### The Bond Market

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### Outline

- Introduction
- Bond Calculation
- Relative Value
- 4 Yield Curves
- Credit

Rob Hayward The Bond Market November 27, 2014 2

### Introduction

- The bond market is the core of the capital markets
- Government dominates the bond market due to high liquidity and low risk
- Corporate bonds and LDC bonds offer higher return for a risk
- Recent developments suggest reduced government liquidity
- Quantitative easing

## Bond price

The value of the bond is just the discounted value of the payments that will be made

$$P = \sum_{i=1}^{i=n} \frac{C_i}{(1+r)^i} + \frac{M}{(1+r)^n}$$

Where C is the coupon payment, r is the rate at which future payments are discounted (the redemption yield), M is the par value and n is the number of years to maturity.

Rob Hayward The Bond Market November 27, 2014 4 / 11

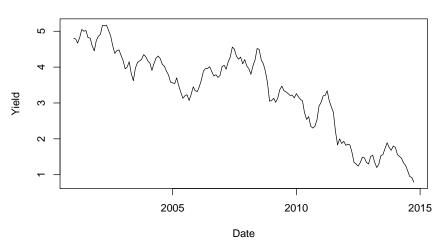
### Relative Value

A strategy that will assess the relative value of two bonds

- There is a standard relationship between yields
- Quantitative strategy (return to normal)
- **Fundamental strategy** (new relationship)

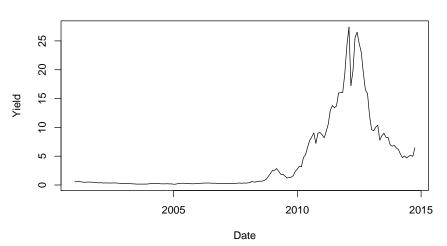
# German yield

#### German 10-year



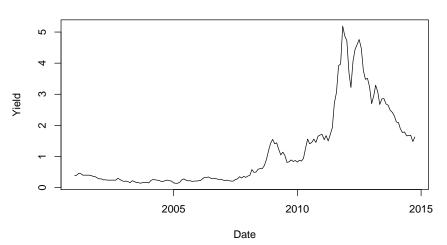
## Greek Risk Premium

#### **Greek Risk Premium**



## Italian Risk Premium

#### Italian Risk Premium



# Yield Curve Theory

There are three main theories about the shape of the yield curve

- Expectations theory
- Preferred habit or segmented market theory
- Liquidity premium theory

## Expectations and Liquidity premium

### Expectations theory

■ Return is  $i^* = (1 + i_i)(1 + \hat{i}_2) - 1$ 

if there is a *liquidity premium*  $\theta_L = p(L)$ 

■ Return is  $i^* = (1 + i_i)(1 + \hat{i}_2) + \theta_L - 1$ 

The liquidity premium is the balance between *interest* rate risk and reinvestment risk.

Rob Hayward The Bond Market November 27, 2014 10 / 11

### Credit

- The government curve provides the benchmark
- Lower quality credit requires a *risk premium* (denominated in bp)
- Global and idiosyncratic factors will affect the risk premium

Rob Hayward The Bond Market November 27, 2014