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Don't sweat the small stuff: A big picture perspective on corporate finance

Aswath Damodaran

The Lead in…

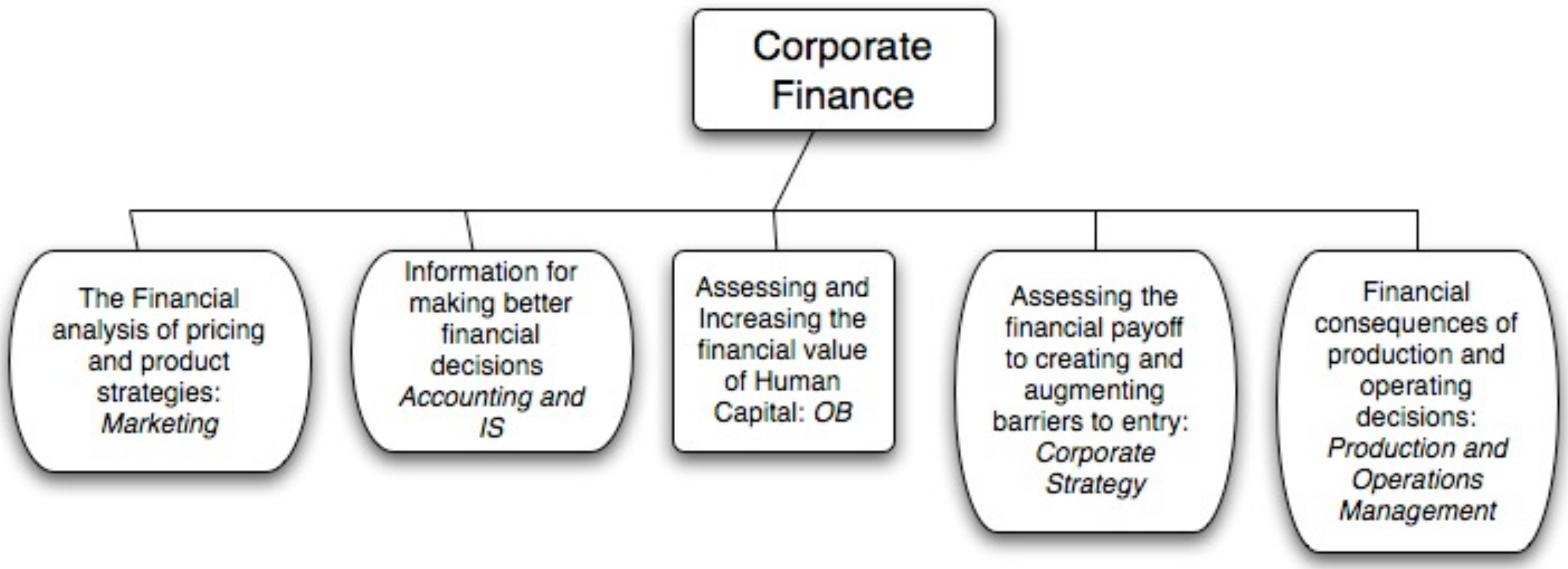
#6 New York Mets

TEAM VALUE [1]	$2.9B Calculated March 2023
OWNER(S)	Steve And Alexandra Cohen
CHAMPIONSHIPS	2
YEAR PURCHASED	2020
PRICE PAID	$2.4B
REVENUE [2]	$374M
OPERATING INCOME [3]	-$138M
DEBT/VALUE [4]	16%
PLAYER EXPENSES [5]	$288M
GATE RECEIPTS [6]	$122M
WINS-TO-PLAYER COST RATIO [7]	67
REVENUE PER FAN [8]	$34
METRO AREA POPULATION	19.8M
MEDIA PARTNERS	Tv: SNY, Pix 11; Radio: WCBS 880-AM

Revenue and operating income are for 2022 season and net of revenue sharing and stadium debt service.

Lesson 1: Every business decision is ultimately a financial one

- Every decision that a business makes has financial implications, and any decision which affects the finances of a business is a corporate finance decision.
- Defined broadly, everything that a business does fits under the rubric of corporate finance.



So, watch out for these justifications

- The "Expert" Cop out: For many firms, the easiest way to explain the unexplainable is to pass the buck and get a consultant/expert to sign off on an action.
- Weapons of distraction: Managers/investors/analysts seem to find ways of over riding the numbers with buzz words. Here are some to watch out for:
  - "Gut feeling" or "Intuition": Older, more experienced managers often claim to have a gut feeling about decisions. Psychological studies of gut feeling find that they are almost never based upon good data, are often completely wrong and get worse as managers get smarter/ more experienced.
  - "Strategic": The word "strategic" almost always goes to describe actions that cannot be justified based upon the numbers…

Weapons of mass distraction in the MLB: The Houston Astros

Mission Statement

The New York Mets' mission statement would provide entertainment to the public by producing a consistently successful baseball program both on the field and in the community.

Lesson 2: Have a destination before you leave: Have a dominant objective that is measurable…

- If you don't have an objective, your decision-making process has no rudder. Each manager will then create his or her own vision of where the business is going, and make decisions based on that vision.
- If you have multiple objectives, you will still have to make choices. If you are not clear about which objective should dominate, managers again will pick their own dominant objectives, leading to them working at cross purposes.
- If you have a fuzzy objective, you are giving no guidance on both how decisions should be made and no accountability for decisions, once made.

What is the objective for an MLB team's management?

Objective 1: To build a viable business (that makes enough money to cover the capital invested in it…)

Constraint: Win as much as you can, given your budget constraints

Objective 2: To win the big prize (World Series, divisional championship, make it to playoffs)

Constraint: Player contracts < Specified limit (<$230 million to avoid tax or Owner specified value, which can be lower than or higher than the MLB limits)

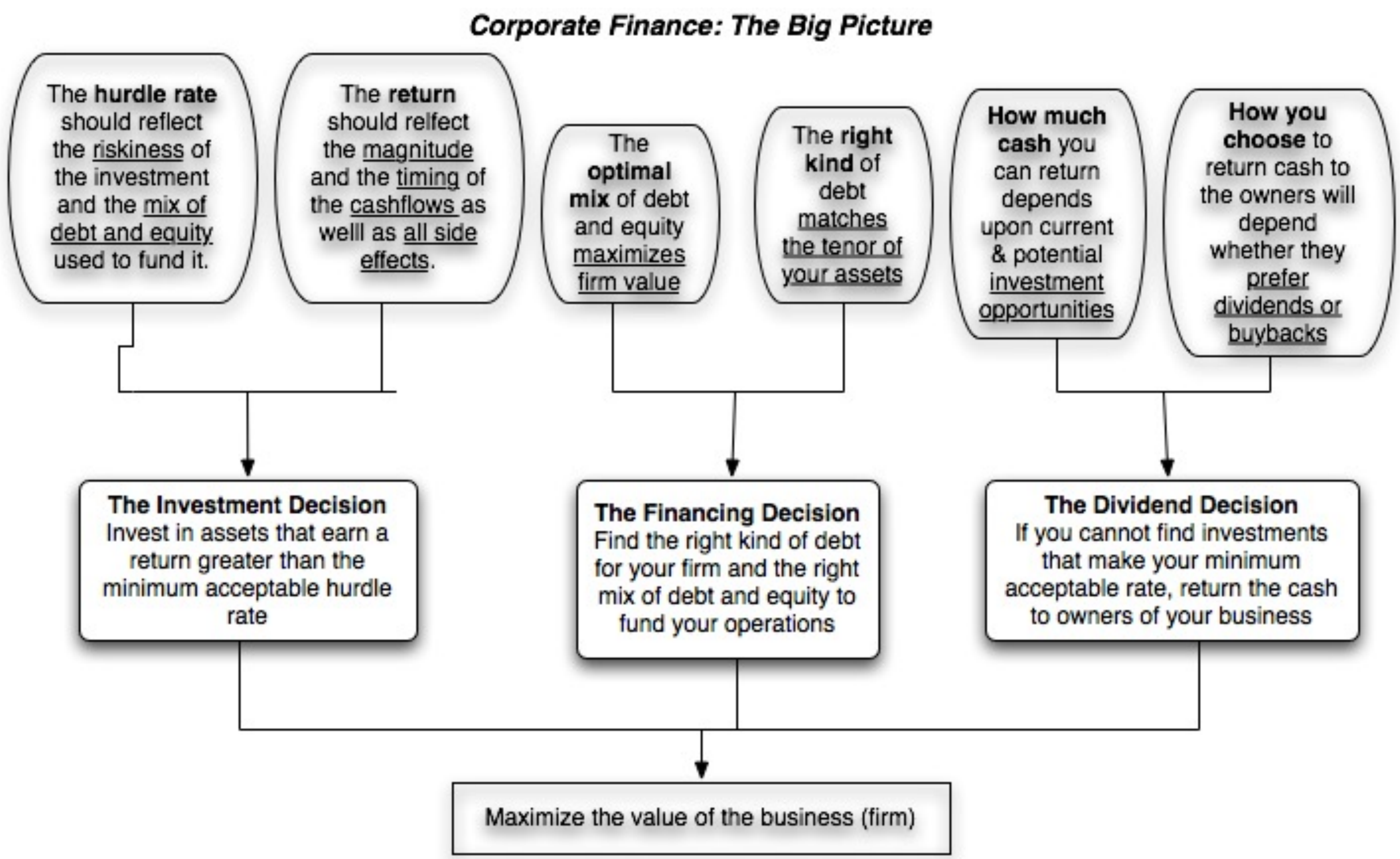
Objective 3: To do just enough (winning, making money) to not get fired

Constraint: Keep owner, fans and players happy enough or not so unhappy that they try to get rid of you…

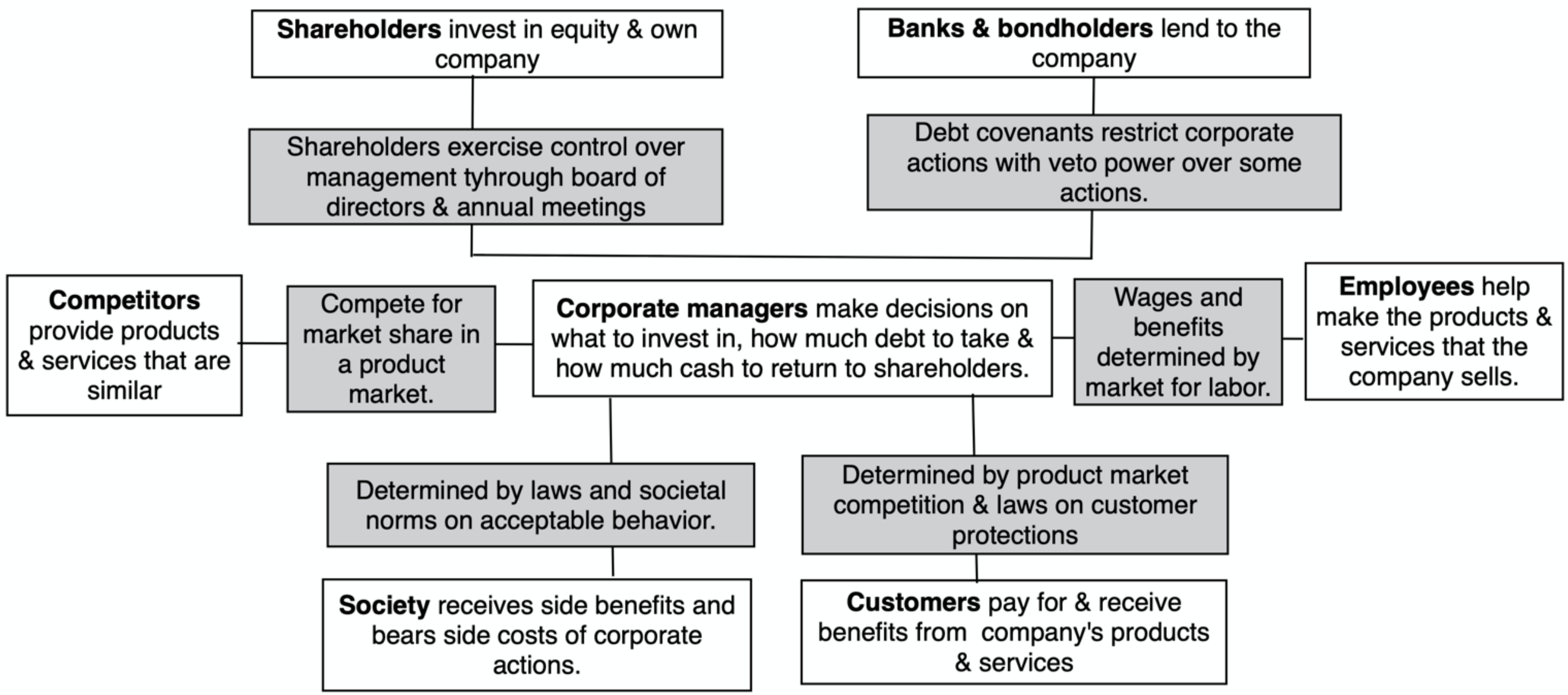
An outsider's guess of the Met's objective?

RANK	TEAM	ROSTER	EST. ACTIVE	EST. INJURED	EST. RETAINED	EST. MINOR	EST. CBT SPACE	EST. TAX PAYROLL	EST. TAX BILL
1	New York Mets	40	$236,543,178	$90,143,333	$32,804,167	$2,917,742	$-148,575,086	**$381,575,086**	$109,117,577
2	New York Yankees	39	$163,355,259	$113,258,650	-	$2,250,000	$-64,095,087	**$297,095,087**	$33,085,578
3	Philadelphia Phillies	40	$187,874,135	$43,972,615	-	$4,050,336	$-25,063,752	**$258,063,752**	$6,000,000
4	San Diego Padres	40	$180,680,011	$42,923,100	$12,280,000	$2,250,000	$-23,299,777	**$256,299,777**	$10,000,000
5	Toronto Blue Jays	40	$201,797,575	$24,993,000	$4,333,333	$2,347,333	$-18,637,907	**$251,637,907**	$4,000,000
6	Los Angeles Dodgers	40	$168,102,900	$35,622,500	$22,537,634	$2,250,000	$-13,679,700	**$246,679,700**	$10,000,000
7	Atlanta Braves	39	$169,713,367	$43,533,333	$10,052,689	$2,877,420	$-11,343,475	**$244,343,475**	$4,000,000
8	Los Angeles Angels	39	$183,869,857	$17,683,333	-	$5,200,000	$2,880,144	**$230,119,856**	-
9	Chicago Cubs	40	$159,815,392	$15,381,000	$23,000,000	$5,031,761	$8,605,181	**$224,394,819**	-
10	San Francisco Giants	40	$142,686,497	$47,778,750	$11,507,742	$2,250,000	$10,610,345	**$222,389,655**	-

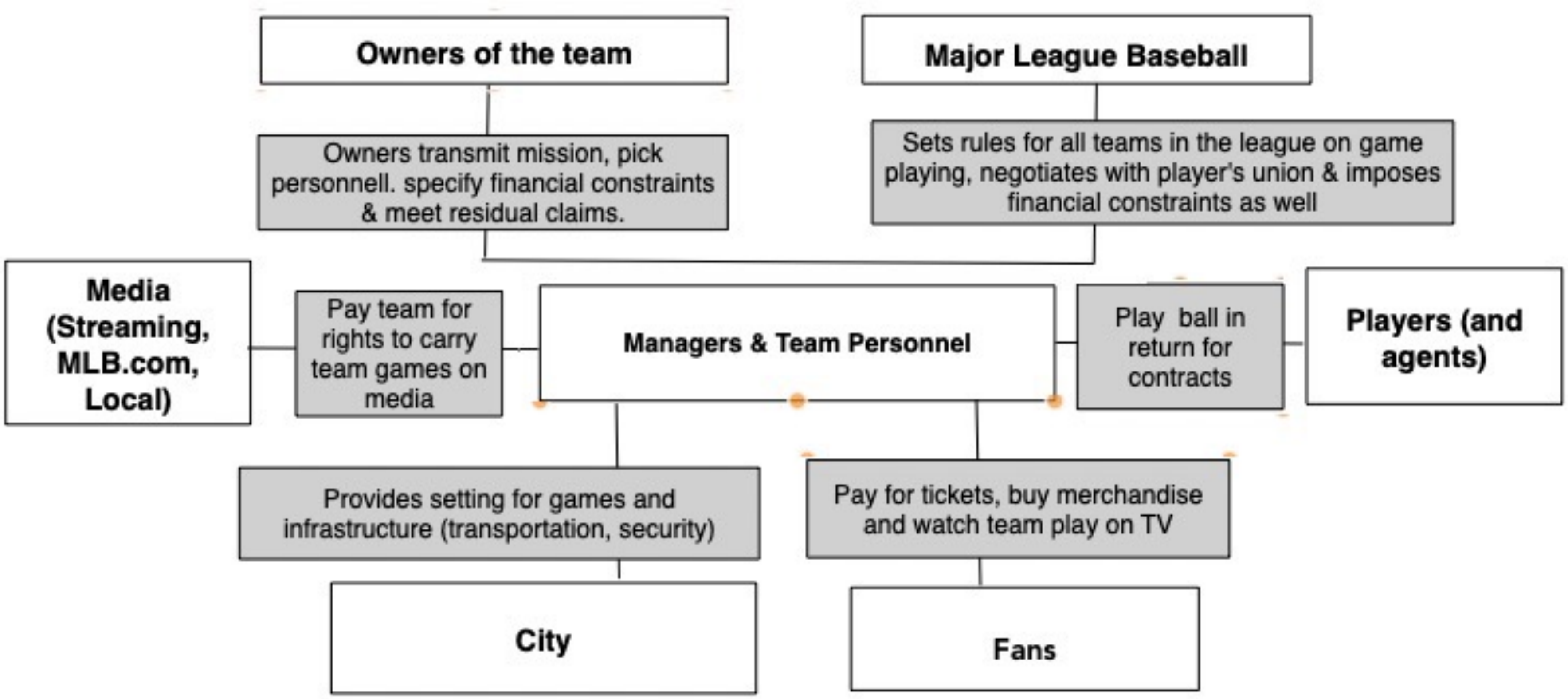
How your objective choice plays out in decision-making?



Lesson 3: In any business, you are juggling conflicting interests..



The stakeholders in an MLB team…



Lesson 4: Understand the essence of risk

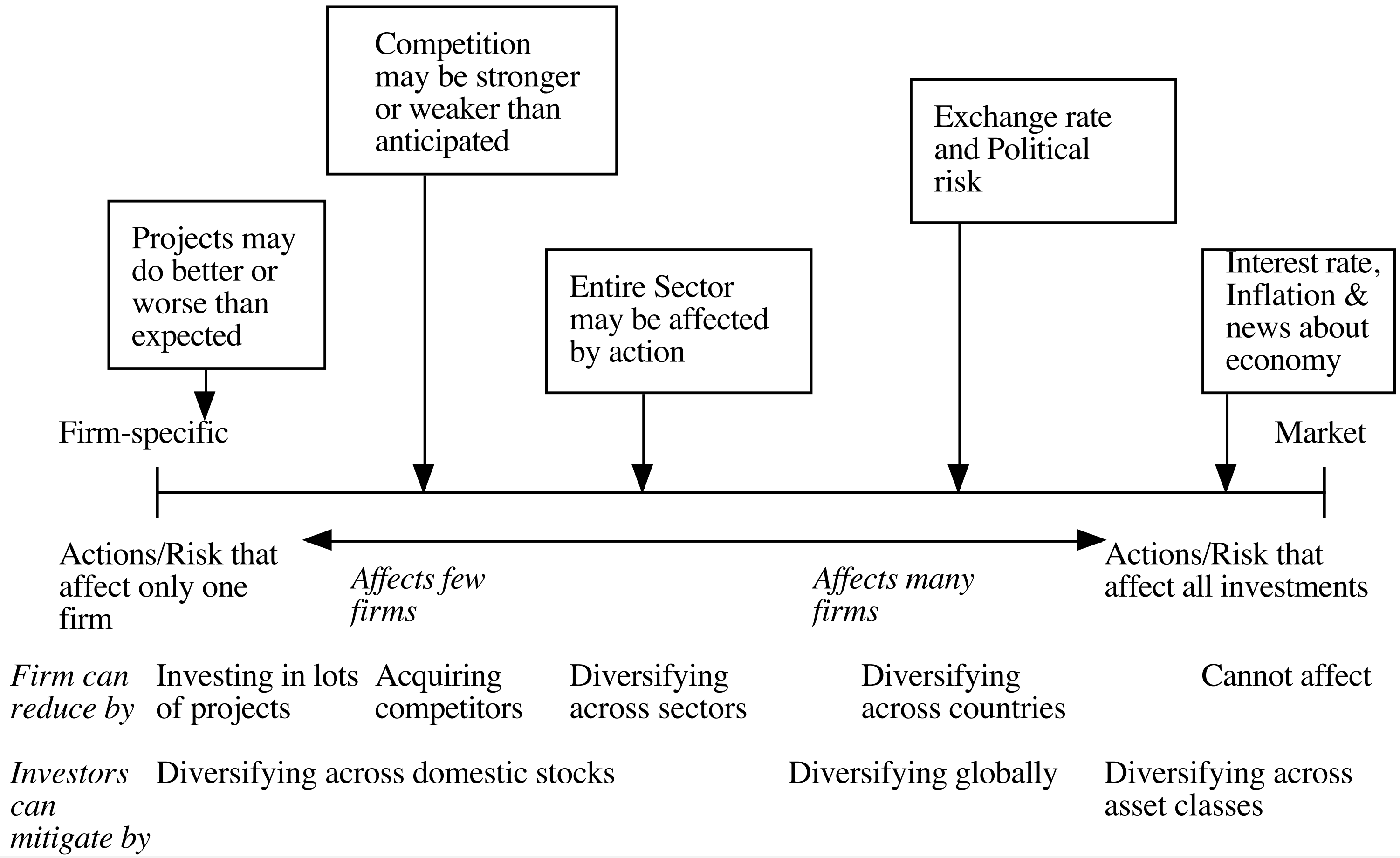
- Risk, in traditional terms, is viewed as a 'negative'. Webster's dictionary, for instance, defines risk as "exposing to danger or hazard". The Chinese symbols for risk, reproduced below, give a much better description of risk:

危機

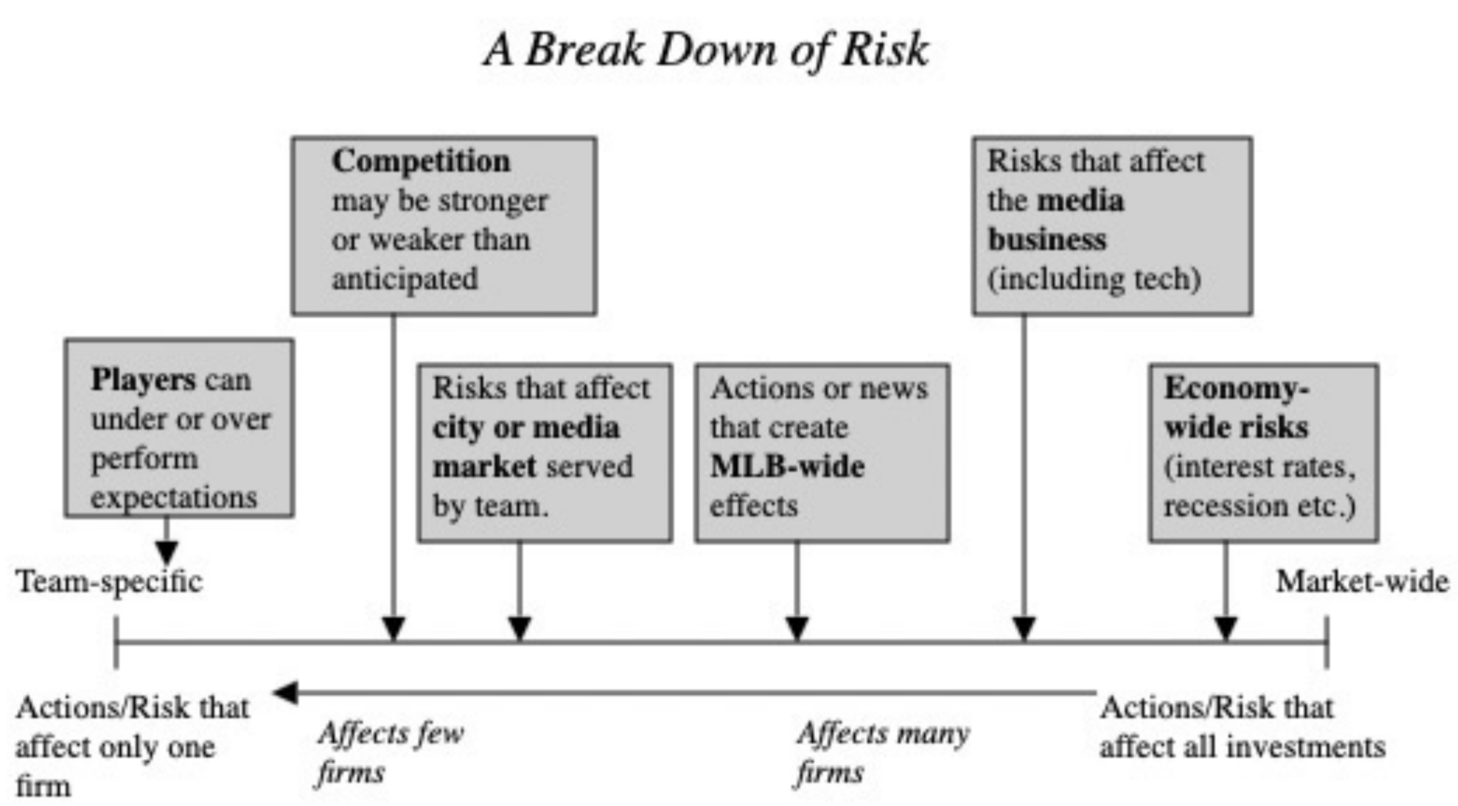
- The first symbol is the symbol for "danger", while the second is the symbol for "opportunity", making risk a mix of danger and opportunity. You cannot have one, without the other.

For a business, risk can come from many places…

Figure 3.5: A Break Down of Risk



For an MLB team, risk can come from many places as well…



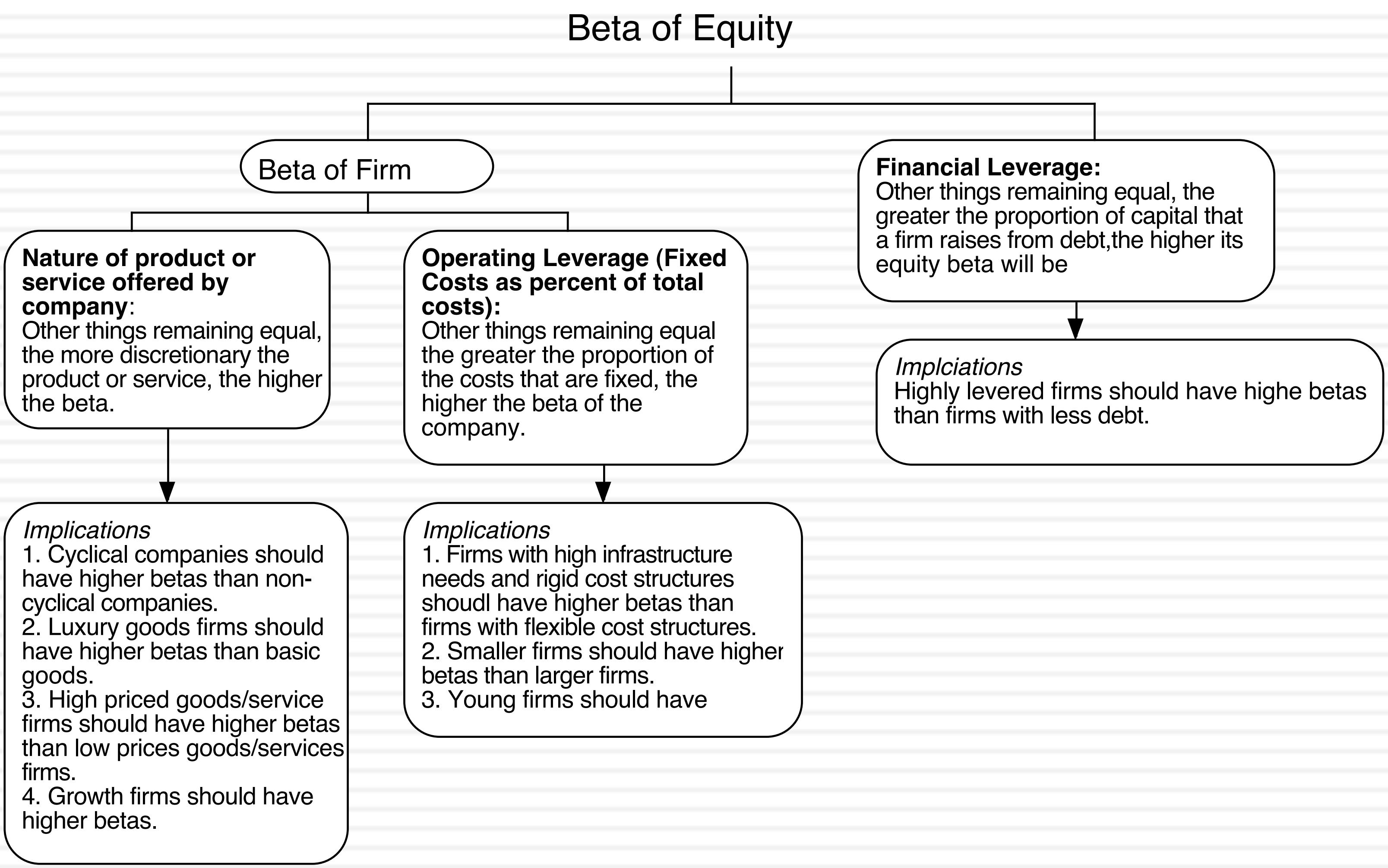
And not all risk is created equal…

- If you are a sole owner of a business, you are exposed to all of the risks in a business. Thus, your hurdle rate should reflect those risks.
- If you are a publicly traded company, the game changes. As a manager, you have look at risk through the eyes of the marginal investor in your company. There are two criteria that go into being a marginal investor:
  - You need to own enough stock to make a difference. In other words, you have to be a large stockholder.
  - You have to trade that stock. Thus, a founder who owns a lot of stock but does not trade is not the marginal investor.
- If that marginal investor is a mutual fund or institutional investor, the only risk they see in an investment is the risk that it adds to a diversified portfolio. Consequently, the only risk you as a manager should build into your hurdle rate is the risk that cannot be diversified away.

Know your marginal investor..

- For a publicly traded company, with many and diverse shareholders, the marginal investor is the shareholder or shareholder group that determines prices at the margin.
  - Since that requires a large shareholding and the capacity to trade that shareholding, that marginal investor in public companies is likely to be institutional.
- For a privately owned business, the marginal investor is the owner of the business, if it is a sole ownership, or the ownership partners, if it is owned by multiple people.
  - The owner can sometimes be wealthy enough to be diversified
  - Alternatively, the investor may have much or all of his/her wealth tied up in the business.

Your risk exposure comes from your choices as a business..



Let's do an intuitive check on the Mets

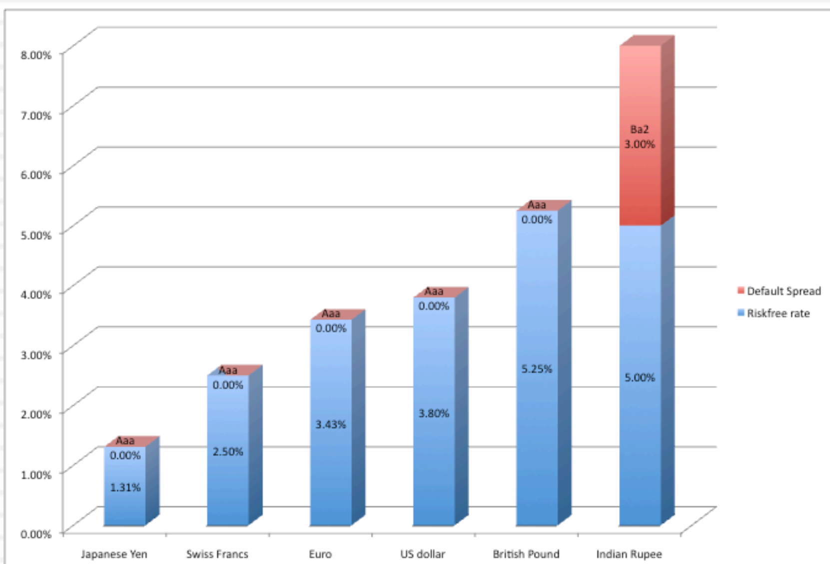
- How risky is your underlying business?
  - How discretionary is your product to your customers (fans)?
  - How are your media contracts structured?
  - How is your merchandising business structured? (Licensed, Owned etc.)
- What does your cost structure look like?
  - How much of your expenses is fixed?
  - If you have a bad year (business-wise), what happens to your expense structure?
- How much debt do you have?

Lesson 5: Know your “hurdle” rate

- Since financial resources are finite, there is a “hurdle rate” that projects have to cross before being deemed acceptable. A simple representation of the hurdle rate is as follows:

Hurdle rate = Riskless Rate + Risk Premium

In what currency are you estimating your hurdle rate?

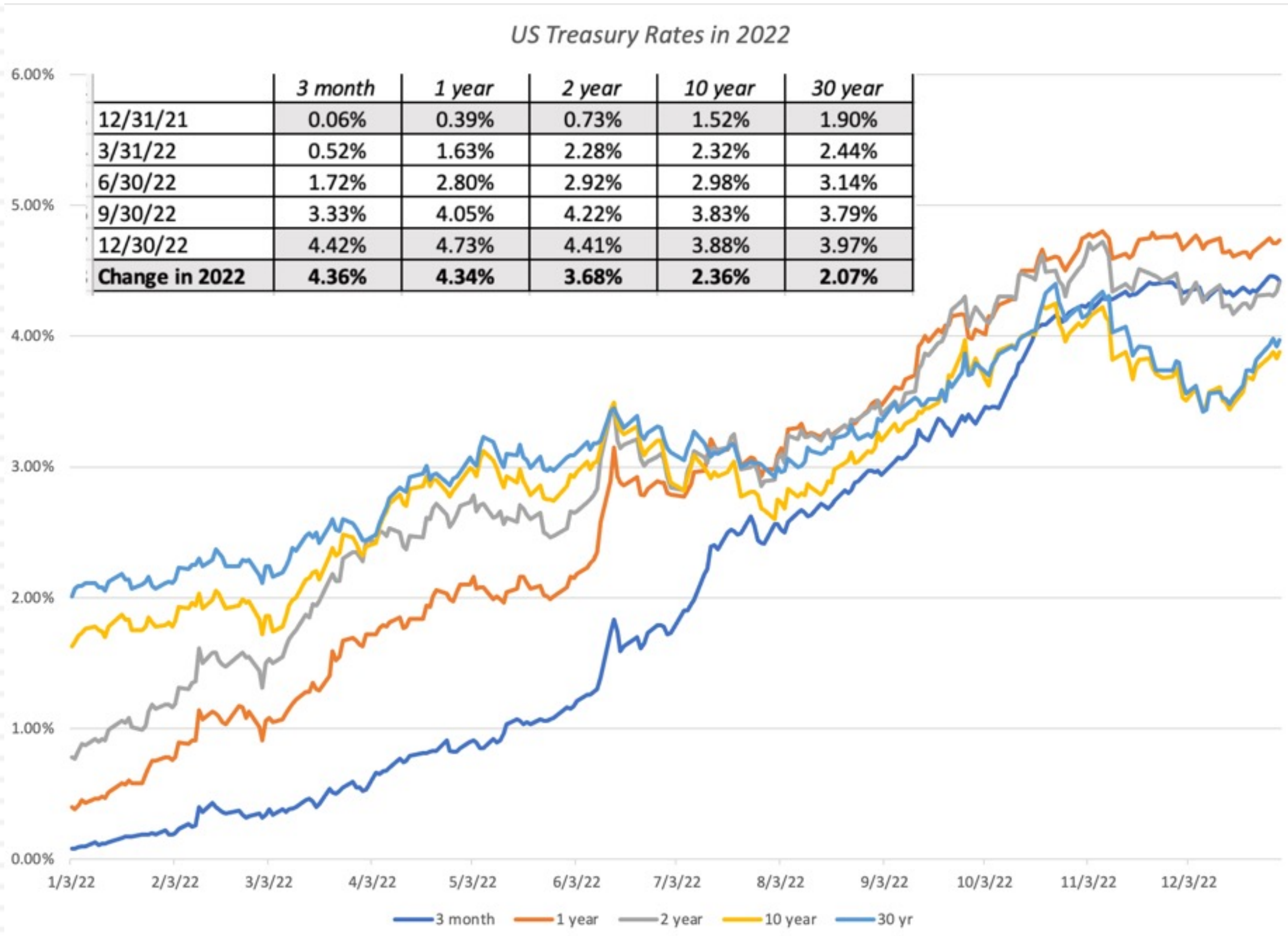


How risky is the business that you are investing in?
Higher risk investments should have higher risk premiums than lower risk investments

How risky are the countries that you are investing in?
You should demand a higher risk premium for operating in riskier countries that safer countries

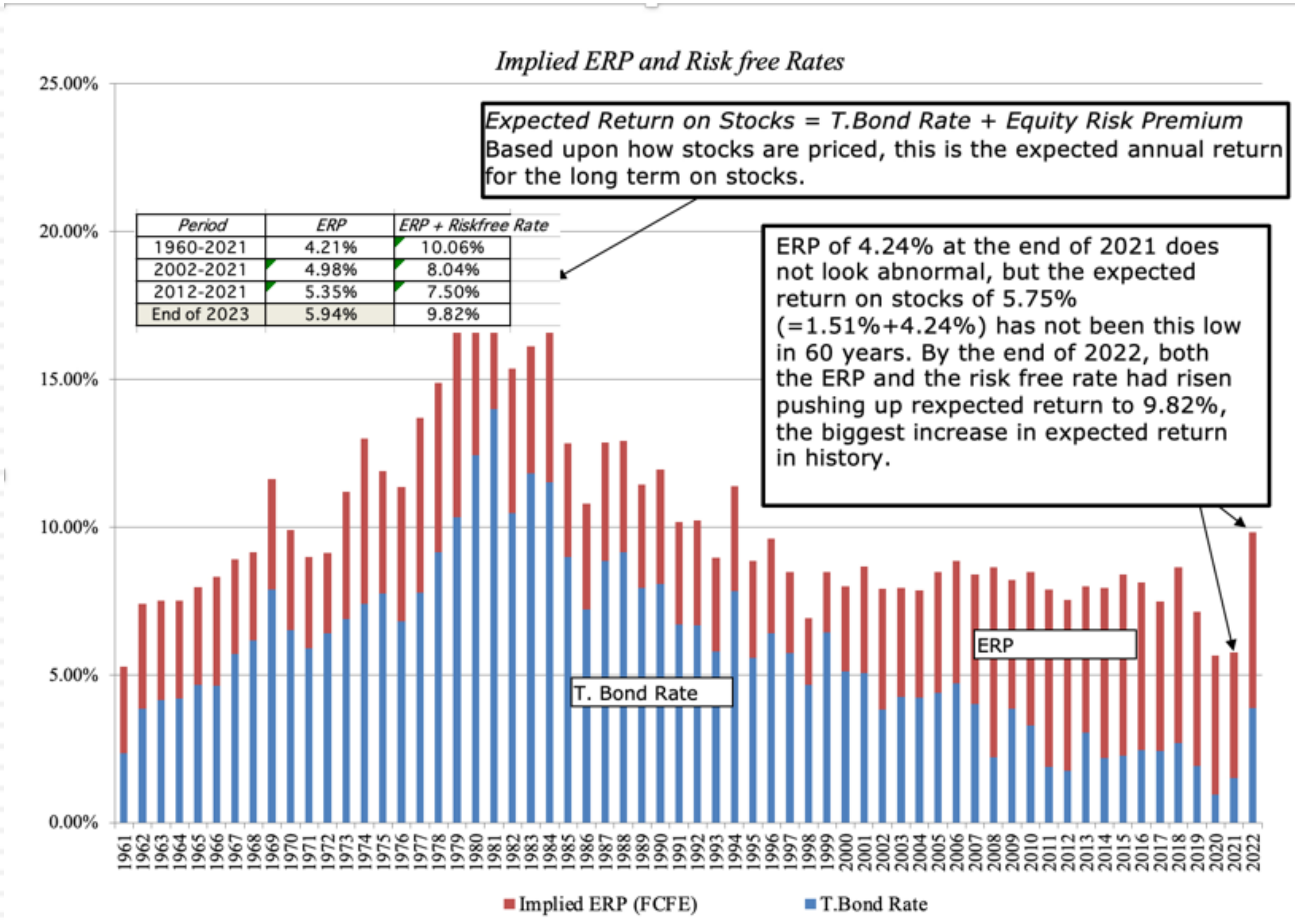
How are you financing this investment?
The hurdle rate is a function of your mix of debt & equity and how much it costs you to raise debt

The Riskfree Rate



	3 month	*1 year*	*2 year*	*10 year*	*30 year*
12/31/21	0.06%	0.39%	0.73%	1.52%	1.90%
3/31/22	0.52%	1.63%	2.28%	2.32%	2.44%
6/30/22	1.72%	2.80%	2.92%	2.98%	3.14%
9/30/22	3.33%	4.05%	4.22%	3.83%	3.79%
12/30/22	4.42%	4.73%	4.41%	3.88%	3.97%
Change in 2022	**4.36%**	**4.34%**	**3.68%**	**2.36%**	**2.07%**

The Equity Risk Premium



Period	ERP	ERP + Riskfree Rate
1960-2021	4.21%	10.06%
2002-2021	4.98%	8.04%
2012-2021	5.35%	7.50%
End of 2023	5.94%	9.82%

The Relative Risk of investing in an MLB team…

- There are no professionally traded baseball teams in the United States. In fact, there are no professionally traded sports teams in the US (with MSG coming closest).
- There are two choices when it comes to measuring relative risk:
  - One is to look at professional sports teams (almost all soccer) that are publicly traded in Europe. **The median beta across these companies is 1.10.**
  - The other is to look at entertainment companies in the US, arguing that the forces that determine how the MLB do are the same ones driving other entertainment businesses. **The median unlevered beta is 1.16.**

A hurdle rate for the Mets..

- Bringing together these inputs, using updated numbers for 2022:
  - Riskfree Rate on April 1, 2023 = 3.47%
  - ERP on April 1, 2023 = 5.54%
  - Beta (based upon comps) = 1.15
  - Expected Return = 3.47% + 1.15 (5.54%) = 9.84%
- This required return works only for investors who are diversified.
  - Does that work for the Mets?
  - How about for the Yankees?

Lesson 6: Your investments need to earn returns that beat the hurdle rate…

- Your hurdle rate is both a cost of financing your business and an opportunity cost, i.e,, a return you can make elsewhere if you invest in a project of equivalent risk. If that is the case, you should only take investments that generate returns that earn more than the hurdle rate.
- To measure returns, though, here are three simple propositions to follow:
  1. Look at the cash flows that you will make on the investment, rather than earnings. You cannot spend earnings.
  2. Look at incremental cash flows that come out because of the investment. Be wary of allocated costs (that will be there whether you take the investment or not) and ignore sunk costs (costs that you have already incurred).
  3. Time weight the cash flows, with cash flows occurring earlier being valued more than cash flows later.

The Problems with Investment Analysis for Professional Sports

- For professional sports teams, the biggest investments that they will make is in the contracts that they offer their biggest stars.
- In assessing these contracts, from a purely business (cash flow) perspective, the challenge you face is in isolating how much an individual player will affect your collective cash flows as a team, since those cash flows can show up as:
  - Higher merchandise sales
  - More season tickets sold (Bryce Harper's signing with the Phillies increased the number of season ticket holders from 10000 to 13000)
  - More wins for the team, and perhaps a greater likelihood of making it to the playoffs and winning it all (Being in the playoffs will increase revenues from both gate receipts and TV revenues)
- Even if you can get these financial analysis done, there is the very real danger that the teams that are competing for the player are not bound by the same business constraints.

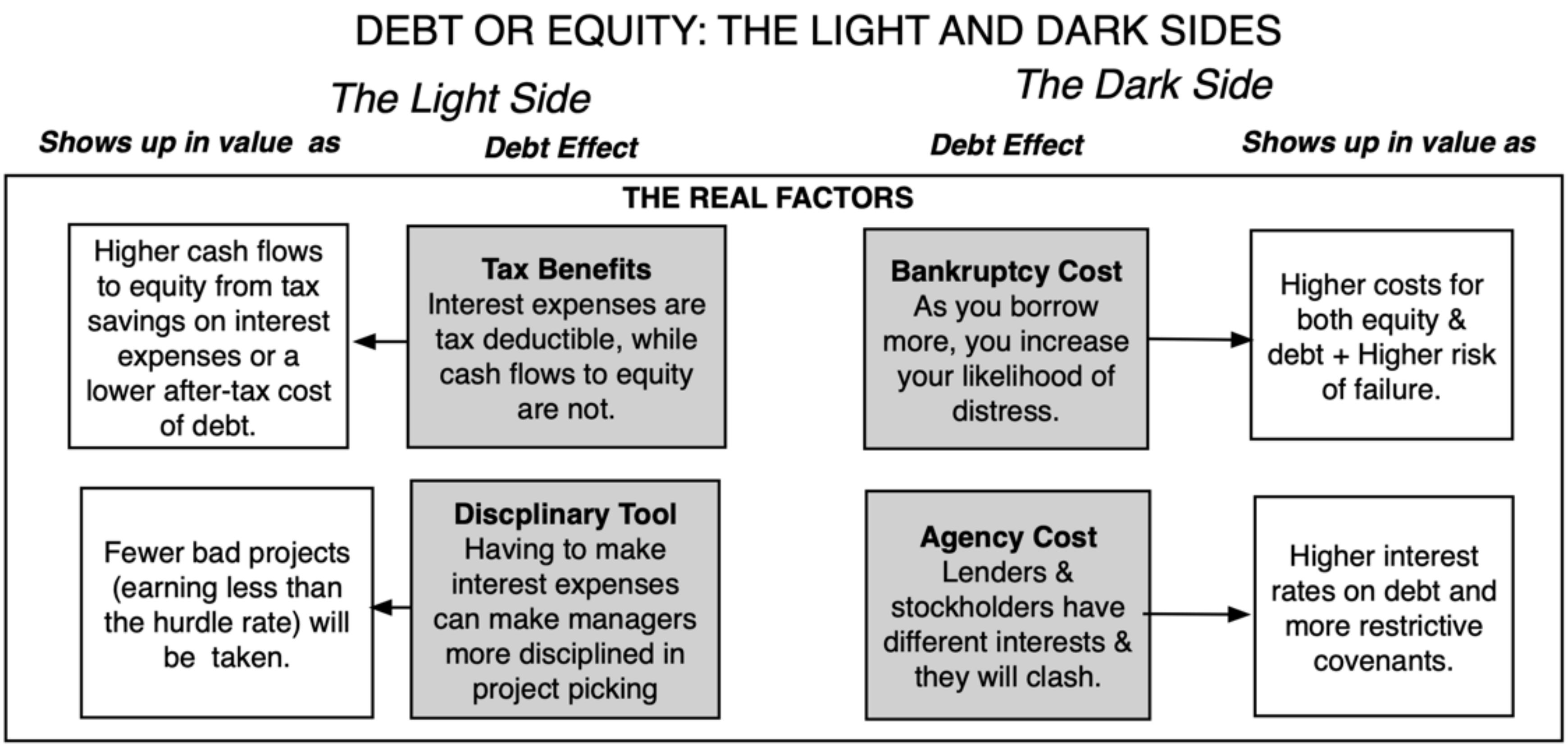
Lesson 7: You have only two ways of raising funding for a business…

Figure 7.1: Debt versus Equity

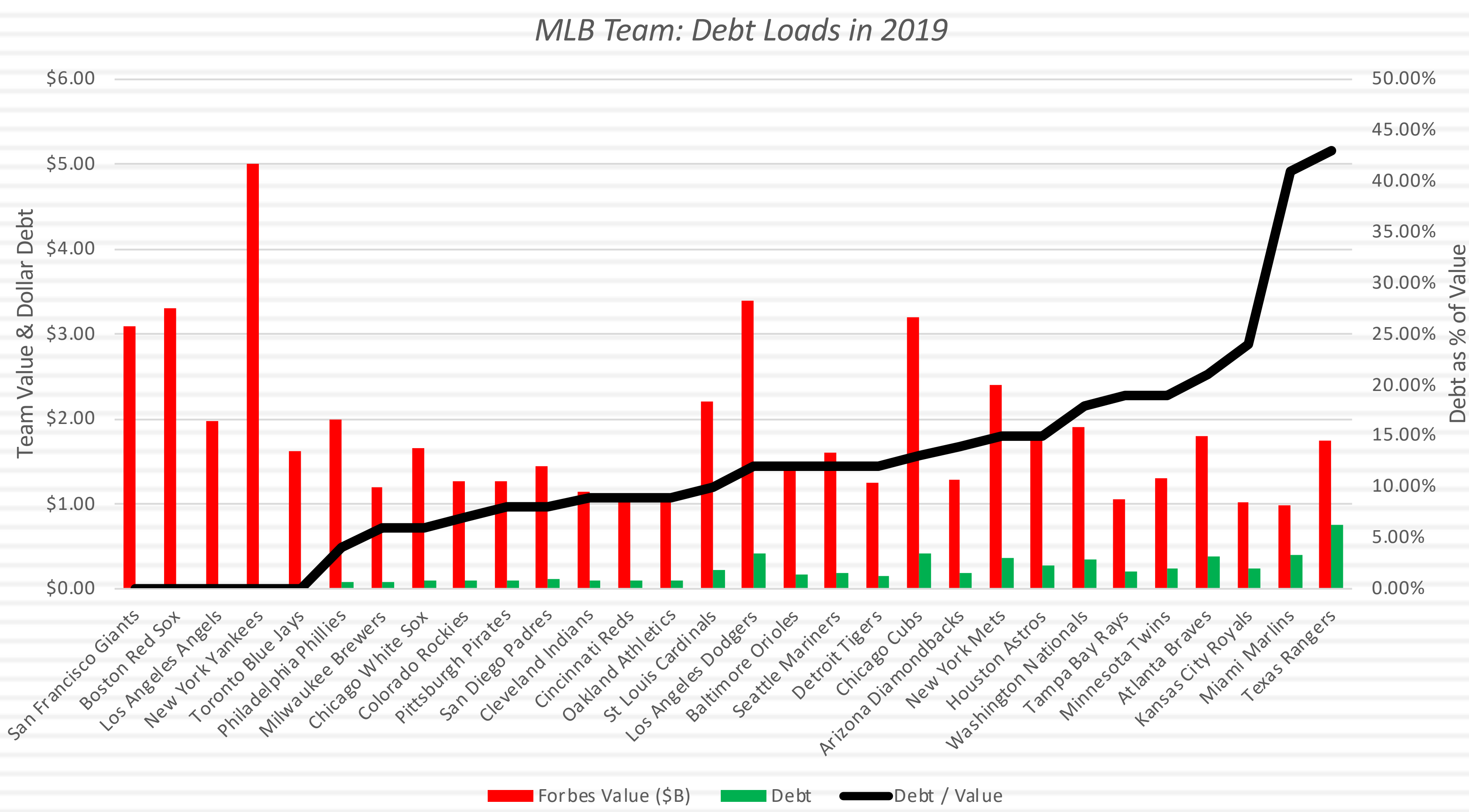
Fixed Claim Tax Deductible High Priority in Financial Trouble Fixed Maturity No Management Control	Residual Claim Not Tax Deductible Lowest Priority in Financial Trouble Infinite Management Control

Debt	**Hybrid Securities**	**Equity**
Bank Debt	Convertible Debt	Owner's Equity
Commercial Paper	Preferred Stock	Venture Capital
Corporate Bonds	Option-linked Bonds	Common Stock
		Warrants

And here is the trade off….



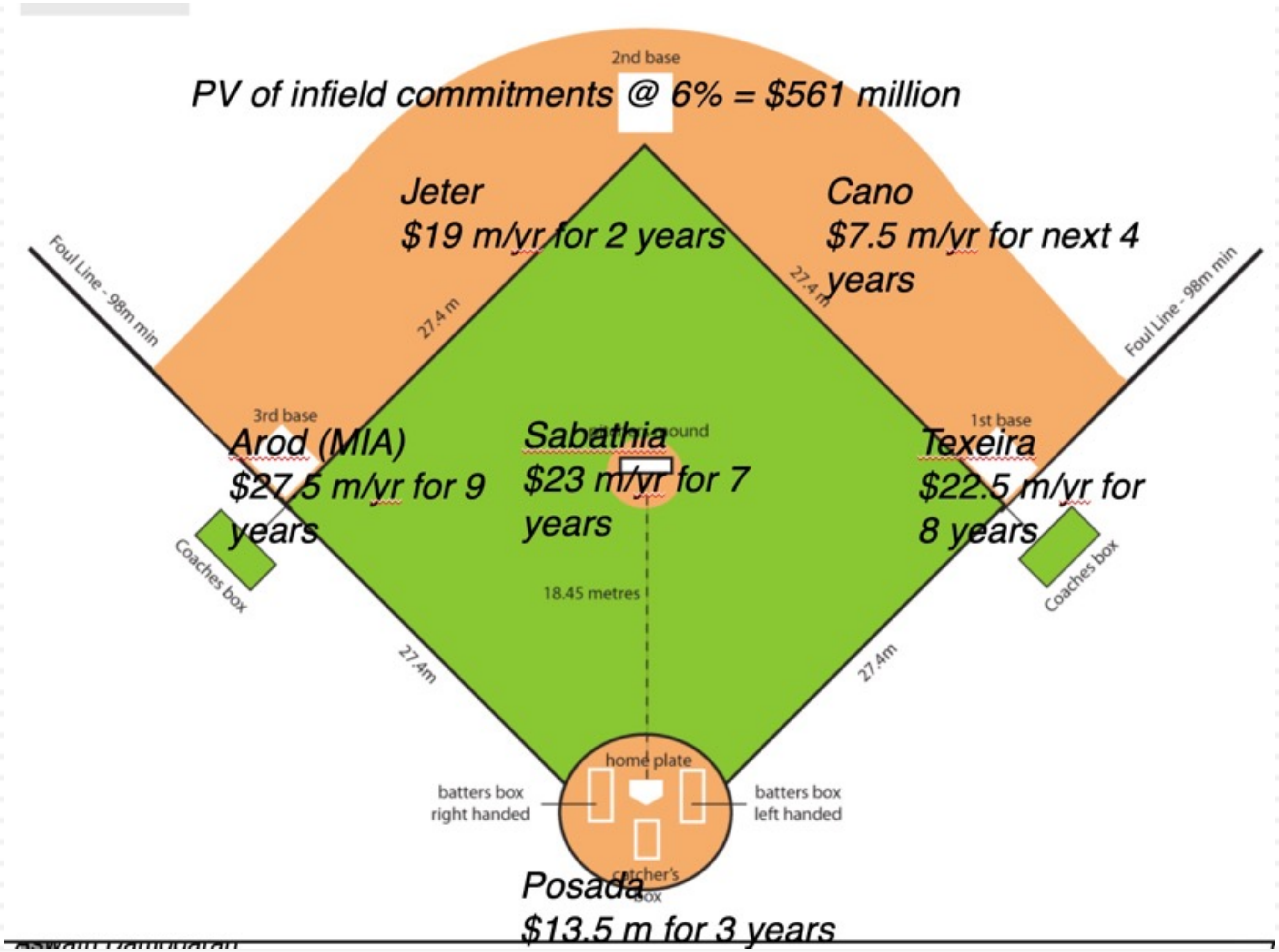
MLB teams don't look very indebted…



But that look can be misleading..

- While debt as a percent of estimated team value is modest, even for the most highly levered MLB teams, it is high relative to the cash generated by these teams from their businesses.
- In addition, and perhaps more critically, the contractual commitments that MLB teams have on their player contracts are effectively debt, and capitalizing those contracts pushes up the debt load at these firms.
- *Bottom line: Professional sports teams are heavily levered, even if they are all equity funded.*

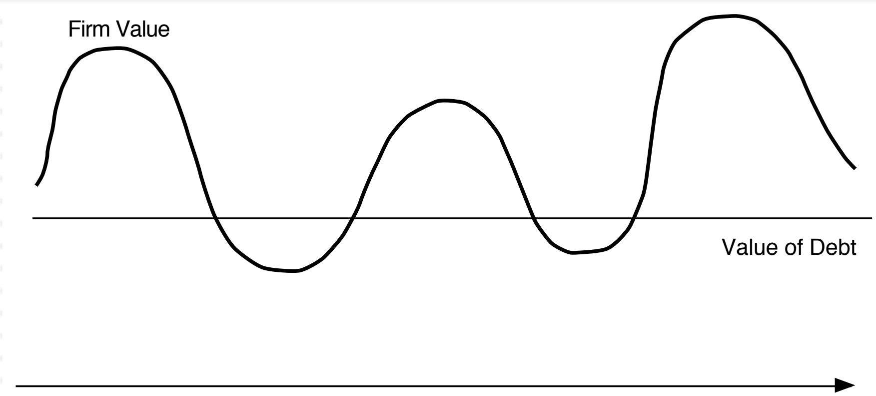
The Yankee infield on opening day, 2009…



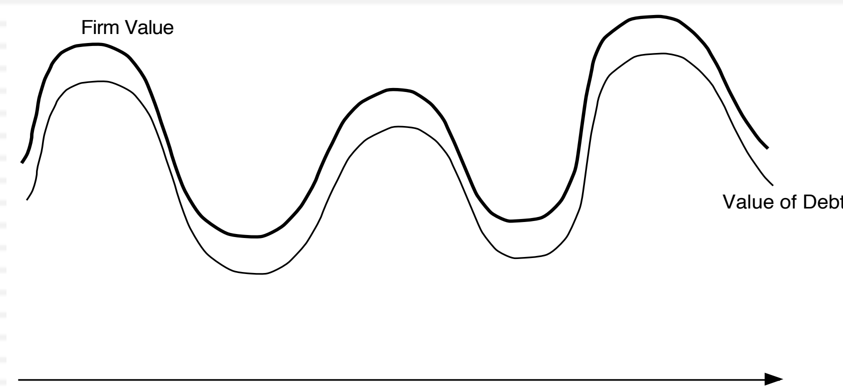
Lesson 8: The "right" financing type for your firm depends on your firm

- The objective in designing debt is to make the cash flows on debt match up as closely as possible with the cash flows that the firm makes on its assets.
- By doing so, we reduce our risk of default, increase debt capacity and increase firm value.

Unmatched Debt

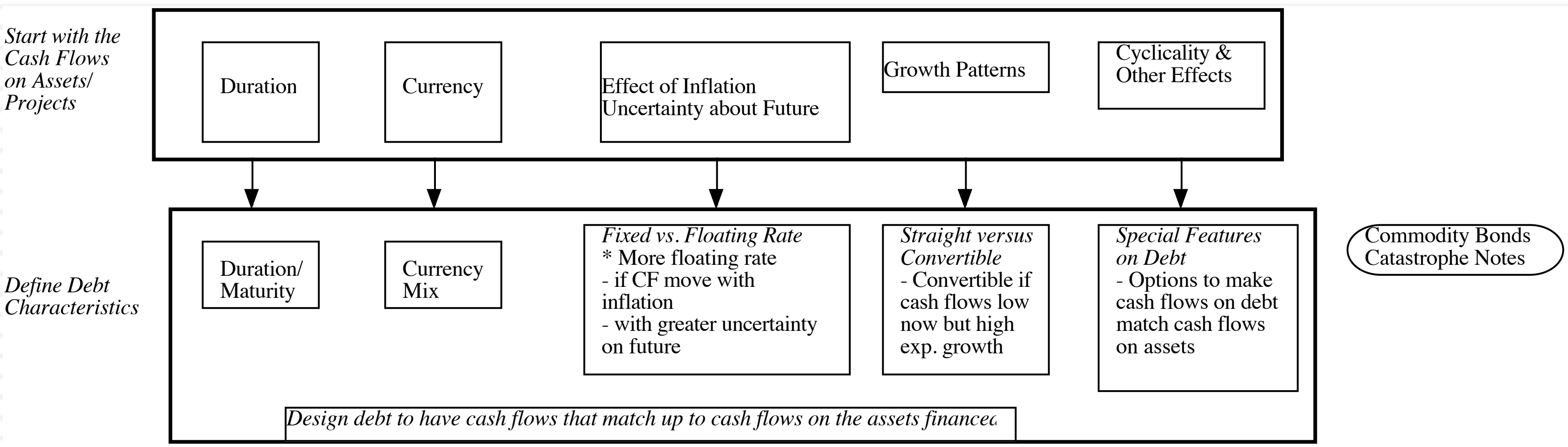


Matched Debt

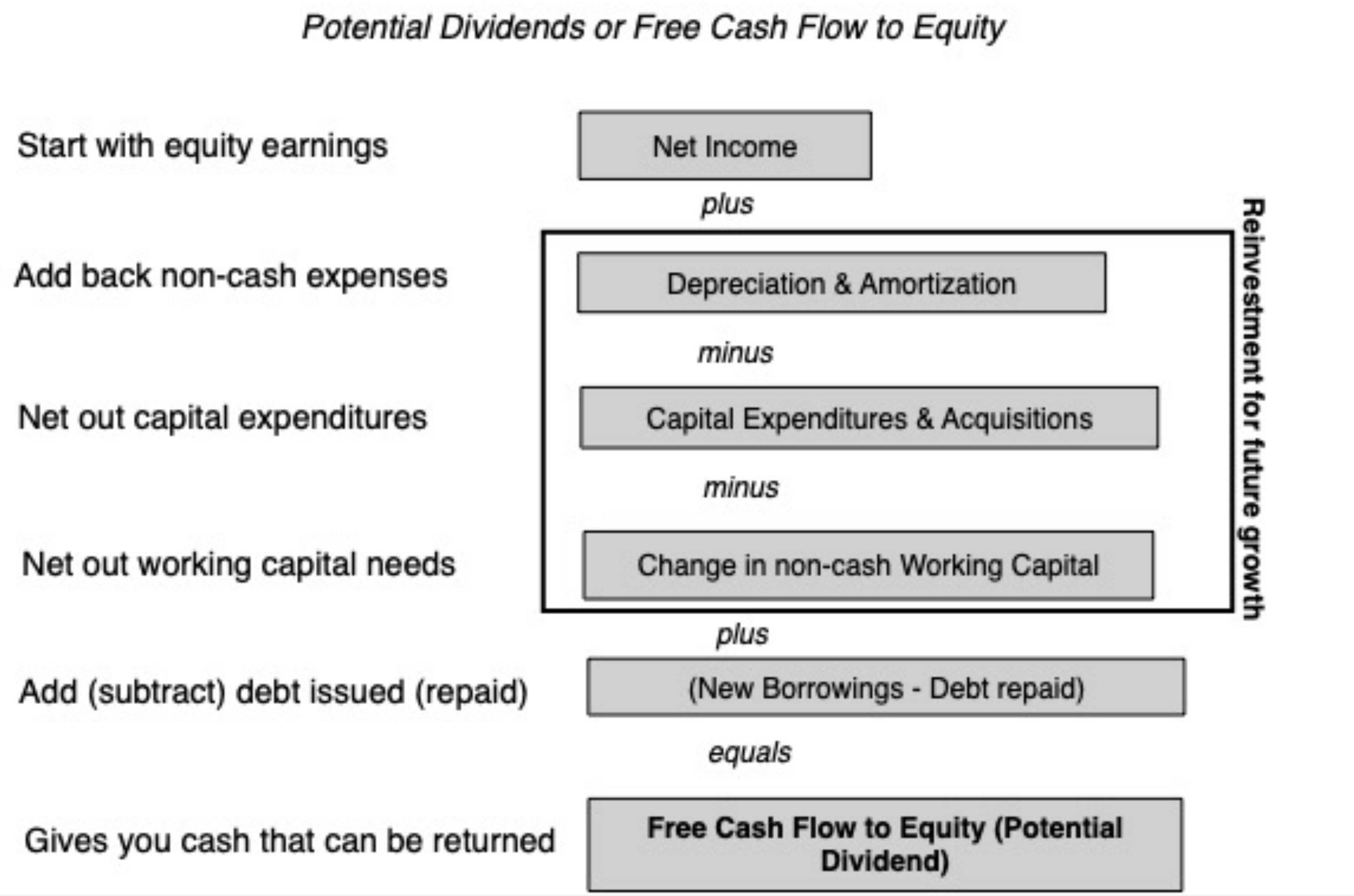


The perfect debt for you is….

- The perfect financing instrument will
  - Have all of the tax advantages of debt
  - While preserving the flexibility offered by equity



Lesson 9: Cash is not accumulated by accident, & cash does not belong to the company

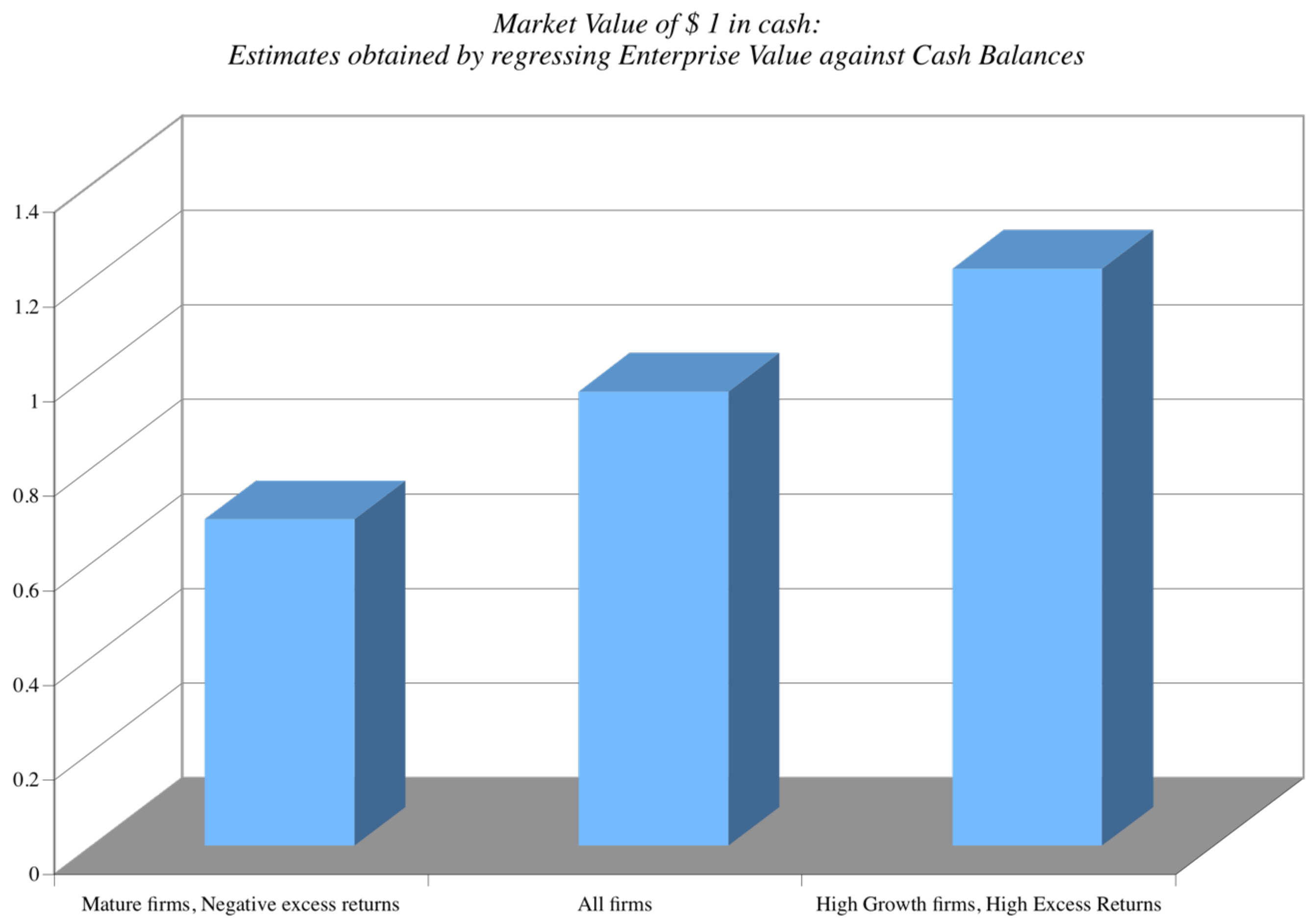


And companies don't pay out what they can afford to….

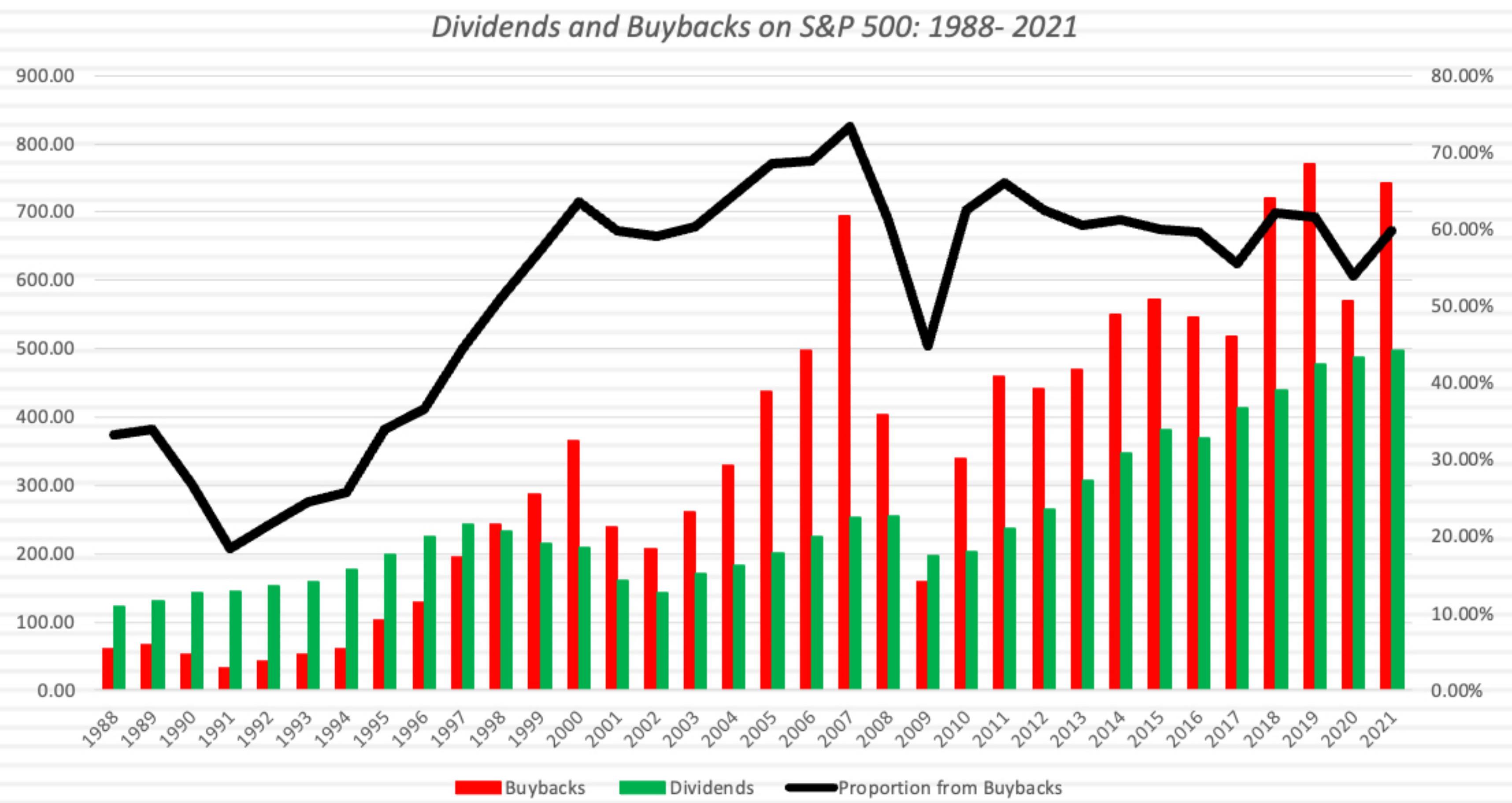
	Africa and Middle East	Australia & NZ	Canada	China	Eastern Europe & Russia	EU & Environs	India	Japan	Latin America & Caribbean	Small Asia	UK	United States	Grand Total
No Cash Return, FCFE >0	21.42%	8.55%	14.07%	6.29%	34.17%	23.08%	34.47%	14.47%	16.72%	17.71%	11.77%	25.44%	18.54%
Cash Returned, < Positive FCFE	9.67%	5.59%	3.62%	8.67%	6.72%	7.61%	3.83%	9.59%	12.61%	10.02%	10.31%	9.30%	8.29%
Cash Accumulators	31.09%	14.14%	17.69%	14.96%	40.90%	30.70%	38.30%	24.06%	29.33%	27.73%	22.08%	34.74%	26.83%
No Cash Return, FCFE <0	22.67%	63.75%	64.00%	14.93%	20.73%	28.65%	31.45%	12.96%	15.05%	23.93%	36.53%	27.36%	27.45%
Cash Returned, Negative FCFE	18.60%	10.40%	11.24%	49.08%	13.73%	19.29%	11.86%	30.65%	27.17%	27.30%	25.00%	23.01%	25.67%
Cash Returned, >Positive FCFE	27.65%	11.72%	7.07%	21.03%	24.65%	21.37%	18.39%	32.34%	28.45%	21.04%	16.40%	14.89%	20.05%
Cash Burners	68.91%	85.86%	82.31%	85.04%	59.10%	69.30%	61.70%	75.94%	70.67%	72.27%	77.92%	65.26%	73.17%

FCFE = Potential Dividends = Cash left over after all operating expenses, taxes, reinvestment and debt payments have been made.

Not all cash balances are created equal…



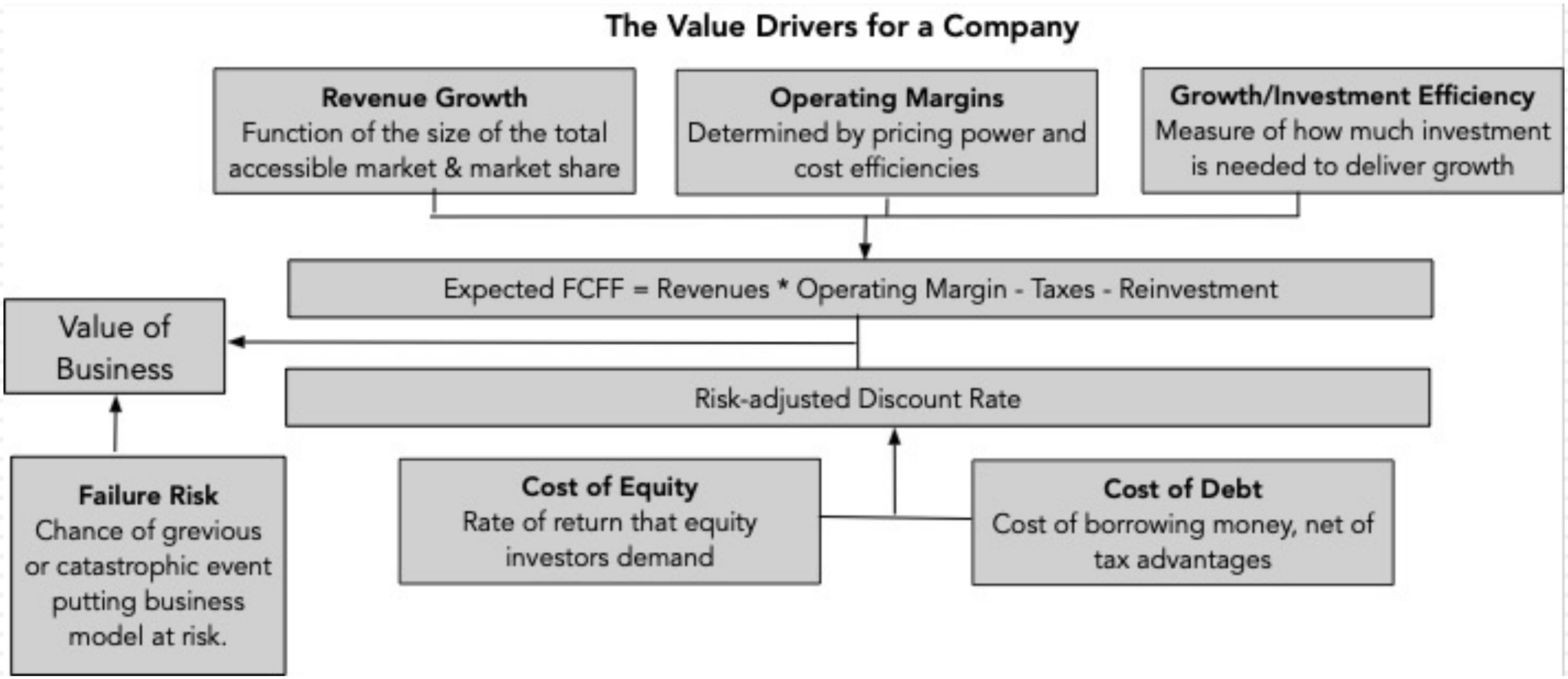
And buybacks are flexible dividends…



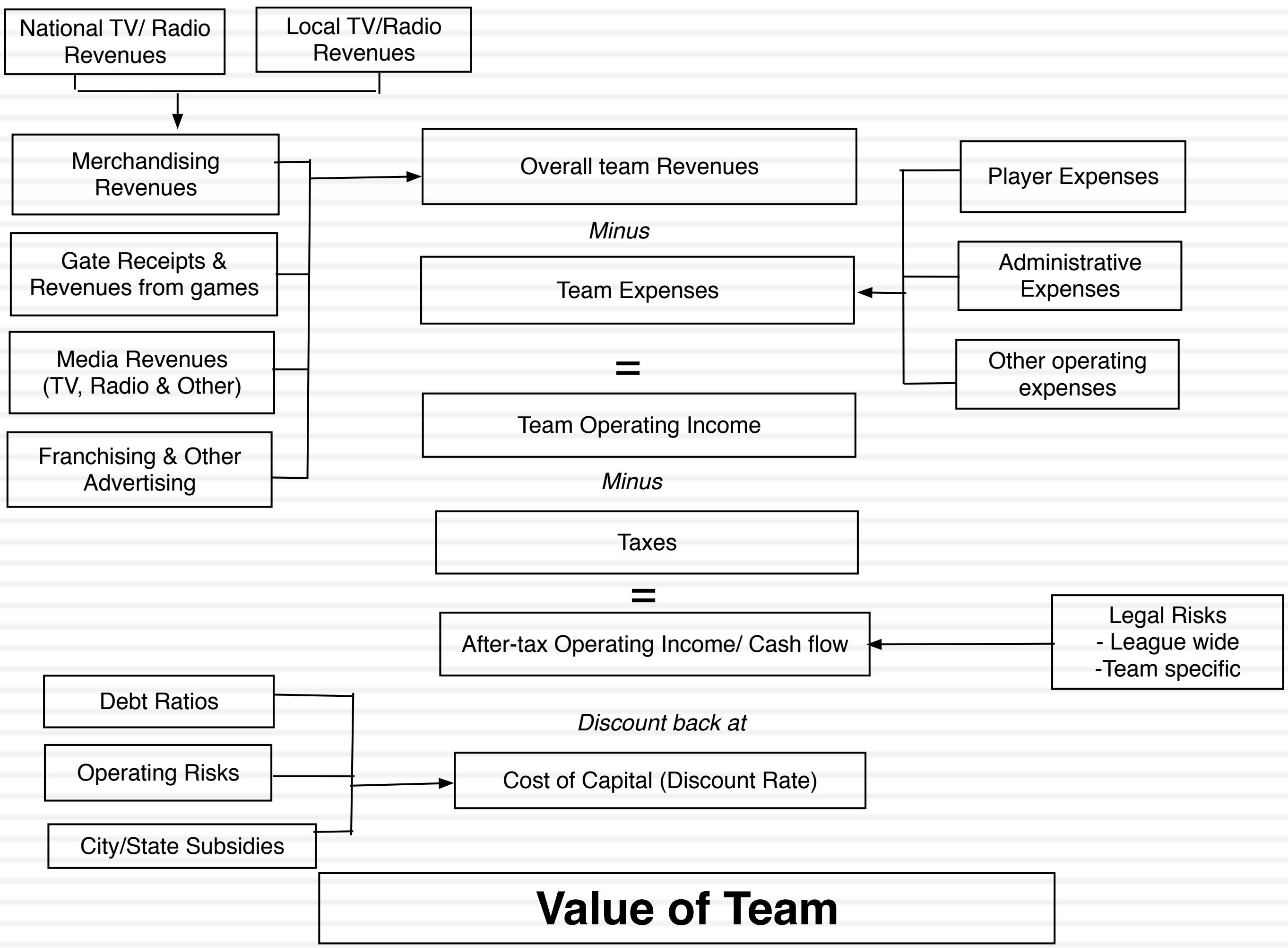
Why the decision is moot at most MLB franchises…

- Most MLB teams are cash flow poor, because much of their revenue is eaten up by player contract payments, and what is left by other expenses.
- Luckily (for these teams), most of them have owners who do not pressure on them to generate cash flows for them, because they are:
  - Wealthy enough to not need these cash…
  - Are playing a trading game, where they plan to sell their teams to someone else in the near term at a much higher price..

Lesson 10: The value of your business is a function of these variables…



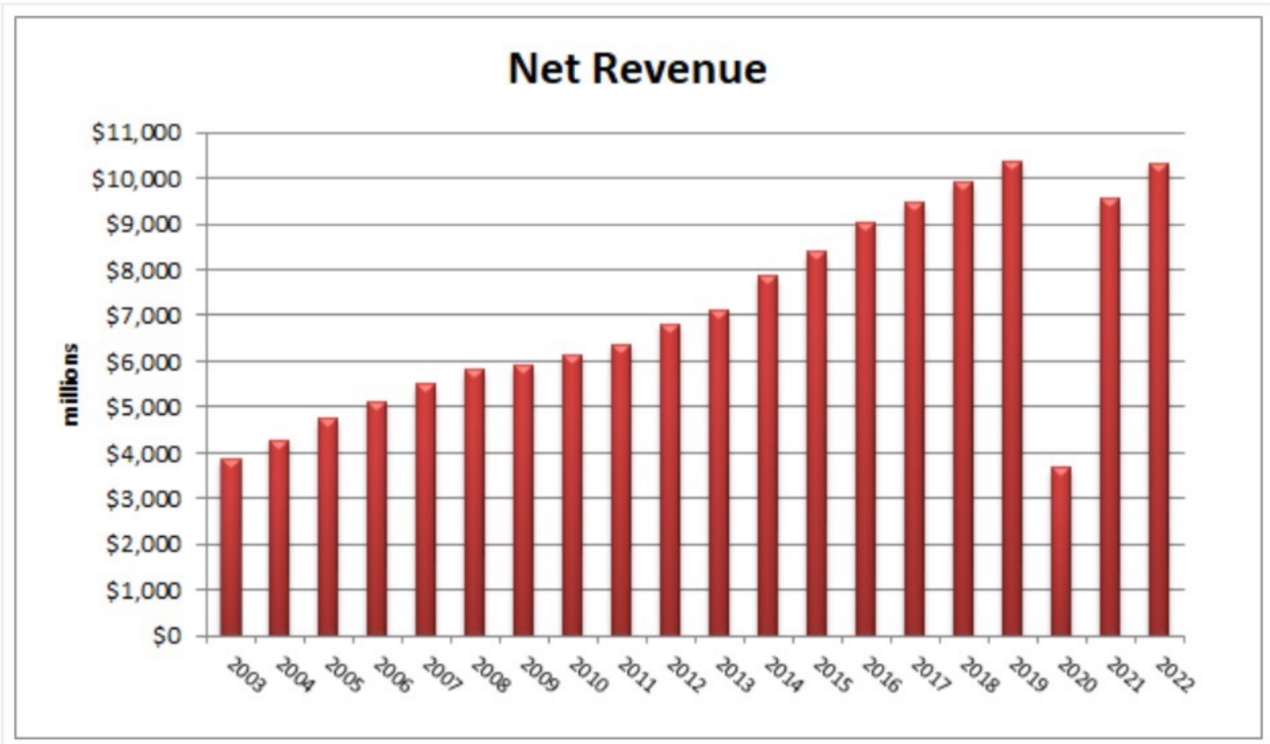
The Drivers of Franchise Value



MLB: The Revenue Problem

- Revenues are growing slowly over time, and attendance has declined nine years in a row..

Forbes' Estimate of Annual MLB Revenue, 2003 to 2022

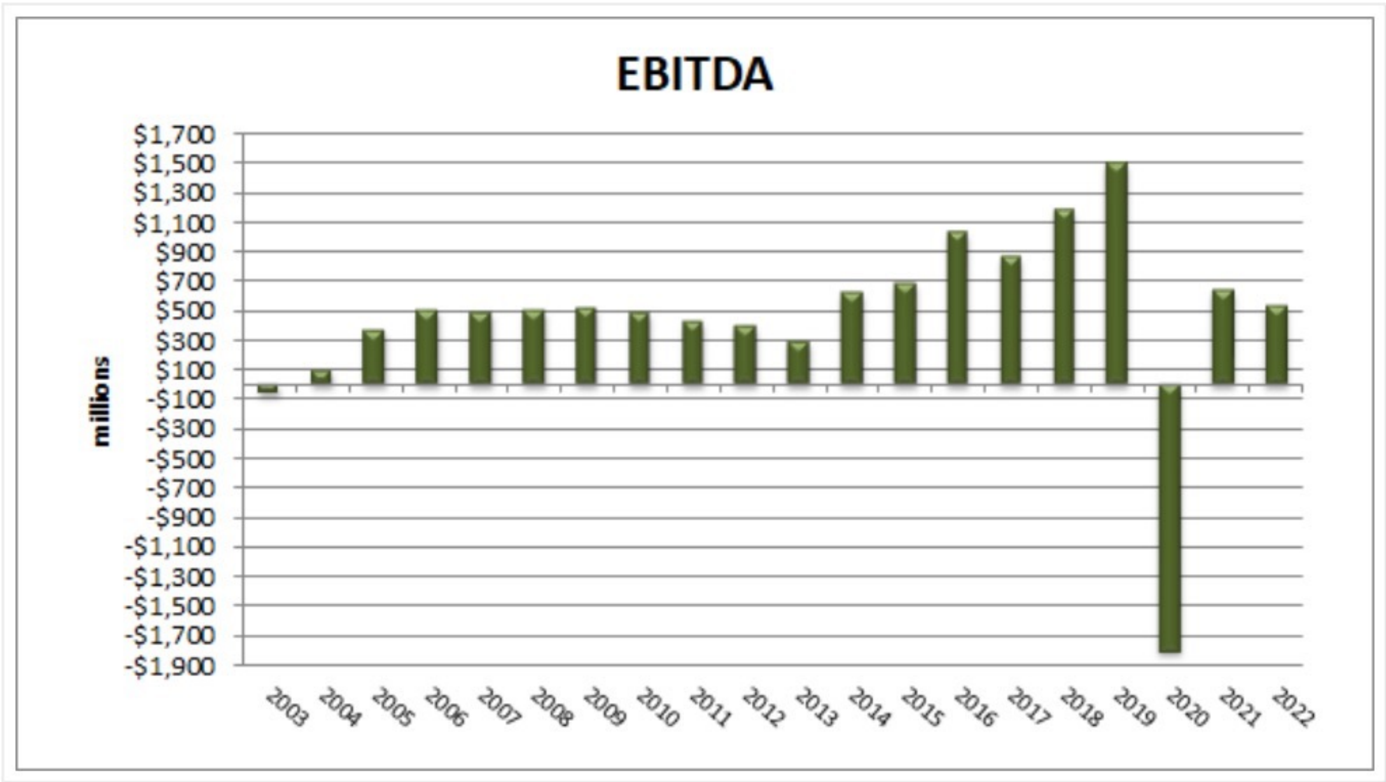


MLB: The Expense Problem

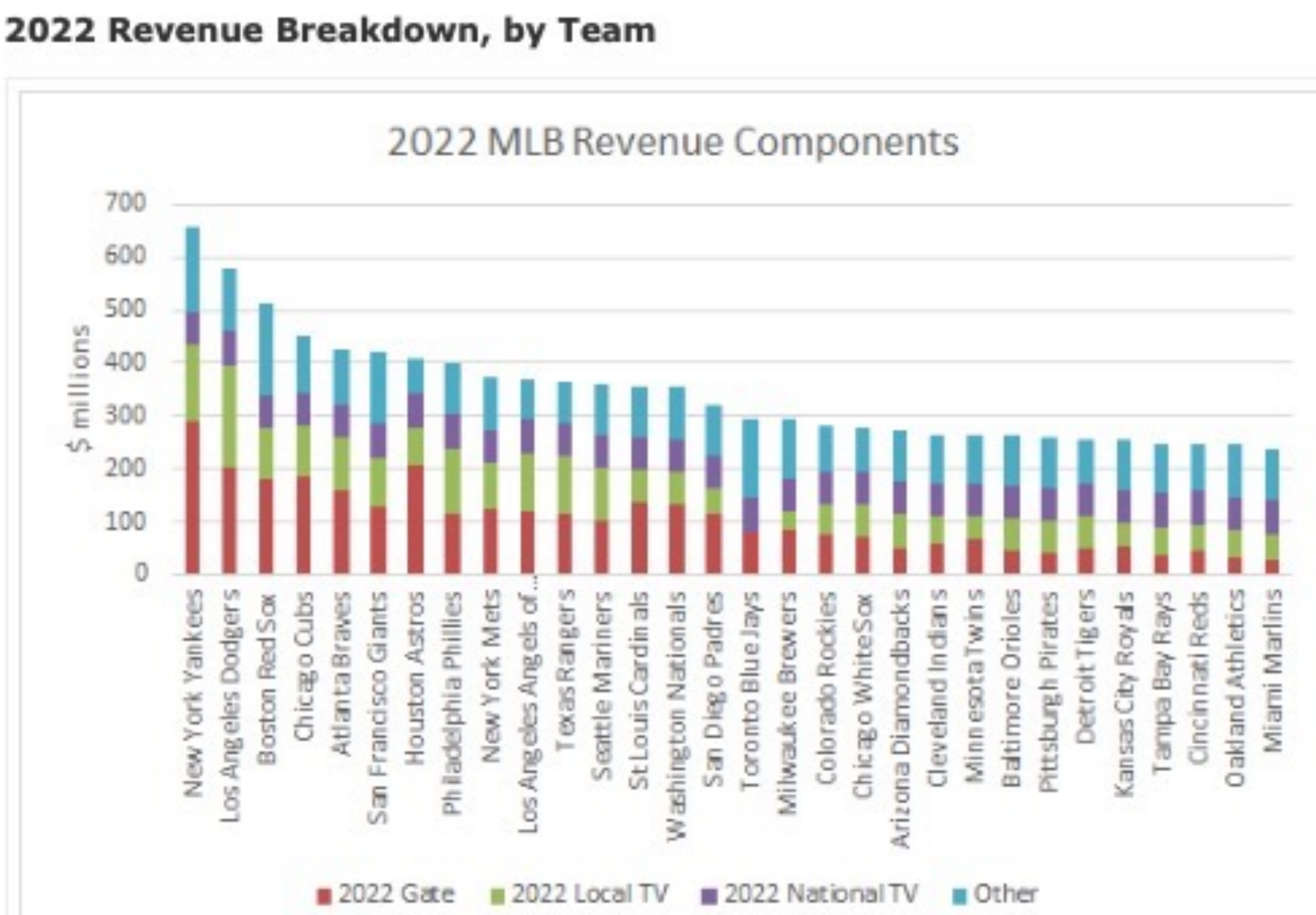
- The biggest expense for MLB teams is player contracts and not only do they eat a large chunk of revenues, they are increasing over time...

With predictable consequences…

Forbes' Estimate of Annual MLB EBITDA, 2003 to 2022



Team Revenues in 2022



And even the best of the MLB teams barely make money..

Top-5 and Bottom-5 Teams by Valuation, Net Revenue, EBITDA – 2022

Net Revenue				
Top 5			Bottom 5	
New York Yankees	$657		Miami Marlins	$238
Los Angeles Dodgers	$581		Oakland Athletics	$245
Boston Red Sox	$513		Cincinnati Reds	$247
Chicago Cubs	$451		Tampa Bay Rays	$248
Atlanta Braves	$425		Kansas City Royals	$255
EBITDA				
Top 5			Bottom 5	
Seattle Mariners	$84		New York Mets	-$138
San Francisco Giants	$75		San Diego Padres	-$55
Boston Red Sox	$72		Chicago White Sox	-$53
Baltimore Orioles	$65		Toronto Blue Jays	-$34
Oakland Athletics	$62		Minnesota Twins	-$30
Franchise Value				
Top 5			Bottom 5	
New York Yankees	$7,100		Miami Marlins	$1,000
Los Angeles Dodgers	$4,800		Oakland Athletics	$1,180
Boston Red Sox	$4,500		Cincinnati Reds	$1,190
Chicago Cubs	$4,100		Tampa Bay Rays	$1,200
San Francisco Giants	$3,700		Kansas City Royals	$1,250

Revenue Breakdown across Franchises

	Baseball (MLB)	Football (NFL)	Basketball (NBA)	Hockey (NHL)	Soccer (European)	Cricket (IPL)
Gate Receipts	40.77%	19.90%	27.72%	34.45%	23.39%	31.79%
TV Broadcasting	32.39%	55.63%	42.36%	35.36%	36.66%	47.68%
Sponsorship	10.05%	11.67%	10.16%	15.55%	35.67%	13.91%
Merchandising & Other	16.79%	12.80%	19.75%	14.64%	4.28%	6.62%
Total Revenue	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

EBITDA Margins across Franchises

	Baseball (MLB)	Football (NFL)	Basketball (NBA)	Hockey (NHL)	Soccer (European)
Total Revenues	$7,375.00	$9,167.00	$4,556.00	$2,630.00	$7,005.00
EBITDA	$290.60	$1,377.30	$711.60	$210.30	$1,264.00
Aggregate EBITDA margin	3.94%	15.02%	15.62%	8.00%	18.04%
Highest EBITDA margin	27.27%	46.51%	33.55%	34.30%	30.13%
Median EBITDA margin	2.71%	10.93%	11.29%	6.71%	19.69%
Lowest EBITDA margin	-24.89%	-14.11%	-10.00%	-16.79%	-18.26%
% of teams with negattive	36.67%	3.13%	13.33%	36.67%	20.00%

Player Expenses across Franchises

	Baseball (MLB)	Football (NFL)	Basketball (NBA)	Hockey (NHL)	Soccer (European)	Cricket (IPL)
Total Revenues	$7,375.00	$9,167.00	$4,556.00	$2,630.00	$7,005.00	$251.67
Total Player Expenses	$3,453.95	$4,731.00	$2,286.00	$1,241.00	$2,436.97	$90.00
Aggregate Player Expenses % of Revenues	46.83%	51.61%	50.18%	47.19%	34.79%	35.76%
Lowest Player expense as % of Revenues	21.73%	27.46%	31.01%	29.58%	15.44%	NA
Median Player expense as % of Revenues	48.40%	53.34%	52.22%	49.15%	38.48%	NA
Highest Player expense as % of Revenues	72.40%	67.79%	70.94%	66.67%	60.15%	NA

Value ≠ Price

Drivers of intrinsic value
- Cashflows from existing assets
- Growth in cash flows
- Quality of Growth

Drivers of price
- Market moods & momentum
- Surface stories about fundamentals

Accounting Estimates

Valuation Estimates

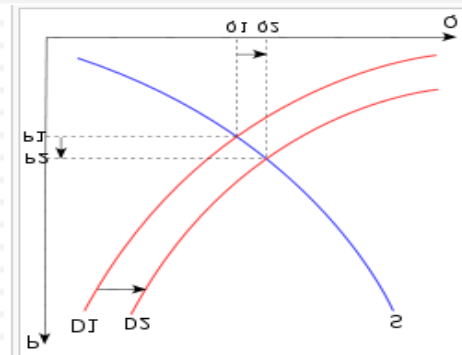
INTRINSIC VALUE

Value

THE GAP
Is there one?
If so, will it close?
If it will close, what will cause it to close?

Price

PRICE



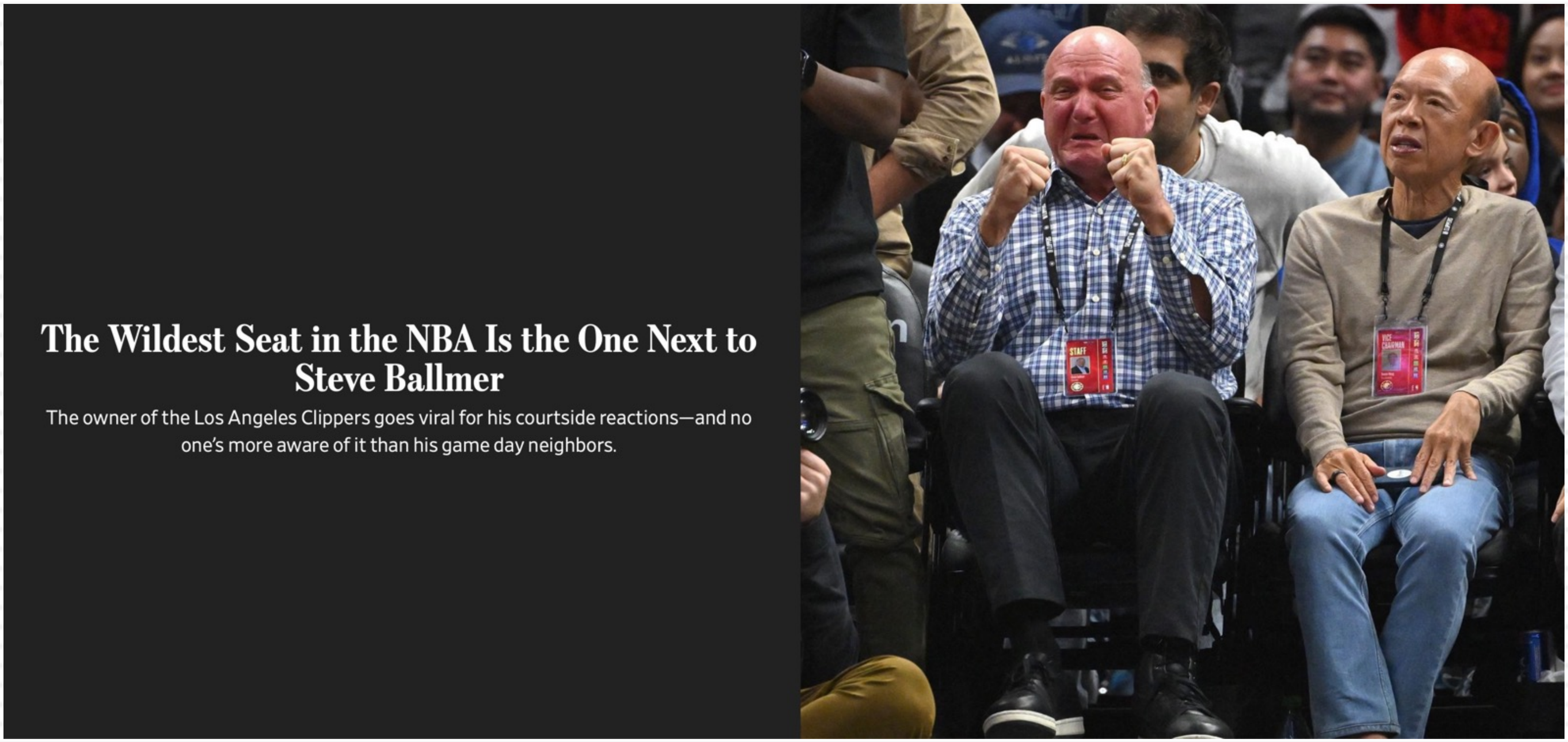
Ranking in pricing…

Rank		Team	2023 Valuation	1-Year Value Change
1		New York Yankees	$7.13 billion	+2%
2 ↑+1		Los Angeles Dodgers	$5.24 billion	+7%
3 ↓-1		Boston Red Sox	$5.21 billion	+3%
4		Chicago Cubs	$4.69 billion	+6%
5		San Francisco Giants	$3.81 billion	+3%
6		New York Mets	$2.82 billion	+5%
7		Atlanta Braves	$2.75 billion	+8%
8 ↑+3		Houston Astros	$2.58 billion	+8%
9 ↑+1		Philadelphia Phillies	$2.46 billion	+2%
10 ↓-2		Los Angeles Angels	$2.45 billion	-2%
11 ↓-2		St. Louis Cardinals	$2.44 billion	0%
12		Washington Nationals	$2.18 billion	-2%
13 ↑+1		Toronto Blue Jays	$1.97 billion	+6%
14 ↓-1		Texas Rangers	$1.93 billion	0%
15		San Diego Padres	$1.87 billion	+1%

Factors driving pricing…

- National versus Local Profile: Teams that manage to acquire following outside of their local markets are priced higher.
- Media Market size: Companies in larger media markets are priced higher than companies in smaller media markets.
- Nostalgia/ History: The the extent that sports teams are trophy assets to some of their owners, teams with longer and more illustrious history will be priced higher than teams without that history.
- Play on the field: The question of whether a team is a winning or losing team right now seems to have only a marginal impact on the pricing of that team.
- Buyer/team match: Since the buyers of teams are often also fans, there is an element of chance that determines pricing, but your odds of finding a wealthy buyer increase significantly if you play in a part of the country where there are far more rich people.
- Stadium: To the extent that a stadium becomes the stage on which a team is presented to the world, having an appealing stage makes a difference.

How much would you pay for a trophy asset? A picture is worth a thousand words…



A few reality checks

1. It is easy to value a sports franchise and it is more a function of media contracts and market size than winning on the field.
2. It is difficult to price a sports franchise, because there are so few franchises being bought and sold.
3. Forbes does not value sports franchises. It prices them, and through no fault of its own, it prices them badly.
4. Pricing dominates valuation, as the number of professional franchises is outnumbered by the number of wealthy people who would like to own them.
    a. If you are an investor, don't invest in a professional sports franchise. You may have a better shot if you invest in semi-professional sports franchise.
    b. If you are a trader, you can get rich "trading" sports franchises, if you can predict the drivers of prices (and they have little to do with financials).

Implications for managers and the sport….

- *To the extent that the owners of professional teams view these teams less as financial investments and more as expensive toys*, the decisions that are made at these teams will reflect how much they are willing to make those toys shiny and desirable.
- *If the owners of professional teams are more interested more in trading the teams*, i.e., selling to someone at a higher price, you will see decisions made at these teams to push up the pricing, including:
  - Signing players with the presence that increases the team's profile (Shohei Ohtani
  - Moving the team to a city or location that is more desirable to potential buyers