PCA in Finance

Long before Machine Learning became popular, PCA was used to "explain" the yield curve.

A Yield Curve is a vector of features

- Whose length n corresponds to the number of bond maturities
- $\mathbf{x}_j^{(\mathbf{i})}$ is the yield, on day i of the j^{th} bond
    - j increases with maturity

Does the yield of each maturity change (from day to day)

- Independently of other maturities ?
- Or are there a small number of "common factors"/"concepts" that drive daily yield changes ?

PCA can help us answer the question.

In the process, we are also able to *interpret* the common factors

- Which helps our intuition

Let's visit the notebook section on PCA of the Yield Curve (Unsupervised.ipynb#PCA-in-Finance)

In [ ]:
```
print("Done")
```