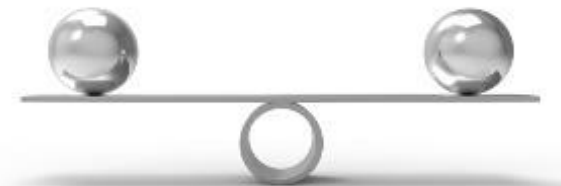




# Can Enterprise Value Be Negative? And What About Equity Value?

Why “Free Companies” Aren’t Really Free



# Can Enterprise Value or Equity Value Be Negative?

- **SHORT ANSWER:** “Yes, but...”
- **BUT:** We need to be more specific with the terminology and qualify this statement a bit more
- **Enterprise Value:** Value of core-business Assets to all investors in the company
- **Equity Value:** Value of *all* Assets, but only to common shareholders (equity investors)
- **Equity or Shareholders’ Equity:** Balance Sheet figure – no market value



# Can Enterprise Value or Equity Value Be Negative?

- **Current vs. Implied or Intrinsic:** “Current” refers to the company’s Equity Value or Enterprise Value based on its public share price, and it represents the *market’s* views of the company’s value



- **Current Enterprise Value:** Yes, it can be negative



- **Implied Enterprise Value:** Yes, it can be negative



- **Current Equity Value:** No, it can’t be negative (in theory)

- **Implied Equity Value:** Yes, it can be negative



- **Equity or Shareholders’ Equity:** Yes, it can be negative



# Can Enterprise Value or Equity Value Be Negative?

- **Part 1:** How Enterprise Value Can Be Negative



- **Part 2:** How *Implied* Equity Value Can Be Negative



- **Part 3:** The Qualifications and Fine Print for “Negative” Enterprise Values and Equity Values



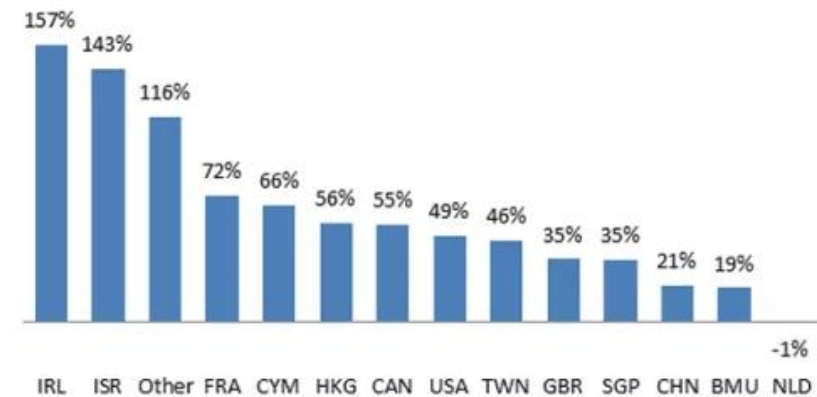
# How Enterprise Value Can Be Negative

- **Enterprise Value:** Can easily be negative! People even screen for companies with negative EVs as an investing strategy:

Stock Screener Database : -Ve EV

Ticker	Name	Sector	Industry	Country	Earnings Date
GIGM	GigaMedia Limited	Technology	Multimedia & Graphics Software	Taiwan	11/10/2017
RUBI	the Rubicon Project, Inc.	Technology	Application Software	USA	2-November-17
CYCC	Cyclacel Pharmaceuticals, Inc.	Healthcare	Biotechnology	USA	13-Nov-17
CLBS	Caladrius Biosciences, Inc.	Healthcare	Biotechnology	USA	11/6/2017
ABIO	ARCA biopharma, Inc.	Healthcare	Biotechnology	USA	11/13/2017
NURO	NeuroMetrix, Inc.	Healthcare	Medical Instruments & Supplies	USA	19-Oct-17
ZFGN	Zafgen, Inc.	Healthcare	Biotechnology	USA	8-November-17
CHFS	CHF Solutions, Inc.	Healthcare	Medical Appliances & Equipment	USA	10/31/2017
TNXP	Tonix Pharmaceuticals Holding Corp.	Healthcare	Drug Manufacturers - Major	USA	9-Nov-17
VICL	Vical Incorporated	Healthcare	Biotechnology	USA	10/23/2017
OVAS	OvaScience, Inc.	Healthcare	Biotechnology	USA	9-November-17
AGTC	Applied Genetic Technologies Corp.	Healthcare	Biotechnology	USA	9/11/2017
ADVM	Adverum Biotechnologies, Inc.	Healthcare	Biotechnology	USA	7-Nov-17
OTIC	Otonomy, Inc.	Healthcare	Biotechnology	USA	9-November-17
CEMP	Cempra, Inc.	Healthcare	Biotechnology	USA	26-Oct-17
CBIO	Catalyst Biosciences, Inc.	Healthcare	Biotechnology	USA	9-Nov-17
VSAR	Versartis, Inc.	Healthcare	Drugs - Generic	USA	2-Nov-17
CHMA	Chiasma, Inc.	Healthcare	Biotechnology	USA	8-Nov-17
SRRA	Sierra Oncology, Inc.	Healthcare	Biotechnology	Canada	11-Aug-17
PYDS	Payment Data Systems, Inc.	Services	Business Services	USA	13-Nov-17

Negative EV Returns by Domicile



- **And:** Applies to both Current and Implied – if a negative EV is observable in nature, *your views* of the company can also create it

# How Enterprise Value Can Be Negative

- **How?** Public company has a Market Cap, no Debt, and some Cash, and Cash > Market Cap:

The screenshot shows a financial data table for Vical Incorporated. The table is divided into two main sections: 'Last Close TEV' and 'Last Close Market Cap'. The 'Last Close TEV' section shows a total value of (5.231), which is the result of a market cap of 27.608 minus net debt of (32.839). The 'Last Close Market Cap' section shows a value of 27.608. The table also includes other financial metrics such as 52-week high/low, volume, and beta.

Last Close TEV	
Vical Incorporated	
Standardized Data	
Oct-30-2017 - US Dollar (mm)	
Last Close Market Cap	27.608
+ Net Debt (as of Sep-30-2017)	(32.839)
= Total	(5.231)

Last Close Market Cap	
Standardized Data	
Oct-30-2017 - US Dollar (mm)	
Common Stock Market Cap	27.608
= Last Close Market Cap	27.608

52 wk High/Low	3.70/ 2.05	P/Diluted EPS
Volume (mm)	0.02	Avg 3M Dly Vli
Beta 5Y	1.98	

Delayed Quote\*\*\* | Last Updated on Oct-31-2017 11:08 AM (GMT-5)

- **Your Response:** “That makes sense mathematically, but what does it *mean*? How can a company’s core-business Assets be worth a *negative amount*? That makes no sense!”

# How Enterprise Value Can Be Negative

- **ANSWER:** If those Assets generate *negative cash flow* in the future



- **Company Value =**

Cash Flow

---

(Discount Rate – Cash Flow Growth Rate)

Where the Cash Flow Growth Rate Must Be < Discount Rate



- **So:** If Cash Flow stays negative forever, Implied EV will be negative



- **BUT:** Let's avoid controversy and show you how this could work even if Cash Flow is positive and everything is normal in the Terminal Period

# How Enterprise Value Can Be Negative

- **So:** Even if the company's Cash Flow eventually turns positive and stays that way, Implied EV could still be negative
- **Why:** The Present Value of what you put in to keep the company running exceeds the Present Value of the cash flows you earn back
- **Or:** If Cash Flow stays negative forever, the company is worthless today... AND you have to contribute cash to keep it running!
- **Real Life:** Companies like Uber or Snap that keep growing but also keep losing more money over time... turnaround in sight?!!





# How Implied Equity Value Can Be Negative

- **“Equity”** can mean many different things, and the names are confusing
- **Shareholders’ Equity or “Equity”**: Balance Sheet figure that can easily be negative since Net Income and Dividends flow into it
- **Current Equity Value**: In theory, this **cannot** be negative for a public company since it equals  $\text{Share Price} * \text{Shares Outstanding}$
- **But**: *Implied* Equity Value could be negative – take a look at that simplified DCF for the startup to see it!
- **Intuition**: Similar → Put in a lot of cash and get little, if anything, back



# The Fine Print and Qualifications

- **“Possible”** does *not* mean “Plausible”
- It’s *possible* for Any Enterprise Value and Implied Equity Value to be negative... but they rarely stay negative for long
- **Most Companies:** Market’s views turn around, and they succeed, or... they go bankrupt and die
- **Intuition:** How long *can* a company last if its core business is worthless?
- **Real Life:** Often, you’ll just set the company’s Implied Share Price to \$0 if you get this result in a valuation, and you’ll look to other methodologies



# Recap and Summary

- **Shareholders' Equity or Equity on Balance Sheet:** Yes, this could easily be negative, and it's almost always a negative sign



- **Equity Value:** *Current* Equity Value for public companies cannot be negative because it = Share Price \* Shares Outstanding...



- But **Implied Equity Value** might be negative, depending on assumptions

- **Enterprise Value:** Both Current and Implied Enterprise Value could be negative



- **Qualifications:** These cases are rare, and they don't last long



# Recap and Summary

- **Meaning:** *You expect or the market expects the company to generate negative cash flow into the future – and your contributions into the company are worth more than what you *earn* from it*
- **Most Cases:** Negative Equity Value or Enterprise Value means you shouldn't even be using traditional valuation methodologies
- **Bargain?** If a company has a negative Enterprise Value, you could buy its shares for less than its Cash per Share... great, right?
- **Fine Print:** Well... not really. Company doesn't have to distribute that Cash to you! Could just burn through it all

