

2020 Long-Term Capital Market Assumptions

24th Annual Edition | Assumptions matrix: U.S. Dollar

Time-tested projections
to build stronger portfolios



PORTFOLIO INSIGHTS

J.P. MORGAN ASSET MANAGEMENT'S LONG-TERM CAPITAL MARKET ASSUMPTIONS are developed each year by our Assumptions Committee, a multi-asset class team of senior investors and strategists from across the firm. The Committee relies on the input and expertise of a range of portfolio managers and product specialists, striving to ensure that the analysis is consistent across asset classes. As a final step in the process, the team, along with senior leaders at J.P. Morgan Asset Management, conducts a rigorous review of the proposed assumptions and their underlying rationale.

A wide range of investors use our capital market assumptions to ensure that investment policies and decisions are based on real-world, consistent views and can be tested under a variety of market scenarios.



NOT FOR RETAIL DISTRIBUTION: This communication has been prepared exclusively for institutional/wholesale/professional clients and qualified investors only as defined by local laws and regulations.

If you are a person with a disability and need additional support in viewing the material, please call us at 1-800-343-1113 for assistance.

We have a number of security protocols in place which are designed to ensure all customer data is kept confidential and secure. We use reasonable physical, electronic, and procedural safeguards that are designed to comply with federal standards to protect and limit access to personal information.

There are several key controls and policies in place designed to ensure customer data are safe, secure and anonymous:

- Before J.P. Morgan Asset Management receives the data, all unique identifiable information, including names, account numbers, addresses, dates of birth and Social Security numbers is removed.
- J.P. Morgan Asset Management has put privacy protocols for its researchers in place. Researchers are obligated to use the data solely for approved research and are obligated not to re-identify any individual represented in the data.
- J.P. Morgan Asset Management does not allow the publication of any information about an individual or entity. Any data point included in any publication based on customer data may only reflect aggregate information.
- The data are stored on a secure server and can be accessed only under strict security procedures. Researchers are not permitted to export the data outside of J.P. Morgan Chase's systems. The system complies with all J.P. Morgan Chase Information Technology Risk Management requirements for the monitoring and security of data.
- J.P. Morgan Asset Management provides valuable insights to policymakers, businesses and financial advisors, but these insights cannot come at the expense of consumer privacy. We take every precaution to ensure the confidence and security of our account holders' private information.

JPMAM Long-Term Capital Market Assumptions: Given the complex risk-reward trade-offs involved, we advise clients to rely on judgment as well as quantitative optimization approaches in setting strategic allocations. Please note that all information shown is based on qualitative analysis. Exclusive reliance on the above is not advised. This information is not intended as a recommendation to invest in any particular asset class or strategy or as a promise of future performance. Note that these asset class and strategy assumptions are passive only – they do not consider the impact of active management. References to future returns are not promises or even estimates of actual returns a client portfolio may achieve. Assumptions, opinions and estimates are provided for illustrative purposes only. They should not be relied upon as recommendations to buy or sell securities. Forecasts of financial market trends that are based on current market conditions constitute our judgment and are subject to change without notice. We believe the information provided here is reliable, but do not warrant its accuracy or completeness. This material has been prepared for information purposes only and is not intended to provide, and should not be relied on for, accounting, legal or tax advice. The outputs of the assumptions are provided for illustration/discussion purposes only and are subject to significant limitations. "Expected" or "alpha" return estimates are subject to uncertainty and error. For example, changes in the historical data from which it is estimated will result in different implications for asset class returns. Expected returns for each asset class are conditional on an economic scenario; actual returns in the event the scenario comes to pass could be higher or lower, as they have been in the past, so an investor should not expect to achieve returns similar to the outputs shown herein. References to future returns for either asset allocation strategies or asset classes are not promises of actual returns a client portfolio may achieve. Because of the inherent limitations of all models, potential investors should not rely exclusively on the model when making a decision. The model cannot account for the impact that economic, market, and other factors may have on the implementation and ongoing management of an actual investment portfolio. Unlike actual portfolio outcomes, the model outcomes do not reflect actual trading, liquidity constraints, fees, expenses, taxes and other factors that could impact the future returns. The model assumptions are passive only – they do not consider the impact of active management. A manager's ability to achieve similar outcomes is subject to risk factors over which the manager may have no or limited control. The views contained herein are not to be taken as advice or a recommendation to buy or sell any investment in any jurisdiction, nor is it a commitment from J.P. Morgan Asset Management or any of its subsidiaries to participate in any of the transactions mentioned herein. Any forecasts, figures, opinions or investment techniques and strategies set out are for information purposes only, based on certain assumptions and current market conditions and are subject to change without prior notice. All information presented herein is considered to be accurate at the time of production. This material does not contain sufficient information to support an investment decision and it should not be relied upon by you in evaluating the merits of investing in any securities or products. In addition, users should make an independent assessment of the legal, regulatory, tax, credit and accounting implications and determine, together with their own professional advisers, if any investment mentioned herein is believed to be suitable to their personal goals. Investors should ensure that they obtain all available relevant information before making any investment. It should be noted that investment involves risks, the value of investments and the income from them may fluctuate in accordance with market conditions and taxation agreements and investors may not get back the full amount invested. Both past performance and yield are not a reliable indicator of current and future results. J.P. Morgan Asset Management is the brand for the asset management business of JPMorgan Chase & Co. and its affiliates worldwide. To the extent permitted by applicable law, we may record telephone calls and monitor electronic communications to comply with our legal and regulatory obligations and internal policies. Personal data will be collected, stored and processed by J.P. Morgan Asset Management in accordance with our **Company's Privacy Policy** (www.jpmorgan.com/global/privacy). For further information regarding our local privacy policies, please follow the respective links: **Australia** (www.jpmorgan.com.au/wps/portal/au/ec/PrivacyPolicy), **EMEA** (www.jpmorgan.com/emea-privacy-policy), **Japan** (www.jpmorganasset.co.jp/wps/portal/Policy/Privacy), **Hong Kong** (<https://am.jpmorgan.com/hk/en/asset-management/per/privacy-statement/>), **Singapore** (www.jpmorgan.com.sg/privacy) and **Taiwan** (www.jpmorgan.com/country/GB/en/privacy/taiwan). This communication is issued by the following entities: in the United Kingdom by JPMorgan Asset Management (UK) Limited, which is authorized and regulated by the Financial Conduct Authority; in other European jurisdictions by JPMorgan Asset Management (Europe) S.à r.l.; in Hong Kong by JPMorgan Asset Management (Asia Pacific) Limited, or JPMorgan Funds (Asia) Limited, or JPMorgan Asset Management Real Assets (Asia) Limited; in Singapore by JPMorgan Asset Management (Singapore) Limited (Co. Reg. No. 197601586K), or JPMorgan Asset Management Real Assets (Singapore) Pte Ltd (Co. Reg. No. 201120355E), this advertisement or publication has not been reviewed by the Monetary Authority of Singapore; in Taiwan by JPMorgan Asset Management (Taiwan) Limited; in Japan by JPMorgan Asset Management (Japan) Limited which is a member of the Investment Trusts Association, Japan, the Japan Investment Advisers Association, Type II Financial Instruments Firms Association and the Japan Securities Dealers Association and is regulated by the Financial Services Agency (registration number "Kanto Local Finance Bureau (Financial Instruments Firm) No. 3307"); in Australia to wholesale clients only as defined in section 761A and 761G of the Corporations Act 2001 (Cth) by JPMorgan Asset Management (Australia) Limited (ABN 55143832080) (AFSL 376919); in Brazil by Banco J.P. Morgan S.A.; in Canada for institutional clients' use only by JPMorgan Asset Management (Canada) Inc., and in the United States by J.P. Morgan Institutional Investments, Inc., member of FINRA; J.P. Morgan Investment Management Inc. or J.P. Morgan Alternative Asset Management, Inc.

Copyright 2019 JPMorgan Chase & Co. All rights reserved.

LV-JPM52180 | 11/19 | 0903c02a827296bf