



Numbers in Context

Asset Class Assumptions Update

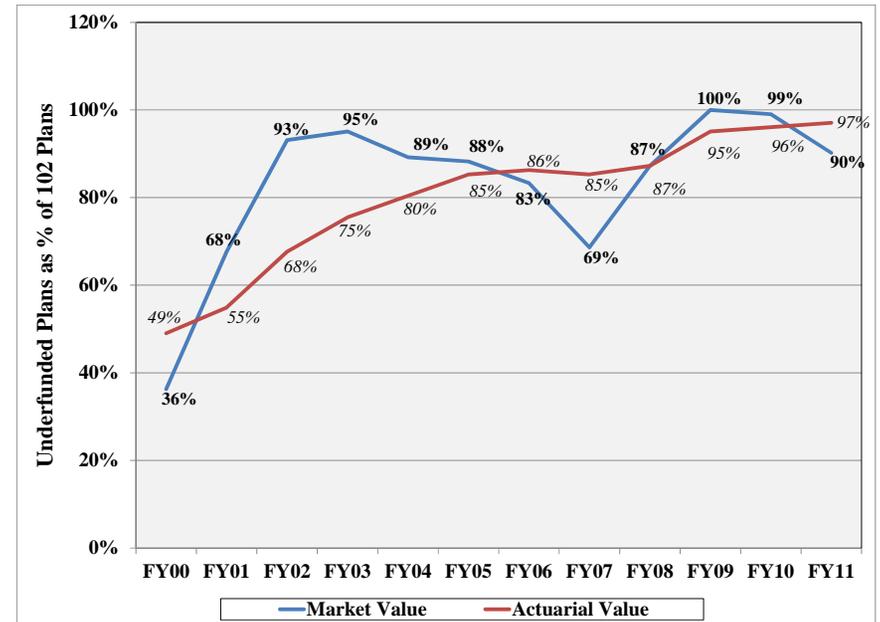


	Total Return (%)			Risk (%)
	2012 ACA	Q1 2012	Change vs YE	2012 ACA
<u>Investment Categories:</u>				
U.S. Stocks	7.50	7.25	(0.25)	17.00
Dev ex-U.S. Stocks	7.50	7.25	(0.25)	18.00
Emerging Mkt Stocks	7.50	7.25	(0.25)	26.00
Global Stocks	7.80	7.55	(0.25)	17.05
Private Markets	10.25	9.85	(0.40)	27.50
Cash Equivalents	1.50	1.75	0.25	1.25
Core Bonds	2.85	2.95	0.10	5.00
LT Core Bonds	3.20	3.50	0.30	10.00
TIPS	1.65	2.00	0.35	6.00
High Yield Bonds	5.45	5.25	(0.20)	10.00
Non-U.S. Bonds (Hdg)	2.50	2.60	0.10	3.50
U.S. RE Securities	5.05	5.30	0.25	15.00
Private Real Estate	5.80	6.05	0.25	12.25
Commodities	4.00	4.35	0.35	13.00
Real Asset Basket	5.85	6.10	0.25	7.75
Inflation:	2.00	2.35	0.35	1.75
<u>Returns minus Inflation:</u>				
U.S. Stocks	5.50	4.90	(0.60)	
U.S. Bonds	0.85	0.60	(0.25)	
Cash Equivalents	(0.50)	(0.60)	(0.10)	
<u>Stocks minus Bonds:</u>	4.65	4.30	(0.35)	
<u>Bonds minus Cash:</u>	1.35	1.20	(0.15)	

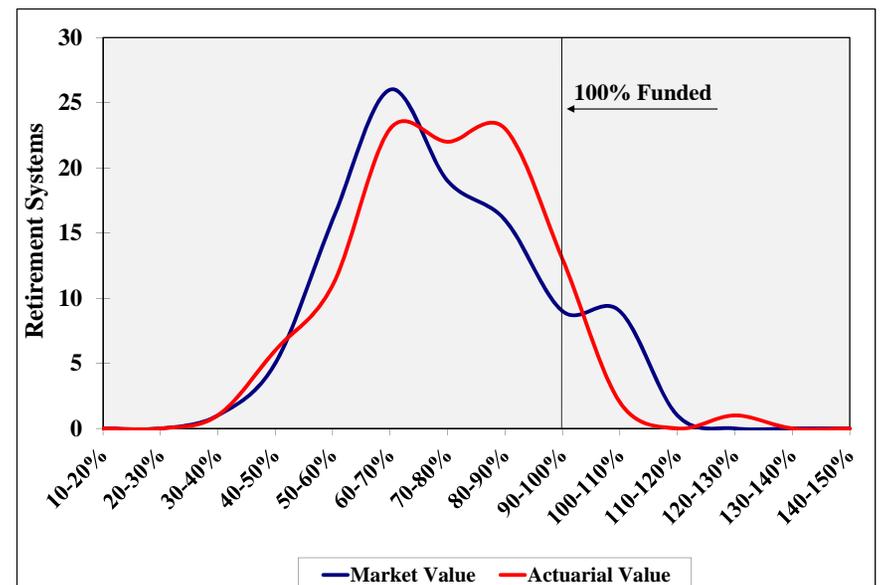
Wilshire 2012 State Funding Study



- Of the 102 plans with 2011 data, 90% of them were underfunded based on market values



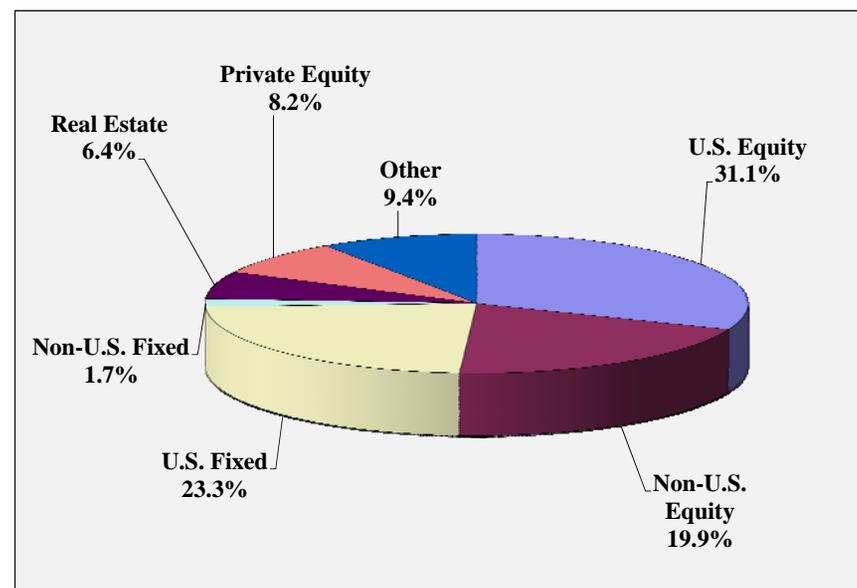
- On a market value basis, a majority of the 102 plans are less than or equal to 80% funded



Wilshire 2012 State Funding Study



- U.S. Equity plus Non-U.S. Equity equals 51% of assets

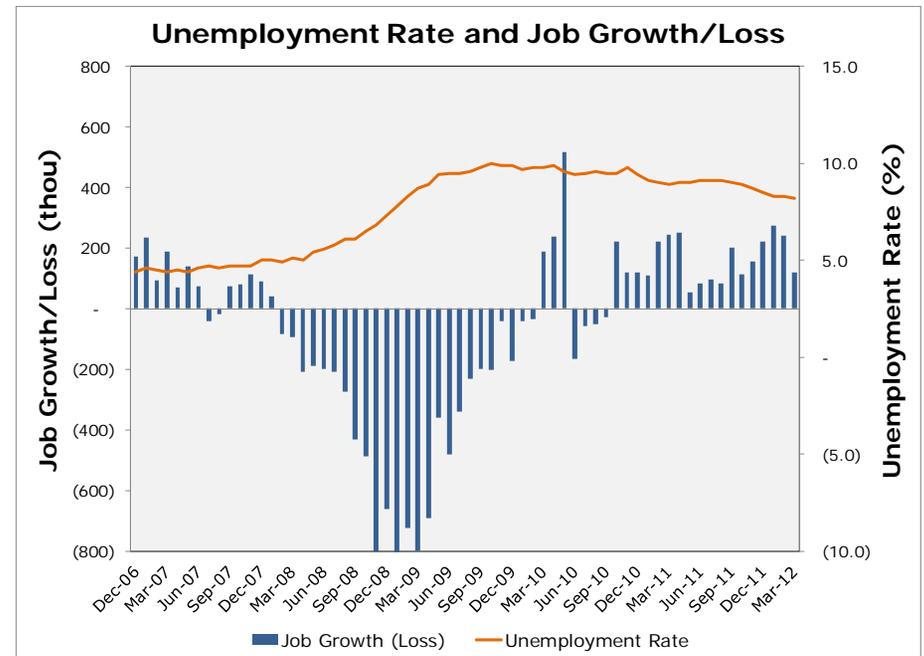
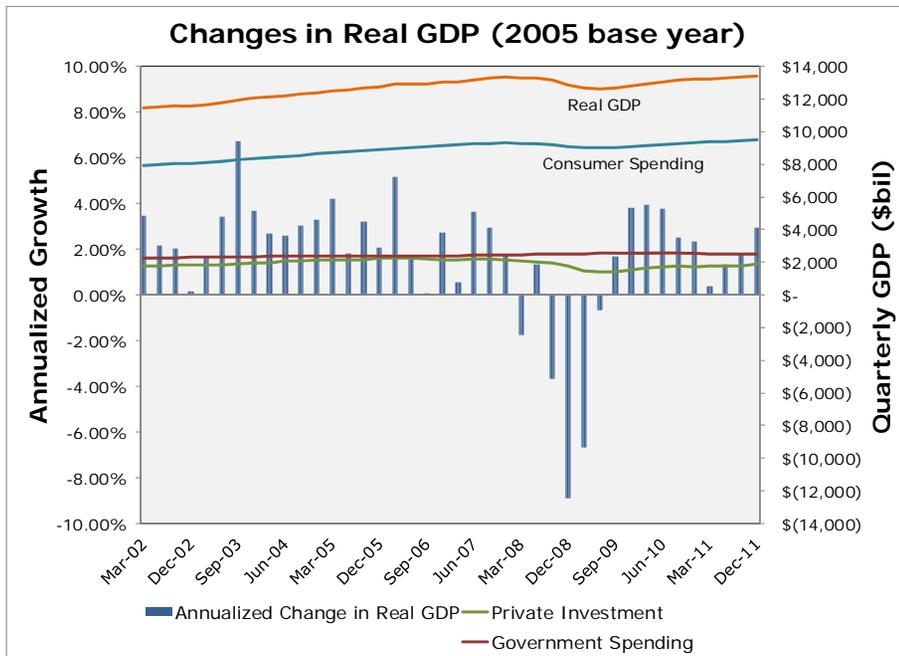


- Average allocation to Non-U.S. Equities has increased while allocation to U.S. Bonds decreased

Equity	2001	2006	2011	Change in Exposure	
				01-11	06-11
U.S. Equity	43.8 %	42.3 %	31.1 %	-12.7 %	-11.2 %
Non-U.S. Equity	12.5	17.1	19.9	7.4	2.8
Real Estate	3.4	4.8	6.4	3.0	1.6
Private Equity	3.9	4.4	8.2	4.3	3.8
Equity Subtotal	63.6	68.6	65.6	2.0	-3.0
Debt					
U.S. Fixed	34.6	27.2	23.3	-11.3	-3.9
Non-U.S. Fixed	1.6	0.9	1.7	0.1	0.8
Other	0.2	3.3	9.5	9.3	6.2
Debt Subtotal	36.4	31.4	34.4	-2.0	3.0
Return *	6.2	6.4	6.4	0.2	0.0
Risk *	11.0	11.5	11.2	0.2	-0.3

March 31, 2012	Key Economic Indicators			
CPI (all items) Seasonally adjusted	Monthly Change		Cumulative Change	
	Mar-12	0.3	3-Month	0.9
	Feb-12	0.4	12-Month	2.6
	Jan-12	0.2	10-Yr Annual	2.5
Breakeven Inflation	10-Year	2.3		
Consumer Sentiment Unv. of Michigan Survey	Mar-12	76.2		
	Feb-12	75.3		
	1-Yr Ago	67.5	10-Yr Avg	79.9
Manufacturing Inst. for Supply Mgmt Purchasing Mngrs' Idx	Mar-12	53.4	Change in Manufacturing Sector	
	Feb-12	52.4	>50	Expansion
	1-Yr Avg	53.6	<50	Contraction

Note: Seasonally adjusted CPI data is utilized to better reflect short-term pricing activity.



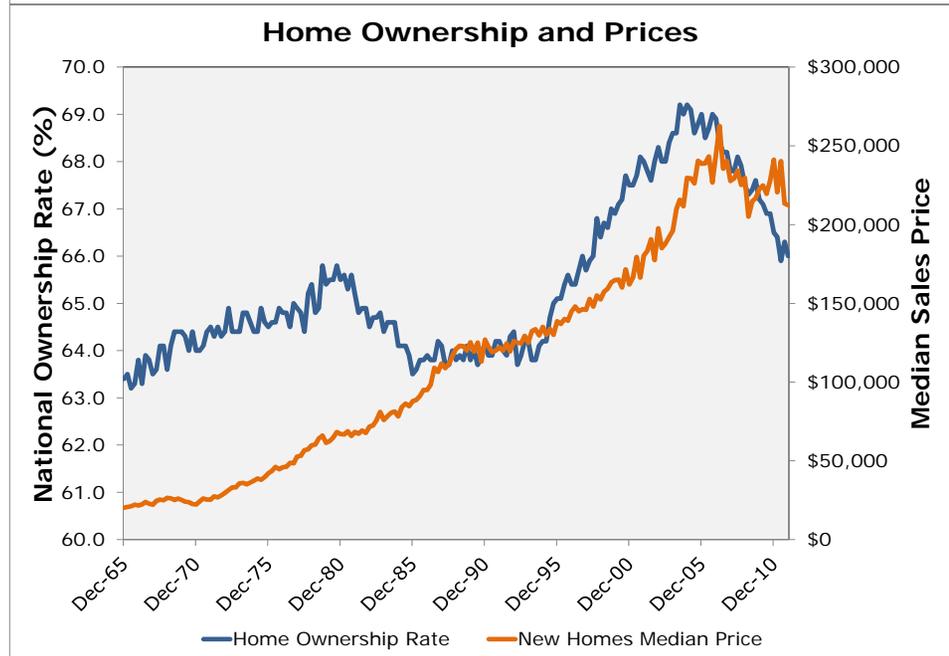
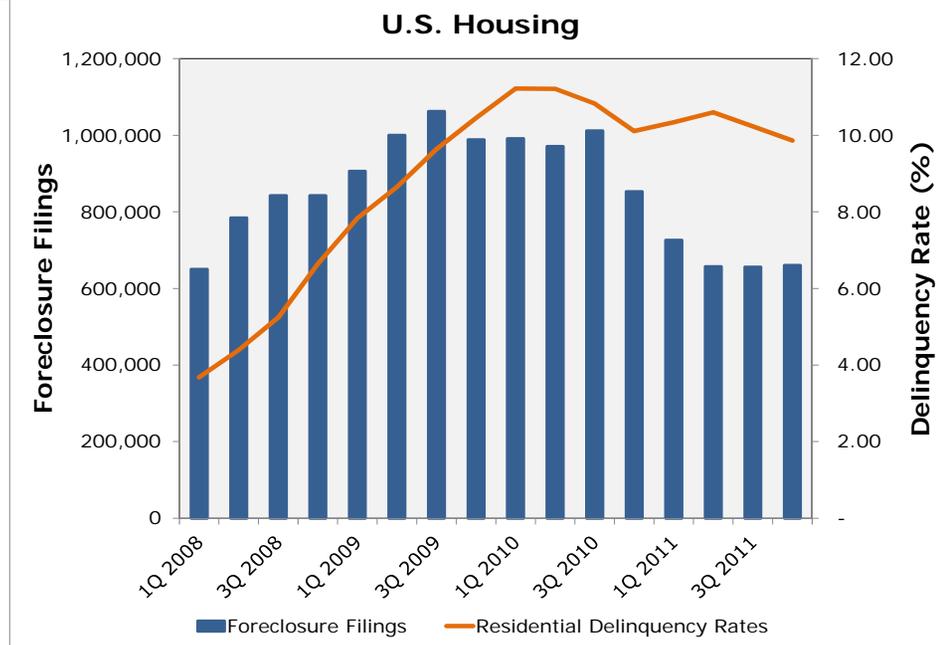
Data sources: Bureau of Economic Analysis, Bureau of Labor Statistics, Federal Reserve Bank of St. Louis, Barclays Capital

Re-establishing the Housing Market



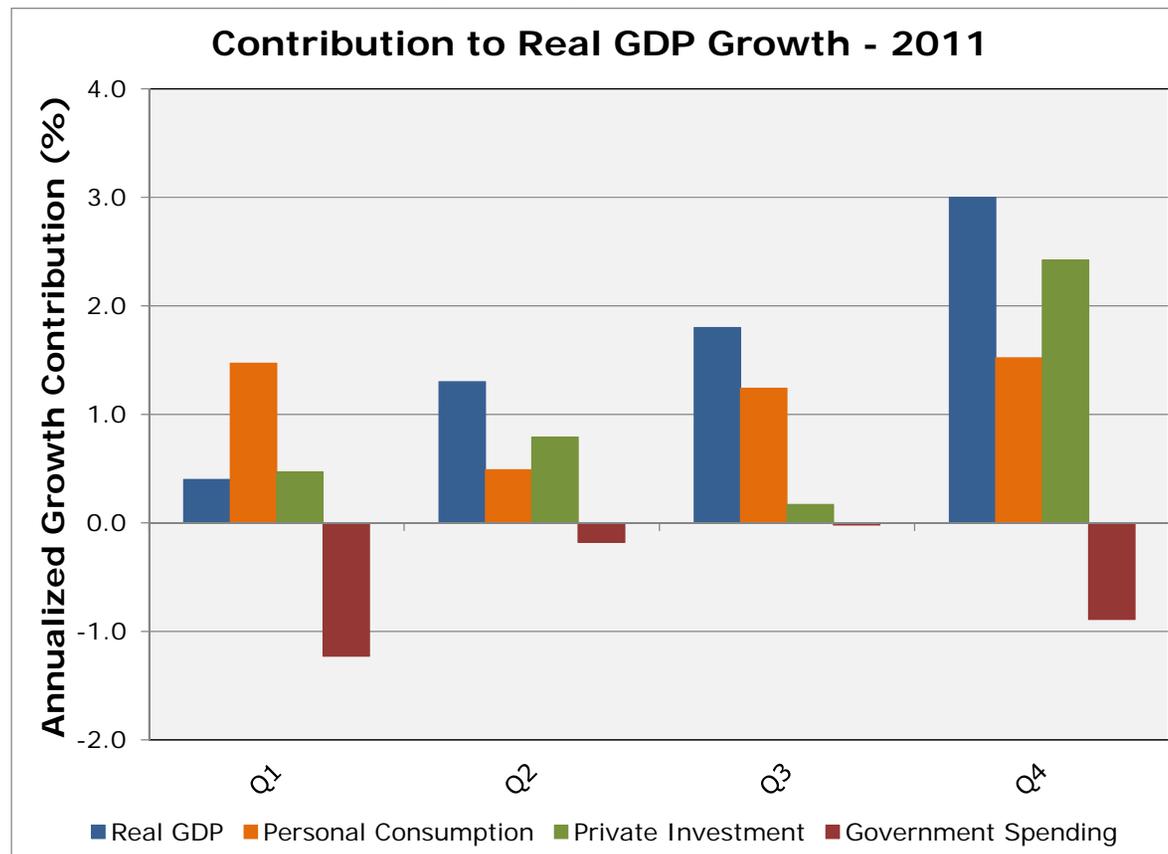
- Dramatic increase in foreclosures
 - 2006 = <1 million
 - 2007 = 1.7 million
 - 2008 = 3.2 million

- Since peak ownership (Dec-2004), 10 mil new housing units
 - Owner occupied = 1 mil
 - Renter occupied = 6 mil
 - Vacant = 3 mil



Waiting on Consumer Spending

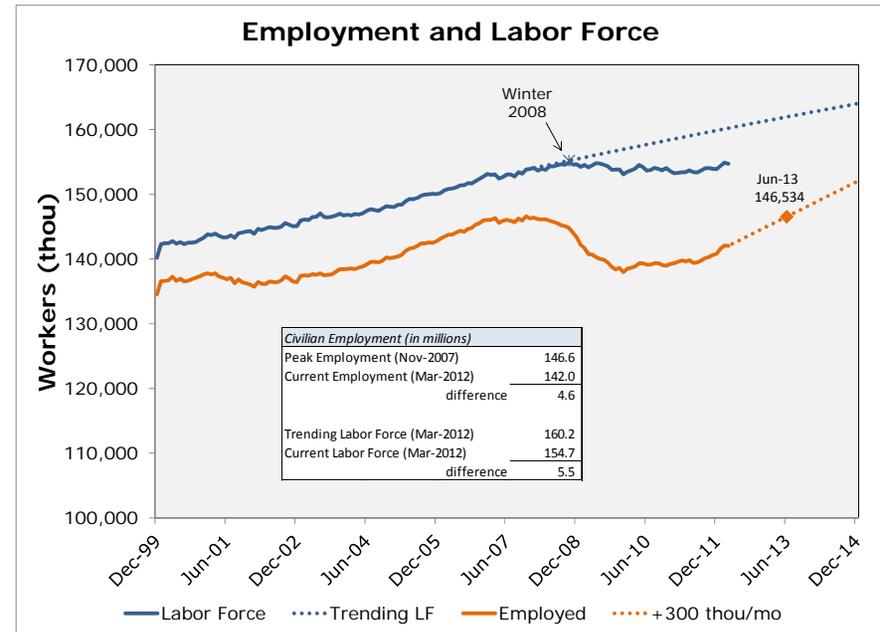
- Consumer spending comprises 70% of GDP
- Growth slowed in 2011
 - Real GDP Growth of 1.6% versus 3.1% in 2010
 - Moderate consumer spending, but positive



Employment Constraints



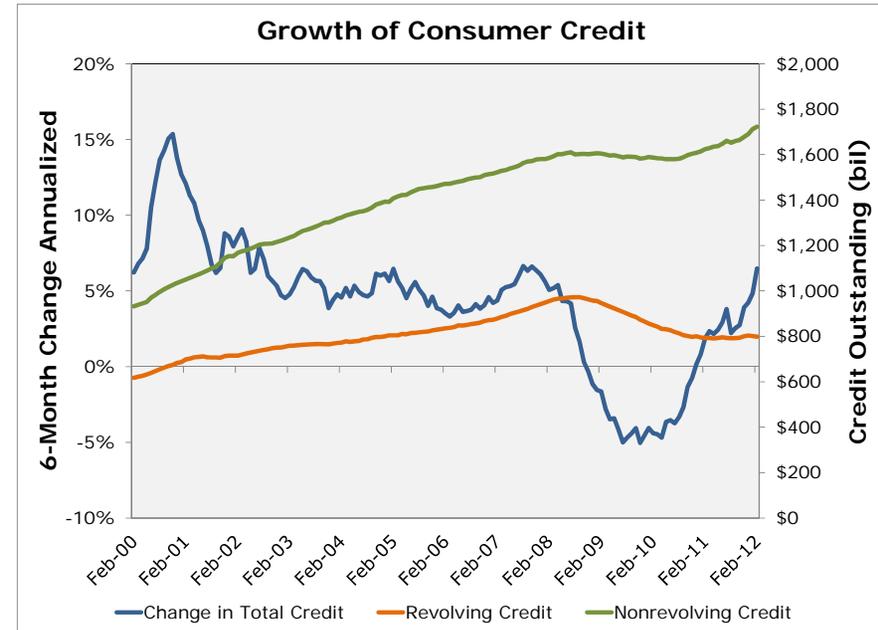
- High unemployment continues to restrain growth
 - Labor force has not been growing
 - Jobs slowly coming back
- Wage growth remains stagnant
- Weak employment and wage growth translates to weak consumer demand



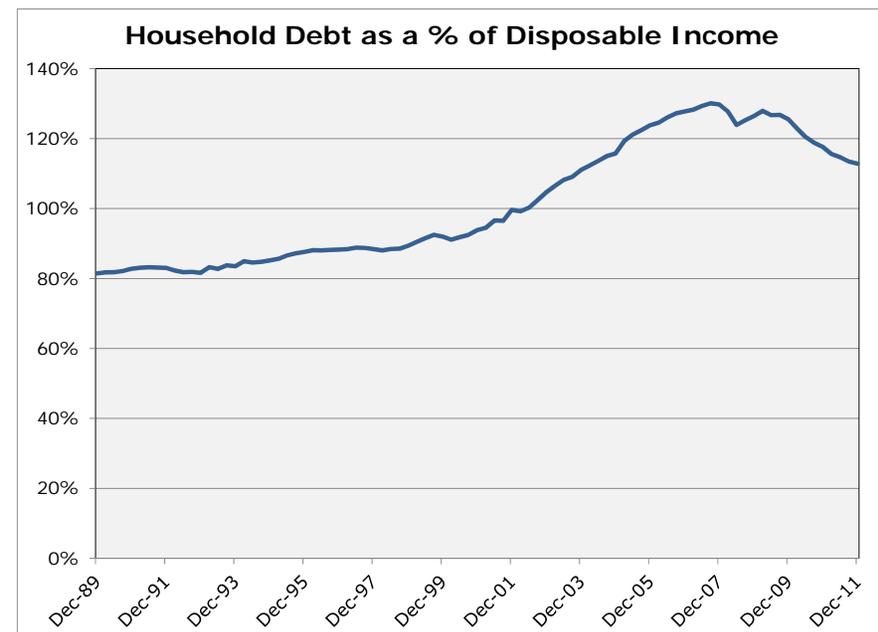
Debt Constraints



- Consumers again willing to utilize debt
 - Revolving credit (i.e. credit cards) has flat lined
 - Non-revolving credit (i.e. autos, school loans) moving higher



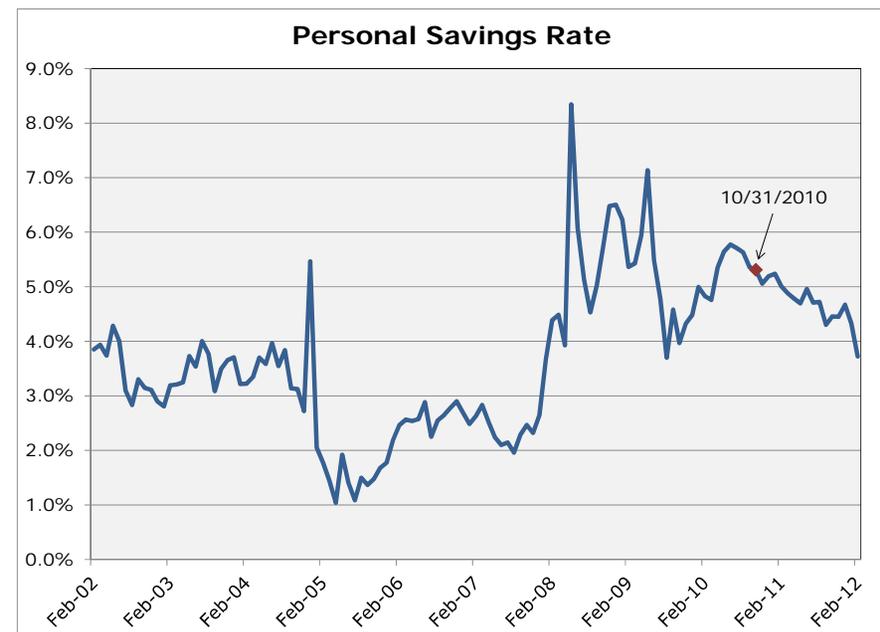
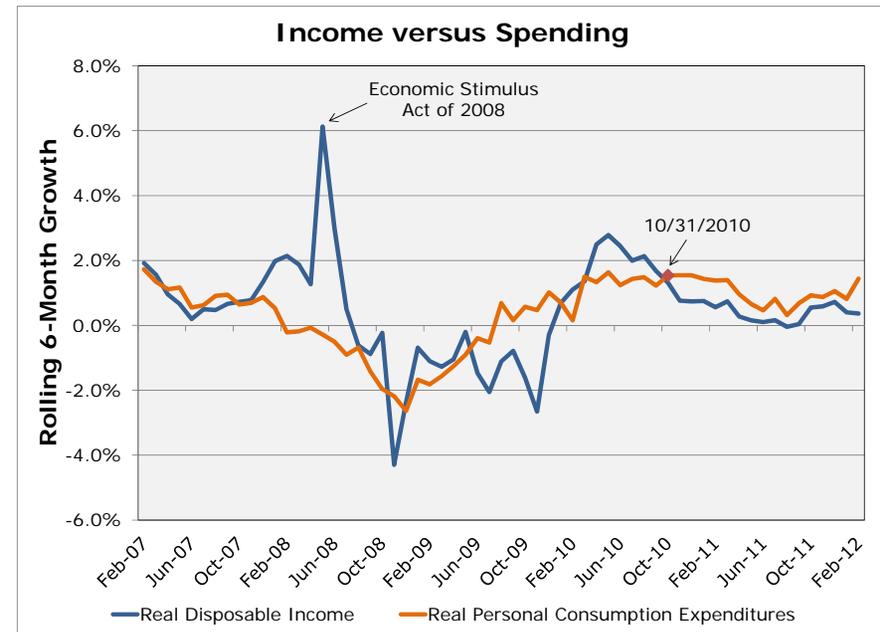
- Household debt, which includes mortgages, continuing to fall versus disposable income



Drop in Savings

- Growth in personal consumption has been outpacing disposable income growth, with the difference coming from savings

- Assuming mild growth in real disposable income, savings rate would have to fall to ~3.4% to produce 2% real growth in personal consumption



- Provisions of current tax law, including 2%-point cut in payroll tax, will expire
- Extended unemployment benefits also set to expire
- Deficit reduction committee's sequestration cuts equal \$1.2 tril

“Resulting fiscal contraction
– consisting of both tax
increases and spending cuts
– would be in the
neighborhood of 3.5% of
gross domestic product.”

- Alan Blinder, Clinton
Appointee to the Federal
Reserve's Board of
Governors

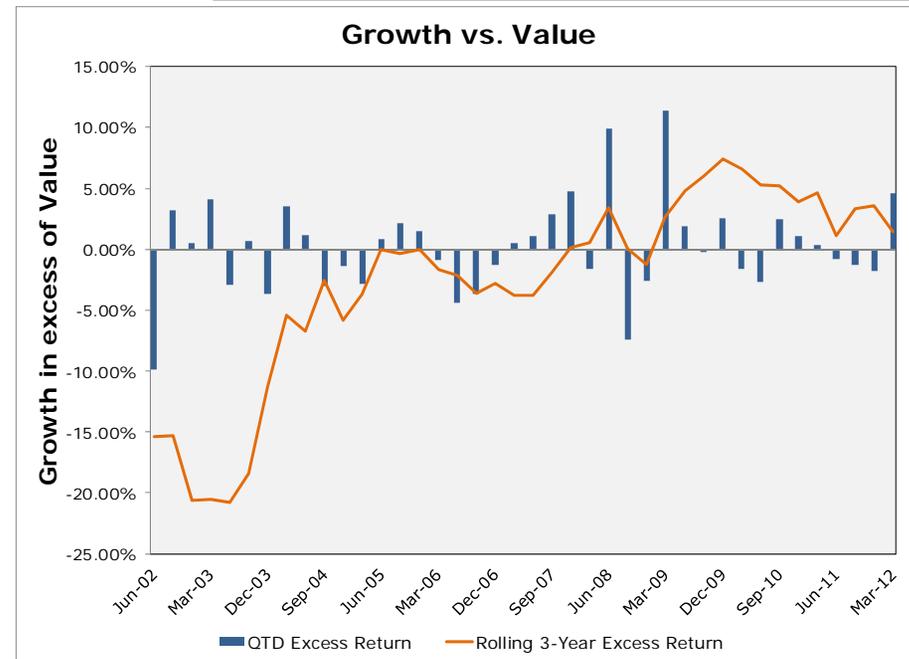
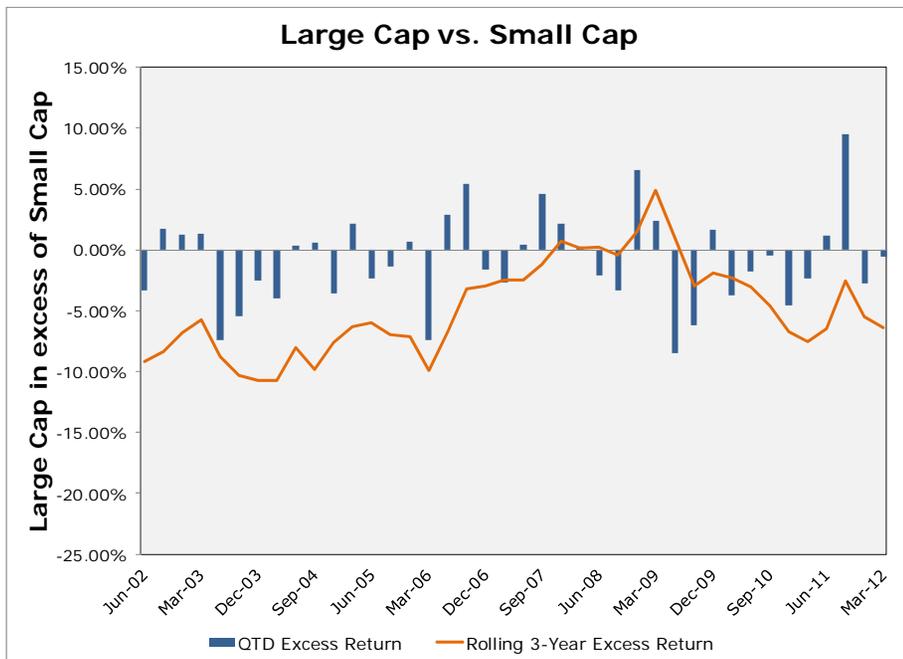
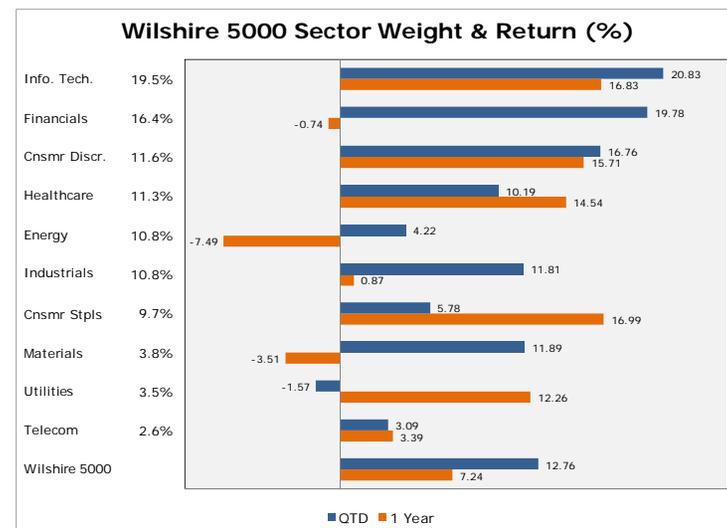
“The Congressional Budget
Office predicts...(a federal
revenue) increase of
\$512bn...equivalent to 2.9
per cent of GDP.”

- Martin Feldstein, Chairmen
of Council of Economic
Advisors under Reagan

U.S. Capital Markets: Equity



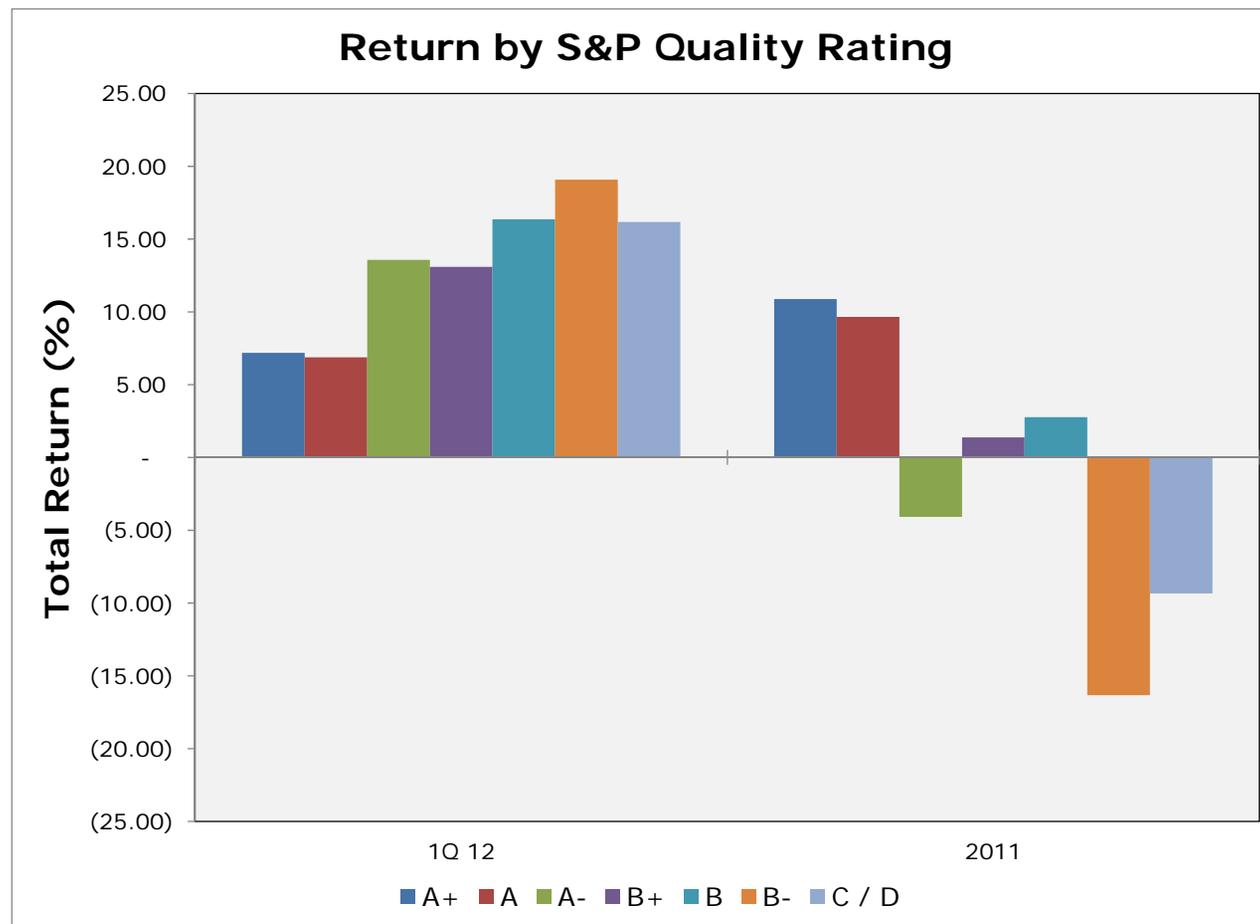
March 31, 2012	Qtr	Ytd	1 Yr	3 Yr	5 Yr	10 Yr
Wilshire 5000	12.8	12.8	7.2	24.2	2.3	5.0
Wilshire U.S. Large Cap	12.7	12.7	8.1	23.3	2.2	4.6
Wilshire U.S. Small Cap	13.3	13.3	0.9	31.7	4.1	8.4
Wilshire U.S. Large Growth	15.6	15.6	8.4	24.1	4.4	4.6
Wilshire U.S. Large Value	9.9	9.9	7.7	22.4	-0.1	4.5
Wilshire U.S. Small Growth	12.8	12.8	0.8	32.7	5.2	8.3
Wilshire U.S. Small Value	13.7	13.7	0.8	30.6	2.9	8.3
Wilshire REIT Index	10.8	10.8	13.4	44.7	-0.7	10.4
MSCI USA Minimum Volatility Index	6.2	6.2	13.9	22.0	3.5	4.4
FTSE RAFI U.S. 1000 Index	11.4	11.4	5.0	38.8	2.9	n.a.



Data sources: Wilshire Compass, Wilshire Atlas

Returns by Quality Segment

After the highest quality names dominated the market in 2011, lower quality led the market for the first quarter of 2012

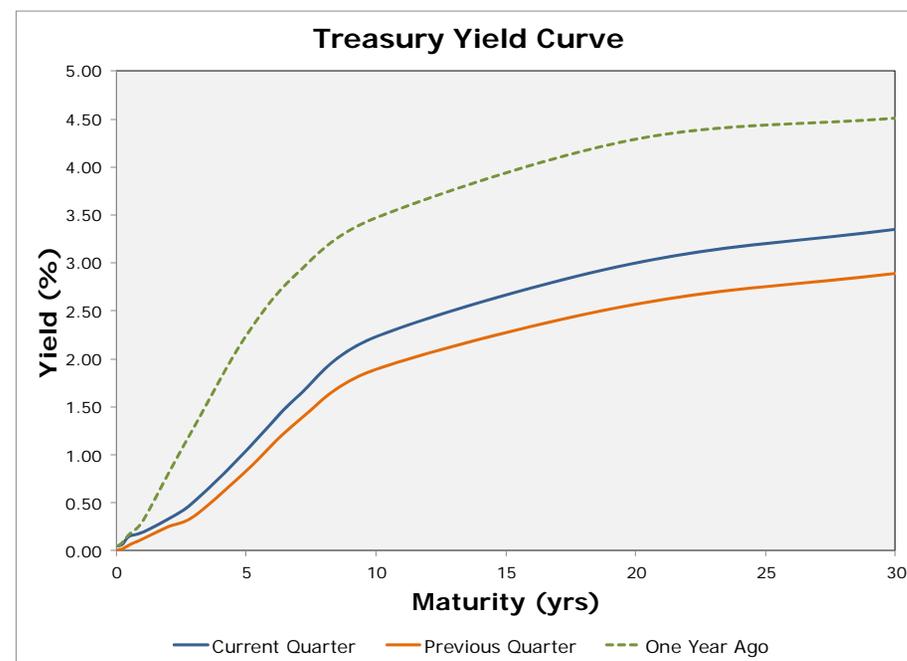
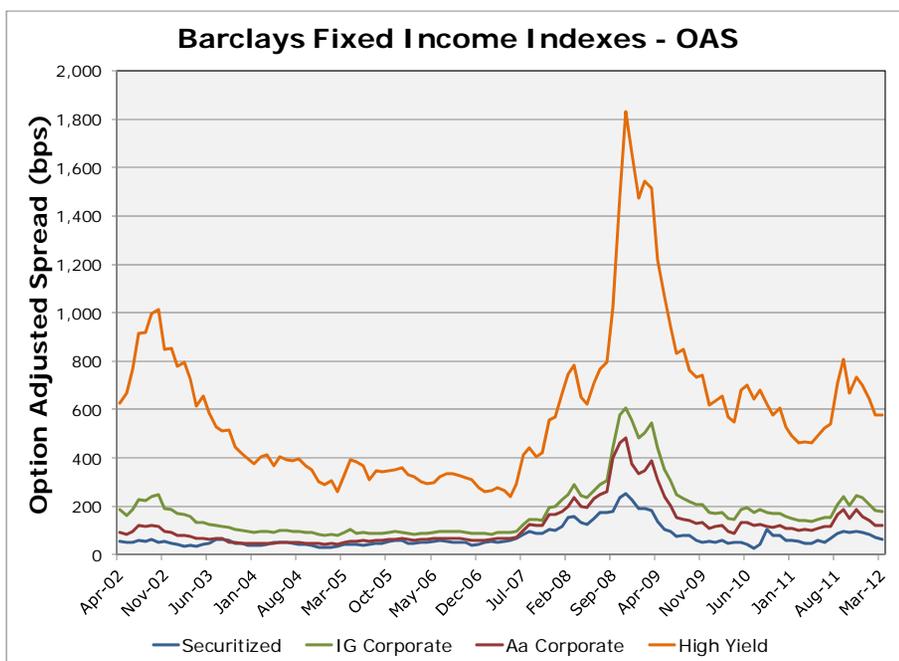


Data sources: Wilshire Atlas

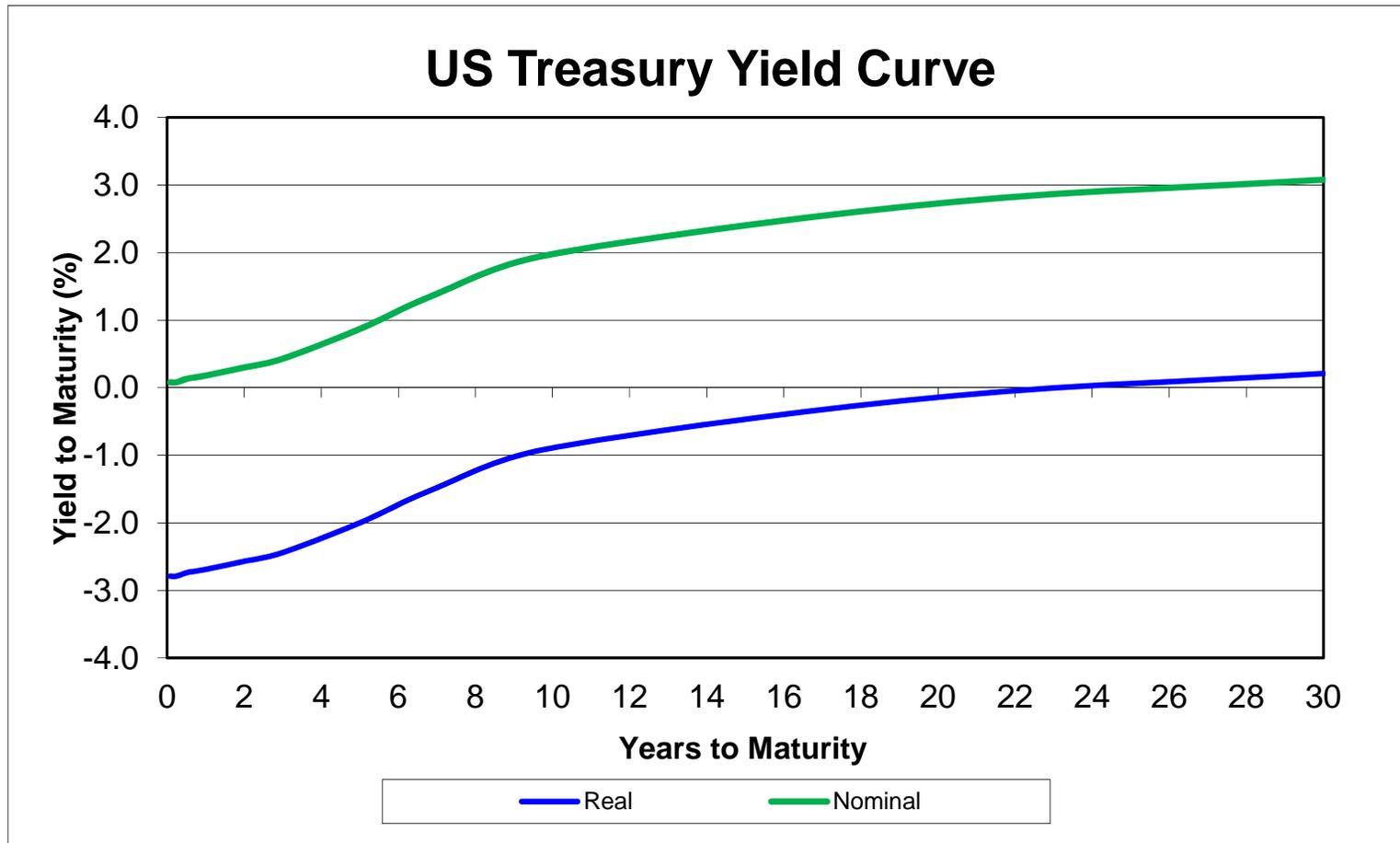
U.S. Capital Markets: Fixed Income



March 31, 2012	Qtr	Ytd	1 Yr	3 Yr	5 Yr	10 Yr
Barclays Aggregate Bond Index	0.3	0.3	7.7	6.8	6.3	5.8
Barclays Treasury Index	-1.3	-1.3	8.6	3.9	6.2	5.7
Barclays Govt-Related Index	0.9	0.9	7.0	5.2	6.0	5.6
Barclays Securitized Index	0.7	0.7	6.3	6.4	6.2	5.6
Barclays Corporate IG Index	2.1	2.1	9.5	13.3	6.9	6.6
Barclays LT Govt/Credit Index	-2.1	-2.1	19.9	12.8	9.0	8.4
Barclays Long-Term Treasury Index	-5.8	-5.8	23.6	7.1	9.5	8.5
Barclays U.S. TIPS Index	0.9	0.9	12.2	8.7	7.6	7.5
Barclays High Yield Index	5.3	5.3	6.4	23.9	8.1	9.2
Treasury Bills	0.0	0.0	0.1	0.1	1.2	1.9



Data sources: Wilshire Compass, Barclays Capital, U.S. Treasury



- Real yields are currently negative to 20-years maturity
- At these levels, probability of rise greater than further decline

Implications of Low Yields

- Benefits economy in general....
 - Low mortgage and consumer debt rates
 - Low cost of debt capital
 - Lower fiscal debt service burden
 - Reduced exchange rate; increases exports
-but is detrimental to investors
 - Low earnings on savings
 - Low bond returns
 - Higher liabilities
 - Increased reliance on sources of external growth (i.e., greater contributions, funding, gifts, etc.)

Reasonableness of Objectives in Low Yield Environment



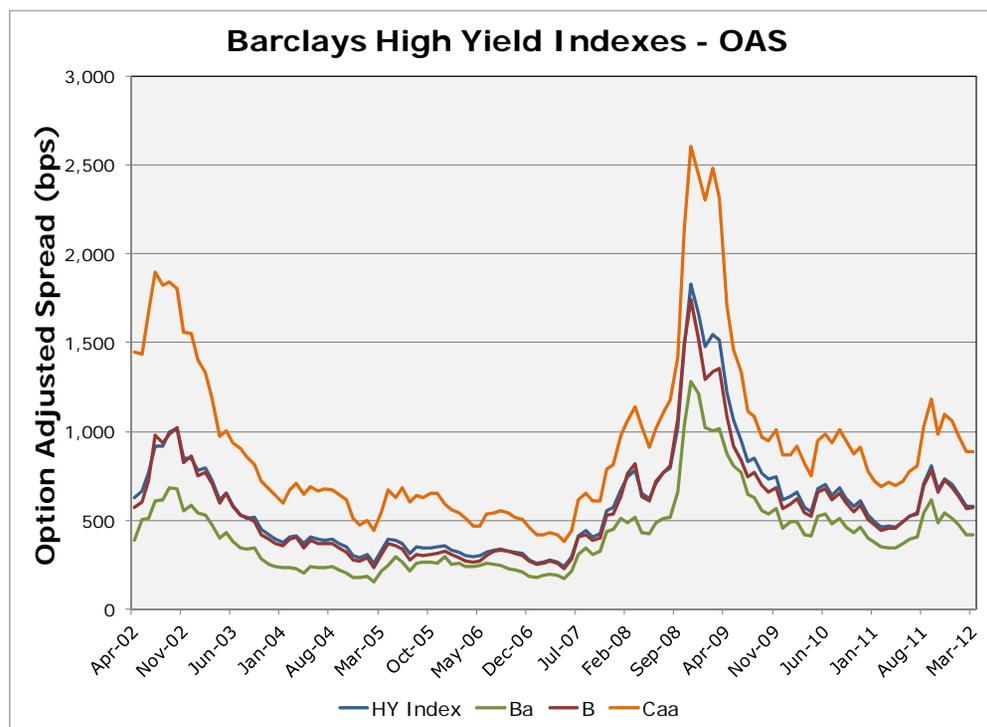
- Corporate Defined Benefit Plans:
 - Focused on hedging liabilities to maintain stable funding ratio
 - However, requires large cash contributions to get there
 - Freezing and closing plans has been solution
- Public Defined Benefit Plans:
 - Focused on improving funding ratio through asset growth
 - Able to take very long term view on discount rates because tied to asset allocation policy
 - Given mean expected return at current allocations, discount rates of 7.5% and 7.75% are not unreasonable given long term historical asset class returns
- Endowments/Foundations:
 - Spending objectives lower relative to corporate and public DB plan liability funding needs
 - However, current spending must be weighed against future real asset growth ('intergenerational wealth transfer')
 - Modestly scaling back annual spending in order to continue to build wealth

1. *Do nothing* – expectation is that capital markets will revert to levels more in line with historical norms at some point in future
2. *Maintain current expected return objectives but at reduced risk* – prevent further funded status erosion from periods of market downside volatility
3. *Increase growth* – focus less on return from fixed income yields
4. *Broaden fixed income* – increased exposure to higher yield market segments
 - Can be combined with any of the remaining options

High Yield by Quality



March 31, 2012	Weight	Qtr	Ytd	1 Yr	3 Yr
Barclays High Yield Index	100%	5.3	5.3	6.4	23.9
Quality Distribution					
Ba U.S. High Yield	41.7%	4.4	4.4	7.8	19.6
B U.S. High Yield	41.7%	4.9	4.9	6.6	20.3
Caa U.S. High Yield	14.7%	8.1	8.1	4.3	32.3
Ca to D U.S. High Yield	1.7%	13.0	13.0	-7.8	46.1
Non-Rated U.S. High Yield	0.3%	9.5	9.5	11.8	19.8



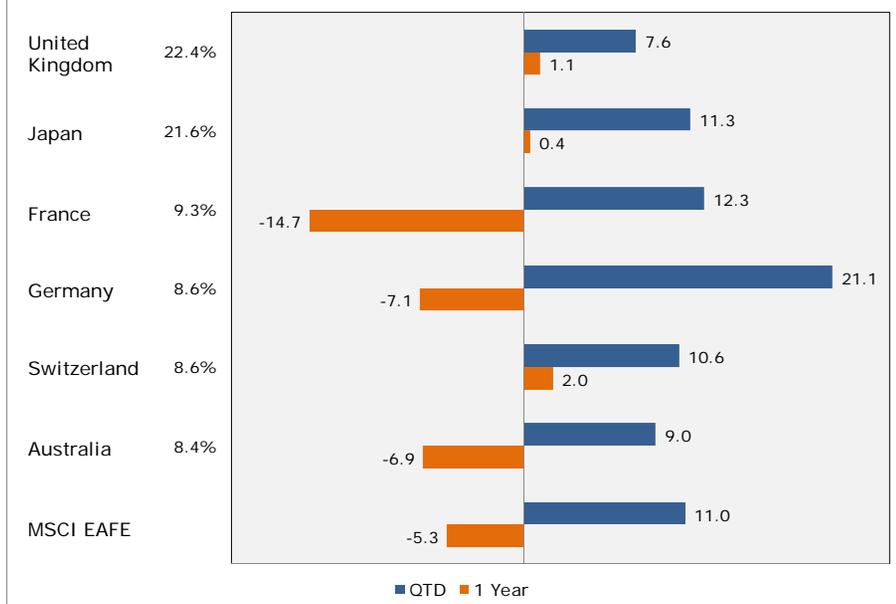
Data sources: Barclays Capital

Non-U.S. Capital Markets

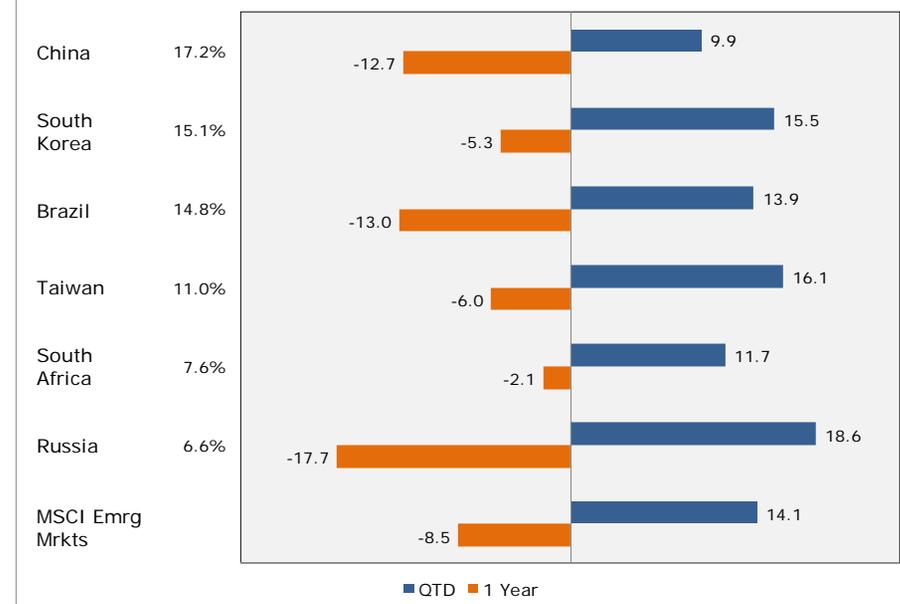


March 31, 2012	Qtr	Ytd	1 Yr	3 Yr	5 Yr	10 Yr
MSCI ACWI ex-US (\$g)	11.3	11.3	-6.7	19.6	-1.1	7.7
MSCI EAFE (\$g)	11.0	11.0	-5.3	17.7	-3.0	6.2
MSCI Emerging Markets (\$g)	14.1	14.1	-8.5	25.4	5.0	14.5
MSCI Frontier Markets (\$g)	5.6	5.6	-8.9	14.3	-5.8	n.a.
MSCI EAFE Minimum Volatility Idx	5.8	5.8	3.9	17.1	0.6	10.2
FTSE RAFI Developed ex-US Index	10.6	10.6	-10.0	19.9	-2.1	n.a.
JPM Non US Global Bond	-0.7	-0.7	4.3	7.4	7.4	8.8
JPM Non US Global Bond Hedged	1.2	1.2	6.5	4.3	5.0	4.9
JPM EMBI Global	4.9	4.9	12.6	16.5	8.6	10.9
Euro vs. Dollar	2.6	2.6	-6.1	0.0	0.0	4.3
Yen vs. Dollar	-6.5	-6.5	0.7	6.3	7.5	4.9
Pound vs. Dollar	2.8	2.8	-0.3	3.7	-4.0	1.1

MSCI EAFE: Largest Countries and Return

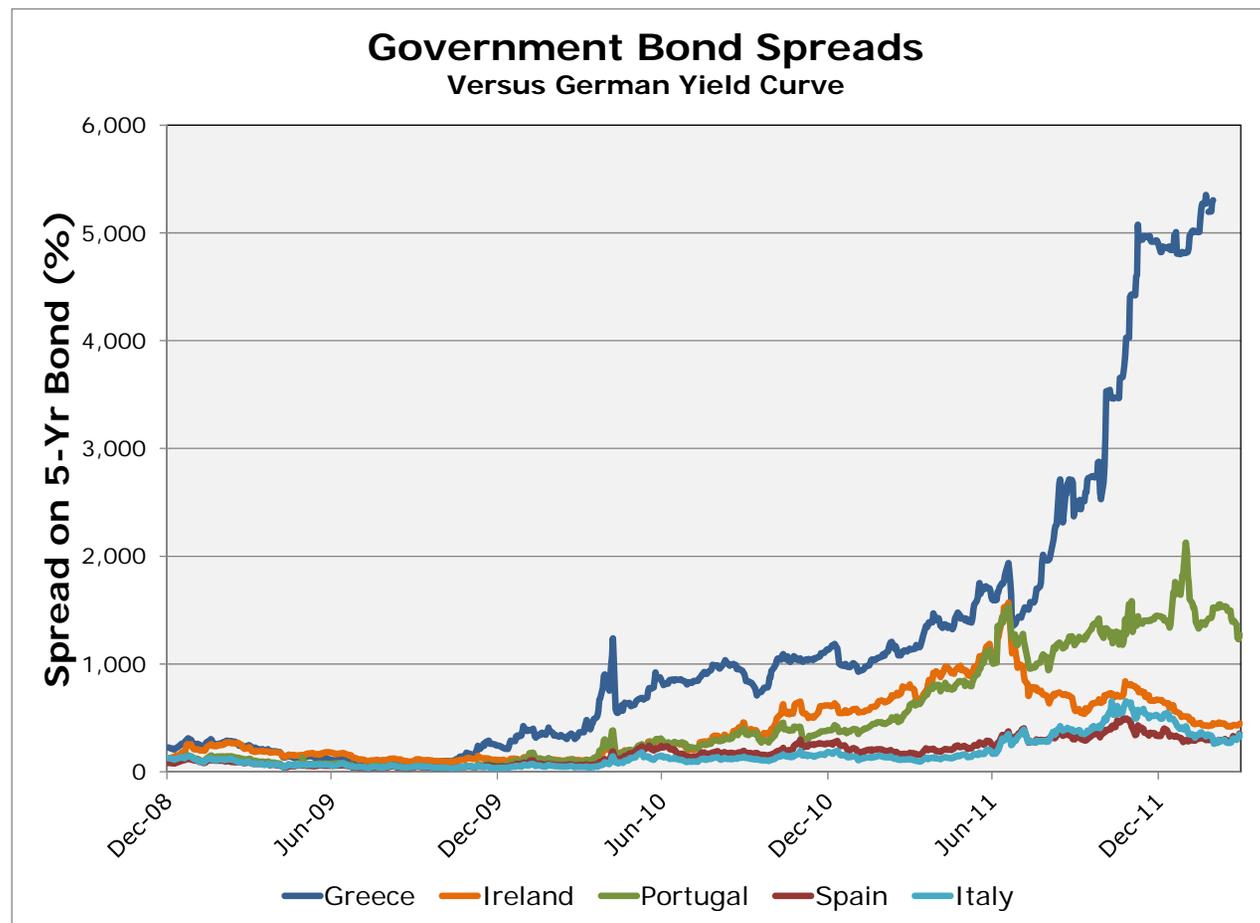


MSCI EM: Largest Countries and Return



Data sources: Wilshire Compass, MSCI Barra

Large majority of private creditors agreed to a bond swap deal with Greece during the quarter that cut its public debt by 100 billion euros



Data sources: Barclays Capital

Private Equity Dry Powder

Fig. 37: Private Equity Dry Powder by Fund Type, 2003 - March 2012

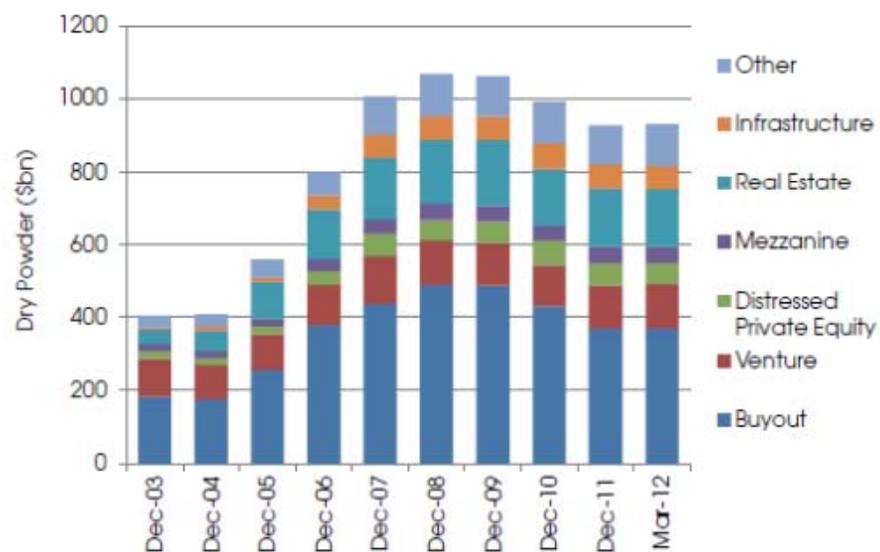
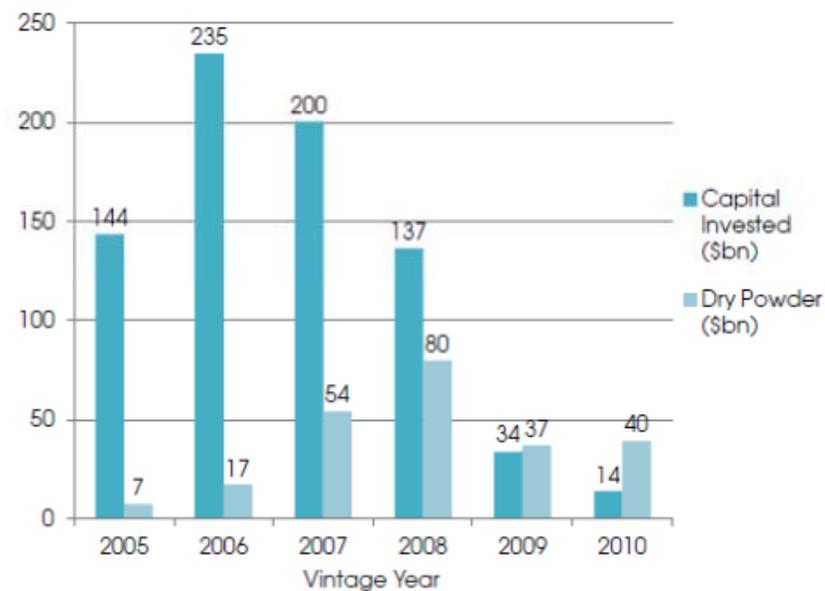
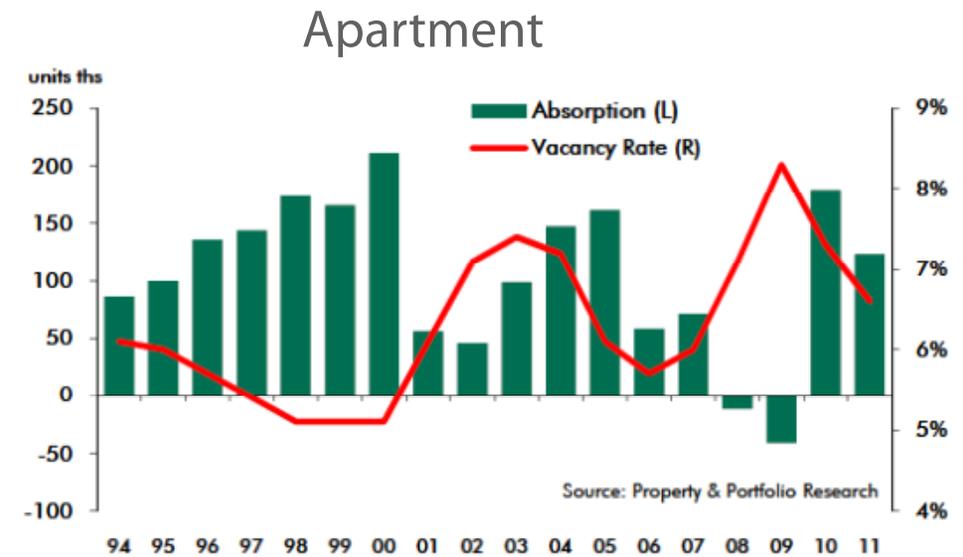
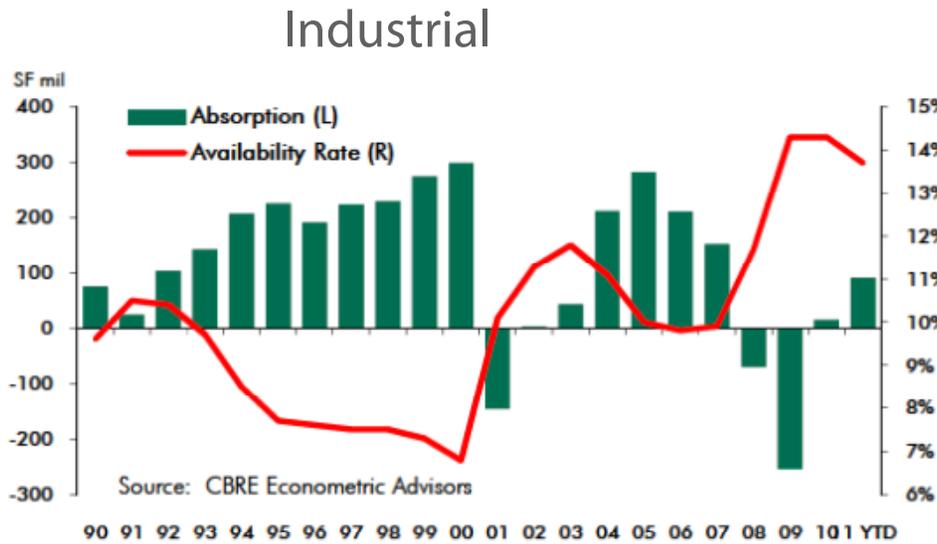
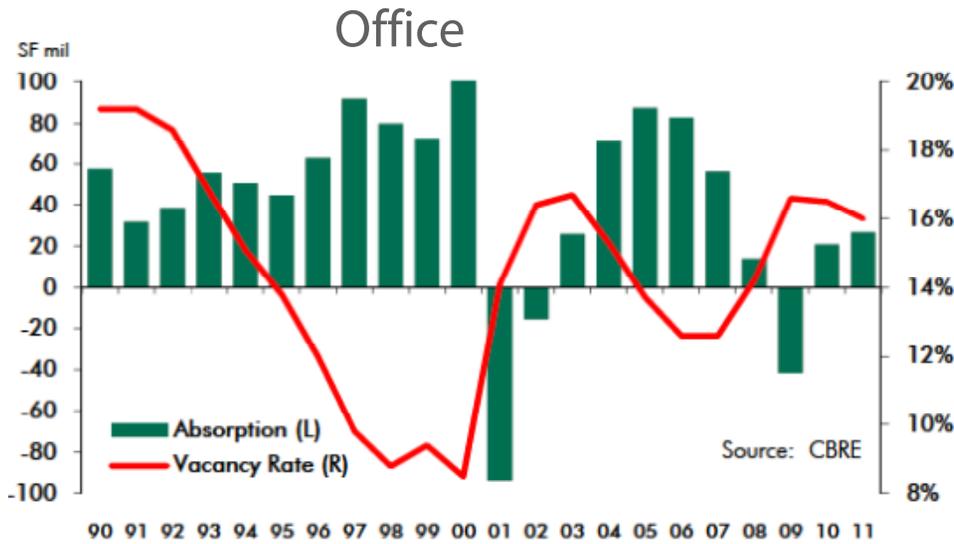


Fig. 39: Buyout Funds - Capital Invested and Dry Powder Remaining by Vintage Year as of March 2012



Source: Preqin

Commercial Property *(as of Q4 2011)*



Source: CB Richard Ellis

Fig. 2: Unlisted Infrastructure Fundraising, Q1 2009 - Q1 2012

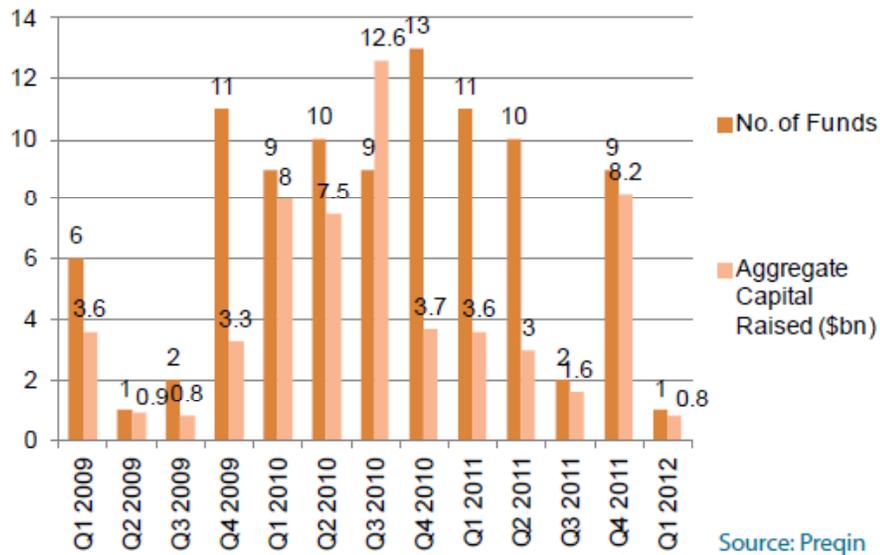
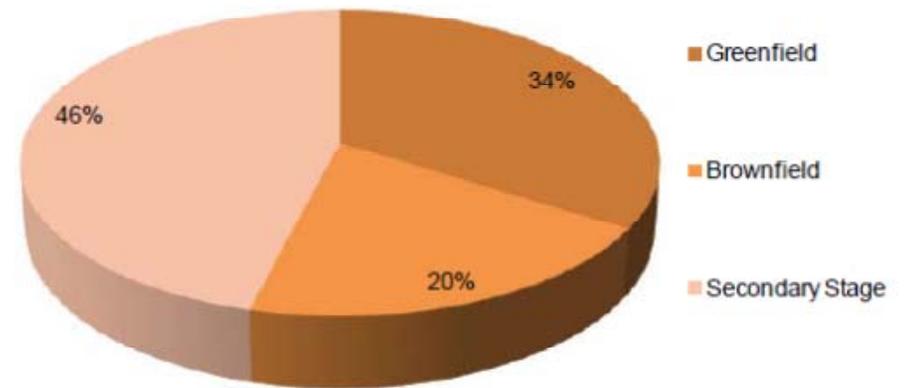


Fig. 2: Breakdown of Infrastructure Deals by Project Stage, 2004 - 2012 YTD (as of 20th February 2012)



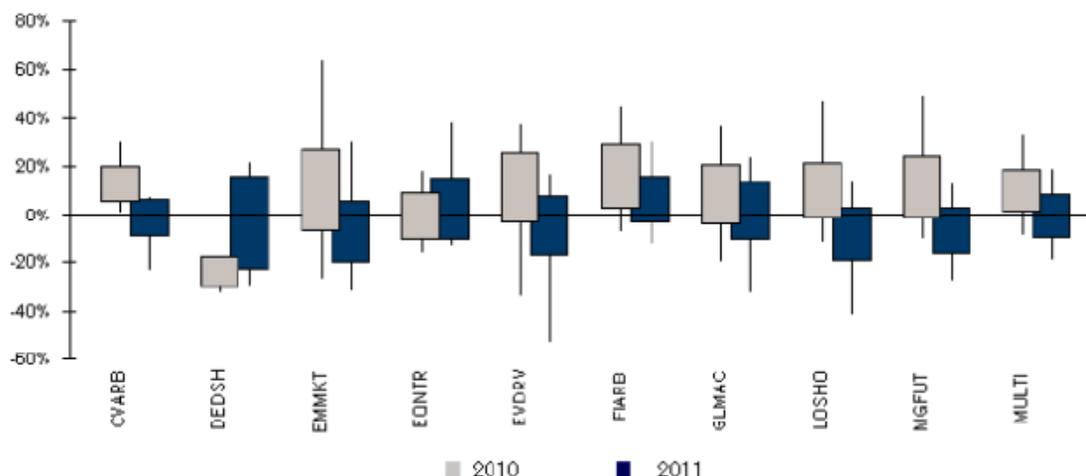
Source: Preqin

Hedge Fund Performance



March 31, 2012	Qtr	Ytd	1 Yr	3 Yr	5 Yr	10 Yr
DJ CS Hedge Fund Index	4.0	4.0	-0.8	9.8	3.3	6.8
Event Driven Index	5.2	5.2	-7.1	9.1	2.9	7.5
Global Macro Index	1.6	1.6	7.4	10.1	8.3	10.5
Long/Short Equity Index	7.2	7.2	-2.9	8.9	2.7	6.8
Multi-Strategy Index	4.7	4.7	2.3	11.9	3.3	7.0
Wilshire 5000	12.8	12.8	7.2	24.2	2.3	5.0
MSCI ACWI ex-US (\$g)	11.3	11.3	-6.7	19.6	-1.1	7.7
Barclays Aggregate Bond Index	0.3	0.3	7.7	6.8	6.3	5.8
Dow Jones UBS Commodity Index	0.9	0.9	-16.3	9.0	-2.8	5.5

Dow Jones Credit Suisse Hedge Fund Index Performance Dispersion by Strategy (2010 and 2011)



Note: The bulk of returns shown as the dark blue and grey boxes (one standard deviation from the mean in either direction). The black lines represent dispersion from 1st to the 99th percentiles. Data based on funds included in Dow Jones Credit Suisse Hedge Fund Index in 2011.

Data sources: Wilshire Compass, Credit Suisse