Invest for success

5 principles you need to know

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February 14, 2023

Agenda

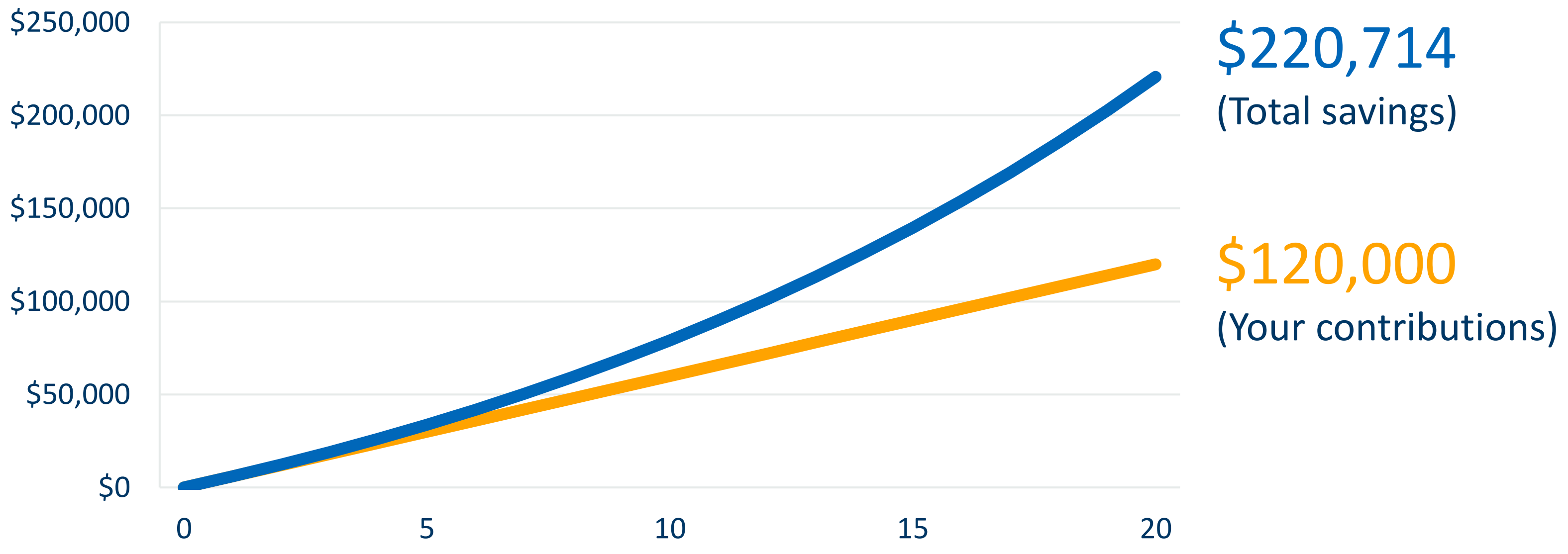
Follow the 5 principles of investing for retirement.

1. Take advantage of time
2. Make use of tax-advantaged saving options
3. Commit to regular contributions and stick to them
4. Choose an appropriate investment mix
5. Review your strategy and investments regularly

Principle 1: Take advantage of time

See the potential of compound interest—when you give it time.

Saving $500/month for 20 years at 6%



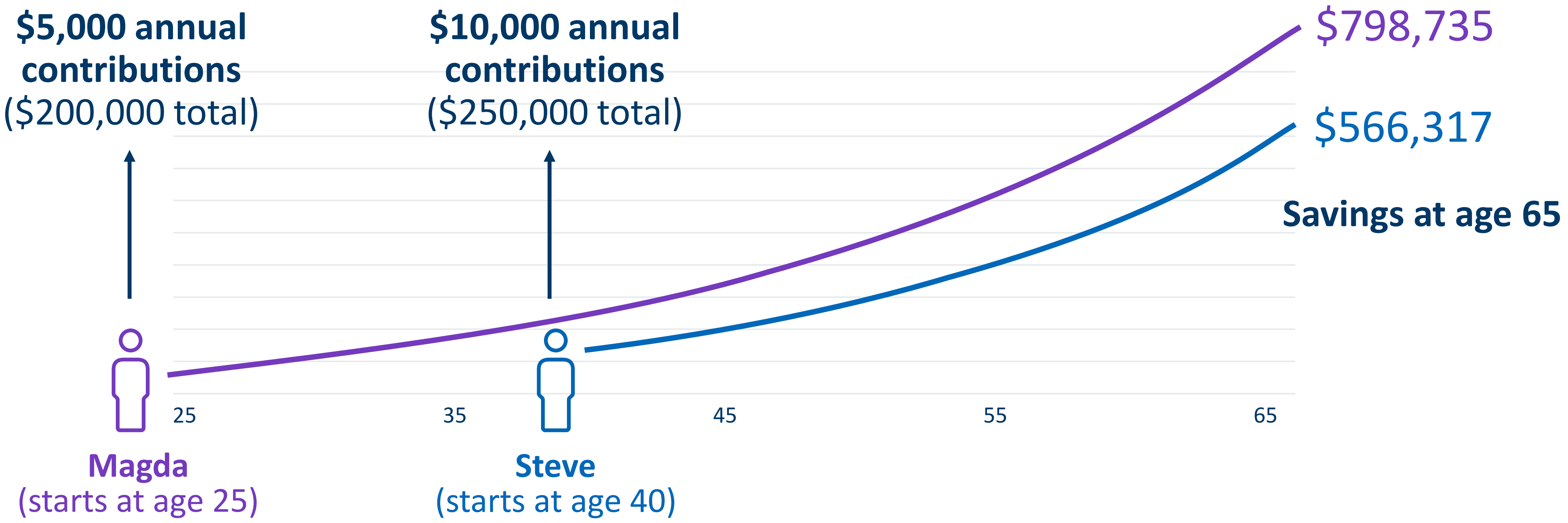
Waiting 1 year

Lose $12,154 in earnings on only $6,000 more in contributions ($18,154 total)

“Compound Interest Calculator,” U.S. Securities and Exchange Commission, investor.gov/financial-tools-calculators/calculators/compound-interest-calculator. For illustration only.

Waiting may cost you

The sooner your start, the easier it may be to save enough.



Hypothetical illustration only. Not intended to represent the past or future performance of any investment. Assumes contributions are made monthly with a 6% annual effective return, compounded monthly. Actual performance will vary with market conditions. Source: "Investing 101," TIAA.org/public/learn/personal-finance-101/investing-101. See slide 10 for disclosure on historical stock market increases.

Listen to what retirees say

A recent survey offers eye-opening lessons for younger generations.

70%

of retirees…

- Wished they had started saving earlier and/or investing more
- Would have reduced discretionary spending

Bridget Bearden, "Retiree Reflections," EBRI Issue Brief No. 561, Employee Benefit Research Institute, June 16, 2022, ebri.org/content/retiree-reflections.

Principle 2: Make use of tax-advantaged saving options

Your workplace retirement plan offers valuable benefits.

2023 contribution limits: **$22,500 per year, $30,000 if age 50+**

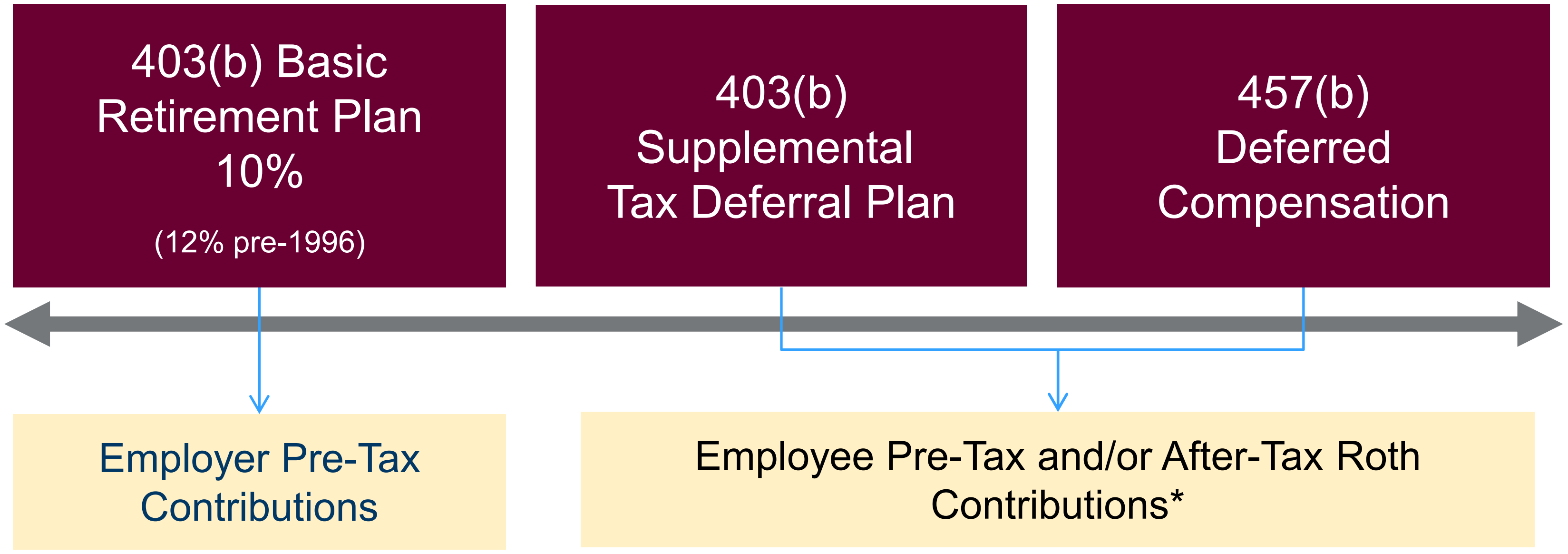
- Tax-deductible contributions
- Tax-deferred growth
- Employer matching funds, if available
- Portablility if you change jobs
- Valuable resources and support

Withdrawals from a Traditional IRA before age 59½ may be subject to a 10% tax penalty.

Central Michigan University Retirement Plan Overview

CMU
CENTRAL MICHIGAN UNIVERSITY

TIAA.org/cmich



2023 IRS Contribution Limits:
$22,500, $30,000 age 50+

*After-tax Roth contributions are available on the 403b Supplemental Retirement Account (SRA) and 457b Deferred Compensation Plan. This allows you to contribute *after-tax* dollars to your CMU retirement savings plan, at the higher IRS contribution and income limits (vs a ROTH IRA) with the incentive that qualified distributions are tax-free.

Comparing 403(b) and 457(b)	**403(b)**	**457(b)**
Annual contribution	$22,500 (>50 $30,000)	$22,500 (>50 $30,000)
Contribution type	Pre-tax and/or Roth	Pre-tax and/or Roth
Contribution coordination	Employee pretax and Roth contributions to 403(b) and 401(k) plans in the same year are limited in the aggregate to the IRS Section 402(g) limit.	Not subject to the IRS Section 402(g) limit.
Other catch-up limits	Employee may make the age 50 catch-up contribution.	Employee may make the age 50 catch-up contribution.
Total contribution limit (employer + employee)	Not applicable.	Lesser of 100% of taxable compensation or $22,500 in 2023. Roth contributions must be included.
Withdrawals	Severance from service, age 59½, disability or death. Hardship (contributions only) may also be available.	Severance from service, age 70½ or death. Unforeseeable emergency, small sum withdrawal and loans may also be available.
Early withdrawal penalty	Applies, generally 10% before age 59½.	Not applicable.

The Roth contribution option in 403(b) and 457(b) plans

- Not a different plan, but a contribution option under the current 403(b) plan and/or 457(b) plan
- Contributions are made on an after-tax basis and do not reduce your current taxable income
- Earnings are tax free at withdrawal if qualifying conditions are met*
- You can make both pretax and Roth contributions, subject to IRS limits

*A withdrawal of Roth earnings is tax free, provided eligible participants meet the five-year seasoning period and attain age 591/2 (or are disabled or deceased). Withdrawals prior to age 59 ½ may be subject to a 10% federal tax penalty, in addition to ordinary income.

Comparing after-tax Roth and pretax contributions

	Roth 403(b) after-tax contributions	Pretax contributions
Annual contribution	$6,000	$8,000
Current tax savings	$0	$2,000
Effect on annual income	($6,000)	($6,000)
Future account value	$233,956	$311,942
Future account value (after taxes paid) assuming 25% tax bracket before and after retirement	$233,956	$233,956
Future account value (after taxes paid) assuming 25% tax bracket while working and 30% tax bracket after retirement	$233,956	$218,359
Future account value (after taxes paid) assuming 25% tax bracket while working and 20% tax bracket after retirement	$233,956	$249,553

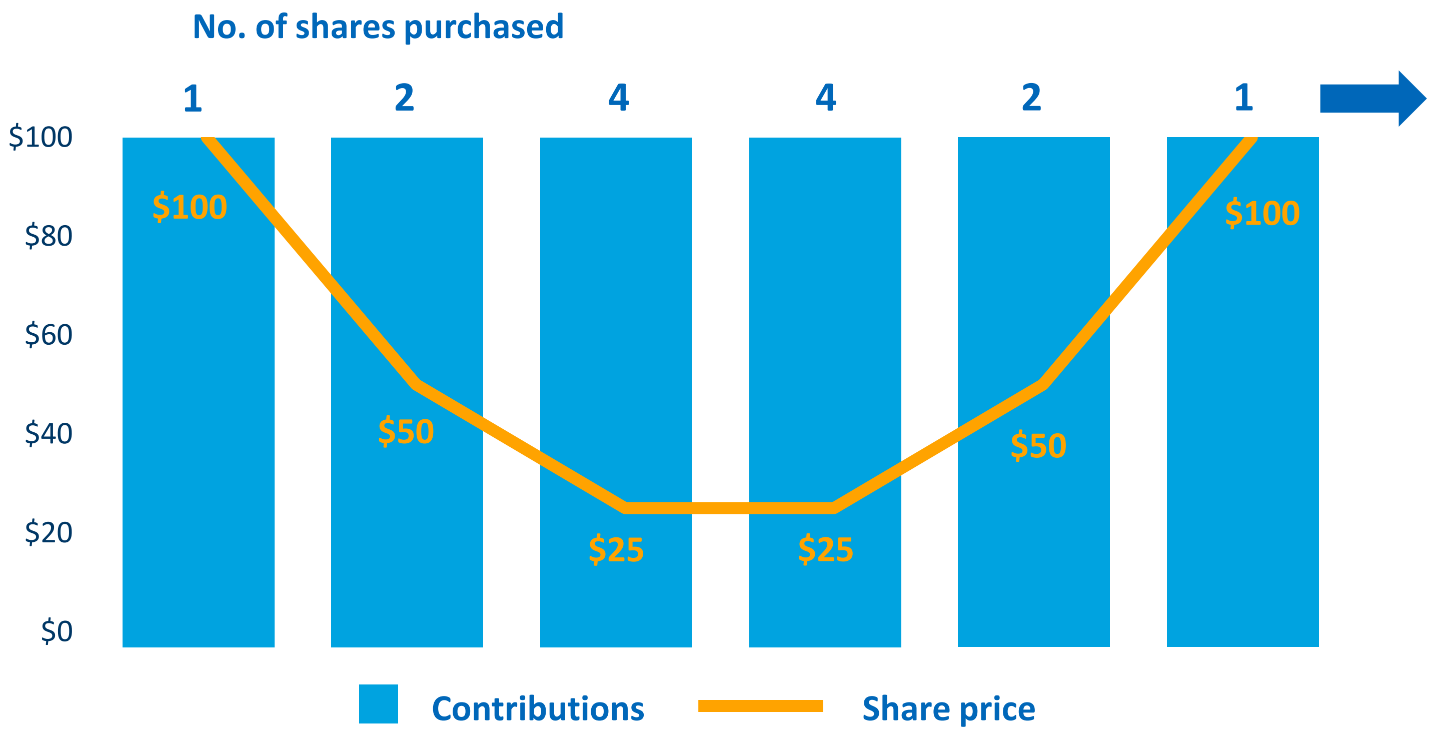
* This illustration is hypothetical and not intended to represent the performance of any specific investment product and cann ot be used to predict or project investment performance. Charges and expenses that would be associated with an actual investment are not reflected. Chart assumes 6% rate of return and 25% current tax bracket.

Benefits of the Roth Option

- Provides additional flexibility in planning retirement income
- Protects against higher future ordinary income tax rates
- Unlike Roth IRAs, there are no maximum income limits for Roth 403(b) contributions

Principle 3: Commit to regular contributions and stick to them

Regular contributions spread out your risk over time (dollar-cost averaging).



Shares purchased: 14

($600 in six installments)

Average cost per share: $42.86

vs.

Shares purchased: 6

($600 all at once)

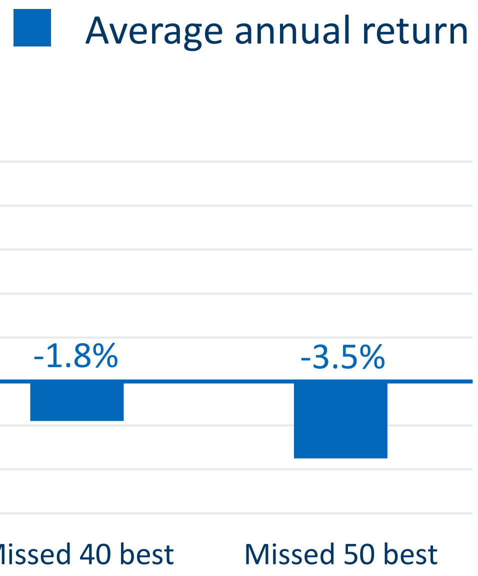
Average cost per share: $100

NOTE: A periodic investment plan such as dollar-cost averaging does not assure a profit or protect against a loss in declining markets. For illustration only.

Don’t try to time the market

Missing the best days in the market may set you back.

The risk of missing the best days in the market (2002–2022)



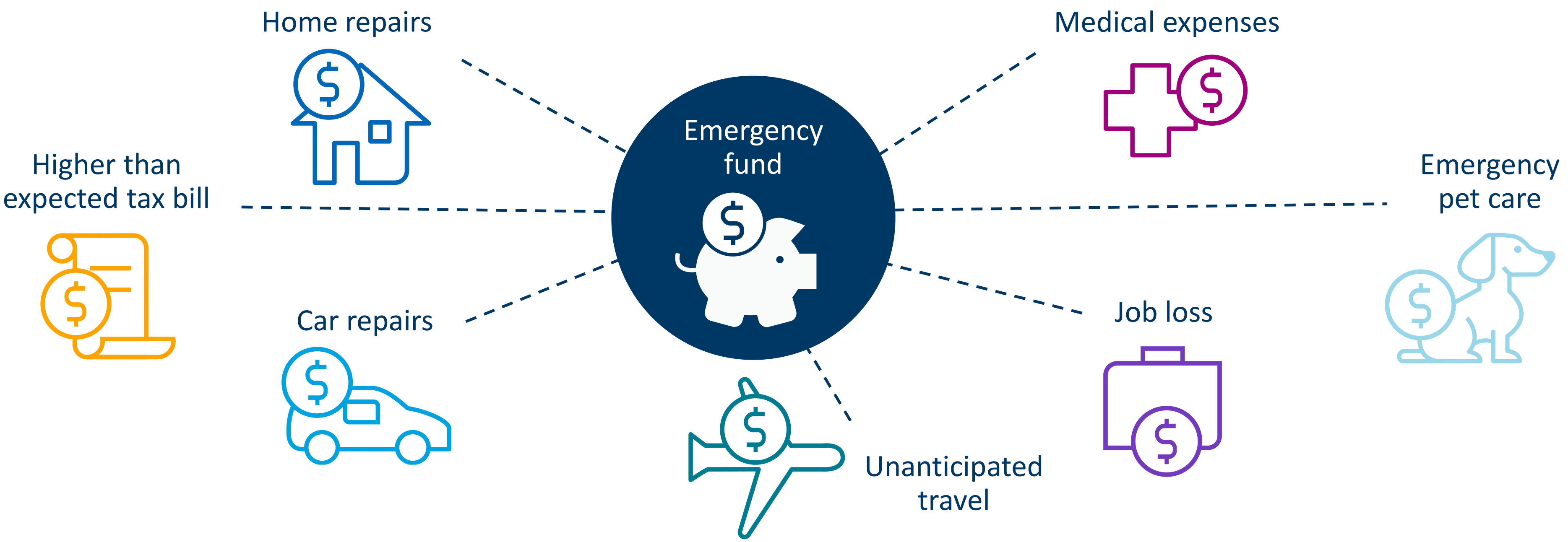
* 2/28/2002 to 2/28/2022. The returns are average annual over the past 20 years ending on 2/28/2022. The bars represent what would have happened if the investor had “missed” the best 10/20/30/40/50 days for the equity markets during that 20-year period. Past performance is no guarantee of future results. This is for illustrative purposes only. This is not indicative of any investment. An investment cannot be made directly in an index. The S&P 500 index is based on the market capitalizations of 500 large companies having common stock listed on the NYSE or NASDAQ. © 2022 Morningstar. All Rights Reserved.

Source for bear market statement: Tom Lauricella, “3 Charts That Show Why Investors Should Stay the Course Throughout Market Turmoil,” Morningstar, March 16, 2020, morningstar.com/articles/972119/3-charts-that-show-why-investors-should-stay-the-course-throughout-market-turmoil.

Protect yourself with an emergency fund

An emergency fund can keep you from stopping contributions or dipping into your savings.

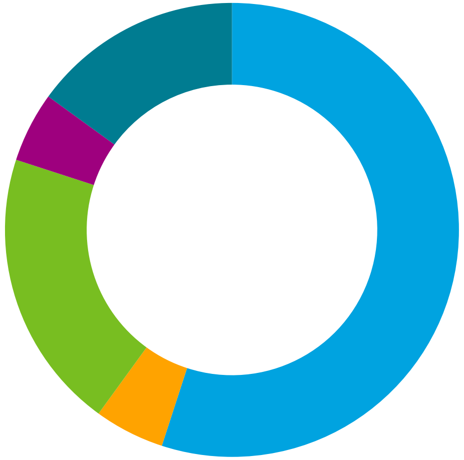
Build at least 6 months of living expenses in a separate bank account



Principle 4: Choose an appropriate investment mix

Asset allocation has a bigger impact on returns than individual investment selection.

What does your mix of asset classes look like?



Higher risk

- Equities
- Real estate

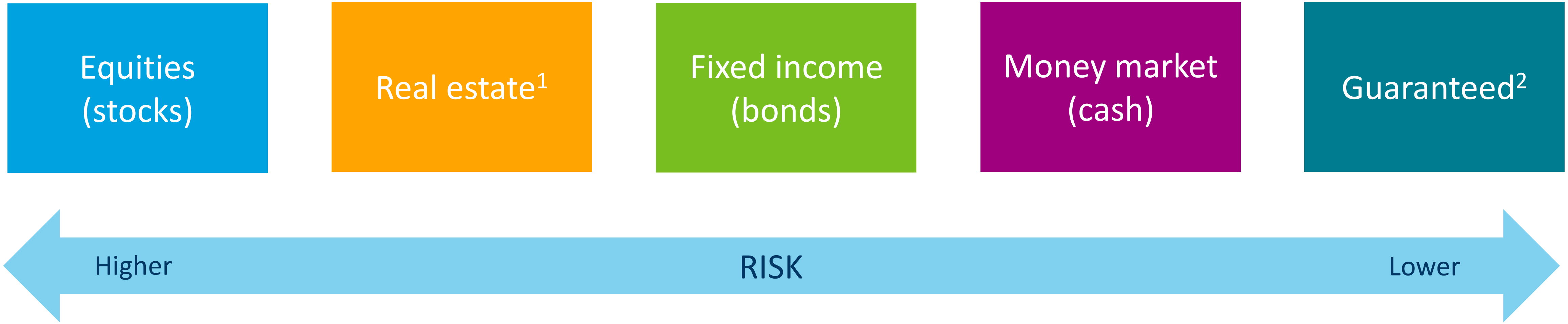
Lower risk

- Fixed income
- Money market
- Guaranteed*

*Guarantees are based on the claims-paying ability of the issuer.
The strategies of diversification, rebalancing and asset allocation cannot eliminate the risk of investment losses or guarantee that an investor's goal will be met.
There are inherent risks in investing in securities. Past performance is no guarantee of future results. In addition, investment returns and principal value will fluctuate so your accumulation, when redeemed, may be worth more or less than the original cost.

Know the asset classes

The asset classes have different levels of risk and reward.



There are inherent risks in investing in securities. Past performance is no guarantee of future results. In addition, investment returns and principal value will fluctuate so your accumulation, when redeemed, may be worth more or less than the original cost.

[1] The real estate industry is subject to various risks including fluctuations in underlying property values, expenses and income, and potential environmental liabilities.

[2] Guarantees are based on the claims-paying ability of the issuer.

Know yourself

Taking too much risk isn't worth it if you can't sleep at night.

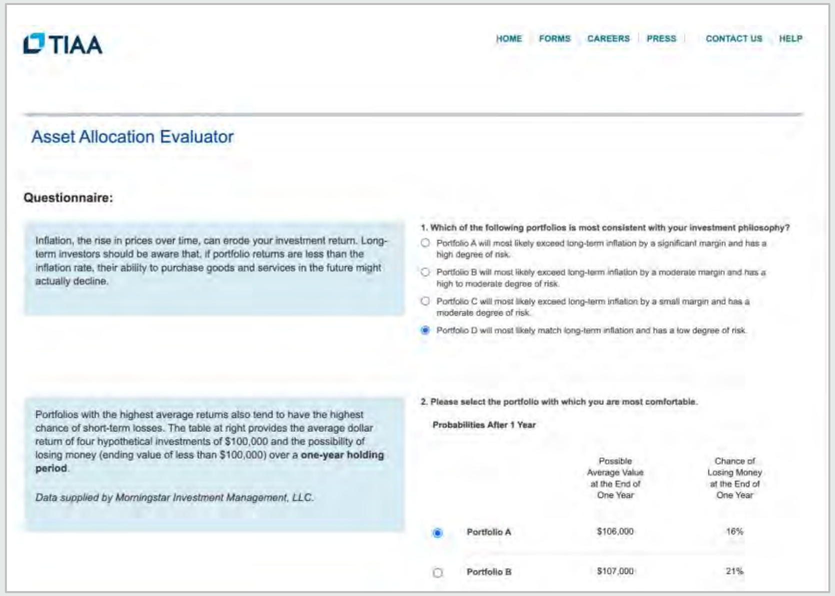
Think about...

- Your timeframe
- Your goals
- Your comfort with risk

Asset Allocation Evaluator

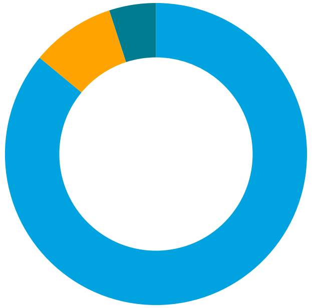
TIAA.org/aae

Answer 6 quick questions to see an asset allocation that may be right for you



Find your mix

Consider a mix that's right for you. Here are some examples.

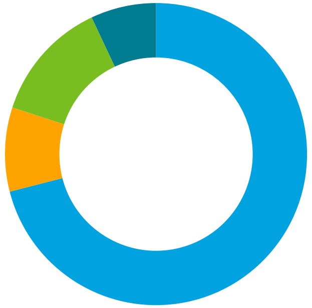


Aggressive portfolio

- Equities (86%)
- Real estate (9%)
- Guaranteed (5%)

Moderately conservative portfolio

- Equities (32%)
- Real estate (8%)
- Fixed income (29%)
- Money market (7%)
- Guaranteed (24%)



Moderately aggressive portfolio

- Equities (71%)
- Real estate (9%)
- Fixed income (13%)
- Guaranteed (7%)

Conservative portfolio

- Equities (12%)
- Real estate (8%)
- Fixed income (42%)
- Money market (9%)
- Guaranteed (29%)

Source: Asset Allocation Evaluator. All examples are hypothetical and for illustration only. See further information at the end of this presentation.
Diversification is a technique to help reduce risk. There is no guarantee that diversification will protect against a loss of income.

Choose investments within asset classes

Mutual funds are a common way to invest.

What are mutual funds?

A collection of investments designed to pursue a specific investment objective

What's available?

Stock funds

Bond funds

Real estate funds

Target-date funds

Guaranteed assets

A fixed annuity provides guaranteed growth and guaranteed income for life at retirement

Guarantees are based on the claims-paying ability of the issuer.

Diversify investments within asset classes

It is difficult to predict which investments will do best in any given year.

Higher return ↑

2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2007-2021 Annualized returns	2007-2021 Volatility level**
Emerging Market Equity 39.42%	Bonds 5.24%	Emerging Market Equity 78.51%	Small Cap 26.85%	TIPS 13.56%	Emerging Market Equity 18.22%	Small Cap 38.82%	S&P 500 13.69%	Large Cap Growth 5.67%	Small Cap 21.31%	Emerging Market Equity 37.28%	Bonds 0.01%	Large Cap Growth 36.39%	Large Cap Growth 38.49%	S&P 500 28.71%	Large Cap Growth 13.72%	Emerging Market Equity 21.38%
Large Cap Growth 11.81%	TIPS -2.35%	High Yield Bond 58.21%	Mid Cap 25.48%	Bonds 7.84%	Large Cap Value 17.51%	Mid Cap 34.76%	Large Cap Value 13.45%	S&P 500 1.38%	Large Cap Value 17.34%	Large Cap Growth 30.21%	TIPS -1.26%	S&P 500 31.49%	Small Cap 19.96%	Large Cap Growth 27.60%	S&P 500 10.66%	Small Cap 20.26%
TIPS 11.64%	60/40 Div Portfolio -25.38%	Mid Cap 40.48%	Emerging Market Equity 16.88%	High Yield Bond 4.98%	International Stocks 17.32%	Large Cap Growth 33.48%	Mid Cap 13.22%	Bonds 0.55%	High Yield Bond 17.13%	International Stocks 25.03%	Large Cap Growth -1.51%	Mid Cap 30.54%	S&P 500 18.40%	Large Cap Value 25.16%	Mid Cap 10.22%	Mid Cap 17.90%
International Stocks 11.17%	High Yield Bond -26.16%	Large Cap Growth 37.21%	Large Cap Growth 16.71%	Large Cap Growth 2.64%	Mid Cap 17.28%	Large Cap Value 32.53%	Large Cap Growth 13.05%	International Stocks -0.81%	Mid Cap 13.80%	S&P 500 21.83%	High Yield Bond -2.08%	Large Cap Value 26.54%	Emerging Market Equity 18.31%	Mid Cap 22.58%	Small Cap 8.69%	International Stocks 17.44%
60/40 Div Portfolio 8.74%	Small Cap -33.79%	International Stocks 31.78%	Large Cap Value 15.51%	S&P 500 2.11%	Small Cap 16.35%	S&P 500 32.39%	60/40 Div Portfolio 6.39%	TIPS -1.44%	S&P 500 11.96%	Mid Cap 18.52%	S&P 500 -4.38%	Small Cap 25.52%	Mid Cap 17.10%	Small Cap 14.82%	60/40 Div Portfolio 7.51%	Large Cap Value 16.24%
Bonds 6.97%	Large Cap Value -36.85%	60/40 Div Portfolio 27.65%	High Yield Bond 15.12%	60/40 Div Portfolio 1.41%	S&P 500 16.00%	International Stocks 22.78%	Bonds 5.97%	60/40 Div Portfolio -1.46%	Emerging Market Equity 11.19%	60/40 Div Portfolio 15.20%	60/40 Div Portfolio -5.60%	International Stocks 22.01%	60/40 Div Portfolio 13.48%	60/40 Div Portfolio 12.52%	Large Cap Value 7.51%	Large Cap Growth 15.97%
Mid Cap 5.60%	S&P 500 -37.00%	Small Cap 27.17%	S&P 500 15.06%	Large Cap Value 0.39%	High Yield Bond 15.81%	60/40 Div Portfolio 15.85%	Small Cap 4.89%	Mid Cap -2.44%	60/40 Div Portfolio 6.57%	Small Cap 14.65%	Large Cap Value -8.27%	60/40 Div Portfolio 20.44%	TIPS 10.99%	International Stocks 11.26%	High Yield Bond 7.07%	S&P 500 15.34%
S&P 500 5.49%	Large Cap Growth -38.44%	S&P 500 26.46%	60/40 Div Portfolio 13.25%	Mid Cap -1.55%	Large Cap Growth 15.26%	High Yield Bond 7.44%	TIPS 3.64%	Large Cap Value -3.83%	Large Cap Growth 7.08%	Large Cap Value 13.66%	Mid Cap -9.06%	Emerging Market Equity 18.42%	International Stocks 7.82%	TIPS 5.96%	TIPS 4.69%	60/40 Div Portfolio 10.41%
High Yield Bond 1.87%	Mid Cap -41.46%	Large Cap Value 19.69%	International Stocks 7.75%	Small Cap -4.18%	60/40 Div Portfolio 12.96%	Bonds -2.02%	High Yield Bond 2.45%	Small Cap -4.41%	TIPS 4.68%	High Yield Bond 7.50%	Small Cap -11.01%	High Yield Bond 14.32%	Bonds 7.51%	High Yield Bond 5.28%	Emerging Market Equity 4.45%	High Yield Bond 9.73%
Large Cap Value -0.17%	International Stocks -43.38%	TIPS 11.41%	Bonds 6.54%	International Stocks -12.14%	TIPS 6.98%	Emerging Market Equity -2.60%	Emerging Market Equity -2.19%	High Yield Bond -4.47%	Bonds 2.65%	Bonds 3.54%	International Stocks -13.79%	Bonds 8.72%	High Yield Bond 7.11%	Bonds -1.54%	Bonds 4.09%	TIPS 5.51%
Small Cap -1.57%	Emerging Market Equity -53.33%	Bonds 5.93%	TIPS 6.31%	Emerging Market Equity -18.42%	Bonds 4.21%	TIPS -8.61%	International Stocks -4.90%	Emerging Market Equity -14.92%	International Stocks 1.00%	TIPS 3.01%	Emerging Market Equity -14.58%	TIPS 8.43%	Large Cap Value 2.80%	Emerging Market Equity -2.64%	International Stocks 3.60%	Bonds 3.23%

Lower return ↓

Emerging Market Equity | Large Cap Growth | TIPS | International Stocks | Bonds | Mid Cap | S&P 500 | High Yield Bond | Large Cap Value | Small Cap | 60/40 Diversified Portfolio

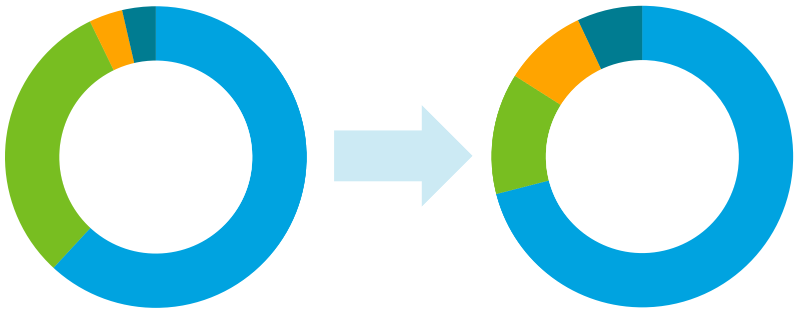
60/40 Diversified Portfolio assumes annual rebalancing. Data derived from Morningstar Direct^{SM}, Morningstar, Inc., 2021. All data represents total returns for the stated period. Past performance does not guarantee future returns. Volatility is defined as standard deviation (2007-2021); the greater the volatility, the greater the variance to the mean return of a given asset.

Diversification is a technique to help reduce risk. There is no guarantee that diversification will protect against a loss of income. The strategies of diversification, rebalancing and asset allocation cannot eliminate the risk of investment losses or guarantee that an investor's goal will be met.

Principle 5: Review your strategy and investments regularly

Reviewing your account can help keep it on track.

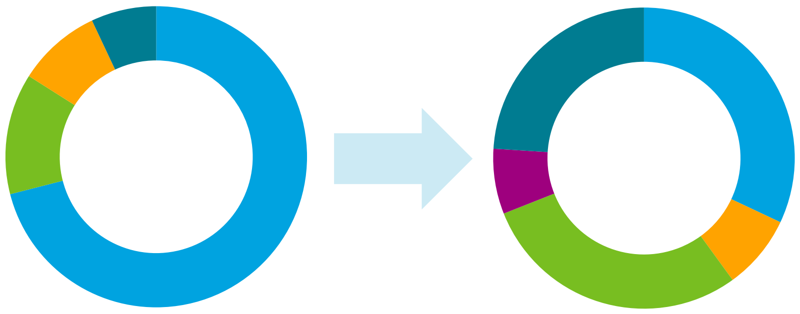
Rebalance to maintain your asset allocation



Unbalanced mix due to market returns

Desired mix

Adjust your asset allocation to reflect your changing circumstances



More aggressive

More conservative

For illustration only. Actual allocation amounts should be based on your personal circumstances. There are inherent risks in investing in securities. There is no guarantee that asset allocation reduces risk or increases returns.

Take the next step for your future

Remember the 5 investing principles…

1. Take advantage of time
2. Make use of tax-advantaged saving options
3. Commit to regular contributions and stick to them
4. Choose an appropriate investment mix
5. Review your strategy and investments regularly

Take the next step for your future

...and then take action.

1. Join your plan or increase your contributions if you can
2. Review your current investments
3. Use the Asset Allocation Evaluator and/or Retirement Advisor to see what strategy may be right for you
4. Schedule an appointment with a TIAA financial consultant

Take the quiz

1

What is the most important thing to focus on when selecting investments?

a. Choosing individual investments that are performing well this year

b. Conservative investments that help protect your savings

c. An asset allocation that suits your age, goals and tolerance for risk

2

A target-date fund is a diversified mix of investments based on your age. Which asset class is not included in a target-date fund?

a. Fixed income

b. Equities

c. Guaranteed assets

3

As you progress in your career, you may want to increase the portion of savings going into guaranteed assets, or annuities, which can be a source of what?

a. Dividend-paying stocks

b. Guaranteed lifetime income

c. Variable life insurance

We're here to help

No matter your background, income or financial circumstances, don't hesitate to talk to us.

Schedule a call with a TIAA financial consultant

800-732-8353
Weekdays, 8 a.m. to 8 p.m. (ET)

TIAA.org/schedulenow

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The Asset Allocation Evaluator is intended to serve as an educational tool to help you identify a mix of asset classes that could be used to help you create a diversified portfolio that is consistent with your individual preference to assume investment risk. The asset allocation models in this tool are based on generally accepted investment theories that take into account the historical returns of different asset classes (e.g., equities, bonds, or cash) over defined periods of time. The asset allocation models in this tool do not recommend specific investments and should not be deemed to be investment advice. This tool may provide you with access to information about the specific investments in your retirement plan or IRA for educational purposes only. That information should not be considered a recommendation to invest in any specific investment product. Your circumstances are unique, and you need to assess your own situation and consult with an investment adviser to receive more personalized advice. You should consider your other assets, income and investments before making any investment decisions. All examples used are hypothetical and designed for illustrative purposes only.

In considering these model allocations for your portfolio, keep in mind that they are based solely on your responses to a questionnaire that is designed to gauge your tolerance for investment risk. The model allocations do not take into account your other assets, other sources of retirement income, your future retirement income need, or the impact that the model allocation will have on your ability to achieve that income need. It's therefore important that you consider your entire personal financial situation in evaluating the proposed portfolio. In addition, your circumstances may change over time so review your financial strategy periodically to make sure it continues to meet your goals and needs.

The ultimate decision on asset allocation is yours to make. It is up to you to implement this asset mix if you choose to do so.

Nothing contained herein is a recommendation to buy, sell or exchange any fund or account. We cannot guarantee the suitability or potential value of any investment, and we are not responsible for any losses incurred on any investment.

Retirement Advisor does not monitor your retirement assets or personal circumstances. The purpose of the retirement income tool is to show how the performance of the underlying investment accounts could affect the participant's policy cash value and the resulting retirement income. It is not intended to project or predict investment results. The advice may vary over time and with each use. There may be other investments not considered by the Retirement Advisor that have characteristics similar or superior to those being analyzed. The tool's advice is based on statistical projections of the likelihood that you will achieve your retirement goals. The projections rely on financial and economic assumptions of historical rates of return of various asset classes that may not reoccur in the future; volatility measure and other facts; as well as information you have provided.

IMPORTANT: Projections and other information generated through the Retirement Advisor regarding the likelihood of various investment outcomes are hypothetical, do not reflect actual investment results and are not a guarantee of future results. The projections are dependent in part on subjective assumptions, including the rate of inflation and the rate of return for different asset classes. These rates are difficult to accurately predict. Changes to the law, financial markets or your personal circumstances can cause substantial deviation from the estimates. This could result in declines in the account's value over short or even extended periods of time.

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Annuities are designed for retirement savings or for other long-term goals. They offer several payment options, including lifetime income. Guarantees are based on the claims-paying ability of the issuing company. Payments from variable annuities are not guaranteed, and the payment amounts may rise or fall depending on investment returns. The contract value of a deferred variable annuity is subject to market fluctuations and investment risk so that, when withdrawn, it may be worth more or less than its original value. Annuity contracts contain terms for keeping them in force. We can provide you with costs and complete details.

You should consider the investment objectives, risks, charges, and expenses carefully before investing. Please call 877-518-9161 or log in to TIAA.org for underlying product and fund prospectuses that contain this and other information. Please read the prospectuses carefully before investing.

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