



Impact Investing Landscape

May 13th, 2016

Tony Werley

Chief Investment Officer – J.P. Morgan Endowments & Foundations Group

Any views and outlooks expressed herein are those of J.P. Morgan's Private Bank that may differ from other J.P. Morgan Chase & Co. affiliates and employees. There is no guarantee that any outlooks and views will occur in the future. This constitutes our judgment based on current market conditions that are subject to change without notice. This material should not be regarded as research or as a J.P. Morgan research report. All outlooks represent our current view of anticipated market trends, which are not forecasts or price targets. We believe certain third party information contained in this material to be reliable, but we do not warrant its accuracy or completeness. The views and strategies described herein may not be suitable for all investors and are subject to investment risks. Investors may get back less than they invested. The information contained herein should not be relied upon in isolation for the purpose of making an investment decision. More complete information is available, including product profiles, which discusses risks, benefits, liquidity and other matters of interest. For more information on any of the trade ideas and products illustrated herein, please contact your J.P. Morgan representative. Please read the Important Information section at the end of this presentation.

INVESTMENT PRODUCTS: NOT FDIC INSURED • NO BANK GUARANTEE • MAY LOSE VALUE

Please read Important Information at the end of the presentation.

Agenda

- Impacting Investing: Definition and Focus
- Approaches to Impact Investing
- Case Studies:
 - Dementia Discovery Fund
 - Global Health Investment Fund
- Q&A

History of Sustainable and Responsible Investing (SRI)



Mid-18th Century:
Quakers prohibit members from participating in business tied to slavery¹



1960's:
SRI gains strength in the civil rights, environmental, social and anti-war protest movements³

In Europe, churches and religious institutions adopted ethical screens and launched ethical funds founded on their moral values.⁸



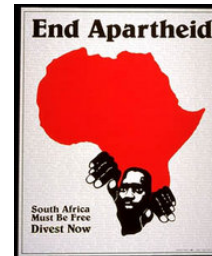
Mid-1990's:
Nearly 60 SRI mutual funds, and SRI assets under management nears \$640 billion. Key concerns are climate change, corporate scandals, and humanitarian crises⁵



Today:
Over \$3.7 trillion in U.S. domiciled assets utilizing a range of SRI strategies, including screening, incorporation of ESG criteria into investment analysis, and shareholder engagement.⁷

1921:
Pioneer Group starts first mutual fund to screen out tobacco, alcohol, and gambling²

1970's:
Awareness of apartheid in South Africa leads to the creation of the first fund that screened out companies doing business in a given country.⁴



2006:
The U.N. Principles for Responsible Investment has over 1,200 signatories with \$34 trillion in assets working to incorporate environmental, social and governance (ESG) issues into investment practices.⁶

¹"The Quakers in America", Thomas Hamm, 2006

²"Report on Sustainable and Responsible Investing Trends in the United States", US SIF Foundation, 2012
^{3,4,5} Ibid.

⁶ U.N. Principles for Responsible Investing, "PRI Fact Sheet", www.unpri.org/news/pri-fact-sheet/

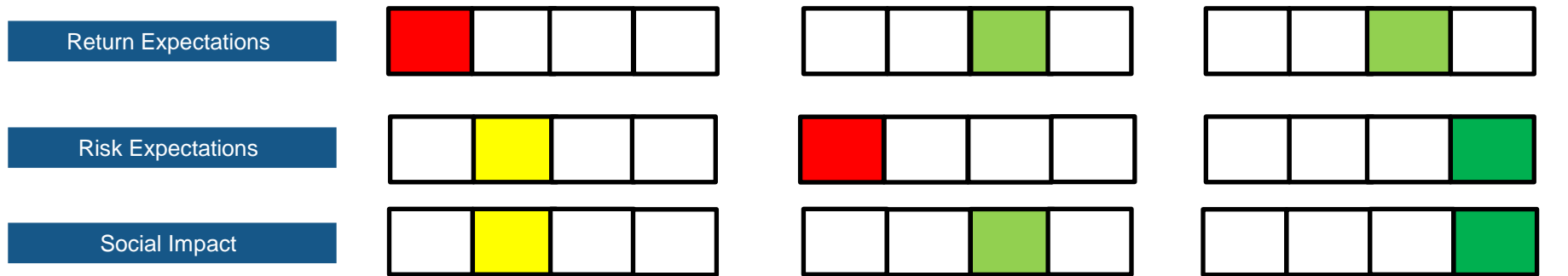
⁷"Report on Sustainable and Responsible Investing Trends in the United States", US SIF Foundation, 2012

⁸Eurosif European SRI Study, 2012.

A Broad Representative Framework for Understanding the Spectrum of Social & Responsible Investing

Investment Style	Socially Responsible Investing "SRI"	Environment, Social & Governance "ESG"	Impact Investing "II"
Core Characteristic	<ul style="list-style-type: none"> Industry exclusion 	<ul style="list-style-type: none"> Best socially and economically responsible practices across & between industries 	<ul style="list-style-type: none"> A cross between Private Equity and Venture Capital industry
Example	<ul style="list-style-type: none"> Exclude tobacco, firearms, etc. 	<ul style="list-style-type: none"> Own energy producers with best safety record only 	<ul style="list-style-type: none"> Energy distribution in Sub-Saharan Africa

Return, Risk, and Social and Responsible Objective Allotment Heatmap



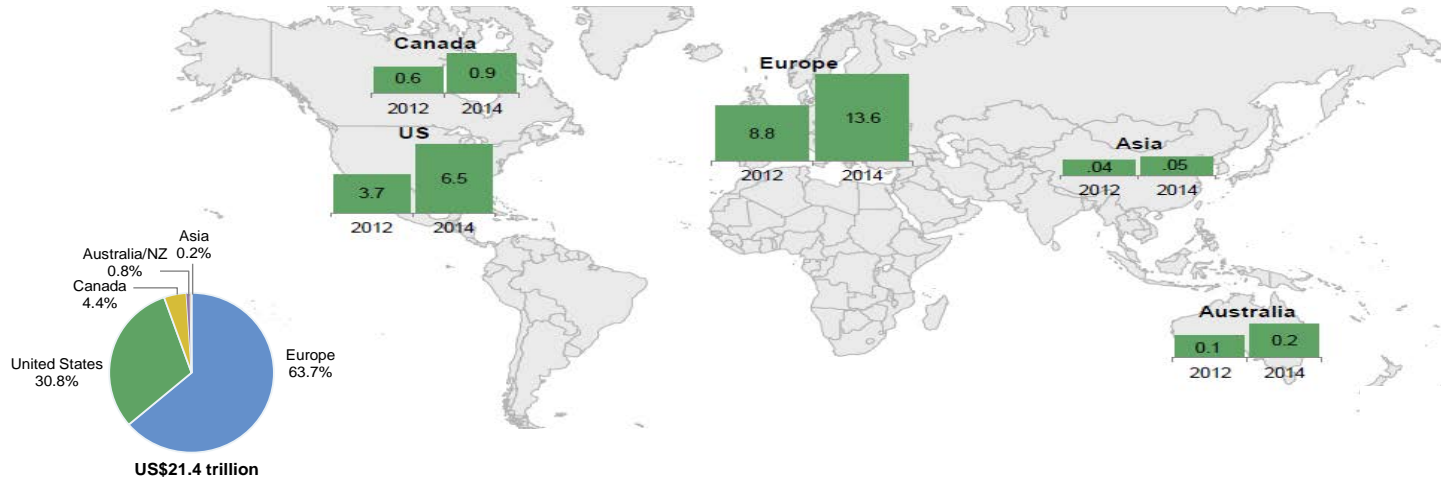
Intended Objective	<ul style="list-style-type: none"> Avoid support to specific companies / sectors 	<ul style="list-style-type: none"> Place premium on companies with best ESG practices (discounts to others) A crowding out effect 	<ul style="list-style-type: none"> Highly proactive involvement for maximum social impact with acceptable returns
--------------------	---	---	--



Source: J.P. Morgan, as of 3/31/2016. The information contained herein is provided for illustrative purposes only and should not be relied upon in isolation for the purpose of making an investment decision. For more information on product profiles and trade ideas, which discusses risks, 3 benefits, liquidity and other matters of interest, please contact your J.P. Morgan representative.

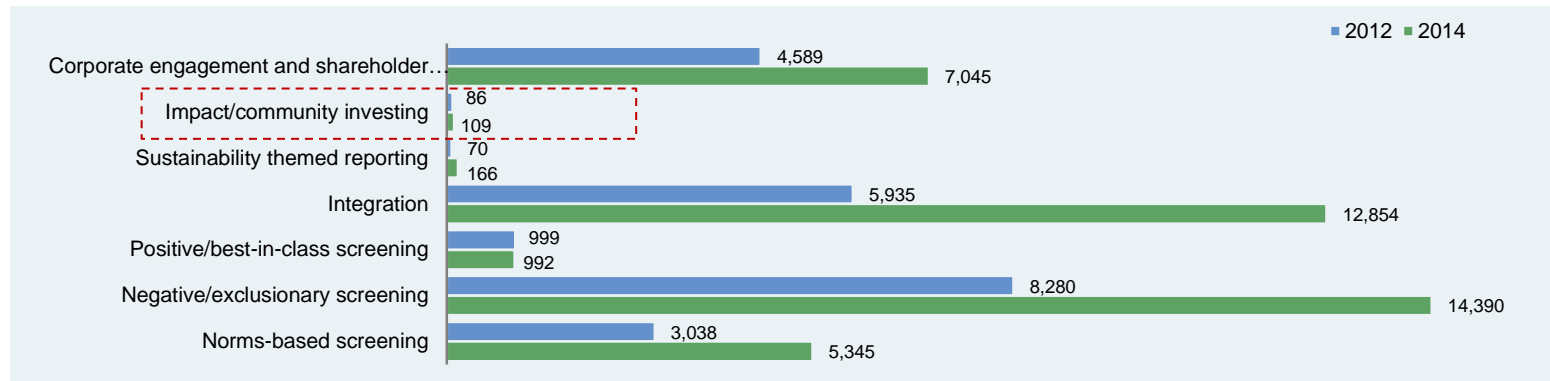
There are large assets dedicated to the SRI goal across spectrum of Socially Responsible Investing

2012-2014 growth of SRI-themed investments, \$ Trillion equivalent



Source: The 2014 Global Sustainable Investment Review

Growth of SRI strategies 2012–2014 (US\$bn)



Source: The 2014 Global Sustainable Investment Review.

The impact investment market includes a wide range of investors

Organization type	Examples
Public sector organizations	
Foundations / non-profit organizations	
Corporates / corporate foundations	
Financial services organizations	
Private investors	<ul style="list-style-type: none"> Global high net worth individuals as well as family offices

Impact investment case study

Funding research and development for dementia

Dementia Discovery Fund Overview

- In March of 2015, the U.K. Government and Department of Health announced its involvement and support in structuring a new Dementia Discovery Fund (“The Fund”)
- The Fund will invest on the development of potentially disease modifying pre-clinical assets
- The Fund aims at improving the likelihood of identifying treatments to slow the progression of the disease and improve the quality of life of dementia patients and their careers
- As part of this initiative the UK Government committed £15mm to the fund supported by other institutional investors including:
- The Fund is one of a series of initiatives promoted by the World Dementia Council and intended to improve regulatory pathways and data sharing across research organizations

Challenges and Opportunities

- The global consensus is that funding dementia research needs to be considered a greater priority.
- As the average age of the population grows, dementia is quickly becoming one of the biggest global challenges we face – the burden is increasing proportionately.
- There are no existing therapies that have a meaningful impact on symptoms or the disease.
- By combining the expertise of our investors with the world’s most promising scientific talent, the fund aims to support innovative research into novel therapeutic strategies, laying the foundation for an effective, disease-modifying treatment for dementia.

Dementia Discovery Fund supporters



Impact investment case study

Funding research and development for neglected diseases



Global Health Investment Fund Overview

- The Global Health Investment Fund (“GHIF” or the “Fund”) represents an innovative investment structure that introduces private sector financing as an alternative to traditional grant-based funding for global health product development¹
- The Fund’s objective is to provide funding to support the development of drugs, vaccines, diagnostics or other technologies that address global health challenges that disproportionately impact developing countries, while also generating a financial return
- To mitigate the risk of investing in the clinical development of emerging technologies and offset the modest upside potential associated with global health products targeting low-income populations, the Bill & Melinda Gates Foundation (the “Foundation”) and the Swedish government have committed to limit investors’ downside if the Fund’s investments are not successful²

¹ There can be no assurance that the Fund will meet its investment or charitable objectives.

² Any investment entails the risk of loss. Please see “Certain Risk Factors” for risks associated with the partial loss protection mechanism.

³ Source: World Health Organization (“WHO”) (2011). Cause of death 2008 summary Tables. Health statistics and informatics department. WHO, Geneva, Switzerland. Accessed online on 1 February 2012 at: http://www.who.int/healthinfo/global_burden_disease/estimates_regional/en/index.html.

⁴ Source: Bill & Melinda Gates Foundation (2011).

⁵ Source: Moran M, Guzman J, Abela-Oversteegen L, Liyanage R, Omune B, Wu L, Chapman N, Gouglas D (2011). Neglected disease research and development: Is innovation under threat? Policy Cures.

Challenges and Opportunities

- Despite scientific advances over the past half century, an estimated 15 million people die every year from infectious diseases, maternal, infant, and child health issues, and nutritional deficiencies³
- Over the past decade, grant-funded support for global health research and development has resulted in a growing pipeline of drugs, diagnostics and vaccines^{4,5}
- The Fund is designed to take advantage of the opportunity presented by this grant-funded pipeline by using private sector investment to support the commercialization of late-stage global health product candidates

Global Health Investment Fund: Structure

Advisory & structuring

JPMC advised the Bill & Melinda Gates Foundation (BMGF) on the structure of GHIF

- JPMC's Sustainable Finance team, in partnership with teams in J.P. Morgan's Private Bank and Investment Bank, designed the GHIF to advance BMGF's charitable objectives by attracting private sector capital to invest in promising new technologies for global health
- To increase the marketability of the fund, the firm also advised upon the size and structure of a partial guarantee that was funded from BMGF's program-related investments budget

GHIF guarantee framework

In structuring the guarantee, JPMC had to balance numerous competing concerns for BMGF











- Minimize financial burden while attracting a critical mass of investor commitments
- Maximize "leverage" achieved through use of the guarantee (minimum 1:1 with a 5:1 target)
- Needed investors to have "skin in the game" and demonstrate a willingness to partner on a mission-driven investment
- Wanted to syndicate the risk with other mission-aligned partners

GHIF structure



Source: Bill & Melinda Gates Foundation (2011). The information contained herein is provided for illustrative purposes only and should not be relied upon in isolation for the purpose of making an investment decision. For more information on product profiles and trade ideas, which discusses risks, benefits, liquidity and other matters of interest, please contact your J.P. Morgan representative. **Past performance is no guarantee of future results.**

JPMC's impact investment portfolio: \$68mm in total commitments

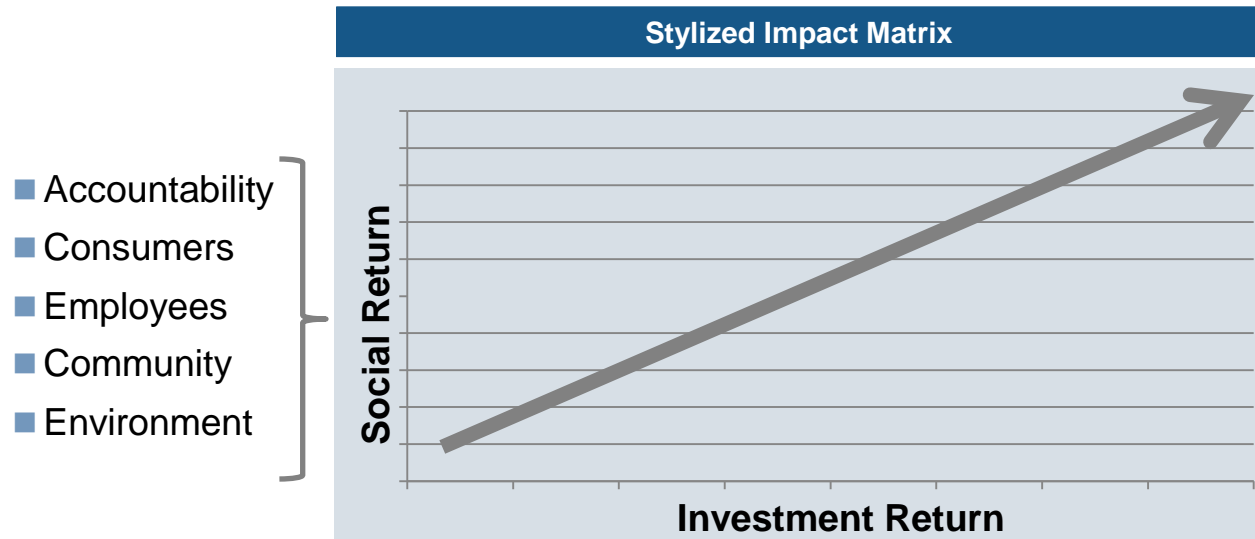
 <p>Jan. 2009 \$60mm</p> <p>MicroVest II: Provides equity capital to low-income financial institutions to help build capital markets serving low-income individuals in emerging markets</p> <p>Representative deal: India non-bank financial company that provides financial services to poor women entrepreneurs</p>	 <p>Dec. 2012 \$108mm</p> <p>GHIF: Invests in the development of drugs, vaccines, diagnostics that address global health challenges that impact emerging markets</p> <p>Representative deal: Oral, single-dose cholera vaccine that is effective in less than 7 days</p>
 <p>May 2010 Sep. 2014 \$135mm \$400mm</p> <p>LeapFrog I & II: Invests in companies that distribute microinsurance and related products to low-income and excluded people in Africa & Asia</p> <p>Representative deal: South African life insurer serving people with HIV/AIDS who commit to follow health monitoring and treatment programs</p>	 <p>Sep. 2013 \$35mm</p> <p>EcoEnterprises: Invests in small and medium-sized enterprises that create positive conservation and community impacts in Central & South America</p> <p>Representative deal: Company selling tea beverages made from the leaves of the native Amazonian tree</p>
 <p>June 2010 \$77mm</p> <p>IGNIA: Invests in entrepreneurs with scalable businesses that deliver high impact to low-income populations in Mexico</p> <p>Representative deal: Business that helps rebuild communities by acquiring, refurbishing and selling foreclosed homes in low-income housing developments</p>	 <p>June 2015 \$74mm</p> <p>Elevator: Invests in businesses delivering essential services to disconnected communities in Latin America and Asia underserved by global networks</p> <p>Representative deal: Company providing infrastructure and project loans to help affordable private school entrepreneurs in India grow and improve their schools</p>
 <p>Jan. 2011 £12mm</p> <p>Social Entrepreneurs Fund: Supports scalable, high-impact social enterprises serving the most deprived 25% of the population in the UK</p> <p>Representative deal: Community transport business which reinvests its profits to fund local transport services for mobility-impaired</p>	 <p>Sep. 2015 \$80mm</p> <p>Novastar: Invests in entrepreneurs with scalable businesses that deliver high impact to low-income populations in East Africa</p> <p>Representative deal: Distributor of cookstoves and other basic products in urban and rural environments</p>
 <p>Sep. 2011 \$25mm</p> <p>AACF: Invests in small and medium-sized agriculture-related businesses in East Africa directly benefiting small-holder farmers</p> <p>Representative deal: Floriculture business that exports summer flowers grown by a network of 3,000 small farmers in Kenya</p>	 <p>Oct. 2015 \$90mm <i>Target: \$120mm</i></p> <p>AFIF: Invests in early and growth stage companies that promote breakthrough innovations in financial services and further financial inclusion in emerging markets</p> <p>Representative deal: Online remittance company offering low-cost, fast and secure payments from any device to recipients in over 190 countries</p>

Note: Where a fund is still fundraising, the target is noted in italics. The information contained herein is provided for illustrative purposes only and should not be relied upon in isolation for the purpose of making an investment decision. For more information on product profiles and trade ideas, which discusses risks, benefits, liquidity and other matters of interest, please contact your J.P. Morgan representative. Source: J.P. Morgan as of 3/31/2016.

Impact Investing Measurement: No lingua franca chosen yet

- Why be interested: “Standardized metrics enable capital to flow toward investment that perform well financially, socially, and environmentally.”
–Impact Reporting & Investment Standards
- Main Issues: “No standardized metric for evaluating social impact across very diverse projects and small pool of data”
“...impact is the difference between what happened with you and what happened without you.”

–Stanford Social Innovation Review





Fund Index Summary: End-to-End Pooled IRR (%)

Net to Limited Partners – data as of 3/31/2015

	1 Quarter	1 Year	3 Years	5 Years	10 Years	15 Years
Impact Investing Benchmark	-1.52%	2.64%	11.04%	8.81%	5.11%	6.29%
Comparative Universe*	2.64	13.63	14.06	13.60	11.22	7.84
Barclays Government / Credit Bond Index	1.84	5.86	3.35	4.75	4.96	5.73
MSCI World ex-U.S. Index	3.83	-1.39	8.24	5.72	5.03	3.03
MSCI World Index	2.31	6.03	12.19	10.01	6.39	3.21
MSCI Emerging Markets Index	2.28	0.79	0.67	2.08	8.82	7.37
Russell 1000 Index	1.59	12.73	16.45	14.73	8.34	4.43
Russell 2000 Index	4.32	8.21	16.27	14.57	8.82	7.19
S&P 500 Index	0.95	12.73	16.11	14.47	8.01	4.15

Note: Returns corresponding with the Impact Investing Benchmark and Comparative Universe are end-to-end calculations based on data compiled from 867 private equity and venture capital funds from the years 1998 through 2012. 56 of these funds have been qualified by Cambridge Associates as Impact Investing funds.

*The Comparative Universe includes 811 funds of the same asset classes, vintage years, and geographic/sector focuses as the funds in the Impact Investing Benchmark. Notable exclusions are buyout strategies and funds focused exclusively on IT. Calculations are net of fees, expenses, and carried interest. Sources: Cambridge Associates LLC, Barclays, Dow Jones Indexes, Frank Russell Company, Standard & Poor's, Thomson Reuters Datastream, and Wilshire Associates, Inc.

Source: Cambridge Associates. The information contained herein is provided for illustrative purposes only and should not be relied upon in isolation for the purpose of making an investment decision. For more information on product profiles and trade ideas, which discusses risks, benefits, liquidity and other matters of interest, please contact your J.P. Morgan representative. Past performance is no guarantee of future results.

Fund Review Example

Fund Profile

Fund Type:	Venture Capital
Investment Type:	Equity
Target Financial Return:	15%
Fund Size:	\$5,000,000
Fund Stage:	Growth
Vintage Year:	2008

Investment Targets

Sector Focus:	Small and Growing Business
Industry:	Healthcare Services
Investment Region:	East Africa
Target Investment Size:	\$200,000 - \$999,000
Other Investment Screens:	Negative screens for alcohol and tobacco companies

Investment Manager Profile

GIIRS Rating for Inv. Manager ◆◆◆◆

Accountability

Governance / Accountability
Transparency / Reporting

Employees

Compensation and Benefits
Employee Ownership
Work Environment

Consumers

Beneficial Products / Services
Beneficial Method of Production
Serving Those in Need

Community

Local
Diversity
Charity / Direct Service

Environment

Corporate Offices
Transportation
Manufacturing Facilities

Source: Global Impact Investing Reporting Survey. The information contained herein is provided for illustrative purposes only and should not be relied upon in isolation for the purpose of making an investment decision. For more information on product profiles and trade ideas, which discusses risks, benefits, liquidity and other matters of interest, please contact your J.P. Morgan representative. As of 3/31/2016.

Q&A



Important Information

Purpose of This Material

The information provided is intended to inform you of certain investment products and services offered by J.P. Morgan's private banking business, part of JPMorgan Chase & Co. The views and strategies described in the material may not be suitable for all investors and are subject to investment risks. **Please read this Important Information in its entirety.**

Regulatory Status

In the United States, Bank products and services, including certain discretionary investment management products and services, are offered by JPMorgan Chase Bank, N.A. and its affiliates. Securities products and services are offered in the U.S. by J.P. Morgan Securities LLC, an affiliate of JPMCB, and outside of the U.S. by other global affiliates. J.P. Morgan Securities LLC, member [FINRA](#) and [SIPC](#).

INVESTMENT PRODUCTS: NOT FDIC INSURED • NO BANK GUARANTEE • MAY LOSE VALUE

In the United Kingdom, this material is issued by J.P. Morgan International Bank Limited (JPMIB) with the registered office located at 25 Bank Street, Canary Wharf, London E14 5JP, registered in England No. 03838766. JPMIB is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority. In addition, this material may be distributed by: JPMorgan Chase Bank, N.A. ("JPMCB"), Paris branch, which is regulated by the French banking authorities Autorité de Contrôle Prudentiel et de Résolution and Autorité des Marchés Financiers; J.P. Morgan (Suisse) SA, regulated by the Swiss Financial Market Supervisory Authority; JPMCB Dubai branch, regulated by the Dubai Financial Services Authority; JPMCB Bahrain branch, licensed as a conventional wholesale bank by the Central Bank of Bahrain (for professional clients only). In Hong Kong, we will cease to use your personal data for our marketing purposes without charge if you so request. This material is distributed by JPMCB, Hong Kong branch except to recipients having an account at JPMCB, Singapore branch and where this material relates to a collective investment scheme (other than private funds such as private equity and hedge funds) in which case it is distributed by J.P. Morgan Securities (Asia Pacific) Limited ("JPMSAPL"). Both JPMCB, Hong Kong branch and JPMSAPL are regulated by the Hong Kong Monetary Authority and the Securities and Futures Commission of Hong Kong. In Singapore, this material is distributed by JPMCB, Singapore branch except to recipients having an account at JPMCB, Singapore branch and where this material relates to a collective investment scheme (other than private funds such as private equity and hedge funds) in which case it is distributed by J.P. Morgan (S.E.A.) Limited ("JPMSEAL"). Both JPMCB, Singapore branch and JPMSEAL are regulated by the Monetary Authority of Singapore. Dealing and advisory services and discretionary investment management services are provided to you by JPMCB, Hong Kong/Singapore branch (as notified to you). With respect to countries in Latin America, the distribution of this material may be restricted in certain jurisdictions. Receipt of this material does not constitute an offer or solicitation to any person in any jurisdiction in which such offer or solicitation is not authorized or to any person to whom it would be unlawful to make such offer or solicitation. To the extent this content makes reference to a fund, the Fund may not be publicly offered in any Latin American country, without previous registration of such fund's securities in compliance with the laws of the corresponding jurisdiction.

Non-reliance

We believe the information contained in this material to be reliable but do not warrant its accuracy or completeness. The views, opinions, estimates and strategies expressed in it constitute our judgment based on current market conditions and are subject to change without notice. They may differ from those expressed by other areas of J.P. Morgan, view expressed for other purposes or in other contexts, and this should not be regarded as a research report. Any projected results and risks are based solely on hypothetical examples cited, and actual results and risks will vary depending on specific circumstances.

Investors may get back less than they invested, and past performance is not a reliable indicator of future results.



Important Information

Risks, Considerations and Additional information

The information contained in this material should not be relied upon in isolation for the purpose of making an investment decision. Investors are urged to consider carefully whether the products and strategies discussed are suitable to their needs, and to obtain additional information prior to making an investment decision. More complete information is available from your J.P. Morgan representative, and you should be aware of the general and specific risks relevant to the matters discussed in the material.

JPMorgan Chase & Co. and its affiliates and employees do not provide tax, legal or accounting advice. This material has been prepared for informational purposes only. You should consult your own tax, legal and accounting advisors before engaging in any financial transactions.

JPMorgan Chase & Co. or its affiliates may hold a position or act as market maker in the financial instruments of any issuer discussed herein or act as an underwriter, placement agent, advisor or lender to such issuer.

References in this report to "J.P. Morgan" are to JPMorgan Chase & Co., its subsidiaries and affiliates worldwide. "J.P. Morgan Private Bank" is the marketing name for the private banking business conducted by J.P. Morgan.

Investment in alternative investment strategies is speculative, often involves a greater degree of risk than traditional investments including limited liquidity and limited transparency, among other factors and should only be considered by sophisticated investors with the financial capability to accept the loss of all or part of the assets devoted to such strategies. Investing in fixed income products is subject to certain risks, including interest rate, credit, inflation, call, prepayment and reinvestment risk. Investments in commodities may have greater volatility than investments in traditional securities and may be affected by changes in overall market movements, commodity index volatility, changes in interest rates, or factors affecting a particular industry or commodity, such as drought, floods, weather, livestock disease, embargoes, tariffs and international economic, political and regulatory developments.

Investing in fixed income products is subject to certain risks, including interest rate, credit, inflation, call, prepayment and reinvestment risk. Any fixed income security sold or redeemed prior to maturity may be subject to substantial gain or loss.

As a reminder, hedge funds (or funds of hedge funds) often engage in leveraging and other speculative investment practices that may increase the risk of investment loss. These investments can be highly illiquid, and are not required to provide periodic pricing or valuation information to investors, and may involve complex tax structures and delays in distributing important tax information. These investments are not subject to the same regulatory requirements as mutual funds; and often charge high fees. Further, any number of conflicts of interest may exist in the context of the management and/or operation of any such fund. For complete information, please refer to the applicable offering memorandum.

Investments in commodities may have greater volatility than investments in traditional securities and may be affected by changes in overall market movements, commodity index volatility, changes in interest rates, or factors affecting a particular industry or commodity, such as drought, floods, weather, livestock disease, embargoes, tariffs and international economic, political and regulatory developments.



Important Information

Conflicts of Interest

Conflicts of interest will arise whenever JPMorgan Chase Bank, N.A. or any of its affiliates (together, "J.P. Morgan") have an actual or perceived economic or other incentive in its management of our clients' portfolios to act in a way that benefits J.P. Morgan. Conflicts will result, for example (to the extent the following activities are permitted in your account): (1) when J.P. Morgan invests in an investment product, such as a mutual fund, structured product, separately managed account or hedge fund issued or managed by JPMorgan Chase Bank, N.A. or an affiliate, such as J.P. Morgan Investment Management Inc.; (2) when a J.P. Morgan entity obtains services, including trade execution and trade clearing, from an affiliate; (3) when J.P. Morgan receives payment as a result of purchasing an investment product for a client's account; or (4) when J.P. Morgan receives payment for providing services (including shareholder servicing, recordkeeping or custody) with respect to investment products purchased for a client's portfolio. Other conflicts will result because of relationships that J.P. Morgan has with other clients or when J.P. Morgan acts for its own account.

Investment strategies are selected from both J.P. Morgan and third-party asset managers and are subject to a review process by our manager research teams. From this pool of strategies, our portfolio construction teams select those strategies we believe fit our asset allocation goals and forward looking views in order to meet the portfolio's investment objective.

As a general matter, we prefer J.P. Morgan managed strategies. We expect the proportion of J.P. Morgan managed strategies will be high (in fact, up to 100 percent) in strategies such as, for example, cash and high-quality fixed income, subject to applicable law and any account-specific considerations.

While our internally managed strategies generally align well with our forward looking views, and we are familiar with the investment processes as well as the risk and compliance philosophy of the firm, it is important to note that J.P. Morgan receives more overall fees when internally managed strategies are included. We offer the option of choosing to exclude J.P. Morgan managed strategies (other than cash and liquidity products) in certain portfolios.

Confidentiality

This material is intended for your personal use and should not be circulated to any other person without our permission and any use, distribution or duplication by anyone other than the recipient is prohibited. If you have any questions or no longer wish to receive these communications, please contact your usual J.P. Morgan representative.

© 2016 JPMorgan Chase & Co. All rights reserved