



Looking now at HY, we can see the potential real returns for USD HY assuming mean reversion over the next decade has dropped again since last year's study at +1.2% p.a. (+3.7% p.a. in nominal terms). Therefore we would expect them to remain comfortably below long-term average levels. Even expected excess returns (+1.7% p.a.) are below the long-term average level by nearly 1% now but they are around 0.6% higher than the potential IG excess return. For EUR, HY expected real returns over the next decade are negative and therefore notably lower than for USD HY. However excess returns would still be positive at around +1% p.a. This analysis assumes long-term average levels of default but it's worth highlighting that defaults over the past decade have been consistently and significantly lower than long-term averages.

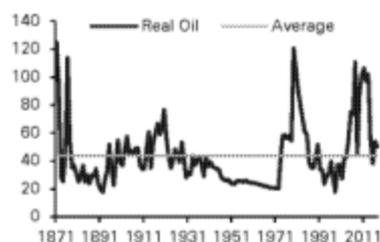
For property, using Robert Shiller's long-term data back to 1900, the asset class still appears expensive on a mean reversion basis. In nominal terms, our mean reversion suggests house prices could fall by just over 2% p.a. over the next decade, similar to what we showed in last year's study. We also remain mindful that property is probably tied to interest rates though so while yields remain ultra low, property will look expensive.

Figure 74: Real US House Price



Source: Deutsche Bank, Bloomberg Finance LP, *Irrational Exuberance*

Figure 75: Real Oil Price



Source: Deutsche Bank, GFD

Finally we look at commodities. In recent studies our mean reversion exercise has highlighted that both Oil and Gold were likely to have poor decades in both nominal and real terms. The re-pricing we've seen in these assets in recent years has helped to take some of the sting out of these potential negative returns. That said, in real terms both Oil and Gold are still expected to provide negative returns based on mean reversion over the next decade with the numbers slightly lower than in our study a year ago. Oil would at least see positive nominal returns over the next 10 years.

We now look at the methodology of this mean reversion exercise and then move on to the data bedrock of the piece which is the database of long-term returns across the globe.

## Mean reversion assumptions

As an appendix to this section we outline the methodology and the variables that we have mean reverted in order to calculate potential returns for the various asset classes discussed in this study.

### Inflation

The starting point, which is essential for calculating possible future returns across all asset classes (including equities), is to get a future CPI time series. For this we have just reverted the YoY growth in CPI to its long-term average (around 3.1%).