows (FFCF's)**

Calculation of FFCF	
Net Revenue	
- COGS & Operating Expenses	
<hr/>	
= Earnings Before Interest, Taxes, Depreciation & Amortization (EBITDA)	
- Depreciation & Amortization	
<hr/>	
Operating Income (EBIT)	
- Taxes	
<hr/>	
= Net Operating Profit after Tax (NOPAT or EBIT(1-T))	} Managing the Income Statement
+ Depreciation & Amortization	
- Additions to Net Working Capital	} Managing the Balance Sheet
- Capital Expenditures	
<hr/>	
= Company's Free Cash Flows (FFCF)	

Free Cash Flow

- Companies are valued based on the expected future free cash flows (FCF), discounted at the Company's weighted average cost of capital (r).

$$V_F = \frac{FCF_1}{(1+r)^1} + \frac{FCF_2}{(1+r)^2} + \frac{FCF_3}{(1+r)^3} \dots \frac{FCF_n + TV_n}{(1+r)^n}$$

Where: V_F = Value of the Company; r = discount rate or Weighted Average Cost of Capital (WACC); and TV = Terminal Value in period n .

- The components of *free cash flow (FCF)* are:
 - Net operating profit after tax (NOPAT)* * NOPAT = EBIT (1- T_c) or Earnings before Interest but after taxes
 - + Depreciation and Amortization (Non- Cash Expenses)
 - Net Capital Expenditures (CAPEX)
 - +/- Changes in Net Working Capital (ΔNWC)
 - = Company Free Cash Flow
- Thus, management of the Company's income statement and balance sheet affect free cash flow and the value of the enterprise and equity.

Terminal Value

- Most Companies have a five-year planning horizon. Thus, they will project revenues, expenses, assets, and liabilities for 5 years from which the Company Free Cash Flow for each year is derived.
- Since most Companies cannot calculate with accuracy beyond this horizon period, they will estimate the free cash flows in year 6 into perpetuity by taking year 5's cash flow, multiplying by (1+g) to get year 6's cash flow and then capitalize this into perpetuity using a perpetuity cap rate (r - g)

$$TV = [FCF_n (1 + g)] / (r - g)$$

- Perpetuity growth (g) is usually close to the growth of real GDP + expected inflation or around 3 - 4%.
- As an alternative estimate, investment banks often use a comparable multiple (such as an EBITDA multiple) for TV to estimate what the company could be sold for in the final year.

Valuing the Company - Discount Rate

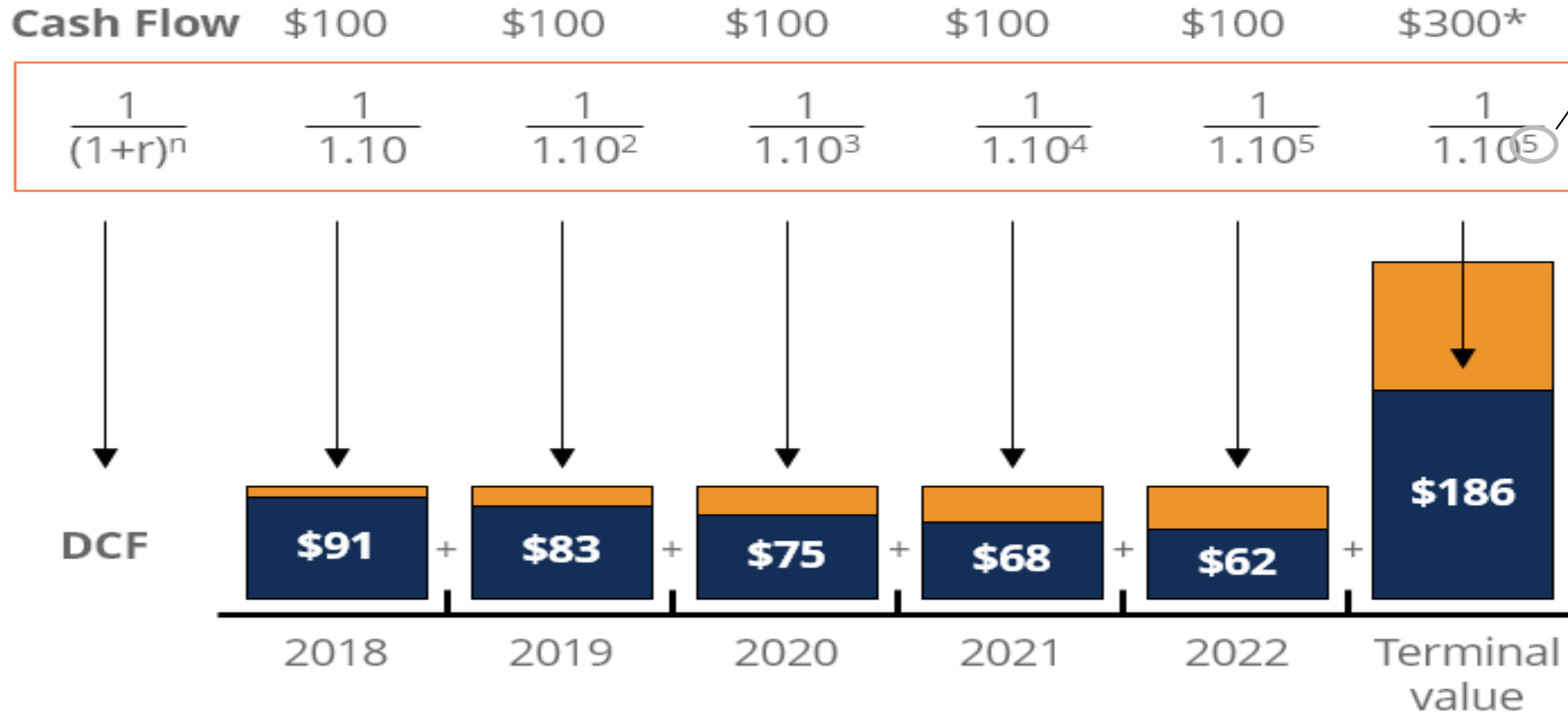
$$V_F = \frac{FCF_1}{(1+r)^1} + \frac{FCF_2}{(1+r)^2} + \frac{FCF_3}{(1+r)^3} \cdots \frac{FCF_n + TV_n}{(1+r)^n}$$

- FCF is the projected annual Free Cash Flow and TV is the terminal value.
- “r” is the required rate of return. It is the expected return of the debt holders and stockholders based on their perception of the riskiness of the future cash flows. This is why we do not include financing cash flows in the numerator.
- For valuing the Company, we can use the *weighted average cost of capital* (WACC) which is the cost of debt (adjusted for the tax shield) and the cost of equity, weighted by the proportion of capital used in the capital structure to finance the Company.

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

DCF Valuation at 10% Example

Discounted Cash Flow Formula



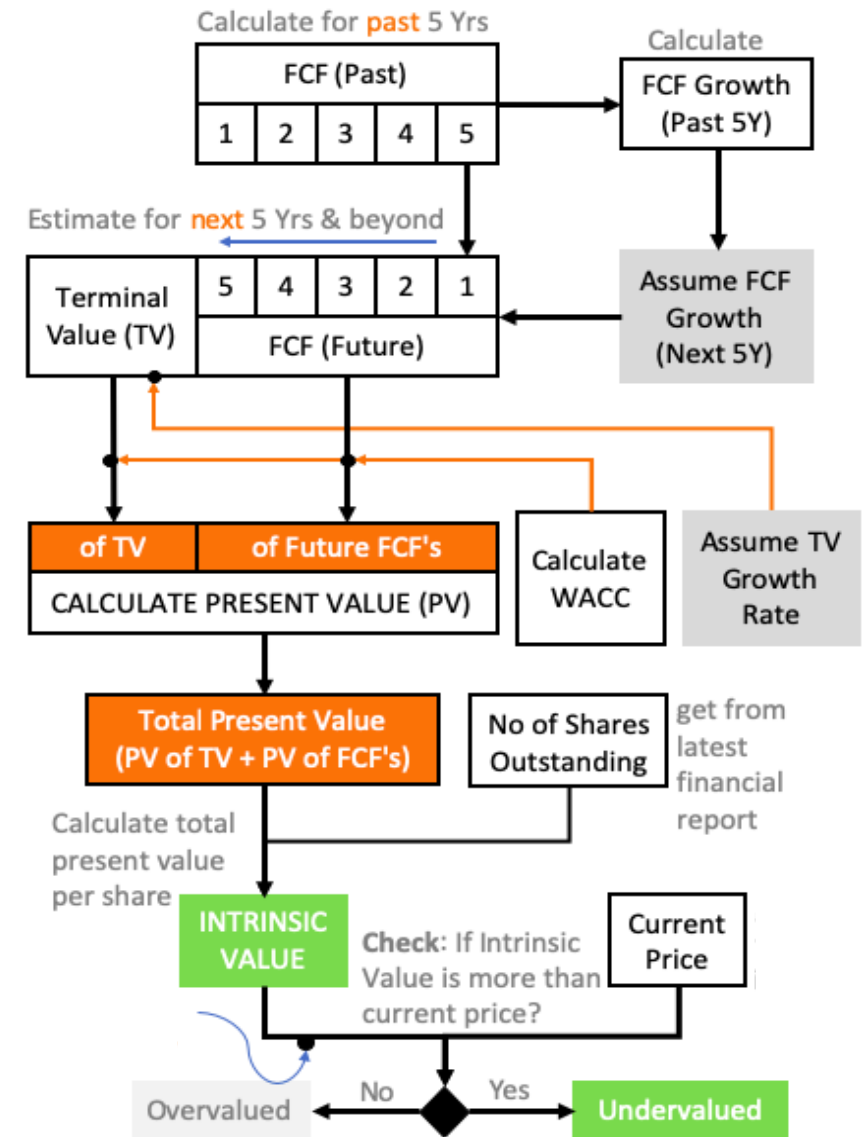
We discount the Terminal Value in year 5 because we want the present value at the end of year 5 of all the future cash flows in year 6 and beyond. Then we discount that 5th year terminal value back to period 0.

DCF Value = \$565 million

* Value of FCF beyond 2022

Company vs Equity Valuation

- Discounting the future Company free cash flow produces the value of the **Company** (debt + equity) or Enterprise Value.
- Subtracting the value of the debt of the company produces the value of equity or market capitalization (market cap).
 - $V_{\text{Equity}} = V_{\text{Company}} - V_{\text{Debt}}$
- Dividing by the number of shares will produce the price per share of the company.



- **Discounted cash flows are affected by:**
 - Amount and Timing of the Cash Flows (**Operating Decisions**)
 - Operating Profits (Revenues less Expenses)
 - Tax Rate
 - Depreciation (Non-Cash, Recovery of CAPEX)
 - The Utilization of Assets (**Investment Decisions**)
 - Cash Conversion Cycle
 - Fixed Asset Utilization (CAPEX)
 - Capital Structure and Dividend Policy (**Financing Decisions**)
 - Weighted Average Cost of Capital (Discount rate)
 - Terminal Value Assumptions
 - Perpetuity growth rate

- **Income or Discounted Cash Flow Approaches**
 - Firm Free Cash Flow
 - Discount Rate
 - Frictionless Model
 - WACC

- **Market Value Approaches**
 - Guideline Public Multiples
 - Precedent Transaction Multiples

- **Other valuation approaches**
 - Adjusted Present Value
 - Dividend Discount Model
 - Flow-to-Equity Model
 - Sum-of-the-Parts
 - LBO Valuation
 - Replacement cost of the assets – Value in Trade or Liquidation

Comparable Company – Relative Value

- **The relative value of a company can be estimated by comparing it to the value of similar companies.**
 - **Guideline Public Companies** - Since the firms are public, the pros of this methodology are that the information is easy to find and the value is current. The cons are that the firms could be dissimilar (larger, more diversified, different products, growth rates, etc.) and their stock price reflects liquidity in the security for a minority block of stock.
 - **Precedent Transactions** – transaction prices paid by willing buyers and sellers of similar companies. The cons of this methodology are that getting private information is difficult and the transaction date could be stale. The transaction price may reflect synergies, control premiums and discounts for lack of marketability. The pros could be that the companies are more similar to the target company.

Valuation Ratios

- Several ratios are used to value assets
 - **Equity Value** (Stock Price) Multiples ($\text{Market Cap} = \text{Price/Share} \times \# \text{ Shares}$)
 - P/E
 - PEG
 - P/BV
 - **Enterprise Value** Multiples ($\text{Enterprise Value} = \text{Market Cap} + \text{Net Debt}$)
 - EV/EBITDA
 - EV/FCF
 - EV/Revenues
 - EV/EBIT

- The choice of which ratio to use depends on the type of firm that is valued, and the choice of comparables
 - For mature companies, M&A Professionals tend to use the EV/EBITDA ratio.
 - Mom and Pop businesses are valued by business brokers as a multiple of Seller's Discretionary Income (SDI) which is $\text{EBITDA} + \text{Owner Comp} + \text{Benefits}$.

Multiples Approach

		Comparables			
		B	C	D	E
EXAMPLE	Target A				
V	?	\$40	\$50	\$100	\$15
EBITDA	\$18	\$10	\$15	\$20	\$5
MULTIPLE	3.83	4	3.3	5	3

← Avg.

Solve for $V_A = 3.83 \times \$18 = \68.94 Enterprise value since EBITDA was used

$V = \text{Enterprise Value} = \text{Value of Equity} + \text{Net Debt}$

Sum of the Parts Valuation

- Conglomerates and Multi-National firms may require that you value different business units separately and then add the value of the parts to get the value of the whole.
 - If using DCF analysis, the riskiness of the cash flows could be different and thus the cash flows should be discounted at different rates.
 - The different business units could be in different industries where the volatility of cash flows affected differently by macro-economic conditions, competition, etc.
 - The different business units have different risks based on geographic location (country risk, political risk, currency risk, etc.)
 - If using Comparable Multiples, then different segments may have different multiples based on the profitability and growth of the various segments.

SEMPRA Valuation | Sum-of-the-Parts Example

Analyst Consensus	Min	Average	Max	Methodology	Avg % of Total
SDG&E	\$36.59	\$50.72	\$56.91	19.5x P/E	
SoCalGas	\$38.16	\$42.35	\$48.81	21.0x P/E	
Texas Utilities	\$39.11	\$43.06	\$44.59	20.3x P/E	
U.S. Utilities	\$129.04	\$136.13	\$143.19		85%
ENova	\$14.34	\$15.77	\$19.74	Market Value	
LNG	\$23.30	\$30.80	\$45.33	DCF EV/EBITDA	
Sempra Infrastructure	\$37.82	\$46.57	\$65.07		30%
Parent	(\$43.29)	(\$24.43)	(\$15.15)	19.9x P/E	(15%)

Price Target	\$144	\$160	\$170
---------------------	--------------	--------------	--------------

Note: Consensus includes 5 analysts, and each segment and corporate group minimum, average, and maximum may reflect different analysts; subtotals and price target won't add

LBO Analysis

- LBO Analysis approaches the valuation based on what kind of financing a purchaser might be able to obtain in making the acquisition.
- Assume the target firm has EBITDA of \$20 Million.
- If the current market is allowing firms to leverage a company with 4 times EBITDA of senior debt and an additional 2 turns of EBITDA in subordinated debt, then a buyer might get 6x EBITDA in total leverage. The buyer could borrow up to \$120 million in debt (6 x \$20M).
- If financial sponsors are putting in 40% equity into deals, then they would contribute \$80 million ($\$120 / (1 - .40) = \$200M - \$120M = \$80M$). Thus, the enterprise value of the firm would be \$200 million or 10x EBITDA with debt at 6x and equity at 4x EBITDA.
- Can the company service \$120 M in debt with \$20M in EBITDA?

Cost Approach

- The Cost Approach (also called Liquidation, Accounting or Book-Value-based Valuation) uses book values to proxy for the market value of the company. A company can be viewed as a collection of assets.
 - Pros:
 - You can easily find in on the balance sheet but are based on historical cost, not current market value. Get Appraisals.
 - Cons:
 - Only applicable to mature companies with mostly fixed assets, little or no growth and in a perfect competitive market.
 - Extractive Industries and Financial Firms may also trade based on a cost approach and **quality of the underlying assets**. Banks trade at multiples or discounts to book. The reserves of an oil company may be the primary asset.
 - Highly inaccurate (ignores growth opportunities, intangible assets/brands, human capital).

Final Words

- With the Federal Reserve trying to fight inflation by raising interest rates and trying to slow the economy, capital costs (both debt and equity) have gotten much more expensive in 2023-2024. Now the Fed is starting to ease rates, but inflation is still sticky.
- Banks were expecting an economic downturn and have tightened lending standards. Many businesses cannot support the higher interest rates and their profit margins may be squeezed with rising costs and tight labor markets. The failure of several large regional banks have regulators putting more pressure on lenders. An increase in default rates or bankruptcies would make it worse.
- Venture Capitalists have turned their attention to managing their portfolio companies rather than aggressively seeking new investments. They have advised their portfolio companies to focus on a pathways to profitability rather than growth at all costs, to extend their runways to make capital last (i.e. layoffs), and avoid raising additional capital as it will probably be at a lower valuation (down round) and dilute the existing shareholders.
- The next big crisis may be **commercial real estate collapse**, especially in office and retail sectors. If your property was valued at a 4% cap rate and now cap rates are 8%, your real estate is worth half of what it was assuming you maintain occupancy and rental rates. Remote and hybrid work and on-line shopping are killing these sectors. If job growth slows (tech sector), so will residential housing demand and real estate prices.

Final Words

- Lastly... Be careful of loan sharks and brokers who want you to pay them fees upfront or have onerous terms. When money gets tight and companies get desperate, it is easy to take advantage of the situation. If you have to pay fees, make it contingent on actually raising the money.
- Your most valuable asset is your reputation and your credit. Be honest and transparent with customers, lenders and investors. No one likes unexpected surprises.
- The one creditor you shouldn't mess with is the IRS. Make sure you stay current on your payroll, sales and income taxes.
- It also may not be the optimum time to sell your business, as valuations are lower and financing is harder to obtain. Good companies are bought, not sold. Hunker down and ride out the storm.
- Think about forming an advisory board or directors. Pick people who can give you a different point of view or insights into the economy, the industry, and be the sounding board for important decisions. (Most will be willing to meet once per quarter for an hour or two and may not need significant compensation, but rather like helping you and your company grow.)
- Get referrals. Ask other small business owners who they use for their banker, accountant and lawyer and how happy they are with them.

Thank you for your participation. Good luck with your businesses.

Jimnolen@utexas.edu