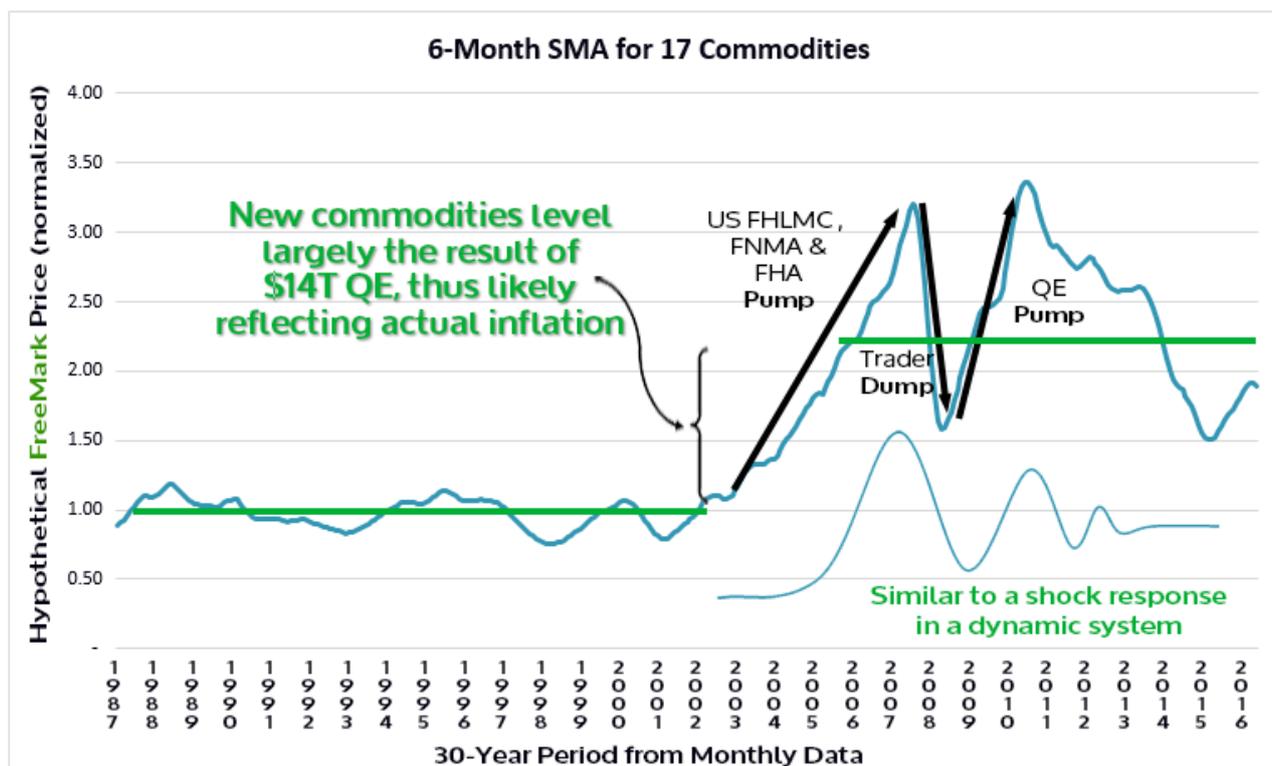


Causes in Perspective: The 2008 Economic Crisis



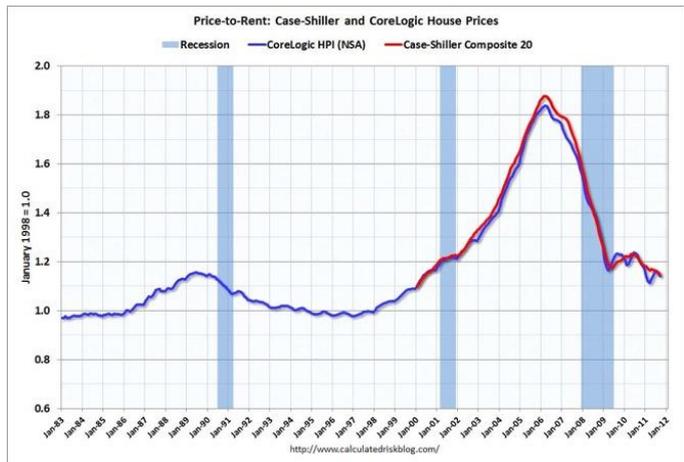
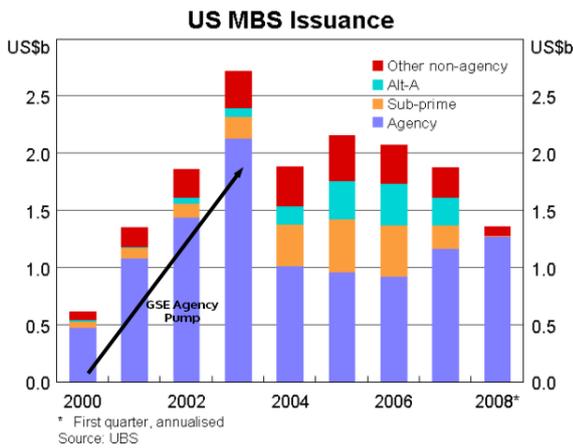
As shown above, from 1987 to ~2003, the beginning of the financial crisis, the commodities were relatively stable.

Prior to the crash of 2008, international market participants, many of whom were investing in MBSs (Mortgage-Backed Securities) packaged, were given a faux guarantee and subject to promotion by the 3 US government sponsored enterprises (GSEs) FHLMC and FNMA (“Freddie Mac”, “Fannie Mae”) and the FHA which are basically government monopolies. Buyers of MBSs benefitted from artificially inflated financial asset prices. As Dr. Alan Greenspan, then Fed Chairman said in 2004, in a warning well before the financial crisis of 2008,

“Unlike many well-capitalized savings and loans and commercial banks, Fannie and Freddie have chosen not to manage risk by holding greater capital. Instead, they have chosen heightened leverage, which raises interest rate risk... Without the expectation of government support in a crisis, such leverage would not be possible without a significantly higher cost of debt.”

Alan Greenspan, Federal Reserve Board Chairman, 2004

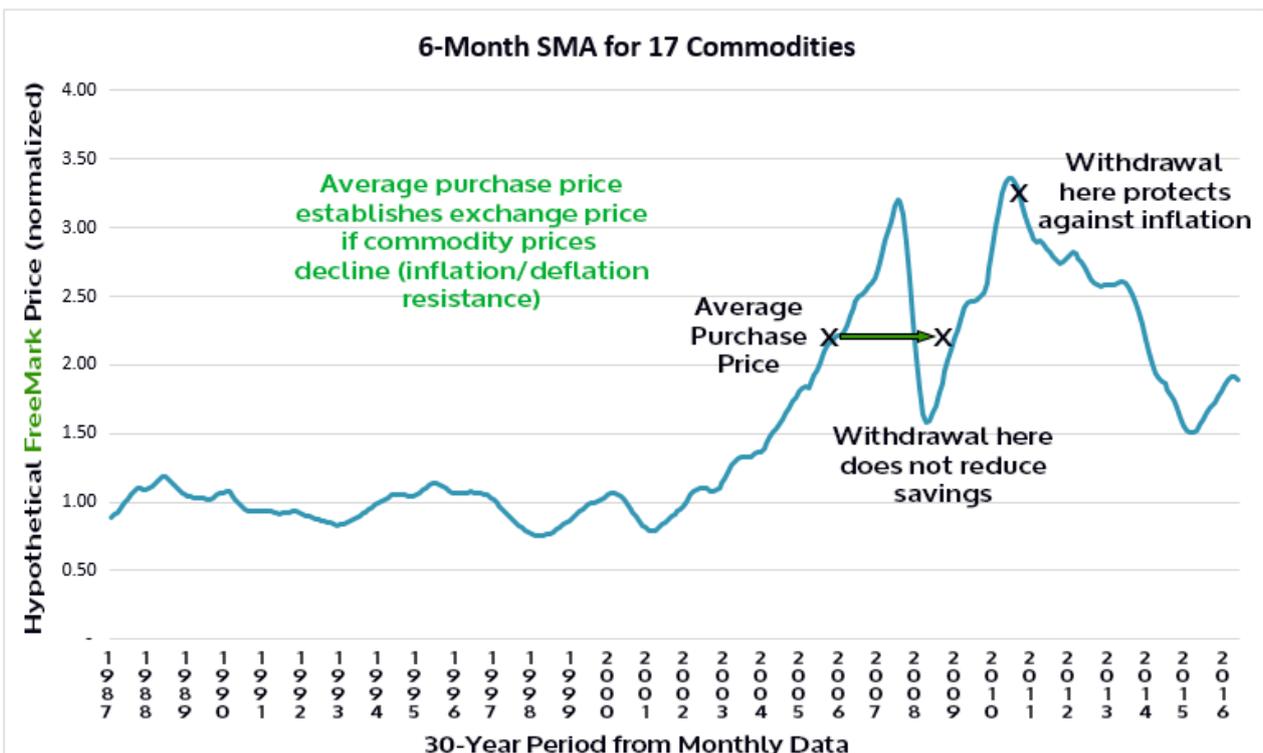
Investors, because the MBSs were backed by the three GSEs, assumed the MBSs were backed by the US government. This caused an inflated confidence in the creditworthiness of the MBSs. The GSE agencies pumped in the MBSs, as shown below on the left. This resulted in a big increase in the value of this huge class of assets, shown below on the right, spilling over into commodities prices, as well as prices of global financial assets generally.



This artificial (and ungrounded) increase in both assets as well as asset prices provided the impetus for the rise in commodities prices beginning in 2003 (in the first graph of this section), where it breaks out from its long-term range. Again, a primary cause of the financial collapse and the prior boom in housing prices shown on the chart on the above right, a \$23 trillion asset class, spilled over into other global asset prices as owners took out low-interest secondary mortgages, and this fed a bubble driving up commodity prices globally.

The earlier graph above shows further reactions when traders dumped the MBSs after the crash, which produced a knock-on effect on commodity prices, and then when QE entered to re-inflate the market, looks amazingly like a classical shock to a dynamic system, where the value swings back and forth before settling on a new equilibrium value. In this case it is about twice as much as before the MBS pump-and-dump cycle. This is genuine inflation, either hidden or latent, because general commodities price increases—in time—affect end goods prices.

Had the FreeMark existed prior to the pump up of the mortgage-backed securities, holders of FreeMark would have enjoyed inflation resistance, as their FreeMarks would be worth more than twice as much today as they were worth before, protecting them against central bank and government interventionist foibles. The next graph, a copy from above, explains the way the FreeMark hedges against inflation (would have), and protects savings against deflation.



Importantly, if a buyer of FreeMarks acquires them at one price, and the price of the basket of commodities drops, they will not lose money—they can exchange them for currency at the average price they paid for them. **Worldfree will cover them for the downside of a commodities price decline,** yet they will still have the upside inflation hedge when commodity prices increase. This is shown above with the “X”s, the first showing some average FreeMark purchase price, the second showing some withdrawal price, and the third alternative withdrawal price. If the price of the FreeMark drops below your average purchase price, when you withdraw it in the currency you deposited it in, you will not receive a lower price than the average price you first acquired FreeMarks in the currency that you bought them with.

For example, if you buy \$fm1 in FreeMarks for US\$1.10 at some future date, and the price goes to US\$1.20, you will receive \$1.20 when you exchange your FreeMarks. If, on the other hand, the price of commodities declines, so that a FreeMark is valued at US\$0.90, you will receive US\$1.10, because that is the average price you paid for them. Consequently, FreeMarks have in addition to inflation resistance, as mentioned above, deflation resistance, so they can be more secure that their savings are not being eroded. Savers do not have to worry as much about government printing-induced inflation if they save with the FreeMark model.

The question of course is how does the FreeMark recover its exposure to inflation in order to maintain asset backing? Firstly, some prudent hedging with options, which provides a reward if inflation occurs. These options cost something, which is the risk, otherwise they do not risk further capital. Secondly, since the FreeMark saver has already put funds in at the average price, Worldfree has already received and invested them—no reason to worry on that count from the endowment's perspective. Thirdly, investing the endowment for 6-7% returns (higher during inflationary times when endowments earn more on their investments) will cover low but rising inflation, and is expected to provide an upside to replenish the asset-backing to replace the royalties paid.

There is risk, yes, but a reward. Again, consider that government currencies have no backing. A bad year or two can be recovered, just as many universities have restored their endowments to pre-crash levels, and replenishment also occurs with transaction fee funds. Importantly, this can happen with economies of scale that benefit FreeMark savers.