

# Asset Allocation

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February 13, 2014

## 1 Introduction

Once the investment goals, resources and level of risk appetite have been identified, it is necessary to consider the asset allocation that will achieve the goals. Standard finance theory suggests that there is a trade off between the return on the asset and its risk and liquidity: there is a higher return as compensation for taking more risk and having less liquidity. It is also important to make sure that funds are available when they are required.

## 2 Assets

There are three main asset classes to consider, but a number of others can also be added to the portfolio.

1. Cash: this is the most liquid and lowest return.
2. Fixed income: Government and corporate bonds. There can be more return for more risk.
3. Equities: Highest return and highest risk.

### 2.1 Cash

It is important to ensure that cash is available at the time that it is required. Holding some proportion of the portfolio in cash is desirable to meet emergencies. The cash can be in different currencies. It is important to think about *currency mismatch*. Currency mismatch happens when cash is held in one currency when another currency is required. It means that there is an *exchange rate risk*. For example, if one of the children need US dollars to purchase a house but have Euros, there is some risk that the exchange

rate will move against them. If there is currency mismatch, there should be some discussion of exchange rate risk. There can also be discussion of diversification.

## 2.2 Fixed income

There are two major attributes of fixed income securities: diversification of equity risk and cash at the maturity date. The price of government bonds usually move in the opposite direction to equities. This can reduce the risk of a portfolio. The maturity date means that you can guarantee that funds will be available at a particular date. Once again, bonds can be denominated in different currencies so there are issues associated with currency mismatch and currency diversification to consider. Credit risk is also important. While government bonds are often considered to be *risk free*, it is clear from recent events that there is some risk.

## 2.3 Equities

Though equities have the highest risk of the three main asset classes, they also have the highest return and therefore, if liquidity is not important or covered elsewhere, it is usually considered a good idea to have a large allocation to equities in the portfolio. Though this may be the case for some pension funds with a long time horizon, in most cases liquidity is important.

In addition to the consideration of the currency composition, country risk is also important for equities. Investment in some countries may carry more risk than others.

## 2.4 Other asset classes

There are a number of other asset classes that can be considered. Amongst these would be property, commodities and a wide variety of others that could include fine art, wine or securitised loans.

Figure ?? shows the fluctuations in the oil price over the last 30 years. It is clear that there is a lot of risk in some commodities. However, the most important issue from the point of fund management is the level of correlation between the returns in these other assets and existing asset classes. The greater the correlation, the smaller the benefit from investing is something exotic.

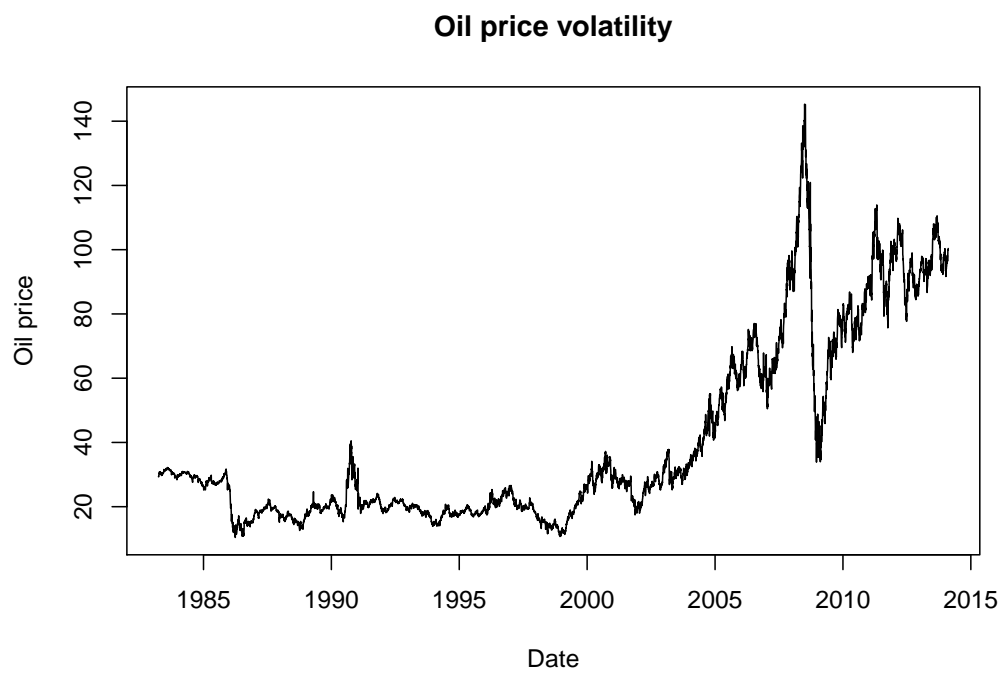


Figure 1: Oil price volatility