Morgan Stanley



US Economic Outlook Managing Neutral

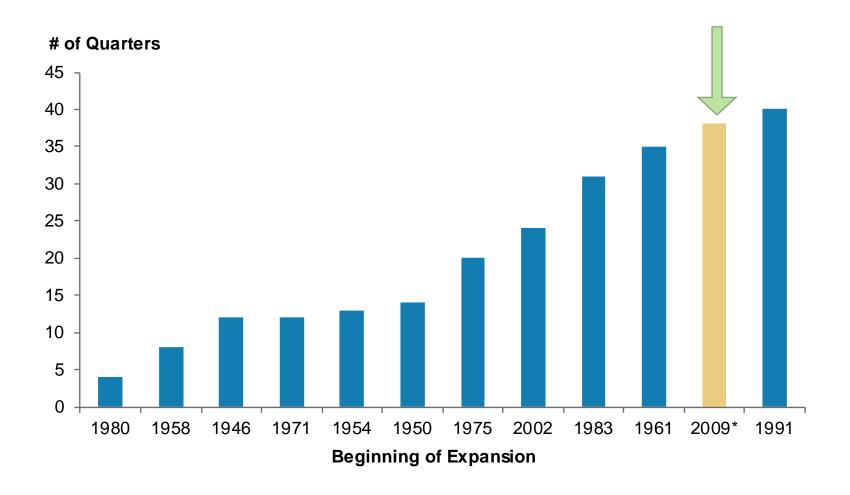
Ellen Zentner, Economist Chief US Economist Morgan Stanley & CO. LLC February 25, 2019

Morgan Stanley Research North America

For important disclosures, refer to the Disclosure Section, located at the end of this report.

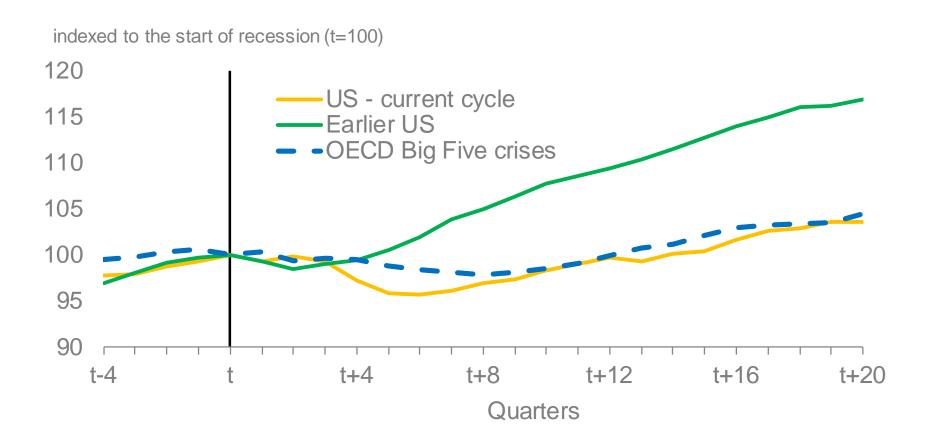
All information as of February 20, 2019 unless otherwise stated.

Exhibit 1. The Length of Post WWII Recessions



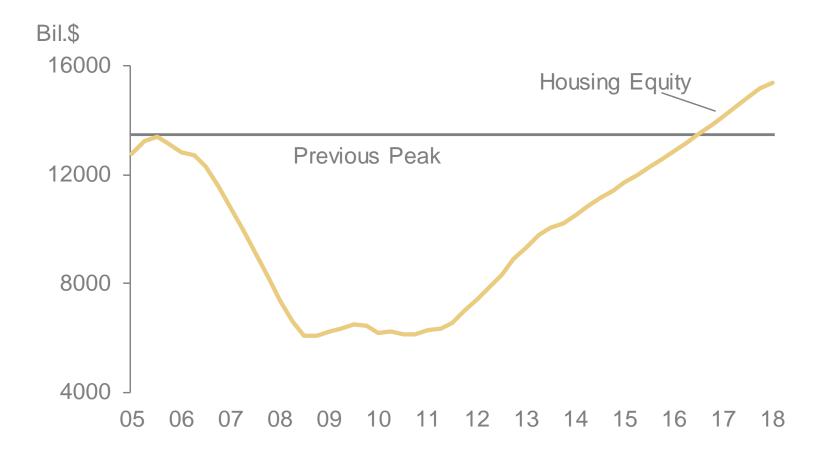
Note: Comparison is to expansions post-WWII. * indicates current expansion through 4Q 2018. Source: National Bureau of Economic Research, Morgan Stanley Research

Exhibit 2. Real GDP Around Recessions and Financial Crises



Note: "Earlier" is the average of the last 10 recessions; OECD Big Five financial crises first identified by Kaminsky and Reinhart (1999); Countries are Spain (1977), Norway (1987), Finland (1991), Sweden (1991) and Japan (1997). We use 1997 for Japan (as opposed to 1992) as this was the start of the most intense phase of the financial crisis there. Source: OECD, Morgan Stanley Research

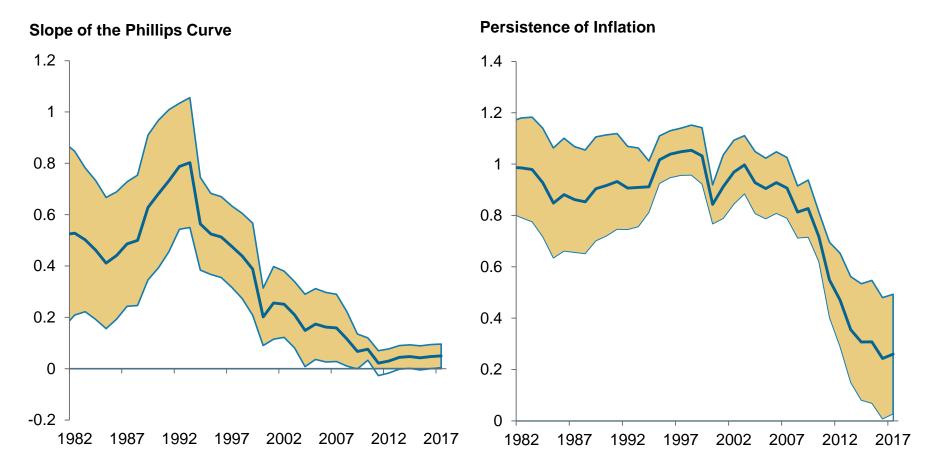
Exhibit 3. Slow Recovery in Housing Equity



Source: Federal Reserve Board data through 3Q18, Morgan Stanley Research

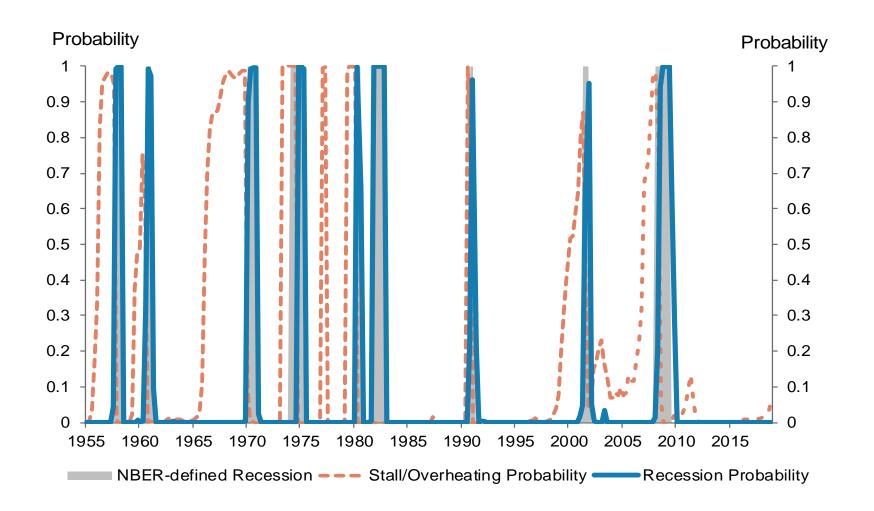
Exhibit 4. The Phillips Curve Is Flat

"...many factors, including better conduct of monetary policy over the past few decades, have greatly reduced, but not eliminated, the effects that tight labor markets have on inflation."



Note: See Chairman Jerome H. Powell, Monetary Policy and Risk Management at a Time of Low Inflation and Low Unemployment, October 2, 2018. Source: Federal Reserve, Morgan Stanley Research

Exhibit 5. DMM Points to a Low Probability We Have Entered the Overheating Phase

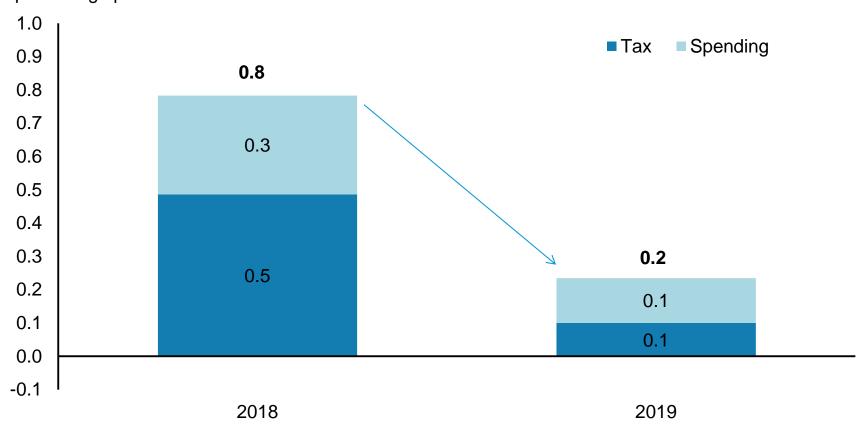


Source: Federal Reserve Board data through 3Q18, Morgan Stanley Research

Exhibit 6. 2019 Outlook: What's Weighing on Growth This Year?

Fiscal stimulus is fading.





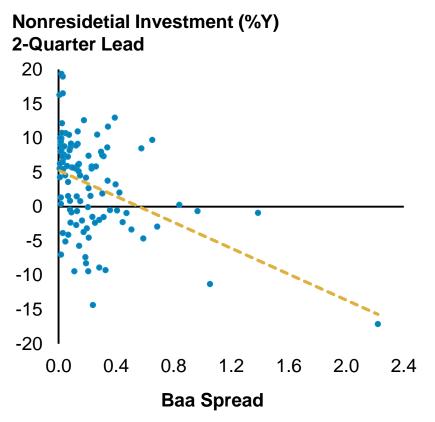
Source: Morgan Stanley Research

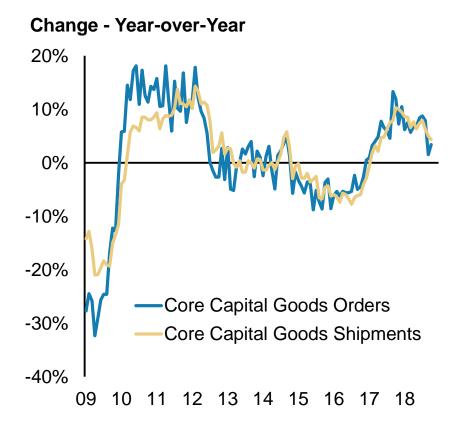
Exhibit 7. 2019 Outlook: What's Weighing on Growth Next Year?

Uncertainty around trade policy and wider corporate credit spreads are pointing to sluggish investment ahead.

Widening corporate credit spreads associated with drag on investment

High frequency data shows slowing momentum in investment trends



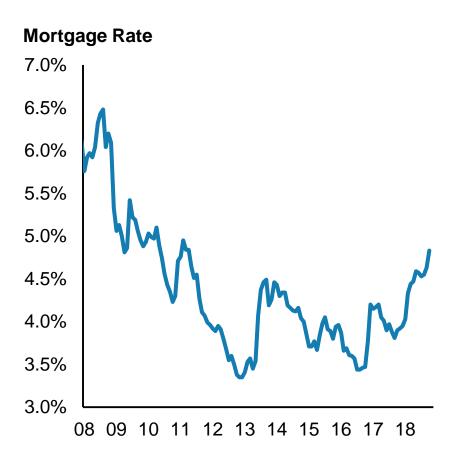


Source: Census Bureau, Bureau of Economic Analysis, Bloomberg, Morgan Stanley Research

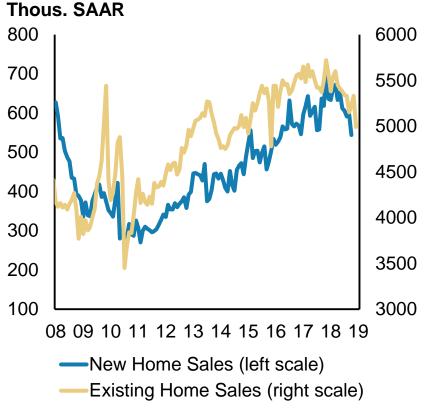
Exhibit 8. 2019 Outlook: What's Weighing on Growth Next Year?

Interest rate sensitive sectors will not contribute.

Mortgage rates continue to climb



New and existing home sales have slowed recently



Source: FHLMC, Census Bureau, National Association of Realtors, Morgan Stanley Research

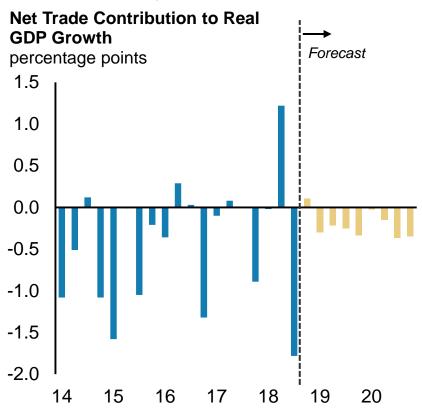
Exhibit 9. 2019 Outlook: What's Weighing on Growth Next Year?

Export growth likely to be restrained by tariffs.

Export growth likely to be restrained by tariffs/slowing global economy; import growth likely to remain moderate as well

%Q, SAAR Real Exports of Goods & Services 14% Real Imports of Goods & Services 12% 10% 8% 6% 4% 2% 0% -2% -4% -6% 14 15 16 17 18 19 20

Net trade expected to subtract about 30bp per quarter from GDP on average in 2019, roughly in line with 5Y average

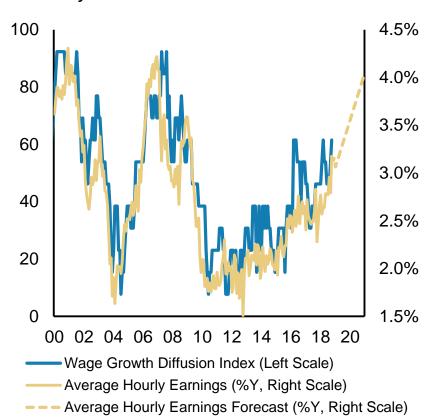


Source: Bureau of Economic Analysis, Morgan Stanley Research

Exhibit 10. 2019 Outlook: What's Bright in the Outlook?

The household sector remains impressively resilient. Wages are rising and the cost of carrying debt is low.

Wage breadth helps lift aggregate earnings to 4.0%Y by end of 2020



Debt-service costs are close to all-time lows





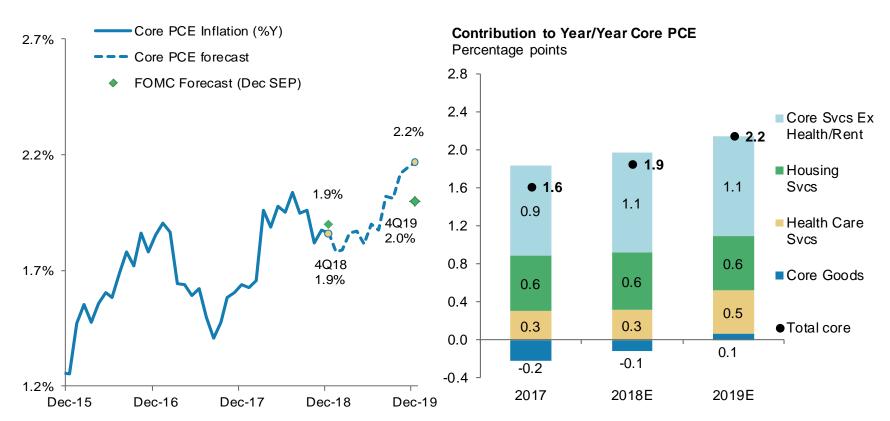
Source: Bureau of Labor Statistics, Federal Reserve, Morgan Stanley Research

Exhibit 11. 2019 Outlook: Inflation Rises to 2.2% By Year-end

Tariffs, higher medical price inflation, and upward pressure from a tight labor market work together to push up core prices. The Fed will debate how much is permanent vs transitory.

Core PCE inflation moving up

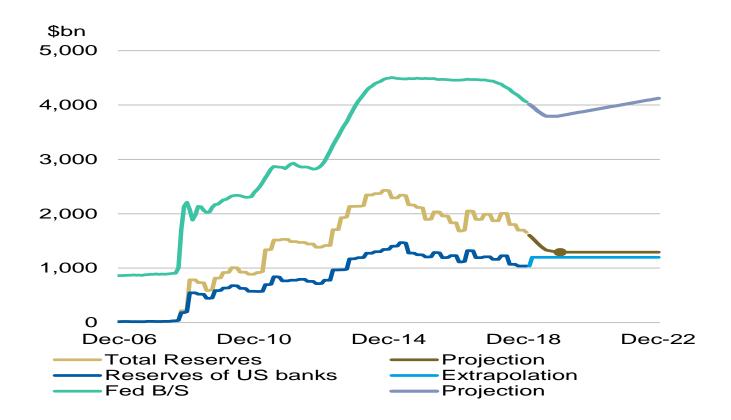
Decomposition of core PCE inflation, actual and projected



Source: Bureau of Economic Analysis, December 2018 FOMC Summary of Economic Projections, Morgan Stanley Research

Exhibit 12. 2019 Outlook: The End of Balance Sheet Normalization

Projection under our base case scenario for a September 2019 end to balance sheet normalization.



Source: Morgan Stanley Research

Disclosure Section

The information and opinions in Morgan Stanley Research were prepared by Morgan Stanley & Co. LLC, and/or Morgan Stanley C.T.V.M. S.A., and/or Morgan Stanley Mexico, Casa de Bolsa, S.A. de C.V., and/or Morgan Stanley Canada Limited. As used in this disclosure section, "Morgan Stanley" includes Morgan Stanley & Co. LLC, Morgan Stanley C.T.V.M. S.A., Morgan Stanley Mexico, Casa de Bolsa, S.A. de C.V., Morgan Stanley Canada Limited and their affiliates as necessary.

For important disclosures, stock price charts and equity rating histories regarding companies that are the subject of this report, please see the Morgan Stanley Research Disclosure Website at www.morganstanley.com/researchdisclosures, or contact your investment representative or Morgan Stanley Research at 1585 Broadway, (Attention: Research Management), New York, NY, 10036 USA.

For valuation methodology and risks associated with any recommendation, rating or price target referenced in this research report, please contact the Client Support Team as follows: US/Canada +1 800 303-2495; Hong Kong +852 2848-5999; Latin America +1 718 754-5444 (U.S.); London +44 (0)20-7425-8169; Singapore +65 6834-6860; Sydney +61 (0)2-9770-1505; Tokyo +81 (0)3-6836-9000. Alternatively you may contact your investment representative or Morgan Stanley Research at 1585 Broadway, (Attention: Research Management), New York, NY 10036 USA.

Global Research Conflict Management Policy

Morgan Stanley Research has been published in accordance with our conflict management policy, which is available at www.morganstanley.com/institutional/research/conflictpolicies. A Portuguese version of the policy can be found at www.morganstanley.com.br

Important Disclosures

Morgan Stanley is not acting as a municipal advisor and the opinions or views contained herein are not intended to be, and do not constitute, advice within the meaning of Section 975 of the Dodd-Frank Wall Street Reform and Consumer Protection Act.

Morgan Stanley Research does not provide individually tailored investment advice. Morgan Stanley Research has been prepared without regard to the circumstances and objectives of those who receive it. Morgan Stanley recommends that investors independently evaluate particular investments and strategies, and encourages investors to seek the advice of a financial adviser. The appropriateness of an investment or strategy will depend on an investor's circumstances and objectives. The securities, instruments, or strategies discussed in Morgan Stanley Research may not be suitable for all investors, and certain investors may not be eligible to purchase or participate in some or all of them. Morgan Stanley Research is not an offer to buy or sell or the solicitation of an offer to buy or sell any security/instrument or to participate in any particular trading strategy. The value of and income from your investments may vary because of changes in interest rates, foreign exchange rates, default rates, prepayment rates, securities/instruments prices, market indexes, operational or financial conditions of companies or other factors. There may be time limitations on the exercise of options or other rights in securities/instruments transactions. Past performance is not necessarily a guide to future performance. Estimates of future performance are based on assumptions that may not be realized. If provided, and unless otherwise stated, the closing price on the cover page is that of the primary exchange for the subject company's securities/instruments.

The fixed income research analysts, strategists or economists principally responsible for the preparation of Morgan Stanley Research have received compensation based upon various factors, including quality, accuracy and value of research, firm profitability or revenues (which include fixed income trading and capital markets profitability or revenues), client feedback and competitive factors. Fixed Income Research analysts', strategists' or economists' compensation is not linked to investment banking or capital markets transactions performed by Morgan Stanley or the profitability or revenues of particular trading desks.

With the exception of information regarding Morgan Stanley, Morgan Stanley Research is based on public information. Morgan Stanley makes every effort to use reliable, comprehensive information, but we make no representation that it is accurate or complete. We have no obligation to tell you when opinions or information in Morgan Stanley Research change apart from when we intend to discontinue equity research coverage of a subject company. Facts and views presented in Morgan Stanley Research have not been reviewed by, and may not reflect information known to, professionals in other Morgan Stanley business areas, including investment banking personnel.

Morgan Stanley may make investment decisions that are inconsistent with the recommendations or views in this report.

To our readers based in Taiwan or trading in Taiwan securities/instruments: Information on securities/instruments that trade in Taiwan is distributed by Morgan Stanley Taiwan Limited ("MSTL"). Such information is for your reference only. The reader should independently evaluate the investment risks and is solely responsible for their investment decisions. Morgan Stanley Research may not be distributed to the public media or quoted or used by the public media without the express written consent of Morgan Stanley. Any non-customer reader within the scope of Article 7-1 of the Taiwan Stock Exchange Recommendation Regulations accessing and/or receiving Morgan Stanley Research is not permitted to provide Morgan Stanley Research to any third party (including but not limited to related parties, affiliated companies and any other third parties) or engage in any activities regarding Morgan Stanley Research which may create or give the appearance of creating a conflict of interest.

Disclosure Section

Information on securities/instruments that do not trade in Taiwan is for informational purposes only and is not to be construed as a recommendation or a solicitation to trade in such securities/instruments, MSTL may not execute transactions for clients in these securities/instruments.

Morgan Stanley is not incorporated under PRC law and the research in relation to this report is conducted outside the PRC. Morgan Stanley Research does not constitute an offer to sell or the solicitation of an offer to buy any securities in the PRC. PRC investors shall have the relevant qualifications to invest in such securities and shall be responsible for obtaining all relevant approvals, licenses, verifications and/or registrations from the relevant governmental authorities themselves. Neither this report nor any part of it is intended as, or shall constitute, provision of any consultancy or advisory service of securities investment as defined under PRC law. Such information is provided for your reference only. Morgan Stanley Research is disseminated in Brazil by Morgan Stanley C.T.V.M. S.A.; in Mexico by Morgan Stanley México, Casa de Bolsa, S.A. de C.V which is regulated by Comision Nacional Bancaria y de Valores. Paseo de los Tamarindos 90, Torre 1, Col. Bosques de las Lomas Floor 29, 05120 Mexico City; in Japan by Morgan Stanley MUFG Securities Co., Ltd. and, for Commodities related research reports only, Morgan Stanley Capital Group Japan Co., Ltd.; in Hong Kong by Morgan Stanley Asia Limited (which accepts responsibility for its contents) and by Morgan Stanley Asia International Limited, Hong Kong Branch; in Singapore by Morgan Stanley Asia (Singapore) Pte. (Registration

number 199206298Z) and/or Morgan Stanley Asia (Singapore) Securities Pte Ltd (Registration number 200008434H), regulated by the Monetary Authority of Singapore (which accepts legal responsibility for its contents and should be contacted with respect to any matters arising from, or in connection with, Morgan Stanley Research) and by Morgan Stanley Asia International Limited, Singapore Branch (Registration number T11FC0207F); in Australia to "wholesale clients" within the meaning of the Australian Corporations Act by Morgan Stanley Australia Limited A.B.N. 67 003 734 576, holder of Australian financial services license No. 233742, which accepts responsibility for its contents; in Australia to "wholesale clients" and "retail clients" within the meaning of the Australian Corporations Act by Morgan Stanley Wealth Management Australia Pty Ltd (A.B.N. 19 009 145 555, holder of Australian financial services license No. 240813, which accepts responsibility for its contents; in Korea by Morgan Stanley & Co International plc, Seoul Branch; in India by Morgan Stanley India Company Private Limited: in Vietnam this report is issued by Morgan Stanley Singapore Holdings; in Canada by Morgan Stanley Canada Limited, which has approved of and takes responsibility for its contents in Canada; in Germany by Morgan Stanley Bank AG, Frankfurt am Main and Morgan Stanley Private Wealth Management Limited, Niederlassung Deutschland, regulated by Bundesanstalt fuer Finanzdienstleistungsaufsicht (BaFin); in Spain by Morgan Stanley, S.V., S.A., a Morgan Stanley group company, which is supervised by the Spanish Securities Markets Commission (CNMV) and states that Morgan Stanley Research has been written and distributed in accordance with the rules of conduct applicable to financial research as established under Spanish regulations; in the United States by Morgan Stanley & Co. LLC, which accepts responsibility for its contents. Morgan Stanley & Co. International plc, authorized by the Prudential Regulatory Authority and regulated by the Financial Conduct Authority and the Prudential Regulatory Authority, disseminates in the UK research that it has prepared, and approves solely for the purposes of section 21 of the Financial Services and Markets Act 2000, research which has been prepared by any of its affiliates. RMB Morgan Stanley Proprietary Limited is a member of the JSE Limited and regulated by the Financial Services Board in South Africa. RMB Morgan Stanley Proprietary Limited is a joint venture owned equally by Morgan Stanley International Holdings Inc. and RMB Investment Advisory (Proprietary) Limited, which is wholly owned by FirstRand Limited.

The trademarks and service marks contained in Morgan Stanley Research are the property of their respective owners. Third-party data providers make no warranties or representations relating to the accuracy, completeness, or timeliness of the data they provide and shall not have liability for any damages relating to such data. The Global Industry Classification Standard (GICS) was developed by and is the exclusive property of MSCI and S&P.

Morgan Stanley Research, or any portion thereof may not be reprinted, sold or redistributed without the written consent of Morgan Stanley Indicators and trackers referenced in Morgan Stanley Research may not be used as, or treated as, a benchmark under Regulation EU 2016/1011, or any other similar framework.

The information in Morgan Stanley Research is being communicated by Morgan Stanley & Co. International plc (DIFC Branch), regulated by the Dubai Financial Services Authority (the DFSA), and is directed at Professional Clients only, as defined by the DFSA. The financial products or financial services to which this research relates will only be made available to a customer who we are satisfied meets the regulatory criteria to be a Professional Client.

The information in Morgan Stanley Research is being communicated by Morgan Stanley & Co. International plc (QFC Branch), regulated by the Qatar Financial Centre Regulatory Authority (the QFCRA), and is directed at business customers and market counterparties only and is not intended for Retail Customers as defined by the QFCRA.

As required by the Capital Markets Board of Turkey, investment information, comments and recommendations stated here, are not within the scope of investment advisory activity. Investment advisory service is provided exclusively to persons based on their risk and income preferences by the authorized firms. Comments and recommendations stated here are general in nature. These opinions may not fit to your financial status, risk and return preferences. For this reason, to make an investment decision by relying solely to this information stated here may not bring about outcomes that fit your expectations.

FEBRUARY 2019 15 US ECONOMIC OUTLOOK

Tel: +1 (1) 212 761 4000

The Americas	Europe	Japan	Asia/Pacific
1585 Broadway	20 Bank Street, Canary Wharf	1-9-7 Otemachi, Chiyoda-ku	1 Austin Road West
New York, NY 10036-8293	London E14 4AD	Tokyo 100-8104	Kowloon
United States	United Kingdom	Japan	Hong Kong

Tel: +81 (0) 3 6836 5000

Tel: +852 2848 5200

Tel: +44 (0) 20 7 425 8000

© 2019 Morgan Stanley