

CONFIDENT CONVERSATIONS® on Retirement: The Evolution & Impact of Target Date Solutions on Modern Investing

Francisco Negrón: Welcome to T. Rowe Price's CONFIDENT CONVERSATIONS® on Retirement. My name is Francisco Negrón, and I'm grateful to be your host. For the past 35 years, I have been privileged to work with organizations to help their employees prepare for retirement. My colleague joining me today is a financial professional who also helps people on their retirement journey, whether they are planning for retirement or already there.

In today's episode, we will discuss target date solutions, including their history, potential advantages, and how they compare to other ways of building and maintaining portfolios. Whether you're a seasoned or beginner investor, understanding target date solutions can be beneficial. Join us as we unpack one of the most popular investment vehicles designed to simplify saving for retirement. And to do so I have with me today Wyatt Lee who is Head of Target Date Strategies at T. Rowe Price and CERTIFIED FINANCIAL PLANNER™ professional Stuart Ritter.

Welcome to the show, Wyatt and Stuart.

Wyatt Lee: Thanks Francisco.

Stuart Ritter: Thank you.

Francisco Negrón: Great to have you here. Let's begin before we dive into the topic, can you talk a little bit about your backgrounds? Wyatt, let's start with you.

Wyatt Lee: Yeah, sure. I'd be happy to. I'm head of target date strategies here at T Rowe Price. I've been working in the target date world for about 19 years now, and I've been at T. Rowe for about 25 years.

Francisco Negrón: Excellent. Stuart. What about you?

Stuart Ritter: As you mentioned, I'm a certified financial planner. I've been with T. Rowe for about 25 years as well, and my career has been helping people understand the world of investments and financial planning so that they can make the right decisions for their situation.

Francisco Negrón: Excellent. Well, thank you both. So, let's just dive right in. Let's begin with a basic definition. What exactly is a target date solution?

Wyatt Lee: Francisco, that's a great question to start with. The easiest way to think about a target date solution is that it is a type of balanced strategy. A portfolio that is well-diversified across both stocks and bonds, as well as potentially other investments. But the big difference of

a target date solution relative to a traditional balanced approach is that the target date is an age-based solution that evolves over time.

Wyatt Lee: Let me step back for a second and I can explain what I mean by that. Target dates are typically sold based on a date which represents the date closest to which you would expect to retire, typically, around age 65. So, if you'd expect to retire around 2040, you would choose a 2040 target date portfolio. From there, the investment design of the portfolio will evolve relative to that date.

Early on in the time horizon when there's a long time until retirement, the portfolio will be designed to deliver more growth and then it will become more conservative as the target retirement date approaches and the time horizon is shorter. If you're looking at target dates, you actually might hear the term glide path. This is the industry term that's typically used to describe that roll down from equities to fixed income, that happens as the target date approaches. From my perspective, the beauty of this then, is that it provides a well-diversified, professionally managed investment strategy that's both tailored to changing needs over time and packaged in a way to potentially simplify the investment process for those who want help managing their asset allocation.

But most importantly, the investment strategy is packaged in a way so that the investor has something that evolves for them. It becomes super convenient for those who want somebody to help manage their asset allocation over time.

Francisco Negrón: So, it is really a professionally managed solution.

Wyatt Lee: Yes.

Francisco Negrón: That, that has a - what's the word I'm looking for? A dynamic element to it in that it is adjusting based on certain factors...

Wyatt Lee: Yeah.

Francisco Negrón: ...and we'll get into those in a moment. Okay. So, this is all very interesting, but it's very much an investment topic up to this point. Stuart, so this is where you come in. To a beginner investor, why is all this very relevant?

Stuart Ritter: It goes to the problem we're trying to solve with this. You said it in your open, it's not just about building a portfolio, but also maintaining it over time. So, you start with figuring out what your time horizon is and other relevant factors, your risk tolerance, to build the portfolio. As Wyatt alluded to, what's the right mix of stocks and bonds and holding different kinds of stocks and different kinds of bonds. Well, that's a point-in-time decision, but then you've got to maintain it as you get older and move through retirement. So about once a quarter or so, you're rebalancing. But then as your time horizon shortens, you want to change

the mix of stocks and bonds potentially. So that needs to happen. Then you've got to rebalance to the new mix.

What a target date solution does is it takes care of all of that maintenance for somebody. When we go back in time, originally there were just stocks for people to invest in and it got to the point where there were so many stocks, it became easier when someone invented the mutual fund to put a package of stocks together and people could just invest directly in that package of stocks through the mutual fund.

Target date solutions are the next evolution. Now, there are so many mutual funds, that the target date solution puts a package of them together and also will change over time to rebalance and to match the change in time horizon that people are dealing with. In terms of an individual investor, it simplifies the process of doing all that investing because you've got a professional involved in putting that package together and maintaining it over time.

Francisco Negrón: That's a really good point, Stuart, and that very last part that you just stated, because a lot of what you described is also what we have talked about in prior episodes, about what constitutes elements of a good financial plan. So, what I'm hearing is that these vehicles, these investment vehicles, these solutions also help address some of those elements that you as a planner would consider are important when you're thinking about your overall financial plan. Am I thinking about it correctly?

Stuart Ritter: Yes. Investing is a key component of someone's financial plan. In addition to how much you're saving and what accounts you're using and all the other elements, and what the target date solution does is it brings a professional element into that investing component to make it easier for people to have that investment solution that they need.

Francisco Negrón: Yeah, that part of it is key. Thank you for that. So, let's take a step back. How did these solutions come about? Wyatt, maybe you could talk about a little bit of the history of how we ended up with target date solutions in the first place?

Wyatt Lee: Yeah, I'd be happy to. And it goes back a little bit to what Stuart was saying. So, if you think about what many people in a defined contribution or 401(k) market are asked to do, they're asked to save for their retirement and then build an investment portfolio. Plan sponsors, employers were seeing investors not do a great job at this.

And so, you start to see target date solutions first emerge in the mid-nineties as an alternative to just having a stock fund and a bond fund that investors had to put together on their own. From there, they really did take off in the 401(k) market because employers saw that their employees needed a solution to improve their investment outcomes.

My guess is most people will have had some sort of exposure to target dates within their retirement plan. T. Rowe was one of the early entrants in the space. We launched back in 2002. We looked a little bit different back then and since then we've really become well known as an

innovator and a pioneer in terms of how we build our strategies and how the portfolio manager and the portfolio management team continues to think about making sure that they're well positioned going forward.

What I'd wrap up, though, is to say, if you think about what's happened over the last two decades, the idea of target date strategies as a simplified investment solution has really become the biggest investment theme in the defined contribution space. We see lots of participants using them. We see them staying in the portfolios. So, one concern with investing is that people tend to move money at the wrong times, but we see vast, vast majority of investors in target date solutions staying the course even during periods of market volatility. And if you look, we probably see well more than 90% of 401(k) plans offering a target date solution. So, I'd probably say it wouldn't be overkill to think of them as one of the most important financial innovations in history.

Francisco Negrón: Yeah, no, definitely it is an important innovation and it's not surprising that 401(k) plans, defined contribution plans, would be where you would see them more prevalent because you know, that has such a long time horizon, so the, as Stuart said earlier, that point in time decision and just forgetting about it actually you know it's not beneficial when you need to be thinking about decades ahead.

Wyatt Lee: And to add to that, think about many people in a 401(k) plan, right. That might be their biggest pool of investable assets. And you're asking someone who has a career that may have nothing to do with investing to make an investment decision for the rest of their working life and probably beyond retirement.

Francisco Negrón: And to maintain that decision.

Wyatt Lee: And to maintain - exactly. And so, to have something that can be simply packaged where you have that professional oversight on top becomes super valuable.

Francisco Negrón: Excellent. Very interesting. So, Stuart, I was going to ask you to talk a little bit more about the appeal of these solutions, but I feel like we've already started talking about that. Why don't we just build on that and what these portfolios might offer to investors?

Stuart Ritter: One of the ways I encourage people to think about what a target date solution can do for you is to think about driving your car. And I want to talk, just stay with me for a minute, I want to talk a little bit about your car's transmission. Now, there's a thing out there called a manual transmission. And a manual transmission gives you more control over the driving experience, gets better gas mileage, they're often cheaper. But with all that comes more responsibility. You've got to be monitoring traffic flow and there's an extra pedal down there and you've got a stick you've got to move, and you're worried about the engine speed. And because there's so much more to do to drive a car with a manual transmission, a lot of people have realized it gets distracting from our main focus which is driving the car. It can take your attention away from driving the car.

So, the vast majority of people, like north of 90% of cars sold in North America are automatic transmission cars. And what people do is they let the professional that built the transmission do all the changing that needs to be done as they're driving down the road. And that's what a target date solution offers to investors for retirement. You don't have to be the one who's getting in there and fussing with it every quarter and wondering when you should shift from more stocks to a little bit less in stocks. There's a professional involved that's doing that for you and gives you the opportunity then to focus on other things and not have to worry so much about the investment portfolio component of your plan.

Wyatt Lee: Stuart, I'm glad you went to transmissions because I thought you were going to make me feel like an Uber driver for the defined contribution marketplace for a second there.

Stuart Ritter: Not at all.

Francisco Negrón: Whenever Stuart begins with "Stay with me for a minute" with the analogy, I sit back because I know it's going to be a good one.

Stuart Ritter: Well, thanks. You are the professional engineer in this whole thing, Wyatt.

Francisco Negrón: Wyatt, do you want to build on that?

Wyatt Lee: Yeah, I'll take that as a compliment.

Francisco Negrón: You can be a race car driver in this analogy if you want.

Stuart Ritter: Absolutely.

Wyatt Lee: I think Stuart's probably spot on there. Right? Because in some ways, building a target date solution is an engineering challenge, right? There are a lot of decisions that ultimately have to be made. We have to think about what's that right mix of stocks and bonds over time. We have to think about what we have in our stock portfolio, how much is in the U.S., how much outside the U.S., how does the bond portfolio work? How much, again, do we have in high yield bonds? So, there are a lot of decisions that have to be made not only for the long term, but also really navigating for the short term.

One thing I think that people should think about here is about if you're choosing this kind of one stop solution, think and spend some time about who you're partnering with in terms of that solution. Right? We've talked about mixes of stocks and bonds. We've talked about different types of management styles. You want to work with a manager who has a lot of tools at their disposal, right?

Partnering with a provider potentially who offers a wide range of investment strategies is really important because if you're buying somebody's target date strategy, it's not just one single portfolio, it's lots of allocations. So, you're buying the collective intelligence of the manager who

you're working with. Right? You want to make sure you have somebody who has the pieces to build these things, to build that transmission in a way that you have confidence that it's going to perform the way you want to.

Francisco Negrón: Very much so. Yeah, there is. There's a lot to them, I guess, is what you're saying. So, you want to make sure that you first understand that and that you select somebody that you believe has the, the track record and the expertise and all of that to be able to do what you describe so well, to do that well for you.

Wyatt Lee: Exactly. I mean, if you think about it, we're positioning these portfolios in the marketplace to be really simple. Right? Helping an investor make a simple choice to get to this portfolio. The attractive piece is that simplicity really packages a lot of the complexity and the engineering of that transmission. Right.

Francisco Negrón: Right right.

Wyatt Lee: In a way that investors don't have to worry about it.

Francisco Negrón: Yeah. To achieve that simplicity, there's a lot behind it. And you want to make sure that you're with somebody who is capable of doing that well. So, would you say then the target date solutions for an investor, that they are a simplified approach then for retirement savings?

Wyatt Lee: 100%. That's exactly what they were designed to do. Well, we saw that investors had problems building or choosing portfolios that were right. So, we put together a prepackaged portfolio for investors saving for retirement. Stuart touched on this earlier. Right? If you think about a financial plan or saving for retirement, it can be daunting to do both the savings piece and the investment piece.

In some ways, the savings part is pretty straightforward. If you just set aside a reasonable amount each month, that can be a really good start to being on the right track. The investment part is more difficult and there's lots of decisions that people would have to make that they don't make every day in order to build that solid investment plan. Target date solutions help solve this problem by providing that hands-off approach to investors. Well, the investors hands are off. My team is always pretty hands on with these investments, right? Our portfolio managers are paying attention to the portfolios every day. We're trying to navigate the short term, but we're also thinking about how to improve the approach over the long term.

Now, that said, while many probably think what we've been talking about is that target dates are set it and forget it investments for retirement savings, Stuart would probably tell me pretty quickly that it always is important to review your investments, that good financial planning means you have to reevaluate your situation. Has it changed over time? Have your goals changed? And if they have, then reevaluate.

Francisco Negrón: Absolutely. Stuart?

Stuart Ritter: I obviously agree with that, Wyatt. At the same time, it's important not to do the opposite, which is to then, if you've got a professional taking care of the investment portfolio component through a target date solution, that you're not fussing with it and potentially making it worse. And that can show up in a couple of ways. One is you're moving in and out of the target date solution in reaction to short-term market movements, what we call market timing. So, you don't want to do that.

The other thing to keep in mind is, as you've talked about a number of times, the target date solutions are an entire package. It's got all the components that one probably needs to put their portfolio together. If you then take that and also invest in other things, you're throwing that balance off.

You talked about the glide path, the mix of stocks and bonds that might be appropriate for someone's particular time horizon. Younger people are going to have more in stocks. Folks closer to retirement would have less in stocks. Well, that's designed for that time horizon. If instead you say I'm going to put half my money into this target date solution and the other half in, I don't know, all stocks, all bonds. You're throwing that balance off and suddenly you don't have any more a portfolio that's potentially appropriate for you and your time horizon. So, once you've made that decision to use this professionally managed packaged solution, that solves a lot of that investing for you. Yes, you want to go in and evaluate it on a regular basis, at the same time you don't want to be fighting your own transmission. And when you're doing 65 miles an hour trying to jam it into first gear somehow, especially with an automatic, you can't do that.

Francisco Negrón: No that would be painful. So, Stuart, I feel like you're already touching on these. What are some, what are additional considerations, important considerations that an investor should be thinking about?

Stuart Ritter: Yeah, there are a couple of additional things. One of the things that we always tell people to pay attention to is any fees that are associated. Very often target date solutions are set up so you're just paying a proportional fee of the underlying investment. So, it's as if you invested directly into those underlying investments. But some target date solutions would add another fee on top of that. So just be aware of what fees you're paying when it comes to target date solutions. Think about the level of effort for you to build and maintain the portfolio on your own compared to the level of effort of using the packaged solution.

One of the other things to think about is your time horizon. We've talked about that a couple of times, and there are two things I want to mention about time horizon. The first one is, for most people, your time horizon does not end the day you retire. We hope it doesn't end the day you retire. That you are going to have a long and fruitful retirement. So, when you're thinking about your time horizon, think all the way through retirement. So, here's one way to think about it. Conceptually, if you're 65 years old and we think about a 30-year retirement, conceptually,

you're not using half your money for another 15 years. You're not using half your money until you're 80, 85, 90 years old. So, thinking about that time horizon and the mix of stocks and bonds that would make sense for that long of a time horizon. Now certainly you'll be spending some money early in retirement. So, for part of it, you've got a short time horizon. But don't forget that hopefully you have a long retirement, and you want to make sure that a target date solution is built to help you with that.

The other thing I'd say about time horizon is you're going to experience bumps along the way. It's not as if a target date solution somehow insulates you from market movements. There is a phrase called "Within Horizon Risks" and what that's referring to is if you're investing for 30, 40, 50 years, you're going to have time periods on all likelihood – and we've seen them historically—where the market's down and the market's going to be down for a while. But remember that you're just in one spot on your journey. You're not there yet.

Another analogy I've used to help people think about this is think about flying from the East Coast of the United States and let's say you're going to San Diego and you look at the weather in San Diego and it's of course, sunny and warm and you've packed your bathing suit and your sunscreen and you're excited about all that. Well, you're on the plane, and somewhere over the Midwest, it starts raining outside the plane and there's turbulence. You shouldn't think to yourself, "oh my gosh, I didn't pack an umbrella or raincoat. Maybe I should see if somehow the pilot can land the plane because I need to get out of here." You're not getting off the airplane at that point, even though it's bumpy.

So, when you're in a target date solution, when you've invested in that and suddenly there's some bumpiness along the way, remember, you're not getting out of the airplane yet. The target date solution is to help you with your retirement investing and keeping that long term time horizon in mind, recognizing with your expectations, hey, there are going to be some bumps along the way. But again, as I said earlier, not overreacting to that, not suddenly deciding you've got to take a different strategy. It's going to happen. I just want to make sure people don't think they're somehow not going to experience that. Those short-term bumps are part of the journey to get to your long-term destination.

Francisco Negrón: Yeah, that's such an important point in the way you explain that, that analogy is such a such a powerful way of getting that point across. So, Wyatt, then in addition to all of this, anything else that you would say investors ought to keep in mind if they're interested in selecting and investing in a target date solution that's appropriate for their needs?

Wyatt Lee: One thing I'd really say is that I think it's important to do your homework, to do your research ahead of time, to understand a little bit about what you're going to be invested in. If you hear about target date solutions broadly, if you see them in the media written up someplace, it almost comes across as target dates are this monolithic block, they're all pretty homogeneous, look and act the same and are going to get you to the same place. But that's really not the case. There can be a lot of differences between approaches that exist in the

marketplace. So, you might want to pay attention to what the equity allocation looks like. Some target date strategies have higher equity allocations, some have lower equity allocations.

Francisco Negrón: And Wyatt, for our beginner investors, the novices, can you just equity allocation higher or lower? What do you mean by that?

Wyatt Lee: Yeah. Stocks. So, this is mostly going to happen as you get closer to retirement and in a target date solution as you're building it, the manager is going to have to think about what it is they want to achieve with the portfolio. If you're thinking over a long-term horizon, like Stuart talked about, and you need those assets for 30 years and you want to use them for 30 years, you're probably going to need some more growth in those assets to help them last. So, you're going to have higher equity, more stocks in those.

Others may get more concerned about short term volatility. Those market dips that Stuart talked about that that are going to tend to happen. So, if you're more concerned about those, your stock allocation's going to be relatively lower. Right. If you look across all the products that exist in the marketplace and you look at the kind of expected point of retirement, that difference in stock allocation from highest to lowest can probably be close to 40%. Right. So, thinking about what it is you want to achieve and how that might influence the growth profile and then aligning that to the target date solution that is aligned with what you're trying to do is really important.

You can also see differences, though, in approaches to management. Some solutions are going to be focused on using actively managed underlying portfolios. There're going to be investing portfolios that are trying to add some value versus their benchmark. Some are going to use passive approaches that are just trying to match a benchmark return. And some are going to use a blend of both, picking different areas. So, understanding what you're getting in terms of that approach and probably how it influences what you're going to pay.

Stuart mentioned fees. Passive target date solutions are going to be generally less expensive than active, but you would expect to pay more for active because you expect them to do a bit better over the long term, all else being equal. And then I also think about the amount of diversification. I mentioned earlier, these are simple portfolios that package a lot of complexity. Some passive approaches use really basic approaches. They don't have a lot under the hood. They're trying to give you a baseline, while other strategies, more active approaches might give you more tools, more levers to use, be more diversified.

Francisco Negrón: Yes. So how high or low are the allocation of the portfolio to stocks, to investment in stocks and then the overall mix under the hood, as you've said, the diversification. So, are there bonds? What type of bonds, how much is allocated? That that's what we're talking about with diversification, with asset classes. Right?

Wyatt Lee: Right.

Francisco Negrón: And then also there's this element of income generating products in retirement. Would you also consider that a point to at least understand the ability?

Wyatt Lee: Yeah, they could. You're starting to see a lot more talk about products that imbed some sort of income generation into it. Most target date solutions that have been built with a long time horizon are trying to think about how you can generate it. So, if you're interested in some way to get income, there are some approaches that have a payout. So, essentially kind of pay a dividend every month. There are some that have some links to insurance, there are some that have links to longevity insurance. So just pay out after a certain time period. So, there are different ways to get income out of these. So, understanding if there is access to those is another key consideration that some might want to think about.

Francisco Negrón: No, thank you for covering those. Stuart. How should, from your perspective, how should someone go about choosing the right target date solution?

Stuart Ritter: I think it starts with understanding the problem you're trying to solve – I need to invest literally for the rest of my life and thinking about how you want to do that. Do you want to take the approach that it's going to be a manual transmission and I'm going to be the one that's making the changes on a regular basis several times a year, making the changes over the course of time in terms of shifting from stocks to bonds? Am I keeping it diversified? Wyatt talked in the beginning about the different components that need to be in a portfolio. So, are you going to do all of that yourself for the rest of your life or are you going to get a professional involved? And one of the ways to do that is through a target date solution.

So, as you're picking out the target date solution, one of the biggest distinguishing factors, as Wyatt pointed out, is how well it matches your time horizon. How much is in stocks at the beginning and how that changes over time. So again, as people think about your entire lifetime, not just, okay, I get to retirement and I'm essentially done investing, that's hopefully, again, not what happens that you have a long retirement. Thinking about the structure of the portfolio is matched to your need to have an investment solution that can carry you through retirement, through the rest of your life.

Francisco Negrón: So, it really comes down to all of the points you guys have made is, the best advice in terms of things to consider when selecting a target date solution is know what is important to you. Understand the product that you are evaluating and whether it has all the components that will align with what you're trying to accomplish, what your objectives are.

Stuart Ritter: Absolutely.

Francisco Negrón: Pretty basic, actually. So, but it sometimes is something that gets overlooked. Thank you both for reinforcing that point. Well, we have run out of time, so I'm going to kick you guys out. No, I'm just kidding. But we have run out of time. We are, we need to wrap this up. This has been a great discussion.

Let's leave our listeners with, and I feel like you've shared a lot of good information, but a parting thought that you would like to leave them with when it comes to investing in target date solutions. Stuart?

Stuart Ritter: Target date solutions were created to help people solve an investing problem they have in a very simple way. So, if that's attractive to you, recognize the simplicity that target date solutions offer. As Wyatt pointed out there's a lot of complexity, a lot of work, and a lot of effort that's going on underneath there. But it's an opportunity for you to simplify part of the financial plan that you need to put together, especially for retirement. So, if that's attractive, something for you to look into.

Francisco Negrón: Wyatt?

Wyatt Lee: Wow, Stuart, you nailed a lot of the long-term benefits there and I think those are critically important. But we shouldn't forget about the short term as well. Target date solutions have teams of people paying attention to the shorter term as well, so they can help navigate those bumps in the road that you mentioned earlier. And really over time, it's this combination of the long term and short-term navigation that can yield good results for investors.

Francisco Negrón: Excellent. Thank you for that. Well, thank you so much for the conversation. I appreciate the expertise and the passion. You both really are very passionate about these solutions and helping investors find the resources that they need to achieve the retirement that we all dream of. So, thank you both for joining me today. I've really enjoyed our conversation.

Stuart Ritter: Thanks for having me.

Wyatt Lee: Thanks, Francisco. It was a great time.

Francisco Negrón: Good to be with you. Well, as we conclude today's episode, it is clear that target date solutions can serve as an important tool in an investor's overall financial plan, whether they are the right tool for your specific needs, well, that's up to you. But we hope that you've gained from our conversation a greater appreciation for how they are structured relative to other investment vehicles that are available to you, and that you're also better equipped with more information to help you make your investment decisions.

Again, I'm Francisco Negrón. Thank you so much for listening. If you like this podcast, please rate us and subscribe wherever you get your podcasts. And remember, it's not how you start, but how you finish. So be confident! Your tomorrow begins today.

T. Rowe Price
Retire With Confidence

The principal value of the target date strategies is not guaranteed at any time, including at or after the target date, which is the approximate date when investors plan to retire (assumed to be age 65). These target date strategies invest in a diversified portfolio of other stock and bond strategies that represent various asset classes and sectors and are therefore subject to the risks of different areas of the market. The allocations of the target date strategies among these underlying investments will change over time to reflect the changing emphasis from capital appreciation to income and less volatility as investors approach and enter retirement. The target date strategies are not designed for a lump-sum redemption at the target date and do not guarantee a particular level of income.

This episode of CONFIDENT CONVERSATIONS® on Retirement is provided for general and educational purposes only, and is not intended to provide legal, tax or investment advice. This podcast does not provide recommendations concerning investments, investment strategies, or account types; it is not individualized to the needs of any specific investor and not intended to suggest any particular investment action is appropriate for you, nor is it intended to serve as the primary basis for investment decision-making.

The views contained herein are as of the date noted on the material and are subject to change without notice; these views may differ from those of other T. Rowe Price group companies and/or associates.

This information is not intended to reflect a current or past recommendation, investment advice of any kind, or a solicitation of an offer to buy or sell any securities or investment services. The material has not been reviewed by any regulatory authority in any jurisdiction.

The opinions and commentary provided do not take into account the investment objectives or financial situation of any particular investor or class of investor. Investors will need to consider their own circumstances before making an investment decision.

©2024 T. Rowe Price. All rights reserved. T. Rowe Price, INVEST WITH CONFIDENCE, RETIRE WITH CONFIDENCE, the Bighorn Sheep design, and CONFIDENT CONVERSATIONS, collectively and/or apart, are trademarks of T. Rowe Price Group, Inc. All rights reserved.

T. Rowe Price Investment Services, Inc., distributor. T. Rowe Price Associates, Inc., investment advisor

202406-3423759