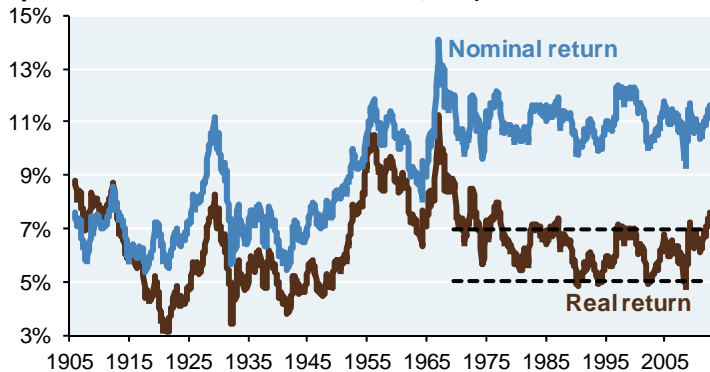


## Faith, hope and charity: active equity managers and excess returns, your relatives and your money

### Faith, hope or experience? How different measures of equity manager excess returns may explain investor behavior

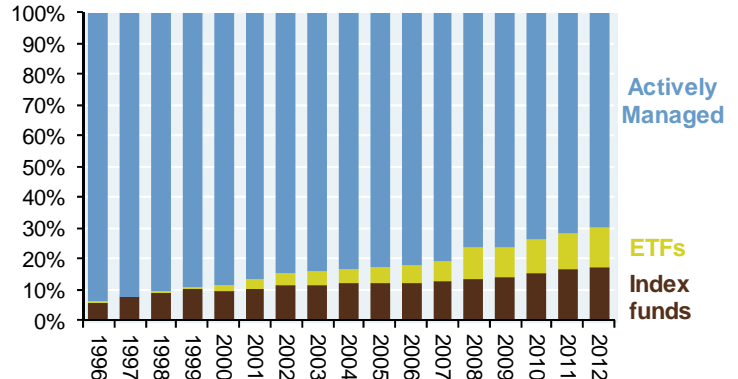
Equities make up a large component of many investor portfolios. As we reviewed a couple of months ago, the long-term real returns (over inflation) on US equities have been remarkably stable over the last 60 years, ranging from 5%-7%. How do investors hold equities? Some own individual stocks, while others own mutual funds and exchange-traded funds (ETFs). An exact breakdown of all actively and passively managed equities held by institutions and individuals is a complicated task, and there are no definitive data sources on the subject. However, the second chart is one estimate, using US equity mutual fund and ETF data from the Investment Company Institute<sup>1</sup>. While index funds and ETFs have been growing, the majority of equity exposure in this snapshot is taken through actively managed products.

**Long-term return on the S&P 500, highlighting the post-war channel of real returns, 35-year annualized return**



Source: Robert J. Shiller data set, JPMAM. June 2013.

**Active vs. passive management in US equities**  
Percent of total mutual fund and ETF assets



Source: Investment Company Institute. 12/31/2012.

What accounts for investor adherence to actively managed equity; is it faith, hope or experience that guides them? To address this, we have to figure out what question we are really asking.

Question A: what is the investor experience with actively managed equities in mutual funds, taking into account the amount and timing of all their purchases and sales?

Question B: what is the chance of picking a manager that generates positive returns over the fund's stated benchmark?

**These two questions are quite different, and in this note, we address the second rather than the first.** The reason: over time, as documented in the table below from Morningstar, timing decisions that investors have made resulted in lower returns than those earned on a constant dollar invested in the same funds. Morningstar refers to this as the "Behavior Gap", and it would be inaccurate/unfair to saddle active equity managers with the consequences of *investor* decisions regarding when to buy and sell, and with how much. **As a result, time- and dollar-weighted returns of actual investors don't help answer the question about manager skill.**

### **The behavior gap: timing decisions by investors have in aggregate been negative**

Fund group by asset class	Investor Return	Total Return	Gap
US Diversified Funds	2.32%	3.30%	-0.98%
US Sector Funds	3.89%	6.08%	-2.19%
Balanced Funds	3.96%	5.13%	-1.17%
International Diversified Funds	4.92%	5.98%	-1.06%
International Regional Funds	6.37%	8.77%	-2.40%
Taxable Bond Funds	4.46%	6.27%	-1.81%
Municipal Bond Funds	2.04%	4.02%	-1.98%
Alternative	9.94%	13.07%	-3.13%
All Funds	3.38%	4.71%	-1.33%

Source: Morningstar. Asset weighted returns. 10 years ending 12/31/2010.

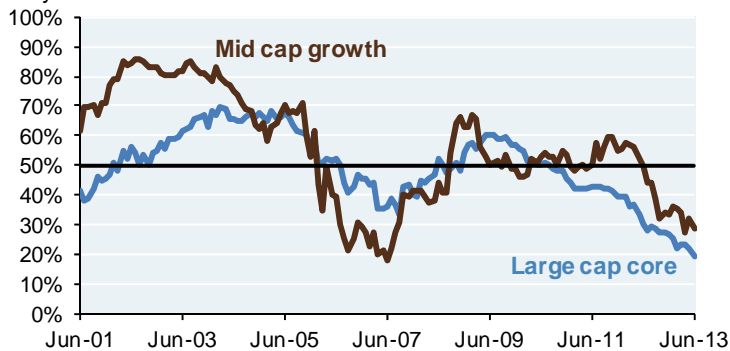
<sup>1</sup> In addition to mutual funds and ETFs, institutional investors hold equities through commingled funds. According to eVestment, of 4,000 US equity commingled fund products, around 9%-10% are passively managed. Passive products tend to be larger, so that on an AUM basis, they represent around 30% of all commingled assets, which is similar to the mutual fund/ETF chart above.

## Faith, hope and charity: active equity managers and excess returns, your relatives and your money

Instead, to analyze manager skill, we look at all managers equally weighted (and all share classes they offer to investors) as the universe of possible choices, and ignore the impact of investor decisions. The charts below show, since 2001<sup>2</sup>, the percentage of large cap core, mid cap growth, small cap core and EAFE investment options that outperformed their respective benchmarks (EAFE stands for Europe/Australasia/Far East). On large cap core, for example, the outperformance percentage hovered around 50% for much of the prior decade, and then fell during the recession. Small cap and EAFE managers fared better on average. Large cap growth (not shown) was one of the weakest categories.

### Outperformance of actively managed funds

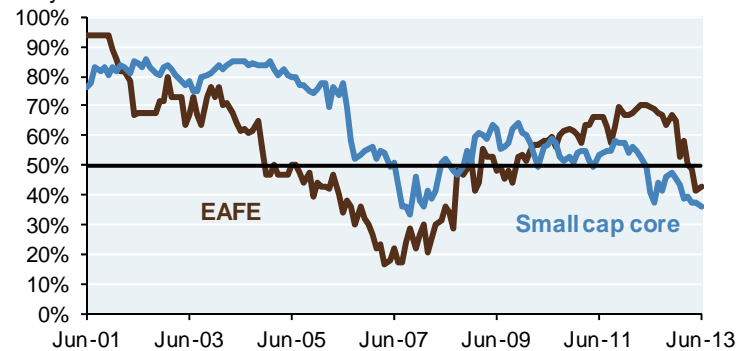
Percent of funds outperforming benchmarks, equal weighted, rolling 5-year basis



Source: Lipper, JPMAM. June 2013.

### Outperformance of actively managed funds

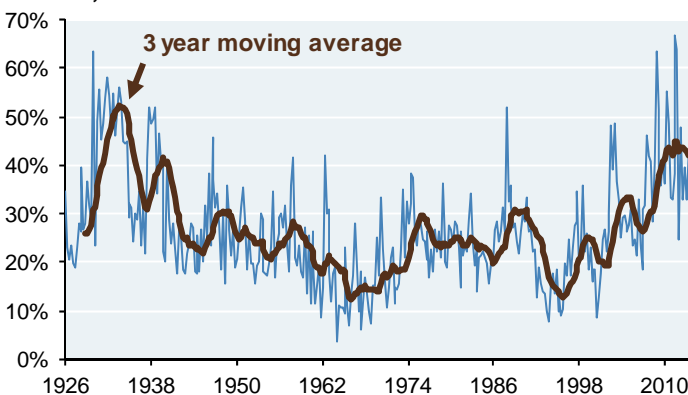
Percent of funds outperforming benchmarks, equal weighted, rolling 5-year basis



Source: Lipper, JPMAM. June 2013.

One often-cited reason for the recent headwinds in active management: the unusual rise in correlations across all stocks during the recession, which rose to their highest level in over 50 years. When all stocks are moving similarly, valuation models designed to pick one over another based on fundamentals may falter.

### Average cap-weighted return correlation among large-cap stocks, Percent



Source: Empirical Research Partners. June 2013.

The charts above, however, are not the end of the story, as there are adjustments one can make to standard equal-weighted performance calculations. First, we can compare each vehicle to an ETF which tracks its benchmark rather than a non-investible benchmark itself<sup>3</sup>. Second, we might be too democratic in the construction of the sample universe. **An analysis which weights every investment vehicle equally ends up including some which have very few assets under management today, and which didn't hold much over the entire time horizon.** In the interest of assessing the odds of manager outperformance but ignoring vehicles that have a negligible impact on investors, we filtered the universe to capture the top 95% and 98% of the AUM in each investment style. In other words, we look at the overwhelming majority of investment options and only exclude those with little to no footprint to speak of. On a rational expectations basis, the excluded vehicles can be predicted to have subpar prior returns; if they didn't, wouldn't the reasonably efficient mutual fund marketplace channel assets to them? That is exactly what we found, as explained on the next page.

<sup>2</sup> We start the analysis in 2001, since it coincides with the inception of Reg FD, which changed disclosure rules for public companies.

<sup>3</sup> For example, if you own a Mid Cap Value fund that is benchmarked to the Russell Mid Cap Value Index and you wanted to switch to passive management, you would not buy the benchmark itself, and would instead purchase the iShares Russell Mid-Cap Value ETF.

## Faith, hope and charity: active equity managers and excess returns, your relatives and your money

The table below shows the outperformance statistics under different assumptions. First, there's the standard equal-weighted percentage of vehicles outperforming *stated* benchmarks (1). Next, there's the percentage that outperform *investible* benchmarks (2). We also show the percentage, on an equal-weighted basis, that outperform if we exclude the smallest 2% (3), and then the smallest 5% (4). Column (5) shows the change compared to (1). In column (6), we don't filter out vehicles based on negligible AUM, and instead look at "institutional" share classes only. If we are going to think about why some investors stick to active management, we have to consider the impact that pricing may have on the decision.

### Percentage of active equity vehicles that outperform benchmarks under different assumptions

7 years of trailing data through June 2013

Data source: Lipper

Computations: J.P. Morgan Asset Management

		Vehicle size filter				Institutional share classes only	
		Incorporating 98% of AUM		Incorporating 95% of AUM			
Investment Style	Code	Equal weighted, vs stated benchmark	Equal weighted, vs investible ETF	Equal weighted, vs investible ETF	Equal weighted, vs investible ETF	Change, (4) vs (1)	Equal weighted, vs investible ETF
		(1)	(2)	(3)	(4)	(5)	(6)
							Change, (6) vs (1)
Large cap core	LCC	27%	31%	35%	38%	11%	39%
Large cap value	LCV	38%	42%	46%	48%	10%	46%
Large cap growth	LCG	15%	20%	26%	28%	13%	30%
Mid cap core	MCC	26%	26%	31%	32%	7%	30%
Mid cap value	MCV	38%	42%	40%	40%	2%	53%
Mid cap growth	MCG	32%	35%	42%	45%	14%	42%
Small cap core	SCC	44%	44%	52%	52%	8%	44%
Small cap value	SCV	75%	75%	83%	82%	8%	87%
Small cap growth	SCG	38%	38%	45%	49%	11%	45%
Multi Cap Core	MUC	28%	31%	39%	43%	15%	44%
Multi Cap Value	MUV	44%	46%	55%	54%	11%	48%
Multi Cap Growth	MUG	27%	31%	36%	38%	11%	42%
Equity Income	EI	69%	70%	74%	76%	7%	77%
International Large Cap Growth	ILCG	54%	56%	66%	74%	20%	60%
EAFE	EAFE	59%	62%	71%	71%	11%	66%

To reiterate, the trailing 7-year time frame used to construct the table covers a period of technical headwinds for active managers. What is of greatest interest here is the magnitude of columns (5) and (7), and how consistent the increases are across investment styles. If these benchmark and size adjustments were similar over time, the lines in the outperformance charts on the prior page would all shift up, and the Large Cap Core series would see its center of gravity shift above 50%. The results may help explain why institutional and individual investors retain substantial exposure to active management: **many managers have delivered positive excess returns on constant dollars invested<sup>4</sup>**. Should stock-to-stock correlations continue to come down, it would not be unreasonable to expect industry alpha measures to improve from where they were at the end of 2012. In any case, describing the history of active management depends a lot on how you ask and answer the question.

### A follow-up to our note on Private Equity

In a prior Eye on the Market, we discussed a variety of topics related to private equity from the perspective of limited partners. A notable development in recent years has been the recognition of significant data quality issues with the Venture Economics database (as per academic research we cited). Until recently, since this was the best dataset available, many researchers used it, including Phalippou (Oxford), Kaplan (Chicago), Schoar (MIT), Rhodes-Kropf (Harvard) etc. Many of these papers found low private equity performance compared to the S&P 500. More recent research with access to better data has arrived at different conclusions, namely that private equity *outperformed* the S&P 500. In singling out the earlier work of Phalippou, we did not mean to imply that he was the only person using such data, or that the problems with the VE database were known by anyone at the time. Its flaws have come to light over time as its contents have been more fully explored by the academic community. We included in our paper other recent research by Phalippou (on secondary buyouts), which indicates that our primary focus was the problems with the VE database and conclusions drawn from it, rather research done by any specific scholar.

<sup>4</sup> If we had computed *asset-weighted* excess returns using the most recent AUM data, the outperformance percentage for almost every category would be well over 50%. However, this would tell us nothing about the likelihood of finding manager skill. Since assets may have migrated to the manager after a period of outperformance, it would tell us nothing about the investor experience either.

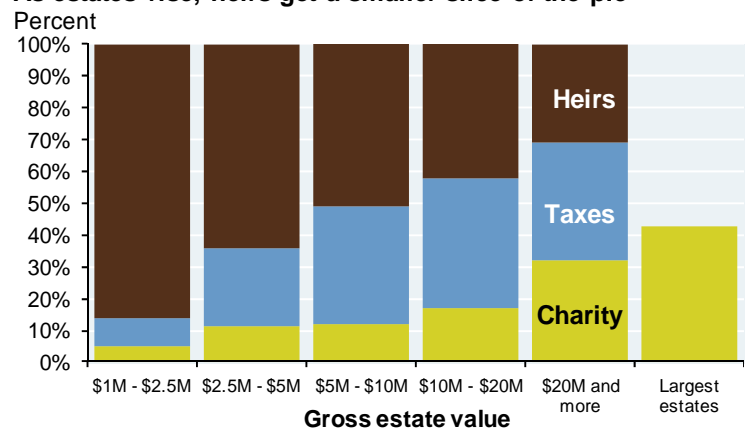
## Faith, hope and charity: active equity managers and excess returns, your relatives and your money

### Charity begins at home: your family and your money

I was in Athens last week seeing clients and discussing the investment landscape in Europe (what discounts are needed relative to US assets, what its emergence from recession may lead to, the consequences of bank de-leveraging and the opportunities it creates, etc). Looking at prior cycles, there's a lead time of 6-18 months during which an investor has to be willing to be "wrong" before contrarian views pay off. Anyway, I don't remember why, but on a bus ride to the Acropolis, **some of us discussed the frequent occurrence of clients either lending to, giving to or investing money with relatives.** Here's some data to complement your thinking regarding intra-family loans, gifts, bequests, investments and marital settlements:

- According to the Global Entrepreneurship Monitor (GEM), \$50 to \$70 billion per year is informally invested by individuals into start-up companies run by family and friends. Around 50% goes to close family members (spouses, siblings, children and parents), another 10% to other relatives (in-laws) and 25% to friends. Only 10%-15% is invested with colleagues and non-affiliated persons (strangers). According to a GEM survey, how much do informal investors expect to get paid back? **Only half of the informal investors with family and friends expect to get a positive return; the other half expect to break even or get back less than they invested.** Expectations for returns from strangers are higher: 50% or more. This latter assumption appears to be optimistic, given a 2005 study in the *International Journal of Entrepreneurial Finance* showing that 60% of "business angel" returns with strangers experienced 0% returns or losses.
- The IRS looks at **large intra-family loans**, and can rule that a loan to a family member was actually a gift. This may occur if the loan's imputed interest rate is less than an applicable federal rate set by the US Treasury. The consequences can be both a gift tax and income tax applied to the gap between the loan rate and the AFR, payable by the lender.
- When you **lend money to friends and relatives**, be prepared for them to think (after the fact) that you had initiated the idea in the first place; to conclude that it was a gift rather than a loan; to believe they repaid more than they actually did; to forget the agreed-upon repayment date; to believe that delinquent loans will somehow be paid off anyway; and to forget about unpaid loans faster than you do, leading to a reduction in trust. (See *Loewenstein/Dezso*).
- Bequests** (parental transfers to children through their estates) **are generally divided equally by child<sup>5</sup>**, irrespective of the child's income, proximity to parents or behavioral differences vs. siblings. Various studies estimate that the "equal treatment of siblings" approach applies to 88%-92% of all estates. On the other hand, transfers from parents while they are still alive (inter-vivos), estimated at \$100+ billion per year, are *not* equally shared and **only 10% of parents split them equally.** Instead, such gifts often are used to smooth earned income differences across children.
- As estates rise in size, **most families give a greater percentage to charity rather than their heirs** (see chart). Taxes as a % of the estate disposition remain roughly constant for estates greater than \$5 million. What this suggests: wealthy families have in mind a baseline level of support for their heirs, and once it is met, they channel more assets to charities.
- You might be a member of the Sandwich Generation, which according to Pew Research refers to people aged 40-59 who give money to both grown children and aging parents. Among adults ages 40 to 59 who have a grown child, **70% provide financial support; and of those with aging parents, 32% provide support.** If you are doing both, you are part of the sandwich.
- Do you run a family business? **According to PWC, 50% of family business owners plan to pass on both management and ownership to the next generation**, while 30% intend to pass on ownership only, and hire professional management. The remaining 20% plan to sell the business. Some families have very high standards for employing and training family members: a European firm highlighted in the Harvard Business Review requires that family members must be 26 years old,

**As estates rise, heirs get a smaller slice of the pie**



Source: Schervish, Haven, Whitaker, Boston College. February 2006

<sup>5</sup> While bequests are generally split equally, children are not legally entitled to anything, according to a paper from Harvard Law School. The American legal system is unique regarding the absence of a right in the decedent's children or other blood relatives to inherit anything, and the ability of the donor to place all sorts of conditions on a bequest. One example: the courts upheld a conditional bequest that a child (a) marry within 7 years of the parent's death, and (b) that both parents of the child's intended spouse were of a certain religion.



## Faith, hope and charity: active equity managers and excess returns, your relatives and your money

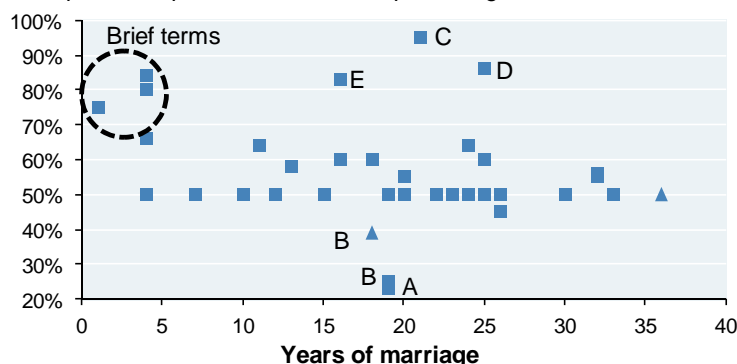
have earned a Masters in either business or engineering, speak 3 languages, and have gotten 2 promotions within 5 years at a nonfamily firm. Other business owners require family members to apply in competition with non-family applicants.

- In a 2012 survey by the American Academy of Matrimonial Lawyers, more than half of AAML members cited an **increase in post-nuptial agreements** during the past three years. Notably, 36% of respondents noted an increase in wives initiating the requests. According to practitioners, post-nuptials are typically used when the foundation of trust has ruptured, and one party is willing to stay married only with additional protections in the event the marriage doesn't survive. As for *pre-nuptial* agreements, an estimated 5-10% of first marriages and 20% of second marriages employ them, and these numbers are rising as enforcement becomes more uniform.
- When people get divorced, a major determinant of the division of marital property depends upon the state they live/file in. Nine states (AZ, CA, ID, LO, NV, NM, TX, WA, WI) use a community property approach, which usually results in an equal distribution of property acquired and income earned during the marriage (but excluding gifts, inheritances, and property owned before the marriage). The other 41 states use *equitable* distribution, although in many, there is a legal presumption of 50-50 unless the facts and circumstances suggest something else. In any case, **"equitable" is not always interpreted to mean "equal"**, given judicial discretion based on each state's statutory factors considered when dividing marital property.

In 2001, a paper in the Journal of the American Academy of Matrimonial Lawyers found that for large marital estates, "unless the dependent spouse made an extraordinary non-financial contribution or a significant financial contribution, the independent spouse usually ended up with the majority of the estate". However, by 2008, the authors' positions changed, and they now see the concept of "marriage as partnership" (see box) applied more frequently; we have read similar conclusions from other legal scholars as well. The chart below shows post-2001 decisions on large marital estates highlighted in their paper. The share of the marital estate granted to the independent spouse is shown as a function of the duration of the marriage; reasons for the departures from 50-50 cited by the authors are explained in the key.

### Some large marital estate judgments post-2001

Independent spouse marital award percentage



- A: Wife "should not suffer decline in standard of living"  
 B: Large non-marital estate of independent spouse justifies lower award  
 C: Gross misconduct of dependent spouse (attempted murder)  
 D: Dependent spouse had long-running separate lifestyle and extramarital affair  
 E: Unclear

Note: triangle denotes community property state (Wash)

Source: "Equitable Distribution in Large Marital Estate Cases", 2012.

Universe: cases cited in Hofstein et al. on settlement of large marital estates

To be clear, given the discretion afforded judges and the differences across states, this is more art than science. Even in community property states like Texas and Arizona, there are substantial departures from 50-50. And in equitable distribution states like New York, there can be idiosyncratic differences by county; some counties have seen opposite trends compared to the AAML article findings, with business-related and deferred compensation assets increasingly subject to a split favoring the earning party. The bottom line: while the courts have not formulaically specified the value of non-financial spousal contributions, in practice, they are often deemed to be roughly equal to purely financial ones.

Michael Cembalest  
 J.P. Morgan Asset Management

The premise of equitable distribution statutes, as per the New York Appellate Court, circa 1986:

"Marriage is an economic partnership with a significant noneconomic component. The non-remunerated efforts of raising children, making a home, performing a myriad of personal services and providing physical and emotional support are, among other non-economic ingredients of the marital relationship, at least as essential to its nature and maintenance as are the economic factors, and their worth is consequently entitled to substantial recognition".

**Faith, hope and charity: active equity managers and excess returns, your relatives and your money**

“Avoid the Traps That Can Destroy Family Businesses”, G. Stalk, H. Foley, Harvard Business Review, February 2012

“Equitable Distribution in Large Marital Estate Cases”, Hofstein, Weiner and Marrone (Temple University and Hofstein & Widman), Journal of the American Academy of Matrimonial Lawyers, 2001; updated in 2008 and 2012

“Family firm: A resilient model for the 21st century“, PwC Family Business Survey 2012, October 2012

“For love or money? A study of financial returns on informal investments in businesses owned by relatives, friends, and strangers”, Bygrave (Babson College) and Hunt (London Business School), 2007

“Gifts, bequests and family incentives”, Jellal and Wolff, Economic Letters, 2007

“Leaving a Legacy of Care”, Schervish, Haven and Whitaker, Boston College Center on Wealth and Philanthropy, 2006

“Lenders’ blind trust and borrowers’ blind spots: A descriptive investigation of personal loans”, Dezso (Vienna) and Loewenstein (Carnegie Mellon), 2012

“The Sandwich Generation: Rising Financial Burdens for Middle-Aged Americans”, Taylor, Parker, Patten and Motel, Pew Research, 2013

“Two Ways to End a Marriage: Divorce or Death”, Laura Rosenbury, Washington University of St. Louis, 2005

*IRS Circular 230 Disclosure: JPMorgan Chase & Co. and its affiliates do not provide tax advice. Accordingly, any discussion of U.S. tax matters contained herein (including any attachments) is not intended or written to be used, and cannot be used, in connection with the promotion, marketing or recommendation by anyone unaffiliated with JPMorgan Chase & Co. of any of the matters addressed herein or for the purpose of avoiding U.S. tax-related penalties. Note that J.P. Morgan is not a licensed insurance provider.*

**The performance quoted is past performance and is not a guarantee of future results. Remember, when investing in mutual funds or exchange-traded and index funds, please consider the investment objectives, risks, charges, and expenses associated with the funds before investing. You may obtain a fund’s prospectus by contacting your Financial Advisor. The prospectus contains this and other information, which should be carefully read before investing.**

The material contained herein is intended as a general market commentary. Opinions expressed herein are those of Michael Cembalest and may differ from those of other J.P. Morgan employees and affiliates. This information in no way constitutes J.P. Morgan research and should not be treated as such. Further, the views expressed herein may differ from that contained in J.P. Morgan research reports. The above summary/prices/quotes/statistics have been obtained from sources deemed to be reliable, but we do not guarantee their accuracy or completeness, any yield referenced is indicative and subject to change. Past performance is not a guarantee of future results. References to the performance or character of our portfolios generally refer to our Balanced Model Portfolios constructed by J.P. Morgan. It is a proxy for client performance and may not represent actual transactions or investments in client accounts. The model portfolio can be implemented across brokerage or managed accounts depending on the unique objectives of each client and is serviced through distinct legal entities licensed for specific activities. Bank, trust and investment management services are provided by JP Morgan Chase Bank, N.A. and its affiliates. Securities are offered through J.P. Morgan Securities LLC (JPMS), Member NYSE, FINRA and SIPC, and its affiliates globally as local legislation permits. Securities products purchased or sold through JPMS are not insured by the Federal Deposit Insurance Corporation (“FDIC”); are not deposits or other obligations of its bank or thrift affiliates and are not guaranteed by its bank or thrift affiliates; and are subject to investment risks, including possible loss of the principal invested. Not all investment ideas referenced are suitable for all investors. Speak with your J.P. Morgan Representative concerning your personal situation. This material is not intended as an offer or solicitation for the purchase or sale of any financial instrument. Private Investments may engage in leveraging and other speculative practices that may increase the risk of investment loss, can be highly illiquid, are not required to provide periodic pricing or valuations to investors and may involve complex tax structures and delays in distributing important tax information. Typically such investment ideas can only be offered to suitable investors through a confidential offering memorandum which fully describes all terms, conditions, and risks. High yield bonds are speculative non-investment grade bonds that have higher risk of default or other adverse credit events which are appropriate for high-risk investors only. Investments in commodities carry greater volatility than investments in traditional securities. There are additional risks associated with international investing and may not be suitable for all investors. This material is distributed with the understanding that J.P. Morgan is not rendering accounting, legal or tax advice. You should consult with your independent advisors concerning such matters.

Bank products and services are offered by JPMorgan Chase Bank, N.A. and its affiliates. Securities are offered by J.P. Morgan Securities LLC, member NYSE, FINRA and SIPC, and other affiliates globally as local legislation permits.

In the United Kingdom, this material is approved 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 and is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and 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 Prudential et 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, this material is distributed by JPMorgan Chase Bank, N.A. (JPMCB) Hong Kong branch except to recipients having an account at JPMCB Singapore branch and where this material relates to a Collective Investment Scheme 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.

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 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.

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.

Each recipient of this presentation, and each agent thereof, may disclose to any person, without limitation, the US income and franchise tax treatment and tax structure of the transactions described herein and may disclose all materials of any kind (including opinions or other tax analyses) provided to each recipient insofar as the materials relate to a US income or franchise tax strategy provided to such recipient by JPMorgan Chase & Co. and its subsidiaries. Should you have any questions regarding the information contained in this material or about J.P. Morgan products and services, please contact your J.P. Morgan private banking representative. Additional information is available upon request. “J.P. Morgan” is the marketing name for JPMorgan Chase & Co. and its subsidiaries and affiliates worldwide. This material may not be reproduced or circulated without J.P. Morgan’s authority. © 2013 JPMorgan Chase & Co. All rights reserved