```
In [3]:  # take two moving averages and apply sign-functiond
         def f(price, fast=32, slow=96):
             s = price.ewm(com=slow, min_periods=300).mean()
             f = price.ewm(com=fast, min_periods=300).mean()
             return np.sign(f-s)
```

```
In [4]:  form = EasyForm("Configuration")
         form.addTextField("fast")
         form.addTextField("slow")
         form.addButton("Go!", tag="run")
         form
```

```
In [13]: portfolio = Portfolio(prices=prices, position=prices.apply(f, fast=int(form["fast"] 
         analysis(portfolio.nav())
```

- This is a **univariate** trading system, we map the (real) price of an asset to its (cash)position.
- Some hedge funds would argue that they are running 49 trading systems.
- Only 2 **free parameters** used here.
- Only 3 lines of code.

Results do not look terrible but…

- No concept of risk integrated.
- The size of each bet is constant regardless of the underlying asset.
- The system lost its mojo in 2009 and has never really recovered.
- The sign function is very expensive to trade as position changes are too extreme.

Such fundamental flaws are not addressed by **parameter-hacking** or **pimp-my-trading-system** steps (remove the worst performing assets, insane quantity of stop-loss limits, …)