In[44]:=
```
SetDirectory[ToFileName[
   Extract["FileName" /. NotebookInformation[EvaluationNotebook[]],
    {1}, FrontEnd`FileName]]];
Import["Pairs.m"]
```

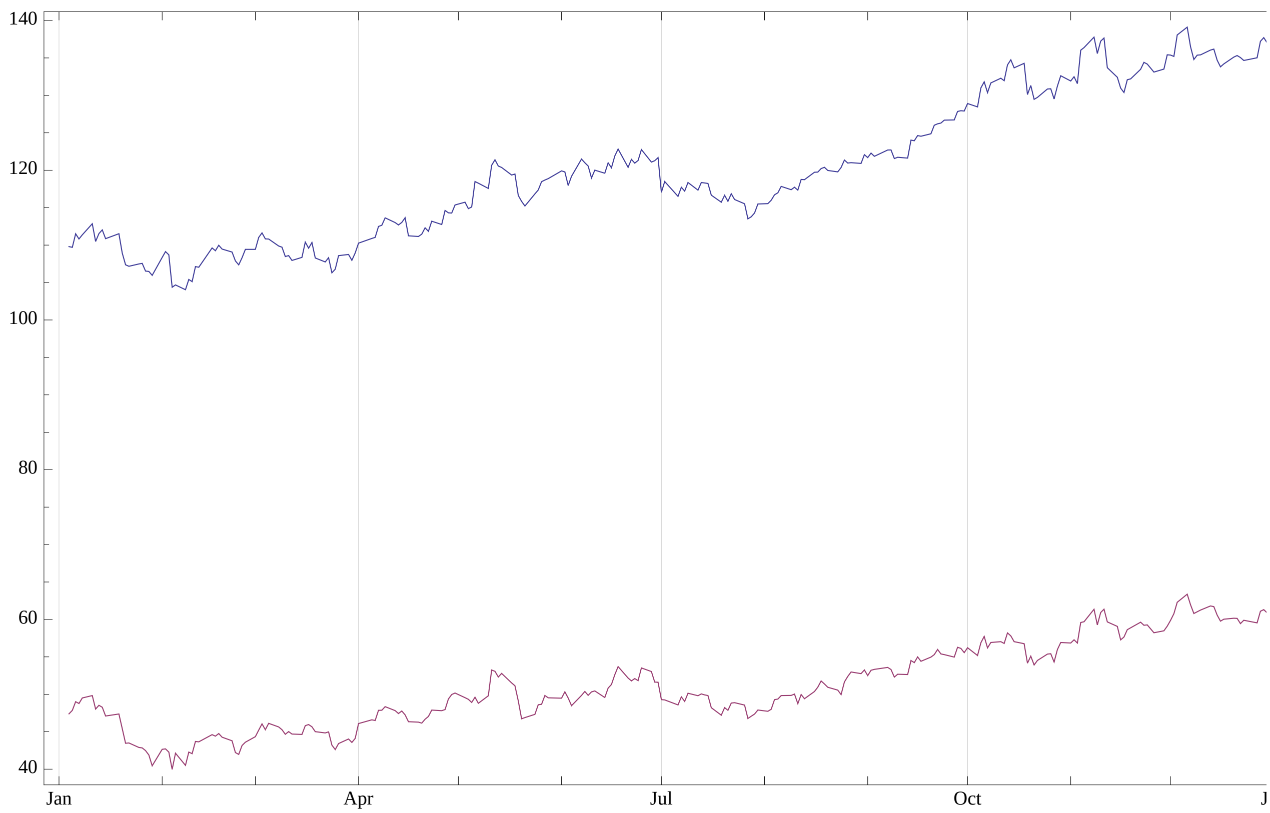
This is an example for testing GLD and GDX pair cointegration from Jan. 1, 2010 to Dec. 31, 2010.

In[46]:=
```
gld = FinancialData["GLD", {{2010, 1, 1}, {2010, 12, 31}}];
gdx = FinancialData["GDX", {{2010, 1, 1}, {2010, 12, 31}}];
```

Let' s plot the time - series on a chart. Just because it' s so easy to do so in Mathematica!

In[48]:=
```
DateListPlot[{gld, gdx}, Joined → True]
```

Out[48]=



Next let' s calculate correlations.

In[49]:=
```
Pearson[gld[[All, 2]], gdx[[All, 2]]]
```

Out[49]= 0.980367

So GLD/GDX pair is highly correlated. Let' s see if they are cointegrated.

In[50]:= Cointegrate[gld[[All, 2]], gdx[[All, 2]]]

InterpolatingFunction::dmval : Input value {−4.33857} lies outside the range of data in the interpolating function. Extrapolation will be used. ≫

ADF::toosmall : p−value smaller than printed value

Out[50]= 0.01

This show that GLD/GDX pair has 99 % probability for cointegration