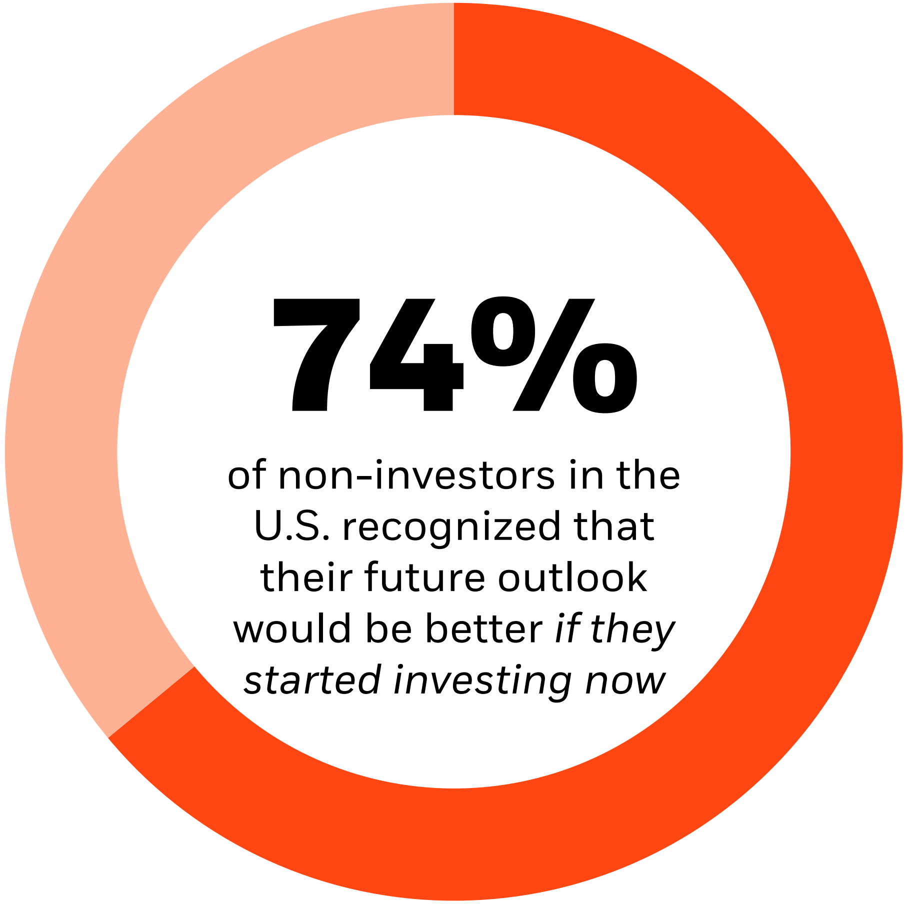
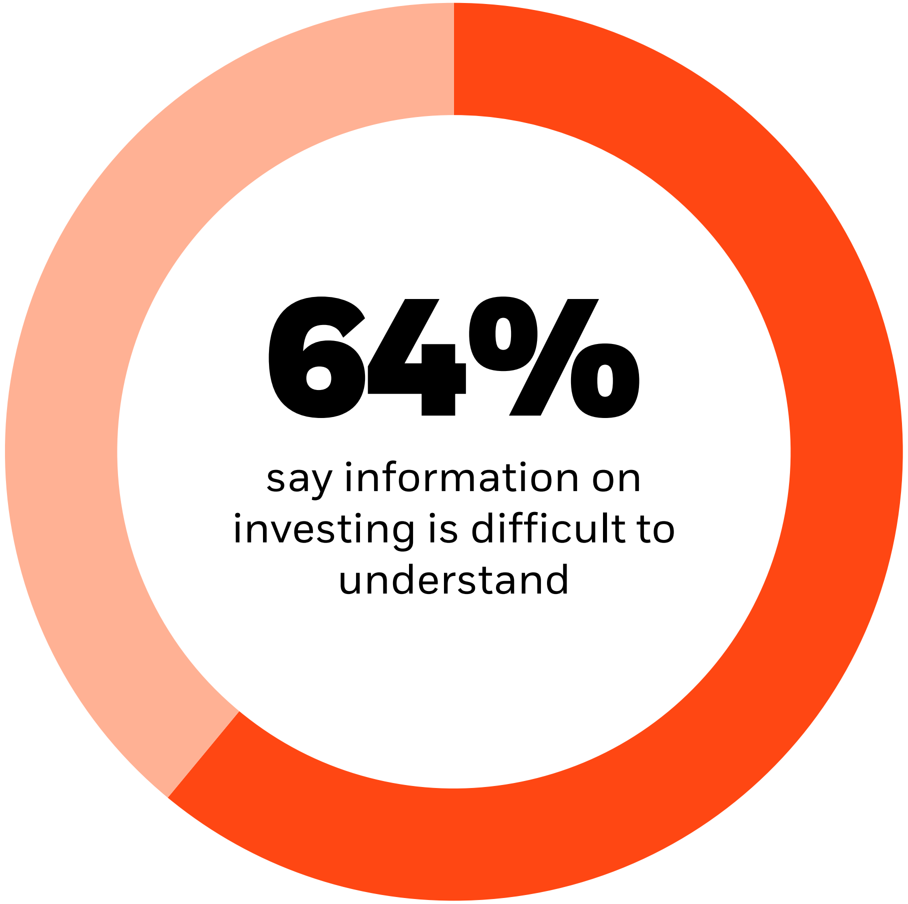
BlackRock

Investing basics

Am I an investor? The first step to investing is investing in yourself





Sources: BlackRock's DC People & Money Survey, 2020 & BlackRock's Global Investor Pulse Survey (U.S. respondents), 2019.

Fact

Investing can feel overwhelming

Stocks

Coupon

Short-sell

Bonds

Put

REITs

Risk

Security

Dividends

Alternatives

IPO

Return

ETFs

Share

Stock market

Options

Mutual funds

Split

Volatility

Call

Credit

Yield

Portfolio

BlackRock.

iCRMH0823U/S-3023336-3/35

Know the roles saving and investing play...

How long does the money need to last?

Daily	6-24 months	1+ years	Your lifetime	Your lifetime and beyond
Everyday needs	**Financial safety**	**Building wealth**	**Financial freedom**	**Creating a legacy**

Savings

- Short-term
- Low/no chance of losing money
- Low return

Investments

- Long-term
- Higher chance of losing money
- Higher return

...because savings alone isn't enough to reach every goal in your life's journey

Source: BlackRock. For illustrative purposes only.

Know your numbers

Net worth

Assets
What you own

Liabilities
What you owe

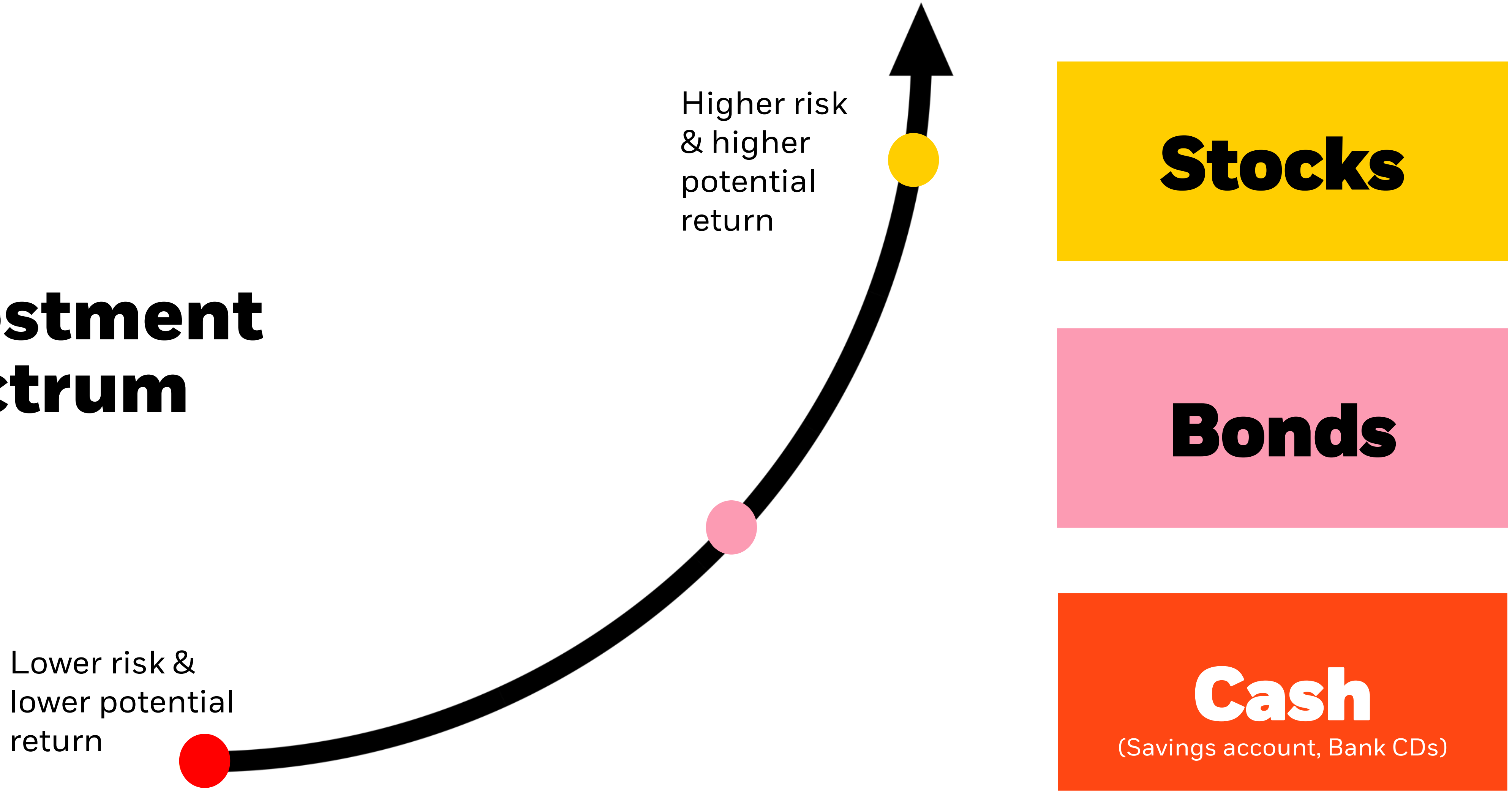
Cash flow

Income
What goes in

Expenses
What comes out

Examples of investing and savings

Investment spectrum

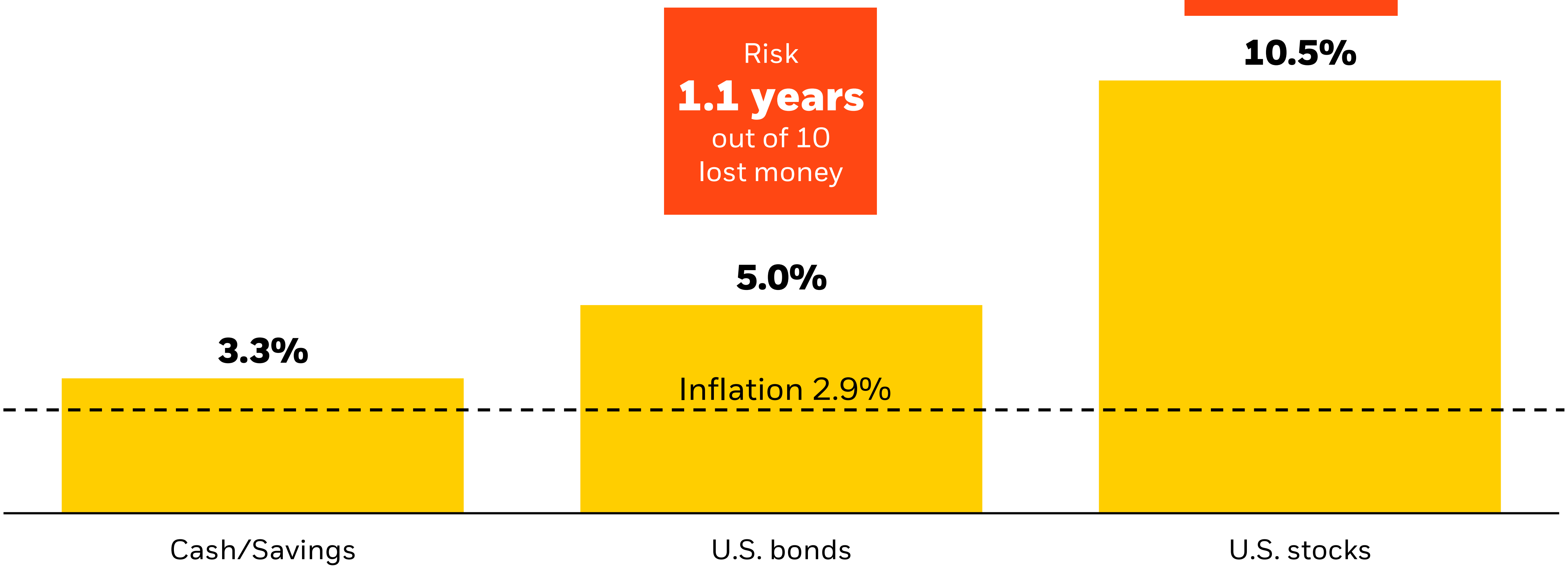


Source: BlackRock. For illustrative purposes only.

Balancing risk and reward

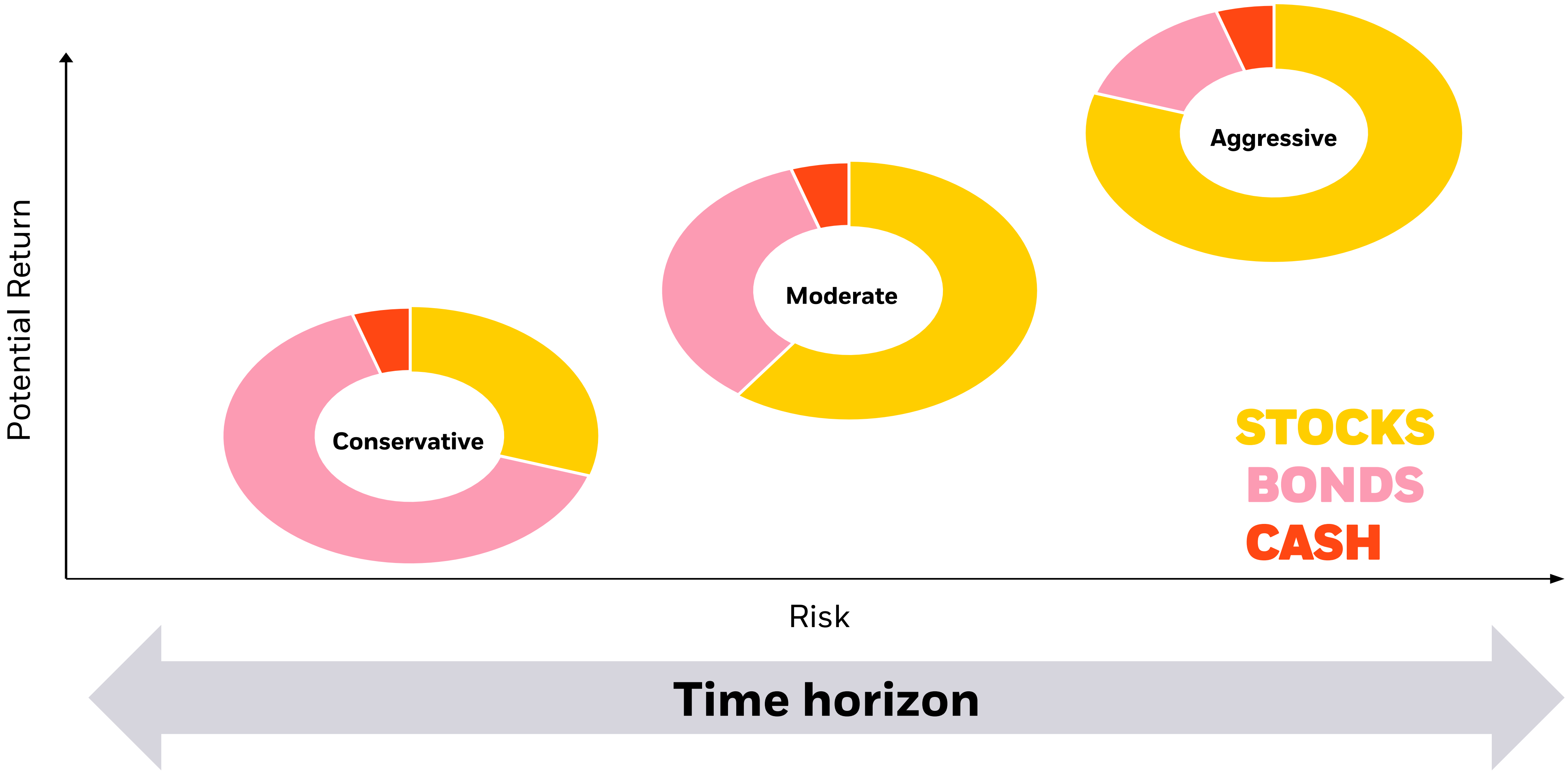
More **return,** but also more **risk**

Average annual returns for various asset classes since 1926



Source: Morningstar, BlackRock. Stocks are represented by the S&P 500 index from 3/4/57 to 12/31/22 and the IA SBBI U.S. large stock index from 1/1/26 and 3/4/57. U.S. bonds are represented by the Bloomberg U.S. Agg Bond TR index from 1/3/89 to 12/31/22 and the IA SBBI U.S. Gov IT index from 1/1/26 to 1/3/89. Cash/Savings are represented by the IA SBBI US 30 Day TBill TR Index from 1/1/26 to 12/31/22. **Past performance does not guarantee or indicate future results.** Index performance is for illustrative purposes only. You cannot invest directly in an index. See page 34 for standardized index performance.

Your investment profile and time horizon determines investments appropriate for you



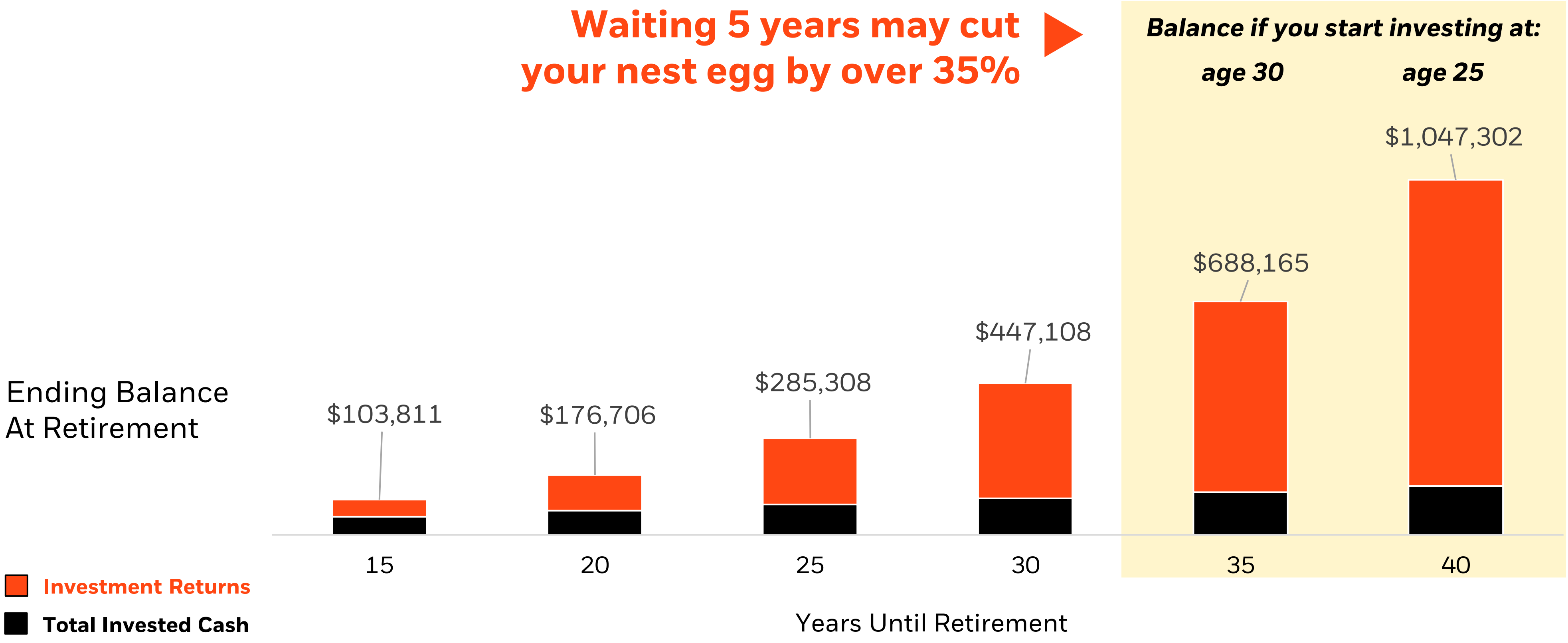
Source: BlackRock. For illustrative purposes only.

Think long term and invest early to reach your goals

It's never too early to start investing

Monthly investment of $300 until age 65

(8% annual return, compounded monthly)



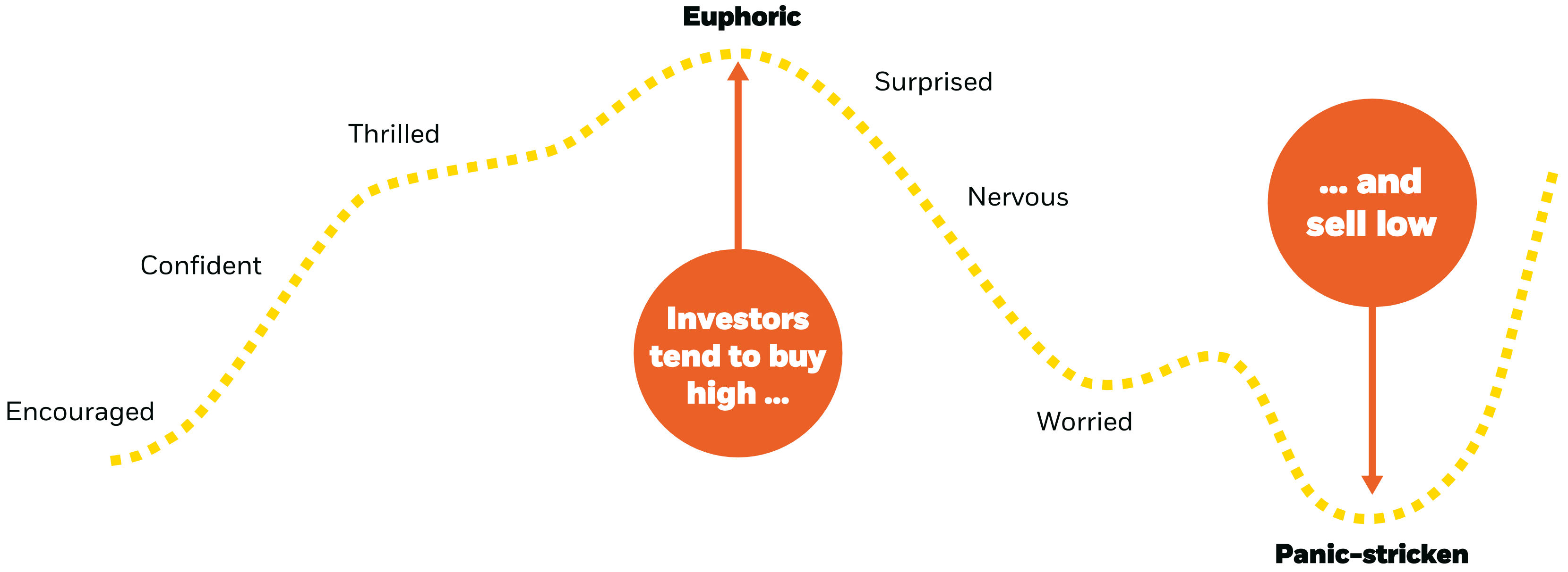
Source: BlackRock. Hypothetical examples for illustration purposes only.

Investing with emotions can be costly, be clear on your timeline and be invested for the long term

When times are tough, we want to limit our losses. When things are going well, we wish we had invested more. We all fear missing out

But when you're investing, giving in to fear is often a losing strategy. More often than not, investors with this mindset tend to buy high and sell low as they invest more in a rising market and pull money out in a falling market

Riding the ups and downs of the market



Source: BlackRock. For illustrative purposes only.

A diversified portfolio can work even though it often doesn't taste good

Last 20+ years

25% U.S. large stocks, 19% U.S. mid cap stocks, 7% international stocks, 5% U.S. small cap stocks, 4% emerging market stocks, 25% U.S. bonds, 15% high yield bonds

Years	S&P 500	Diversified portfolio	
2000–2002*	-40.1%	-15.7%	"I lost money"
2003–2007	82.9%	87.1%	"Diversification worked"
2008	-37.0%	-26.6%	"I lost money"
2009–2019	351.0%	220.1%	"I didn't make as much"
Q1 2020†	-30.4%	-23.1%	"I lost money"
Q2 2020-2021‡	119.0%	66.6%	"I didn't make as much"
2022	-18.1%	-15.5%	"I lost money"
Total return	**288.6%**	**301.6%**	"Diversification can work even when it feels like it's losing"
Gr $100K	**$388,610**	**$401,550**	

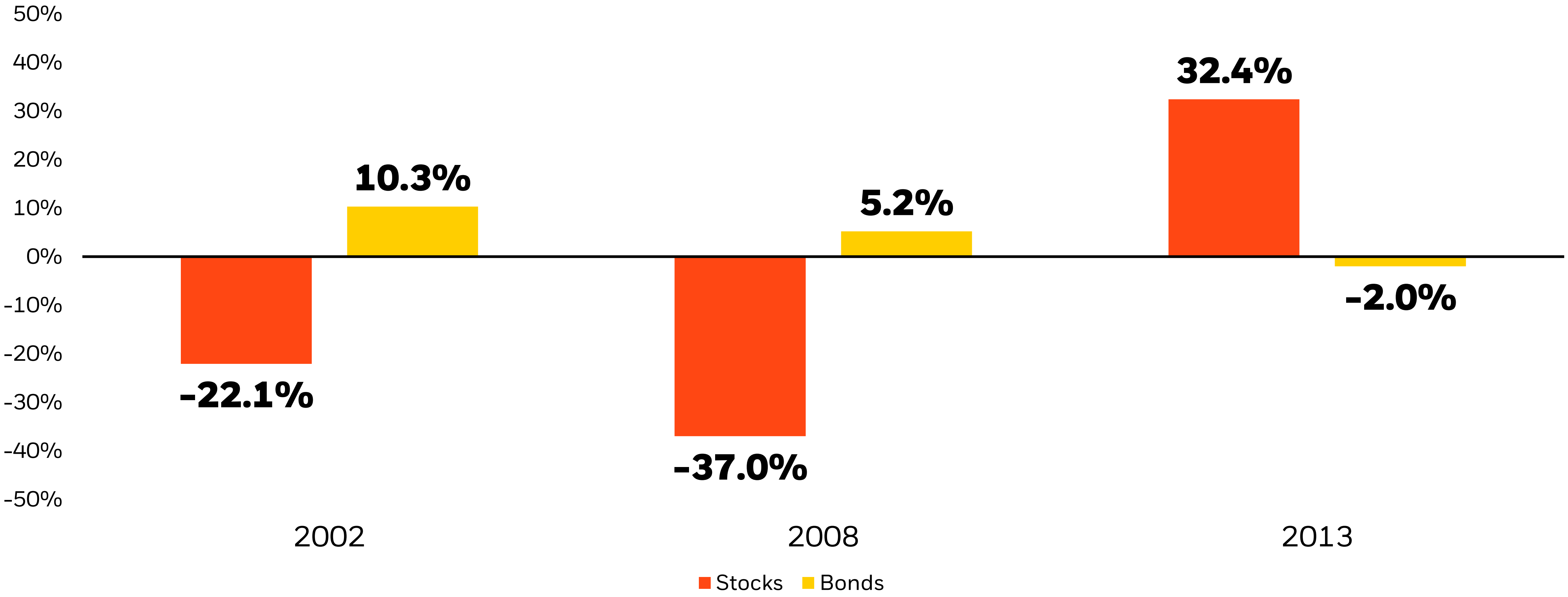
Source: Morningstar as of 12/31/22. *Performance is from 9/1/00 to 12/31/02. †Performance is from 1/1/20 to 3/23/20. ‡Performance is from 3/24/20 to 12/31/22. Diversified Portfolio is represented by 25% S&P 500 Index, 7% MSCI EAFE Index, 5% Russell 2000 Index, 25% Bloomberg US Aggregate Bond Index, 19% Russell Mid Cap Index, 15% Bloomberg US Corporate High Yield Index, 4% FTSE Emerging Stock Index. Index performance is for illustrative purposes only. You can not invest directly in the index. **Past performance does not guarantee or indicate future results**. Diversification does not guarantee a profit or protect against a loss in a declining market. See page 34 for standardized index performance.

Benefits of diversification

Different asset classes zig while others zag

Performance of stocks and bonds

Select years with largest gap in performance between asset classes since 2000



Source: Morningstar, BlackRock. Stocks are represented by the S&P 500 index from 1/1/00 to 12/31/22. U.S. bonds are represented by the Bloomberg U.S. Agg Bond TR index from 1/1/00 to 12/31/22. **Past performance does not guarantee or indicate future results.** Index performance is for illustrative purposes only. You cannot invest directly in an index. See page 34 for standardized index performance.

Understanding the math of investment loss

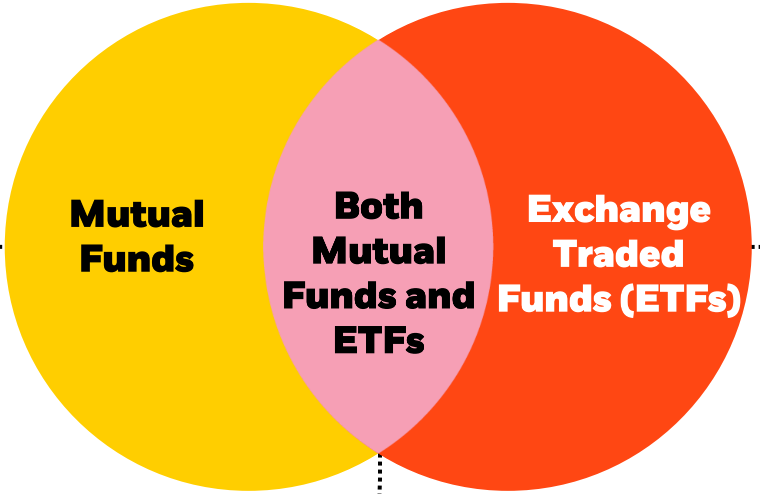
Breaking even

Loss	-5%	-10%	-20%	-30%	-40%	-50%	-60%	-70%
Return needed to break even	+5.3%	+11%	+25%	+43%	+67%	+100%	+150%	+233%

Source: BlackRock. For illustration purposes only.

How should I invest?

Mutual funds and exchange traded funds (ETFs) can help build a diversified portfolio



- Shares purchased/redeemed at the end of the day
- Often features an active manger selecting stocks/bonds

- Diversified investment vehicle
- Exposure to a broad range of asset classes
- Access to active management strategies

- A fund that trades throughout the day like a stock
- Often seeks to track a market index of stocks/bonds

Source: BlackRock. For illustration purposes only. Diversification and asset allocation may not protect against market risk or loss of principal. Investment comparisons are for illustrative purposes only. To better understand the similarities and differences between investments, including investment objectives, risks, fees and expenses, it is important to read the products' prospectuses. For additional information on the difference between ETFs and mutual funds, see next slide.

ETFs vs. active mutual funds: key differences

Criteria	Mutual funds	ETFs
Management	Active	Passive
Performance goal	Outperform a benchmark and / or deliver an outcome	Track a benchmark
Buying/selling shares	Once per day via fund company	Intraday on exchanges
Price to buy/sell	End-of-day NAV, less fees	Current market price, which may differ from NAV
Fees	Expense ratio + any sales loads / redemption fees	Expense ratio + transaction / brokerage costs
Tax impact of buyers/sellers[1]	Shareholders may be impacted by all other shareholders' actions	Shareholders only impacted by their own action
Holdings disclosure	Typically quarterly	Daily
Benefits	• Opportunity to outperform the index • Potential to limiting the downside • Buy/sell decisions based on research	• Exposure to market index • Generally lower fees • Typically more tax-efficient
Trade-offs	• Potential to underperform index • Generally higher fees • Typically less tax-efficient	• Does not seek to outperform index • Participate in all of index downside • Buy/sell decisions based on index, not research

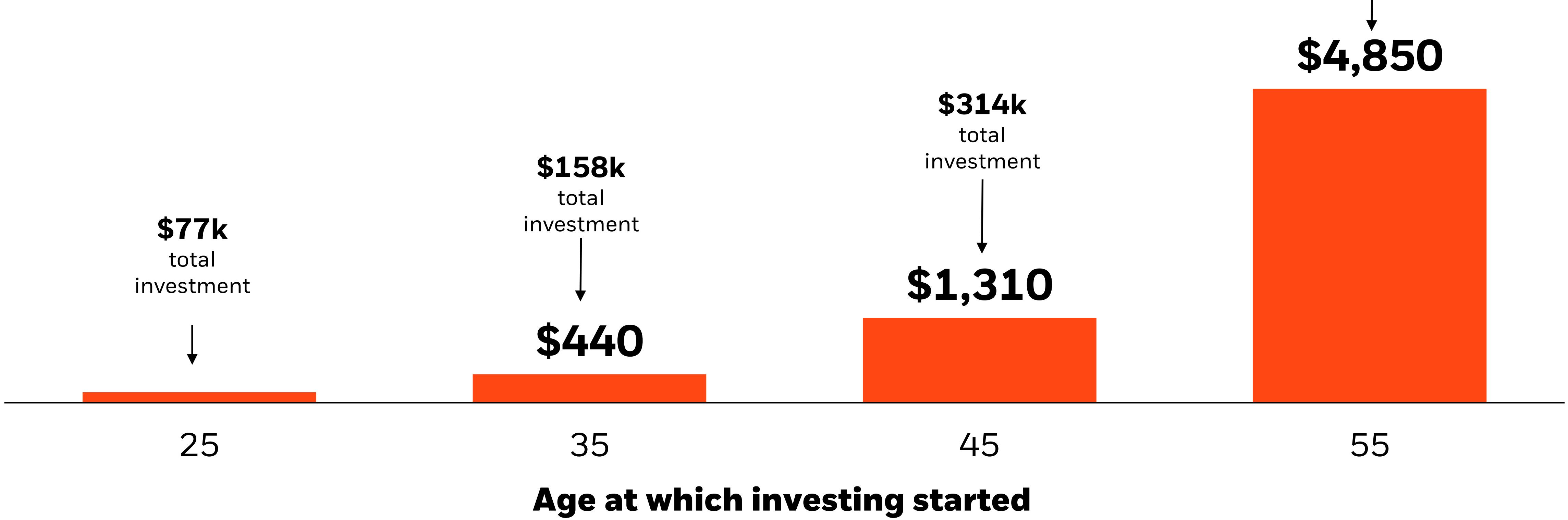
1 Source: Due to fund structure, mutual fund holders may be subject to taxable capital gains distributions due to other investors' redemptions directly to the mutual fund. Taxable capital gain distributions can occur to ETF investors based on stocks trading within the fund as the ETF creates and redeems shares and rebalances its holdings. ETFs and stocks may also generate taxable capital gains when an investor sells their own shares. Certain traditional mutual funds can also be tax efficient.

Systematic investing for retirement

Invest early to help reach your goals

Hypothetical monthly investment needed to accumulate $1 million by age 65

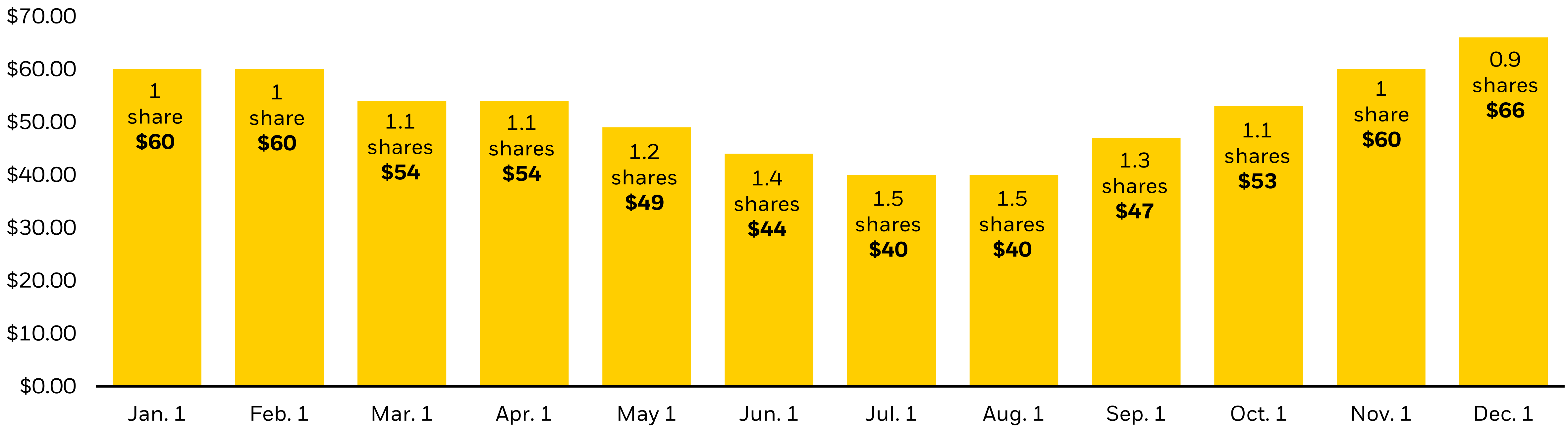
(10% annual returns compounded monthly)



Source: BlackRock. Hypothetical example for illustration purposes only and is not meant to represent the performance of any particular investment . Total investment represents the sum of monthly contributions needed to accumulate $1million by age 65 assuming a 10% annual return compounded monthly. Systematic investing does not guarantee a profit and does not protect against loss in declining markets. Systematic investing involves continuous investing, so investors should consider their ability to make periodic payments in all market environments. **Investing involves risks. Including the possible loss of all your principal.**

Systematic investing potentially benefits from the market ups and downs

Hypothetical example of investing $60/month for 1 year into an asset with starting value of $60/share



14.1
total shares purchased

$51.06
average price/share

+$210.60
gain over the period

Where to invest?

Taxable brokerage account

Retirement accounts (IRA, 401(k)/403(b))

College planning account (529)

For illustrative purposes only. This material contains general information only and does not take into account an individual's financial circumstances. This information should not be relied upon as a primary basis for an investment decision. Rather, an assessment should be made as to whether the information is appropriate in individual circumstances and consideration should be given to talking to a financial professional before making an investment decision.

Fast facts — Taxable brokerage accounts

Need: Building wealth

Contributions

- Contribute as much after-tax money as you want

Withdrawals

- Subject to both income and capital gains taxes

Purpose

- General wealth-building due to tax implications

Source: BlackRock, Internal Revenue Service as of 12/31/22.

Individual Retirement Account (IRA)

Need: Financial freedom

Contributions

- $6,500/year
  - Traditional, Roth, or combination
- $7,500/year if age 50+
- Subject to limits based on annual income

Withdrawals

- Taxed on Traditional, not on Roth*
- May affect income tax bracket
- Mandatory at age 72 (Traditional only)
- If before 59.5, subject to an extra 10% penalty

Purpose

- Long-term, retirement-focused savings due to tax advantaged growth potential

Source: BlackRock, Internal Revenue Service as of 12/31/22. *Roth contributions are subject to tax if your contributions to a Roth account are 5 years or less. Known as the "5-year rule", an investor must have owned the Roth account for at least 5 years to avoid taxes on withdrawals, regardless of the account holder's age at time of either contribution or withdrawal. Investors should consult a Financial Professional for more information based on their specific circumstances.

Traditional or Roth?

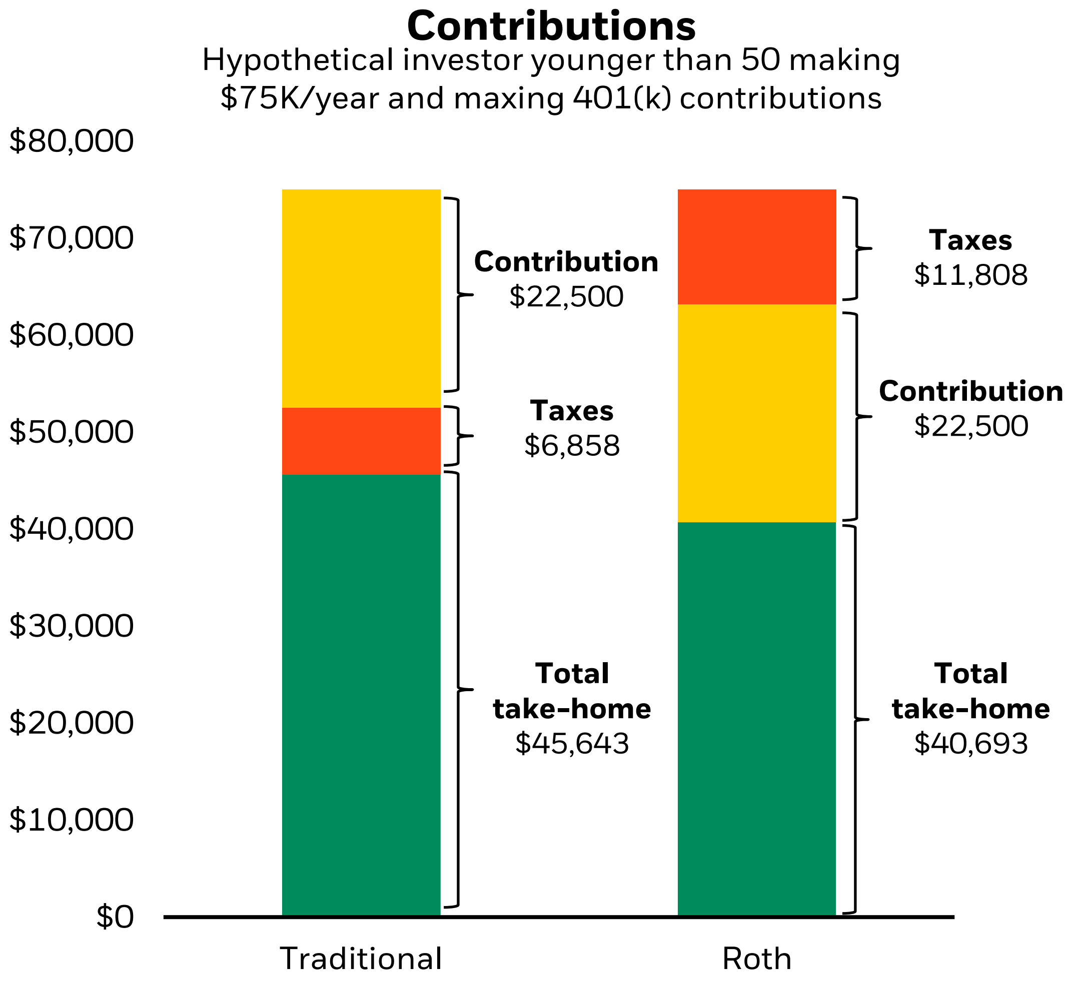
One difference depends on paying ordinary income taxes now or at retirement

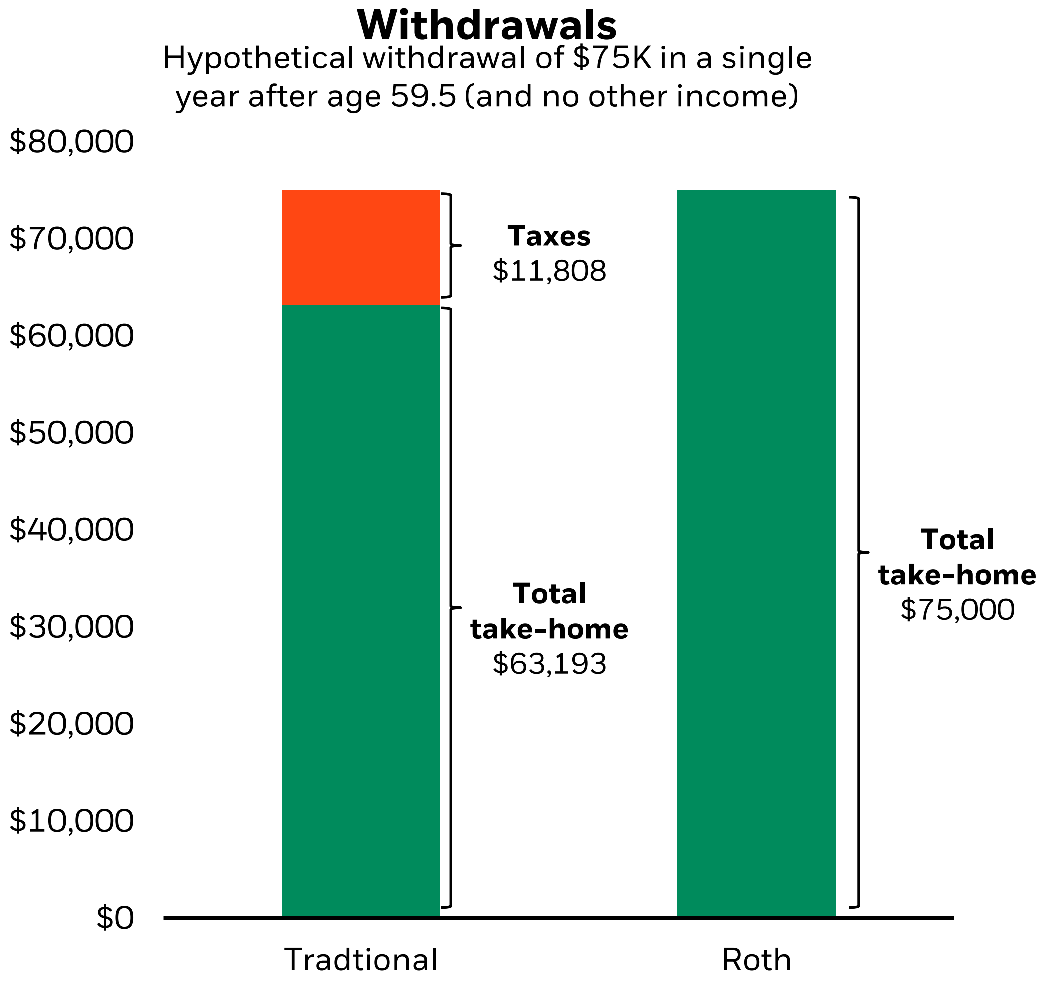
	Traditional 401(k)	Roth 401(k)
Contributions	Tax-deferred	Taxed as income in the year you contribute
Annual Contribution Limit	$22,500 if <50 $30,000 if 50+	$22,500 if <50 $30,000 if 50+
Withdrawals after age 59 ½	Taxed as income in the year you withdraw	Tax-free
Withdrawals before age 59 ½.	Subject to 10% penalty to the IRS. Some exceptions apply.	Contributions can be withdrawn at any time, without penalty. Non-contributions (returns) are subject to 10% penalty. Some exceptions may apply.
Employer Match	Yes, contributions are pre-tax.	Yes, contributions are pre-tax.
Income Limit	None	None
Required Minimum Distributions (RMD)	Age 72	Age 72

- Employer contributions are generally made on a traditional (pre-tax) basis
- If you believe your tax rate may be lower in retirement than today, it may make sense to contribute via tax-deferred (traditional) now, and vice-versa for Roth
- Roth account features generally allow for easier access to contributions, if needed

Tax-advantaged options— Retirement accounts (IRA, 401(k))

Contributions come in and go out the same way





Source: BlackRock, Internal Revenue Service as of 12/31/22. Hypothetical example for illustration purposes only. "Taxes" are calculated using federal tax brackets only, based on a hypothetical $75,000/year reported income. Total taxes may differ between investors based on income level, state residency, additional benefits, or other individualized factors. The hypothetical example shown is for educational purposes only and does not constitute tax-planning advice for any individual investor's financial circumstances..

Employer-sponsored retirement plan (401(k)/403(b))

Need: Financial freedom

Contributions

- $22,500/year
  - Traditional, Roth, or combination
- $30,000/year if age 50+
- Automatically deducted as a percentage of paycheck
- “Employer matching contributions” don’t count towards annual limit

Withdrawals

- Taxed on Traditional, not on Roth*
- May affect income tax bracket
- Mandatory at age 72
- If before 59.5, subject to an extra 10% penalty
- Employer contributions subject to vesting schedule

Purpose

- Long-term, retirement-focused savings due to tax advantaged growth potential
  - Often most accessible retirement option for investors

Source: BlackRock, Internal Revenue Service as of 12/31/22. *Roth contributions are subject to tax if your contributions to a Roth account are 5 years or less. Known as the “5-year rule”, an investor must have owned the Roth account for at least 5 years to avoid taxes on withdrawals, regardless of the account holder’s age at time of either contribution or withdrawal. Investors should consult a Financial Professional for more information based on their specific circumstances.

Getting the most out of your retirement plan

Key takeaways

01

Contribute to your plan. Don't miss out on tax-advantaged growth

02

Meet the full match. Don't leave money on the table

Example: Employer match of 50% up to 4%, based off annual income of $100K

Scenario-employee contribution %	Contribution per year	Employer match	Total contribution after 10 years	After 10 years with 3% growth
0%	$0	$0	$0	$0
1%	$1,000	$500	$15,000	$20,159
2%	$2,000	$1,000	$30,000	$40,317
3%	$3,000	$1,500	$45,000	$60,476
4%	**$4,000**	**$2,000**	**$60,000**	**$80,635**
5%	$5,000	$2,000	$70,000	$94,074

Source: BlackRock. Hypothetical examples for illustration purposes only.

401K versus IRA

401K

- A retirement savings vehicle that is employer-sponsored with its own set of rules. Contribution limit is ($22,500) in 2023 ($30,000 if over 50)

+

- Employer contribution (if offered)
- High annual contribution limit
- Contributions lower taxable income
- Funds in a 401K plan may be less expensive than identical fund purchased outside of 401K

−

- No control over plan and investment costs
- Limited investment selection
- Distributions in retirement are taxed as ordinary income
- Minimum distribution age begins at 72

IRA

- A retirement savings vehicle that is established by the owner without an employer's involvement. Contribution limit is $6,500 in 2023 ($7,500 if age 50 or older)

+

Traditional IRA

- Large investment selection
- If deductible, contributions reduce taxable income in the year they are made

Roth IRA

- Large investment selection
- Contribution can be withdrawn at anytime
- Qualified withdrawals in retirement are tax-free

−

Traditional IRA

- Contribution limits are lower than 401K
- Limited tax incentive if covered by a work retirement account
- Distributions are taxed as ordinary income
- Required minimum distribution after age of 72

Roth IRA

- No immediate tax benefit for contributing
- Ability to contribute is phased out at higher incomes

Source: BlackRock, Internal Revenue Service as of 12/31/22.

College savings (529 plans)

Need: Legacy

Contributions

- After-tax and grow tax-deferred
- No limit
- Total contributions cannot exceed \$235K-\$529K, depending on the state

Withdrawals

- No limit for tax free if for qualified college expenses
- \$10,000/year tax free if used for qualified K-12
  - Amount above \$10,000 threshold is taxed
- Non-qualified withdrawals are taxed and have an additional 10% penalty

Purpose

- Long-term planning for the next generation due to withdrawal uses and flexibility of options
  - Most states have multiple options for residents of any state
  - Typically, investing in home state's plan comes with additional tax credits

Source: BlackRock, Internal Revenue Service as of 12/31/22.

What is a 529 Plan?

- **529 plan is a tax-advantaged savings plan designed to help pay for education**

- Tax-free earnings & withdrawals for qualified education expenses
- Funds can be used for any level of higher education at in and out-of-state colleges, as well as trade and private schools, online universities, and even many schools abroad.
- It's not just for tuition. There are more than 200 eligible expenses, including computers, books, room and board and more
- You can open your account with as little as $1. Saving just $500 has proven to significantly increase graduation rates
- Plan beneficiaries are transferable between family members

Ask about other options

Building Wealth

- Joint Account
- UGMA/UTMA

Financial Freedom

- 457 plan
- Thrift Savings Plan
- SIMPLE IRA
- SEP IRA
- Profit-sharing plan
- Health Savings Account
- Flexible Spending Account

Legacy

- UGMA/UTMA
- Coverdell
- Trust Account

Source: BlackRock, Internal Revenue Service as of 12/31/22.

Credit Scores

Credit scores help lenders measure the creditworthiness of a borrower.

Understanding Credit Scores

Lenders use your credit score to assess whether or not to lend you money, as well as the terms of their lending. The score is usually a 3-digit number from 300-850 that relies on information from your credit report.

What Your Score Means

Score Range	Lender Terminology	What It Really Means
<619	Subprime	Poor
620-659	Near Prime	Fair
660-719	Prime	Good
720+	Super Prime	Excellent

How It's Created

Weight	Factors
35%	**Payment History:** Late or missing payments reduce your score.
30%	**Credit Utilization:** Outstanding balance divided by available credit
15%	**Length of History**: Average age of credit account
10%	**Recent Inquiries**: Credit accounts open or applied for
10%	**Credit Mix:** The mix of credit types you've had and are currently using

TIPS FOR IMPROVING YOUR CREDIT SCORE

Annual Credit Report. Com

Confirm the accuracy of your credit report at **AnnualCreditReport.com**

Continue to make on time payments

Reduce your debt balances

Student Loans

Figuring out the right approach to pay off student loans can reduce financial stress

Understanding Student Loans

	FEDERAL LOANS	PRIVATE LOANS
Lender	Federal Government	Financial Institution (e.g. bank)
Structure	Fixed	Fixed or Variable
Collections	Federal benefits such as Social Security may be garnished	Subject to federal and state debt collection laws
Payment Flexibility	Federal loans allow some borrowers to pursue alternative repayment plans	Loans terms tend to be less flexible, but lenders often have options such as forbearance
Cancellation	Very difficult, except in extraordinary circumstances	In some cases, may be discharged in bankruptcy proceedings

Tips for Managing Student Loans

Automate payments through direct deposit	In some cases, automating payments through a linked direct deposit could lower your interest rate
Prioritize making the minimum payment	Missing payments may trigger penalties, lead to default and/or lower your credit score
Pay down high-interest loans	If you have room in your budget, consider paying down the highest interest rate loan first
Refinance or explore alternatives	You may reduce your monthly payments by refinancing or consolidating through a third party

Long-Term Savings

It can be hard to balance working toward your long-term goals

How to prioritize long-term financial goals

0	Meet short-term goals	Reduce expenses below your monthly income	Save an emergency fund (typically 3-6 of months)	Contribute to *necessary* short-term savings goals (e.g. car for work)
1	Maximize employer contributions	401(k) contributions up to the employer match	HSA (if eligible) up to the employer match*	
2	Pay down high-interest debt	Make minimum payments on every loan	Make additional payments towards high-interest debt	
3	Maximize tax-advantaged* contributions	401(k) contributions beyond employer match*	Maximize HSA contribution*	529 Contributions*
4	Pay down low-interest debt	Make additional payments towards low-interest debt		
5	Additional savings	Contribute to an Individual Retirement Account (IRA)*	Contribute to taxable investment account	

*Subject to applicable IRS regulations

What about credit cards?

Credit cards are useful for spending and payments, but may carry high interest rates if you maintain a balance.

Typical Uses of Credit Cards:

- Pay day-to-day expenses
- Autopayment for bills and other expenses
- Establish credit history
- Protect purchases through benefits such as fraud protection and insurance
- Receive rewards and/or cash back

Credit Card Best Practices:

- Pay your balances off each month
- Always pay at least the monthly minimum *(you will accrue interest on the remaining unpaid balance)*
- Keep your balances <30% of your credit limit
- If you need to carry a balance, use the lowest interest rate card

Types of Credit Cards

Secured and Student Cards: Cards marketed to those with low credit scores or limited credit history. These cards typically have lower limits, and higher fees and higher interest rates.

Balance Transfer Cards: These are typically used to make large purchases or to consolidate higher-interest debt. These cards may offer lower interest rates than other credit cards, no annual fees and few, if any, rewards.

No-annual fee cards: Credit cards that are used primarily for day-to-day spending. They may offer basic rewards such as cash-back or credit card points. Often, branded or 'store' cards typically fall in this category.

Mid-tier annual fee cards: Cards that provide higher rewards such cash-back, hotel, and travel benefits, but come with a moderate annual fee (often \$100-\$250).

Premium Rewards Cards: Cards that provide higher rewards such cash-back, hotel, and travel benefits, but come with a higher annual fee (often \$400+). These cards may provide additional premium rewards such as travel credits, gym discounts, hotel/car rental memberships, and lounge access at airports and entertainment venues.

Important notes

Returns as of 12/31/22	Total Ret 1 Year	Total Ret 5 Years	Total Ret 10 Years
S&P 500 TR USD Index	-18.11	9.42	12.56
IA SBBI US Large Stock TR USD Ext Index	-18.11	9.42	12.56
Russell Mid Cap TR USD Index	-17.32	7.10	10.96
MSCI EAFE NR USD Index	-14.45	1.54	4.67
Russell 2000 TR USD Index	-20.44	4.13	9.01
FTSE Emerging TR USD Index	-16.91	0.14	2.33
Bloomberg US Agg Bond TR USD Index	-13.01	0.02	1.06
IA SBBI US IT Govt TR USD Index	-13.01	0.02	1.06
Bloomberg High Yield Corporate TR USD Index	-11.19	2.31	4.03
IA SBBI US 30 Day TBill TR USD Index	1.43	1.18	0.69

Index performance is for illustrative purposes only. Index performance does not reflect any management fees, transaction costs or expenses. Indexes are unmanaged and one cannot invest directly in an index. Past performance does not guarantee future results.

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Important Notes

Carefully consider the Funds' investment objectives, risk factors, and charges and expenses before investing. This and other information can be found in the Funds' prospectuses or, if available, the summary prospectuses which may be obtained by visiting www.iShares.com or www.blackrock.com. Read the prospectus carefully before investing.

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