# IFB335: A Comprehensive Look at Five Vital Valuation Metrics for Investors 

Dave [00:00:00]:
All right, folks, welcome to Investing for Beginners podcast. Today we have episode 335. Today we are going to talk about five valuation metrics. We're going to talk about how you can start taking a look at the value of a company. And metrics, plus the last one are some of the easier, best ways to get started. So, Andrew, would you like to introduce our first one and tell our lucky listeners what they're going to win today?

Andrew [00:00:27]:
Oh, man. You might win an avalanche of knowledge. How about that for a prize?

Dave [00:00:32]:
But use it sparingly. This is a powerful, powerful thing we're going to give you. So use it for good, not for evil.

Andrew [00:00:38]:
My friends and family might differ on that opinion, but that's okay. Let's start with price to earnings. It is the simplest, probably most frequently used shortcut that you will see when it comes to individual stocks. And all we're trying to do with a price to earnings ratio is just get an overall sense, a rough temperature, if you will, about if a stock is expensive or if it's cheap. So we can use a price to earnings ratio to compare one stock to another stock. We can compare a stock to the stock market. So, just to be completely generalizing here, Tesla today is around a 43 PE. The S and P 500, which we think of as the stock market, is around 2025.

Andrew [00:01:23]:
I don't know, it seems to fluctuate around there recently. So Tesla at a 43 , the SP at a 25 , Tesla is a little bit more expensive than the market, but it makes sense because Tesla is also growing a lot faster than the market. That's kind of the first way you can start to think about the price earnings ratio. I think that helps as
a beginner, and it sometimes can help you to remember that when you get really advanced, too. Can be that simple in a way.

Dave [00:01:47]:
Yeah, it really can. So is a PE ratio, is that appropriate to use in every situation and with every kind of company?

Andrew [00:01:57]:
Yeah, definitely not. Think of a PE ratio like a hammer. It's really good for putting in a nail, but not a screw. And so it's just one tool in the toolbox, places where the PE can really burn you. I'll say from past experience myself, I use the PE maybe a little too strongly on companies that were very cyclical. So what that means is a company is cyclical if it closely follows the economy and even overshoots the economy. So it booms when the economy is doing well, and it really crashes when the economy is doing poorly. If you try to use a PE ratio on super cyclical companies, like that, it's not really going to tell you much because those type of companies and the way they earn profits is so lumpy that if you're looking at profits like you are, with the price to earnings or price to profits, if you want to think of it that way, you're not getting a good answer about what's going on at any given point in time because they're just on this roller coaster of up and down and up and down.

Andrew [00:02:54]:
So a company like Microsoft or Apple, where maybe Apple, not as much as Microsoft, but where the profits are pretty regular and consistent, probably a great place to use a price to earnings ratio, but one where it's lumpy and super cyclical, like a steel company or a home builder, it's not as helpful.

Dave [00:03:14]:
Yeah, for sure. And several other things that kind of come to mind when you think about just metrics like this, just in general, is always remember that each industry, if you will, is going to be a little bit different. So to expect the PE ratios for banks or insurance companies to be the same as Tesla is probably unrealistic. And don't compare the PE of Bank of America to Tesla because theY're just not apples to apples. And that's a beginner mistake, is to look at companies that are from wide ranging different industries and compare them all together using something like a PE ratio. And always kind of remember that the $P$ drives the $e$ and the e can drive the $P$. And so by that I mean that if the e falls a lot, then the ratio could jump up a lot and vice versa. If the price falls and the earnings don't change, then the ratio can kind of come back to earth.

Dave [00:04:17]:
And so it can go from a 15 to a four. And you may look, oh man, that's awesome. It's super cheap. But generally when the price falls on a company, there's something driving it. So it's always good to do your research and never ever use these metrics as the sole reason you go out and buy something. Don't screen for it or don't use the metric. Any of the ones that we talk about today, don't use any of them and say, hey, this is cheap, awesome, I'm going to go out and buy it. And that's literally all you do.

## Dave [00:04:48]:

That will lead to a lot of heartache. So please don't do that. Whether you talk about any of these metrics, always remember that they are relative. So what that means is Andrew mentioned this earlier, but you have to, have to, have to use it to compare it to other companies, it's also great to compare it to each other itself. So look at the PE ratio over a five or ten year period of Tesla and go, okay, now it looks cheaper than it did four years ago kind of thing. So it's all based on a comparison level. It doesn't mean that's an absolute value, if you will. None of these are going to be an absolute value.

Dave [00:05:21]:
And I'll dispel a myth. There is no such thing as absolute value. So whenever you're trying to value a company, there is no precise price that you can find or anything. It's always a range. All right, so when you're valuing companies like a Netflix and you're obsessing about buying it at $\$ 242.16$, for example, you're wasting a lot of time. It's not about the actual number. It's about trying to find a reasonable range. So when you're looking at relative metrics, like a PE ratio, you want to look at kind of an overview of the industry, the sector the company is in, and its historical averages.

Dave [00:05:58]:
To give you a sense of kind of where it plays. Try not to obsess, like, I'm only going to buy it if it's at a 15 pe. If it's 14 or 16 . No, don't get too excited about that. If it's normally at a 15 and now it's selling at 45 , then you might want to do some research. If it's normally selling at 15 and now it's at a pe of ten, that may be an opportunity. So that's kind of how you can use these to help you find where you want to go with valuation. But you always have to remember it has to be within a range.

Dave [00:06:27]:
And try not to. Please do not use this as the sole met company. All right, so now that we've beat that horse, talk about price to free cash flow. Would you like to tell our listeners what's involved with that price to free cash flow?

Andrew [00:06:42]:
Same thing as price to earnings. You just have the free cash flow in the denominator instead of the earnings. And so do you want to tell all our listeners about free cash flow? Sure.

Dave [00:06:52]:
So, free cash flow is like. I like to say, it's the lifeblood of every company. This is what really drives the value of a business, is free cash flow. And the easiest way to visualize it is after you pay for everything that you need to operate the business. This is the money that's left over, and that's the money that you can use to reinvest or grow the business, or you can give it back to shareholders in a dividend or share buyback. So, free cash flow is vitally, vitally important, and it's something you always want to measure. The easiest way to measure it is to take. These are two items from the cash flow statement.

## Dave [00:07:31]:

One is the operating cash flow. So all the money that's left over after it pays for operations, and then a line item called capital expenditures, or capex, you simply subtract the capex from the operating cash flow, and that gives you free cash flow. And that's an easy way to kind of measure the value of what the company is generating from the operations of the business. This is before they pay debt or whether they give a dividend or do anything else. So that's kind of how you calculate it. And it's a very important metric.

Andrew [00:08:04]:
Price to free cash flow can be important because it gives you a more clear picture of the actual cash that flows in and out of a business. And so for accounting reasons, companies might have their profits be different than the actual cash that's flowing in or out of the business. And so it can be helpful to look at free cash flow. I'd say most of the time, it's almost the same as earnings if you zoom out and look at a company's free cash flow over time versus their earnings over time. But it's also a place where you can find hidden value if a company is reinvesting. And so maybe their cash flows are suppressed. Or on the flip side, if they're getting a bunch of cash flow from good working capital management or things like that, that could be a source of value, too. So I think it's very helpful to look at for sure.

Andrew [00:09:04]:
And if you're running a more absolute valuation method, like a DCF model, it is essential to look at free cash flow. But for a beginner, you could almost take a price to earnings and call it a day. I kind of think of price earnings like a hand hammer and DCF, or free cash flow. More like a jackhammer, something like that.

Dave [00:09:28]:
Okay, that'll work. All right, let's move on to the next one. So, the next one we have is price to sales, or p over s. So what does that tell you?

Andrew [00:09:39]:
So now we're looking at the sales or the revenue or the top line of a company. And this can be helpful because some of the year to year fluctuations that we talk about with earnings, you don't see that generally with sales. I mean, you still do with some of the really cyclical companies, other companies can have their profits be more volatile for a variety of reasons, but the sales can tend to be a lot more consistent and growth investors tend to use price to sales a lot more than anything else because there are no earnings to look at. Generally, if you're looking at a lot of the early stage growth, I would say it's even more so of a relative tool than anything else. And so you would definitely want to compare it in that way. If I could throw a nugget out there, one of the things I didn't know as a beginner that became clear the longer I became a stock picker is the price to sales is almost inverse to a company's margins. And so if you have a company with super high margins, they're going to have a high price to sales and vice versa. If their margins are really small, if they're like a retailer or something, and they have razor thin margins, their price of sales is always going to be smaller.

Andrew [00:10:55]:
And that's just because in general, companies are valued based on their profits. And the profit margin shrinks and contracts. And so the amount that you're paying for sales shrinks or contracts, depending on what those margins are. That's why price to sales is similar, but it's actually pretty different from price to earnings, because now profit margins come into the mix.

Dave [00:11:20]:
Yeah, that's awesome. I had not heard that little nugget before. That's pretty cool.

Andrew [00:11:23]:
So you can double check it by taking any company you can think of with like $40 \%$ operating margin, look at, let's say five or ten of them, look at their price to sales, and then compare it with a group of companies with operating margin at like $5 \%$, and look at their price to sales, and you'll notice that the groups are very different.

Dave [00:11:44]:
Well, that's interesting. Yeah, that's awesome. So would you say that of the three metrics that we've talked about so far, would you say that maybe, kind of to maybe Brian Fraldi and Gang's idea that some of these may be better depending on where the company is in their lifecycle?

Andrew [00:12:01]:
Yeah, for sure.

Dave [00:12:03]:
So, like a price to earnings for a company that maybe is not profitable would be kind of futile, but price to sales would be more effective.

Andrew [00:12:12]:
Yeah. So do you want to explain that?

Dave [00:12:14]:
Yeah. So the easiest way to think about it is every company, like humans, we go through a life cycle. We start off young and we grow, and then we get to a point where we start to mature and then we start to decline. And businesses are the exact same idea. So young companies, new companies, companies new to the market, maybe new to the stock market, new to their. But the profitability of the business hasn't quite proved out yet. And so when you are trying to value companies like that using a price to earnings ratio, it's going to be negative because they're not going to have earnings. Their costs are greater than their profits, and so they will have a negative earnings generally.

Dave [00:12:55]:
And because of that, then something like a price to earnings or a price to free cash flow in a lot of cases are ineffective, where price to sales can tell you a little bit more, especially a price to earnings. So a perfect example of this would be a company LikE Tesla. If you look at Tesla's evolution, if you will, over the last four or five years, they've gone from a negative profit company to a positive profit company. And so although their price to earnings is higher than maybe you would normally like to see before, it was negative. And so it would have been really hard to value them on a price to earnings ratio. But using a price to sales, you could have probably been able to get a better sense of what kind of value you could expect from investing in the company when it's younger. It doesn't mean that paying 55 times sales happen during the pandemic is ever a good thing, but it can be a good relative metric to use depending on where they are in the lifecycle.

Andrew [00:13:53]:
Yes.

Dave [00:13:53]:
All right, so LEt's move on to the next one. Next one we have. This one's a little more off the radar. So this is price to gross MARGIN. Would you like to tell our listeners what the price to gross margin means?

Andrew [00:14:07]:
Yeah, I'd love to. This one can be really powerful, particularly if you are the type of investor to buy stocks that are earlier in their growth cycle. But it can help ground you and make sure you're not paying TOo much. And so what it's taking is GRoss MARGIN. If you think about the, there's really three kind of main margins that tend to be calculated. I won't talk about all three, but let's just talk about gross MARGIN. It's the cost of cost of goods sold. So the cost to make your product.

Andrew [00:14:38]:
So let's take Tesla again. I think that's going to be the theme today is an easy company for a lot of people to understand. TESLA has to make a car. They have all the costs that come with the car. So it might be the manufacturing, the factory that makes it, the people who work in the factory to make it. All of these costs go into we're not talking about the marketing or anything, the lawyers, none of that, just literally what it costs to make the car. Once you take those costs out, that's going to be your gross margin. And so why that can be so powerful is because when you have companies that are earlier in that gross stage, let's use Rivian as a good example of this.

Andrew [00:15:16]:
Maybe not as many people know what a Rivian is compared to what a Tesla is. And so Rivian has to go out there and make a name for themselves. They probably have to spend more in marketing than Tesla does so that people can know what a Rivian is. And so even though the cost to make a rivian vehicle might not be much different than a Tesla, if we were comparing apples to apples. So their gross margins might be similar, but their operating margins would be way different, because maybe Rivian's spending a lot more on advertising. And so the reason why price to gross margin can be a helpful metric is you can start to look ahead a little bit and say, you know what? If Rivian was a popular car and successful, they would not have to spend as much. And so now all of that spend and marketing can become profits. And so that could be somewhat of a forward looking metric for finding companies that might have some value for you.

Andrew [00:16:09]:
So, yeah, it doesn't look like they're making a lot of free cash flow now or, yeah, it doesn't look like they're making a lot of profits now, but it is, because they are investing a lot to grow, but it's not like a crazy amount. There is some success at the base of it. So I see it as a useful tool in that regard. I haven't used it much yet, and I don't know if I ever will because I don't know if it fits the type of stocks that I look for, but that's one way that it can help. But you would think that because it's such a nuanced metric, you probably need nuanced understanding of the business that you're looking at. How do you look at price to gross margin? Because I know we haven't talked about it on the show before.

Dave [00:16:54]:
No, we haven't. And I love the way that you are framing it. That's awesome. I think the way that I have kind of looked at it, and again, I have not used it yet, but it's certainly something I'm going to add to my toolkit. And one of the ways that l've used it is, or have been thinking about using it, is to measure a couple of things. One is the potential pricing power that a company has, and also the potential moat a company has. If you're looking at price to gross margin and you're comparing it to other companies in the same industry, generally, the company that has a bigger margin, let's say that you're looking at three companies, and one has a gross margin of $60 \%$, another one has another 70 , and another one has 85 . You would probably look at the one that has $85 \%$ gross margins and think, hey, this company has something going on here.

Dave [00:17:44]:
And maybe the more that you look into it, you find out that maybe they have a superior product and maybe they operate on a better scale or a better efficiency than the other companies do, or maybe their technology just is better than the other people, which allows them to be more efficient. And so those things can lead to a potential moat. Doesn't mean it is, but it can be an indication of it. And kind of the same way with pricing power, if you're looking at it over a longer period of time, let's say a five or ten year period, and you see that a company's gross margins continue to expand, that could indicate that this company has some sort of pricing power, because they can keep raising the prices over the base cost of goods, which allows them to generate more profitability. And so those are things you want. Warren Buffett talks all the time about strength of pricing power and how important that is to him when he's thinking about potential investments. You just look at some of his track record. Apple, American Express, Coca Cola, those are three fantastic examples.

Dave [00:18:47]:

Know supreme pricing power. And so that, to me is something that I kind of like when I look at a price to gross margin. And I think it could be helpful in that respect.

Andrew [00:18:58]:
I like the way you relate it to pricing power. Kind of like you said with the $p$ and the e. The p can drive it or the e can drive it, so the gross margin can drive it. And if the gross margin is expanding that denominator, that should lower the price to gross margin, right?

Dave [00:19:15]:
Yes, exactly. So I think it's underutilized tool and it's a newer one to me, frankly. But I think it's something that I'm going to start including in my checklist, if you will, to start working through companies to just get a sense of some of those things that we were all talking about.

Andrew [00:19:30]:
Nice. That's awesome.

Dave [00:19:31]:
Yeah. All right, so the last one is not a metric. This is our friend the DCF, or the discounted catch woe model. So how would you like to tackle this fun one.

Andrew [00:19:42]:
I know now I regret even bringing it up to you.

Dave [00:19:44]:
Right? No.

Andrew [00:19:46]:
Like Warren Buffett tries to simplify it. A bird in the hand isn't worth more than two in the bush. And so all we're trying to do is figure out how much cash flow is this investment going to generate from now until the length that you're planning to hold it. And when you say bird in the hand versus two in the bush, what's that value of the cash going to be over time? You don't have to go very far in our economy to find places of inflation, places where your dollar yesterday doesn't buy as much as it does today. So you have to account for that. You have to account for the fact that whether I pick this investment or that investment, if I'm picking
this one with this cash flow, that keeps me from picking that one with that cash flow. And so that's when the discounted part of discounted cash flow is trying to discount the present value of the cash flow. And really, it is just, is this burn the ham worth more than the two in the bush tomorrow or the one in the bush that's outside my house or the one behind me in the backyard? That's really what you're trying to do.

Andrew [00:20:55]:
And all the fancy numbers and formulas all centered down into that. But what we're really looking for, the important inputs, is, what's the cash flow today? What's it going to be into the future, and by how much are we discounting? And that's kind of the gist.

Dave [00:21:14]:
Yeah, that's a good way to lay it out. I came across a story a few days ago that I think really kind of helps. Maybe kind of lay it out. Think about, let's say you live in a town, and your friend Andrew owns an ice cream shop, and he comes to you one day and says, you know, I can't do this anymore. The grind of owning this ice cream shop is wearing me down. I want to retire, and I want to go sit on the beach and drink pina coladas for the rest of my life. Do you want to buy it? And so you think, okay, great, this is awesome. I want to buy his shop, but I need to figure out a fair price.

Dave [00:21:47]:
A, he's my friend, and $b$, I don't want to pay too much. So an easy way to do this is to use something like a DCF. And the easiest way to kind of do this is you look at the numbers that Andrew provides you of the company. Let's say it's producing a million dollars in free cash flow every year, and so you're going to base your value on those free cash flows for the next ten years. And like Andrew very astutely said, the value of the million dollars next year is not the same as it is today. And three years and four years and ten years, it's all going to be diminishing returns, if you will. So the million dollars is far less, worth far less in ten years to me than it is today. And so I have to figure out a way to value that.

Dave [00:22:30]:
And using a discount rate like Andrew was talking about is the best way to do that. And if you just take 10\% average discount rate and that's the amount that kind of what you think is worth the next year, and how much you're willing to pay for those cash flows tomorrow or the third year or the 10th year, and if you do that across the board, you discount every single year. And then you simply take up all those numbers and you add it all up. And that's the air quote value of Andrew's ice cream shop. And so if we did a million dollars over ten years with a $10 \%$ discount rate, that comes out to around $8,000,008$ and a half million somewhere in that range. And so then that could be the starting point to go back to Andrew and say, hey, I think your
business is worth around eight and a half million dollars. That's what I'm willing to pay for it, because that's what you think it's worth. And then you can start the process of haggling.

Dave [00:23:24]:
But I think if you kind of think of it, visualize it in that way that, like Andrew said, the cash flow you pay today, it's not worth the same tomorrow. You have to figure out a way to discount that and then try to put all those numbers together. And that can be the value of the ice cream shop or Berkshire Hathaway or whatever it is you're trying to value. You can get super complicated with this, but it really comes down to maintaining the discipline to use the same inputs on every single DCF that you do, and you really only need five or six of them. You don't need lots and lots of numbers, and it doesn't have to be higher math. All the math you need to know in finance, you learned in fourth grade. So this doesn't have to be super complicated. And a lot of people will do these kinds of ideas on, like, back of the napkin math, where they literally will just write it on a napkin and kind of figure out a value.

## Dave [00:24:15]:

And a lot of times it's just as simple as that. And again, you're just trying to find a relative value, a range of what you think his ice cream shop is worth, so that if you do decide that you want to buy it, you have an idea, a ballpark of what you're willing to spend for that business. And it's the same when we go to invest. That's why we use a DCF. Now, keep in mind, there's a couple of things when we talk about this simple idea that we're not encompassing. Number one is the growth of the free cash flow. So we're assuming in our little example that it's straight line for ten years. That doesn't happen.

Dave [00:24:47]:
Number two is we're not also not assuming any sort of investment or reinvestment. So our ice cream machine may break or our registers may stop working, or we got to hire more employees and pay them more. And all those things cost money. And so you have to account for all that when you do a DCF. But in our simple example, it gives you kind of a range of, kind of where you can go with the numbers to help you figure it out. Warren Buffett is a genius and he can do all this in his head. I can't. I have to use a spreadsheet.

Dave [00:25:16]:
Excel is your friend when you try to do these kinds of things, but it can be very simple to do, and it's probably the best way that I know of to value a company and give you an approximate range. Keep in mind, these are all estimates. None of us have any idea what's going to happen in the next year, what will in the next ten years. We are guessing, but you try to make educated guesses as best you can and build in a margin of
safety, our tagline. And that can help you use these models to help you find the value of a company with a margin of safety.

Andrew [00:25:48]:
Love that. What a great example with the ice cream shop and the concept of discounting those capitals. I can almost see it visually in my head. And that's really how a DCF model looks if you work in a spreadsheet. So that's really awesome. I hope people got a nugget out of that. For somebody who really wants to dive into dcfs, what would be the next place that you would take them that you would say they should go?

## Dave [00:26:13]:

Well, there's several places. Number one, you check out our website, einvestingforbeganners.com. Andrew and I have written quite a lot about discounted cash flows. Cash flows in general, reinvestments, Roic. These are all components of things that you can use to help build these. If you want to get more in depth, you need to check out Michael Mobison's writings as well as Oswald the motorins writings. Both of these are free online. I will put links to both of them in the show notes so you guys can find these places and find these great resources if you really want to dig into it.

Dave [00:26:47]:
I have also created a free email series that you can sign up for if you go to Linkedln or Twitter. And there's a seven day free email course that walks you through how to build a DCF model. Starting from the basics and building up and you get one email a day and each email takes about less than five minutes to read. And at the end of it there is a free DCF model as well as a PDF of all the emails so you can use it in future reference as a guide to help you. So it's super easy. It sounds complicated, it looks complicated, but once you really start working with the individual components, I know you can do it. Let me put it this way. If I can figure this out, you can absolutely figure this out.

Andrew [00:27:28]:
Perfect. Yeah, check it out. I really love the way Dave has laid out the email series. I feel like it's very digestible and really teaches you exactly what you need to know to get you to the next step. To get you to the next step. Then you turn around, you're like, oh, wow, I actually kind of understand.

Dave [00:27:44]:
So I was able to value Google. Who knew?

Andrew [00:27:48]:
That's kind of the. Yeah. And also he's a great follow on Linkedln. So go on Linkedln. Search up Dave Ahern. Subscribe to that. It will be worth your time.

Dave [00:27:59]:
All right, everyone, well, with that we will go ahead and wrap up our chat on valuations and metrics and DCF. So I hope you guys enjoyed our little show and got a few nuggets or six out of this. And if you guys have any questions about anything that we talked about today, or just anything in general, please reach out to us. We'd love to help. You can send us your questions at newsletter@fourbeganners.com again, I'll put that in the show notes. And if you have any questions, please again, reach out. We're here to help. So with that, we'll go ahead and sign us off.

Dave [00:28:27]:
You guys go out there and invest with a margin of safety. Emphasis on the safety. Have a great week and we'll talk to you all next week. Bye.

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