3

On Value

When we think about our talents and how we should use them, we don't consider our financial wealth itself as a talent. Our talents are more personal than a simple calculation of net worth. They are the gifts that make us special and the abilities that we develop over time. If there is a link between money and talents for our modern sensibilities, it is that money and fortune may accrue from the exercise of our talents.

Etymologically, though, talent is deeply linked to money. The original meaning of talent as a unit of weight (approximately 60 pounds) quickly morphed into a monetary unit associated with the value of coins corresponding to that weight. Scholars disagree about precisely how much a talent was worth, but estimates range from $1,000 to $500,000 in today's currency. More familiar monetary denominations—such as shekels and drachmas—were actually small fractions of a talent. So when, how, and why did the word for money become elevated to refer to a gift or an ability that defines us?

As we'll see, the Bible's parable of the talents played a crucial role. That parable, depicted opposite in an engraving by Lucas van Doetechum, corresponds well to the financial logic of value creation. You'll often hear finance practitioners talk about managers who create or destroy value and whether or not they are generating "alpha" or getting paid for "beta." The parable can illuminate that jargon.

The intuition of value creation corresponds closely to another preoccupation of finance—the valuation of assets. How do we know what any asset is worth? Anyone buying a home or a stock or a car must, implicitly or explicitly, be undertaking such a valuation. Is this asset "worth" what I'm paying for it? More broadly, any investment of time or resources requires a valuation. Should I pursue that educational degree? Should you send your child to the Russian School for Mathematics? All those kinds of questions require us to trade off a current sacrifice (tuition today) with some future benefit (your daughter's Fields Medal in 2040)—and that requires a valuation. The process of valuation is the same process that a company like Microsoft undertakes when it purchased LinkedIn for $26.2 billion.

Just as the parable of the talents illuminates finance's idea of where value comes from, the actual practice of valuing assets holds lessons on what is truly valuable in life. But these logics of value creation and valuation, like the parable, are extremely severe. As we'll see, the severity of that parable preoccupied two people—John Milton and Samuel Johnson—whose uses of the parable provide a more humbling take on where and how value is created.

In the Book of Matthew, Jesus is preparing his disciples for the Day of Judgment with a series of parables, including the parable of the talents. A master is going on a journey and entrusts his property, in the form of eight talents, to three servants—giving them five, two, and one talent, "each according to his ability." When he returns, he finds that two of his servants have taken these talents and doubled them through trading, into ten and four talents, respectively. The master, usually interpreted as God, is pleased and says to each, "Well done, good and faithful servant. You have been faithful . . . Enter into the joy of your master." Those servants are allowed to keep those talents and enter the kingdom of God. But the third servant, who received only

As we'll see, the Bible's parable of the talents played a crucial role. That parable, depicted opposite in an engraving by Lucas van Doetechum, corresponds well to the financial logic of value creation. You'll often hear finance practitioners talk about managers who create or destroy value and whether or not they are generating "alpha" or getting paid for "beta." The parable can illuminate that jargon.

The intuition of value creation corresponds closely to another preoccupation of finance—the valuation of assets. How do we know what any asset is worth? Anyone buying a home or a stock or a car must, implicitly or explicitly, be undertaking such a valuation. Is this asset "worth" what I'm paying for it? More broadly, any investment of time or resources requires a valuation. Should I pursue that educational degree? Should you send your child to the Russian School for Mathematics? All those kinds of questions require us to trade off a current sacrifice (tuition today) with some future benefit (your daughter's Fields Medal in 2040)—and that requires a valuation. The process of valuation is the same process that a company like Microsoft undertakes when it purchased LinkedIn for $26.2 billion.

Just as the parable of the talents illuminates finance's idea of where value comes from, the actual practice of valuing assets holds lessons on what is truly valuable in life. But these logics of value creation and valuation, like the parable, are extremely severe. As we'll see, the severity of that parable preoccupied two people—John Milton and Samuel Johnson—whose uses of the parable provide a more humbling take on where and how value is created.

In the Book of Matthew, Jesus is preparing his disciples for the Day of Judgment with a series of parables, including the parable of the talents. A master is going on a journey and entrusts his property, in the form of eight talents, to three servants—giving them five, two, and one talent, "each according to his ability." When he returns, he finds that two of his servants have taken these talents and doubled them through trading, into ten and four talents, respectively. The master, usually interpreted as God, is pleased and says to each, "Well done, good and faithful servant. You have been faithful . . . Enter into the joy of your master." Those servants are allowed to keep those talents and enter the kingdom of God. But the third servant, who received only one talent, tells God, "I was afraid and I went and hid your talent in the ground. Here you have what is yours" and returns his one talent.

God is not pleased. "You ought to have invested my money with the bankers, and at my coming I should have received what was my own with interest." As punishment, God takes the talent away from the poor servant and gives it instead to the servant who has ten talents, explaining, "For to everyone who has will more be given, and he will have an abundance. But from the one who has not, even what he has will be taken away." Then, God delivers the ultimate punishment: "And cast the worthless servant into the outer darkness. In that place there will be weeping and gnashing of teeth." The poorest servant is deprived of his talent and banished from the kingdom of God. Yikes.

While I wrestle with some dimensions of the parable, the main lessons seem clear—everyone has been endowed with talents and gifts; they are distributed unequally; they are incredibly valuable; and, most importantly, they should be exercised to their fullest extent. We are the stewards of those gifts and must make the most of them. At some point, we'll all be held accountable for what we do with our gifts, and living in fear and depriving yourself and the world of your gifts is sinful. There also seems to be a close connection to our earlier discussion of risk: one can try to insure against and manage risk to some extent, but, ultimately, life entails risks.

What does this Biblical tale have to do with finance? The big questions in finance are: how is value created, and how should we measure value? In particular, when we think of companies whose value goes up over time, it is because they are presumed to be creating value.

Finance's answer to the question of where value comes from is simple—the capital you're entrusted with has a cost because the people who gave it to you have expectations for returns. In fact, the returns they expect are a function of the risk we talked about before, and that risk is measured by how you respond to market fluctuations (remember those betas?). Their expected returns are your cost of capital. You are a steward of their capital, and the sine qua non of value creation is that you have to *exceed* their expectations and your cost of capital if you want to create value.

It's a brutal logic. For example, if you just meet investor expectations, you've done nothing of value. As one example, say your capital providers expect 10 percent for the $100 they entrust you with. If, in one year, you give them $110, you will have provided them with their expected return but not done anything special—you will have just met expectations, and nothing more. You could have stayed in bed.

Only by delivering, say, 15 percent is there value creation, because in that case you've gone above and beyond their expectations. Think of it this way: you start a restaurant and you sell meals at a price that is exactly the same as the cost of your ingredients and labor. That's not terribly exciting and is evidence that you haven't actually created any value beyond the cost of your inputs. That logic holds for capital as well, though the cost of capital is often not explicit.

The logic becomes even more brutal. If you generate a return with your investors' capital that is below their expectations, you've actually destroyed value. In essence, it would have been better if you didn't take their capital at all. You might think that you are doing well if you generate an 8 percent return. In fact, if they expected 10 percent, you destroyed value. You should have stayed in bed.

This logic of value creation has two corollaries. If you just exceed investors' expectations for one or two years, it's not that exciting. True value creation arises if you are a steward of their capital for multiple years and you beat their expectations every year. In a similar vein, if you can grow and continue to reinvest their earnings at a high rate of return, that's even better than simply returning profits to your capital providers—precisely because you're good at beating their expectations.

As one example, contrast the following two cases. In both cases, your investors expect 10 percent but you return 20 percent, so you're handily beating expectations. But in the first case, you do this for five years and only reinvest a quarter of their profits while returning the rest to them. In the second case, you do this for twenty-five years and reinvest all the profits until the very end. What's the difference in value creation? In the first case, you have effectively created value that corresponds to 50 percent of the capital you were entrusted with, while in the latter you would have created value of 900 percent of their investment.

In short, finance has a simple recipe for value creation—1) surpass the expected returns of your capital providers; 2) surpass those expectations for as long as you can; and 3) grow, so you can keep generating returns that are higher than your cost of capital. That's all that really matters for creating value.

There are at least two striking parallels between this logic and the parable. First, we are stewards of resources for others in both cases. That logic of stewardship and obligation is central to finance—we are overseeing the capital that others have entrusted to us, just as the servants must take care of God's talents. As Bob Dylan sang in his gospel classic, everyone's "Gotta Serve Somebody." We are all stewards—links in a chain of individuals charged with tending to our resources.

Second, that role of steward comes with high expectations, is risky, and can be characterized by great outcomes (high returns/salvation) or terrible outcomes (value destruction/damnation). There is a harsh and challenging logic to both: make the most of what you are given, be aware of how much you've been given and how much is expected of you, and make every effort to exceed those expectations.

The finance recipe for value creation can also easily be mapped to the way we think about our lives. The first step, "surpass the expected returns of your capital providers," can be understood as saying that you should give more than you take; that is, return much more to the world than the considerable talents you've been given. The second step, "surpass those expectations for as long as you can," is simply another way of saying never stop giving more than you take. Finally, "grow, so you can keep generating returns that are higher than your cost of capital" is just another way of saying that you should never stop investing in yourself and continue to grow. Postpone harvesting as long as you can—because the returns to investing in your efforts can be enormous.

The founder of Methodism, John Wesley, clearly understood the link between the parable of the talents and value creation back in the 1700s. He explicitly linked the parable to finance in a sermon titled "The Use of Money." The latter two parts of the sermon are summarized as "Do not throw the precious talent into the sea" and "Having, First, gained all you can, and, Secondly saved all you can, Then give all you can." This quote is in fact the origin of the more popular framing of Wesley's logic: "Do all the good you can. By all the means you can. In all the ways you can. In all the places you can. At all the times you can. To all the people you can. As long as ever you can." It is difficult to summarize the financial logic of value creation any better.

There is only a small step from the logic of where value comes from to the logic of how to value anything. Before we establish what finance's approach to valuation *is*, it's useful to be clear about what its approach to valuation is *not*.

Finance and accounting are often seen as basically the same and fundamentally interchangeable. Nothing could be further from the truth. Finance is a direct reaction against accounting and its limitations. Accounting uses balance sheets to tally the value of assets owned and obligations undertaken; income statements calculate annual profits and losses. Accountants take these calculations as fundamental, and indeed many individuals keep tabs on their own financial well-being with these techniques and assumptions.

For people in finance, accounting's approach to value is deeply troubling. Representations on balance sheets deliberately leave out a company's most valuable assets because of the idea of "conservatism": accountants give zero value to assets that they can't value precisely. In fact, the most valuable assets of companies like Coca-Cola, Apple, and Facebook (their brands, intellectual property, and user community) never show up on balance sheets. It gets worse. Because of the principle of historic cost accounting—that assets should be represented at their acquisition price—some assets are listed at values that are completely distinct from current values. You'll see balance sheets with large amounts of "goodwill" (the amount paid to acquire a company in excess of its book value) that may now have little value at all. As such, accounting and balance sheets are static and backward-looking by their nature. They are incomplete snapshots divorced from real value.

Individuals who measure their progress by tallying their own personal balance sheets will make the same mistakes that accountants make. They will undoubtedly emphasize a score-keeping system that prioritizes the many things that they can count precisely—which may well have no true value. Conversely, the score-keeping system ensures that truly valuable assets will never show up on the balance sheets because their value is too hard to put a number on.

Given that accounting is so problematic, finance adopts a different approach to measuring value. Finance's starting point in valuation is that previous accomplishments and what you have today bear little relationship to real value. Finance is completely and ruthlessly forward-looking. The only source of value today is the future. The first step of valuation is to look forward and project what a company or investment will produce in the future.

The second step is to translate those future benefits into today's values. Here's where finance acknowledges that waiting has costs. We are by nature impatient and we also don't like risk, so we charge for that—by means of the cost of capital we discussed before. We punish all future flows by diminishing their value according to that cost of capital to get their associated value today. And the longer you make us wait, the more severe the punishment will be. By translating all those future flows to the present, we will have arrived at what something is worth today—true value. That process is called discounting.

If you look at any valuation model used in finance, it has that basic structure. Ignore the past and present. Look forward to the future and project economic returns. Translate those back to today's value using a "weighted average cost of capital"—a blend of the returns expected by your debt and equity financing. That translation gives you what something is worth today—and if it's more than what you have to pay for the asset, you have a good deal.

Valuing an investment in education has the same structure—project forward the extra wages you will earn because of that education, translate those incremental wages back to today, and compare them to the tuition. If the translated future values are greater than the tuition, you have a good investment. Given how important and controversial educational investments are (and given that I'm in the education business), it's worth pausing to see how those calculations shake out.

A September 2016 memorandum on higher education produced by the Obama administration estimates that, across a career, a worker with a bachelor's degree earns nearly $1 million more than a similar worker with just a high school diploma. For an associate's degree, they earn $330,000 more. Does that tell the whole story? Given that a student has to wait for all those extra wages, it's critical to discount all those wages from the future to the present. When you do, you'll find that the present values of those extra wages are $510,000 for bachelor's degrees and $160,000 for associates degrees. Now, you simply compare that to tuition today to see if you're getting a good deal. Yes, this analysis (contrary to much misleading logic percolating around today) says that a college education is a great deal—but it doesn't mean that *every* college education is a great deal.

Valuing housing has that same structure but is trickier because it's hard to think about the returns to owning a home. To value a home, project forward the rent you won't now have to pay because you'll own a home, along with the property taxes and home improvements you'll have to make, translate them back to the present, and you'll have a home's value today. The comparison to rent not paid is critical—and it's the reason why the housing bubble persisted. People didn't realize that houses were incredibly expensive compared to renting through the early 2000s. If they looked at price-to-rent ratios, they would have seen how expensive buying a home had become.

Finance's approach to valuation is as harsh as the logic of value creation. Whatever you've done in the past doesn't matter and the only thing that matters is the future—and the longer you make me wait for my returns in that future, the greater the punishment via discounting. All value accrues from the future. In fact, any finance practitioner knows that standard valuation models result in the vast majority of value being attributed to so-called terminal values. The value of companies like Facebook, LinkedIn, and Twitter hinges on whatever assumptions we make about what they will do far off in the future—and these assumptions are captured in what people call terminal values. In short, though we project what they'll do in the next several years, the majority of their value is going to come from whatever we think they'll do well down the road. Similarly, in valuing housing, much of today's house value comes from what we think we can sell that house for in several years.

This brief description of valuation allows a taste of the finance approach and how it might refract onto our lives. First, ruthlessly look forward and ignore the past and present in deciding what value is and what actions to undertake. Your previous accomplishments and missed opportunities mean nothing when looking at yourself today. Second, this emphasis on the future means that all estimates of value and decision making are acts of imagination and fundamentally conjectural. Imagining alternative futures is critical for making good decisions, just as it is for valuing investments. Finally, most value arises from terminal values (reflecting returns into perpetuity) and not returns in the short run. We are in a long game, and most enduring value arises from what we leave behind—our legacies—and not what we enjoy while we're here.

I recall my father often telling me something that I now tell my daughters (my terminal values)—"the world belongs to the young." This is an adaptation of a Mao Zedong quote, but the sentiment permeates many traditions and it is an encapsulation of the logic of finance. We are in service of future generations, for it is their world much more than ours.

Parables, by their nature, are open to interpretation—that's what makes them so much fun and also allows them to endure for so long. In the case of the parable of the talents, there are several pieces that still puzzle me.

First, there is the unequal distribution of the talents to the three servants, explicitly suggesting that this distribution reflects the principle of "each according to his ability." Second, there is the redistribution of the talent away from the poorest and toward those who have more—and this is explicitly the goal: "everyone who has will more be given, and he will have an abundance. But from the one who has not, even what he has will be taken away." And finally, there is the harsh punishment of damnation meted out to the poorest servant. This "worthless servant" is cast "into the outer darkness. In that place there will be weeping and gnashing of teeth."

Here is where I find some lessons of the parable more mysterious. Why did the talents get distributed initially the way they did? Why redistribute toward the richest servant? Why deliver the ultimate punishment to the poorest servant who is guilty of, at most, fear?

For some practitioners of finance, these elements of the parable are not puzzling at all and ring true. They would argue: "The answers to your questions are clear. There are fundamental differences in ability across people, and truly talented individuals end up with great rewards because of their ability. As a result, more of society's resources should be under their control, given how talented they are. Individuals who garner fewer economic rewards are not as talented and often squander opportunity." This Randian worldview manifests the machismo that finance practitioners are often known for. Many practitioners of finance pride themselves on the meritocratic nature of their endeavors: the market is a harsh master and the results accord with ability.

But is this necessarily true? And if we don't know for sure, is it a good set of operating beliefs?

In order to explore this, it's useful to consider two remarkably talented and productive people who, as it happens, were obsessed with the parable of the talents. Samuel Johnson—who in eight years single-handedly created a dictionary that was the precursor of the *Oxford English Dictionary*—was haunted by the parable. And John Milton, author of the epic poem in blank verse *Paradise Lost*, repeatedly mentioned the parable in his writings and lost many hours of sleep to its logic.

No matter how much he accomplished, Samuel Johnson feared damnation for not using his talents fully. "He that neglects the culture of ground naturally fertile is more shamefully culpable than he whose field would scarcely recompense his husbandry." Johnson's sentiment is precisely the burden many gifted, privileged people feel. Rather than congratulating himself on being the beneficiary of the unequal distribution of abilities, he framed it as a task to live up to.

Moreover, in his poem "On the Death of Dr. Robert Levet," Johnson flips the lesson of the parable and praises a simple man who was not blessed with the many talents that Johnson knew he himself was blessed with. Levet was a poor man to whom Johnson gave shelter and Levet became a caretaker of sorts for those around him. While in many ways a completely unremarkable man, Levet was worthy of the highest praise from Johnson: "obscurely wise, and coarsely kind," an individual who, through the care and affection he gave those around him, demonstrated "the power of art without the show." Why did Levet deserve such praise? Johnson invokes the parable when he concludes:

> His virtues walk'd their narrow round,
>   Nor made a pause, nor left a void;
> And sure th' Eternal Master found
>   The single talent well employ'd.

Johnson, a man blessed with innumerable talents, took inspiration from a man with little material wealth or natural ability, but with the sole talent of providing care and affection to those around him. For Johnson, the parable is not a recipe for worshipping the "great men and women" of the world who have been given much, but rather a lesson in humility and a reason to appreciate the contributions of those who provide so much despite not being endowed as richly as he was.

Milton went even further in interpreting the parable. The son of a scrivener (a bookkeeper and a money lender), Milton was obsessed with his incalculable debts to his earthly father, who had invested so much in his education, and to his heavenly father, whom he saw as the source of his poetic talent. Milton repeatedly worried that he wouldn't be able to settle these debts and used the parable to voice his concern. He, like many of us, bumbled around for years looking for what at the time was called "credible employment." This concern reached a climax in Milton's forties when he discovered he was going blind. While he had already accomplished much as a pamphleteer for free speech and republicanism during the English Civil War of the 1640s, he had yet to use fully the talents he knew he had for poetry—and the progression of his blindness made him worry that he never would.

In the sonnet "When I Consider How My Light Is Spent," Milton frames his fear of damnation in terms of the parable of the talents. As he is losing his sight, he is tortured by the fear that his "one talent that is death to hide" is "lodged with [him] useless," given his impending blindness.

Milton works his way out of the tortuous bind he faces by switching from the parable of the talents to a totally different parable, the parable of the workers in the vineyard. In that parable, God is a landowner who hires workers for his vineyard. Some begin working in the morning, and others, who have been standing around all day, begin working near the end of the day. He promises to "pay them whatever is right." At the end of the day, God pays all of them the same amount regardless of when they began working, creating rancor amongst those who worked a longer day. God replies, "I will give unto this last, even as unto thee . . . Is thine eye evil, because I am good? So the last shall be first, and the first last."

In Milton's sonnet, the harsh logic of the parable of the talents gives way to the more forgiving message of the parable of the workers in the vineyard. Concerned that God will punish him because he has squandered his talents, Milton pushes back his anxiety and impatience by concluding

> "God doth not need
> Either man's work or His own gifts. Who best
> Bear His mild yoke, they serve Him best. His state
> Is kingly: thousands at His bidding speed,
> And post o'er land and ocean without rest;
> They also serve who only stand and wait."

In other words, there is more to the world than the harsh logic of the parable of the talents, and one cannot live by its lessons alone. There is kindness, generosity, and forgiveness—and the parable of the talents ignores all that, says Milton. The generosity of spirit that Milton gleaned from that second parable may well have allowed him to complete *Paradise Lost*, *Paradise Regained*, and *Samson Agonistes*, all after he went completely blind.

While the parable of talents corresponds nicely to the intuition of value creation, another important set of ideas in finance directly contradicts the harsher elements of that parable—as well as the harsher elements of the worldview that some in finance tend to exhibit.

That harsh, meritocratic worldview is well encapsulated by the idea of "alpha." Many people in finance, particularly investors, frame their efforts as "alpha generation" and deride those who get "paid for beta." What in the world does this mean? As we saw, beta is a measure of how a stock moves with the market. And that co-movement with the market is the risk that investors can't diversify away and must bear, and therefore demand compensation for. So money managers who get paid for providing returns that are just associated with bearing that risk are doing nothing of value. According to the logic of valuation, they are not creating value. Yet, they are still being compensated handsomely—they are being paid for beta. Returning to our previous example, they are just meeting expectations, yet they think they're creating value.

In contrast to this freeloading logic, "alpha" represents value creation—these are the returns above and beyond expected returns. In short, alpha generators have reached finance nirvana. You are truly generating value, beyond any returns expected for risks borne, when you generate alpha.

The mistake people in finance make all too often is reflected in their appreciation of the more challenging parts of the parable of the talents. They attribute much of their success and returns simply to alpha generation and they pride themselves on it. In reality, finance teaches us that it is very difficult to know the extent to which our efforts are responsible for generating alpha. As a consequence, much of what we label as alpha generation is anything but.

As one example of this, consider the coin-flipping experiment. This experiment is a provocative way to humble any investors who pride themselves on their success as it directly rebuts the idea that alpha is easily labeled or generated. In a room full of a hundred of your friends, ask everyone to take out a coin, flip it ten times in a row, and record their results. You'll find that you're almost guaranteed to have one friend who gets ten heads in a row. Here's the key insight: that friend is indistinguishable from an investor who says they've beaten the market ten years in a row. Why?

Well, it goes back to the nature of randomness and the quincunx. While most balls will fall in the middle and generate the normal pattern, you're guaranteed to have some balls way over on the sides. And when you have tens of thousands of professional investors, you should expect to see many people with remarkably good performance. But it might have nothing to do with their skill; it's entirely possible that it's luck—they are just the balls that landed way off on the side of the quincunx. In fact, if anything, the puzzle is why more professional investors don't do better than the market, based on luck alone.

The lesson from this experiment is that it is very difficult to disentangle skill from luck in finance. First, there is the nature of randomness that will make any measure of success unreliable. Second, there is the inability to identify cleanly which risks have been undertaken, creating ambiguity over what expected returns should have been. Finally, there is now plenty of evidence that indicates that few money managers consistently beat the market, after consideration of their fees.

This last piece is what is known as the efficient markets hypothesis—it is very hard, if not impossible, to consistently beat the market. That hypothesis is much derided today because of the convulsions of the markets and because many professional investors have an interest in making people believe that it is untrue. And naïve formulations of efficient markets—all available information is in prices already—are surely untrue. But the more thoughtful formulations—that it is very hard to beat the market and generate alpha consistently—are well supported.

So, the machismo that heralds market outcomes as clear indicators of effort and ability should be tempered. And the heroism associated with the supposedly meritocratic nature of finance is unjustified. If anything, there is no endeavor where it is easier to recharacterize luck as skill and bad performance as exceptional performance than within the field of finance.

In fact, that is what we see in large chunks of finance. The massive growth of the alternative assets industry over the last three decades is an underappreciated development in our capital markets. That development is predicated on the idea that some investors—such as hedge funds, private equity funds, and venture capital funds—are truly skilled and can generate alpha. That alpha generation serves as the foundation for their fees. Their fee structures—so-called carried interest—are a function of their performance, so, the logic goes, they only get paid when they do well.

Of course, the reality is not quite so benign. These investors have been shown to not outperform reasonable benchmarks on average, and the evidence of skill for most of them is fleeting—except for, perhaps, funds in the top decile of those funds. And their compensation is predicated on benchmarks that don't usually reflect the risks they undertake. Similarly, executive compensation contracts that naively use stock performance to judge how managers are doing are deeply misguided. Separating skill from luck over shorter horizons (less than ten years) is nearly impossible in financial markets. Large chunks of compensation arrangements throughout the economy don't reflect this reality—and have actually contributed handily to growing income inequality.

Finance cautions against attributing outcomes to efforts and skills in a simplistic way. Luck is a dominant and underappreciated part of life and performance. The lesson of finance is one of humility—as it was for Johnson and Milton. The harshest aspects of the parable of the talents—and the worldview of many practitioners of finance—can usefully be tempered with humility, generosity toward others, and a keen appreciation for the force of luck in life.

The logic of valuation is the logic of stewardship and obligation, giving back more than you take, working for future generations, and not confusing outcomes with efforts. The philosophical aspects of finance's approach to valuation should come as no surprise—aren't we all trying to create value in our world? Finance's search for value parallels our own search for meaning.

When we began, we used the etymology of "talent" to find our way to finance. We conclude by using the etymology of "finance" to find our way to meaning. When I ask my students what finance is about, they often reply "money." In fact, finance is rooted in the Latin "finis," which means a "final payment or settlement," as in the settling of a debt with a final payment. The first known use of "finance" is from the medieval story "Tale of Beryn," which is sometimes included in Chaucer's *Canterbury Tales*. In it, one of the characters considers his life and states, "To make from your wrongs to your rights, finance." In short, living up to and settling one's obligations is the road to salvation.

When the Day of Judgment arrives, have you financed?