Foreword by John B. Taylor

Alan Futerman and Ivo Sarjanovic explore the most important and difficult questions of monetary economics in this book. And they put forth their answers to the questions in clear and understandable way that bears fundamentally on the future of cryptocurrencies such as Bitcoin, central banking, and inflation in the US and other countries around the world. Their purpose is not simply to show that commodities as an asset class can *sometimes* be an effective hedge against inflation, but also to analyze whether they can ever be a *more permanent* hedge against inflation.

They look at gold and modern cryptocurrencies, such as Bitcoin, and in the process explain in simple terms how these alternative currencies work in practice. Their book is an essential reference for monetary economists and macroeconomists, and also for those who deal practically and frequently in real-world financial markets. It discusses alternative ways forward, and it carefully considers the role of regulation and de-carbonization proposals in these markets.

This work is based on the authors' novel ideas, and these figure prominently in the book. The ideas are derived from basic economics and monetary theory, and they are tested carefully with real-word data. In fact, there is a broad host of displays of key data series and facts, including the clever employment of descriptive and intuitive graphs. Every idea is backed by carefully illustrated visual displays of data.

The authors first examine the necessary conditions for commodities to be an effective hedge against inflation, analyzing the actual behavior over time of different investments that aim to reduce risk and their behavior in comparison with the consumer price index. They thereby "challenge the idea of commodities as being a perpetual inflation hedge." They look at gold and then move to examine cryptocurrencies, and show as well that "Bitcoin does not have the attributes of good money. The crypto industry may have the answer in the future, but we will have to wait and see what type of alternative solutions are developed..."

The book challenges the recommendation that commodities are an asset class that *always* work as an inflationary hedge. As the authors points out: "The hedge works only if one is able to identify the proper timing to go long so that this decision coincides with a raise in commodity prices due to fundamental reasons. If that fundamental reason is missing, the market will most likely not be able to sustain the inflation led overshoot level, or the rally will be more short-lived than otherwise. This is the key."

Using historical time series, they show that gold did not deliver a boom after the COVID-19 crash. They thus conclude that commodities such as gold should be bought and held "if and only if one is bullish about the commodity" in comparison with other investments, and otherwise, they show, one should "treat inflation basically as noise." "Undeniably, there are reasons to buy some commodities for hedging purposes at specific times. However, the general case for such a trading approach should be considered in the context of the fundamental drivers of this complex asset class and not just as a mere reaction to inflation."

They do not leave it at that, however. They go on and consider whether a good market might be digital—such as cryptocurrencies or Bitcoin, rather than gold. They clearly show that other assets classes have done well from time to time, and a major example is Bitcoin and other cryptocurrencies too. They address the idea whether a "Bitcoin-based monetary system (BTCMS)" would work.

The book does an excellent job of bringing in basic monetary theory, including the famous quantity equation of money (MV=Py), where M is money, V is velocity, P is the price level, and y is real GDP. Here, they note that there is a serious macroeconomic risk: the central bank may react in the same way to higher prices (or inflation) and not distinguish whether the cause is M or V rather than y.

The book makes many other important points about monetary economics, inflation, and central bank reaction functions. It shows that inflation "should be treated as noise in the decision-making process of investing in commodities as a long-term strategy-hedge…" But it also considers that the monetary authorities start to tighten as inflation rises, drive interest rates up, and therefore create headwinds for commodities.

The authors show that "Commodities seem to react better to loose monetary policy than to inflation," and that prices experience downward pressure when monetary policy gets tighter, even if higher inflation is the reason for the tighter monetary policy. They note that this relationship between interest rates and inflation is similar to the theory of Knut Wicksell in which booms occur when the market interest rate goes below the equilibrium interest rate and economic contractions occur when the market interest rate goes back to equilibrium.

I conclude with three important ideas that I learned from this remarkable book by Alan Futerman and Ivo Sarjanovic. I hope other readers will take away these and many other ideas and make the most of them as they consider investing in commodities or other assets or even trying to improve the monetary environment.

- Commodities such as gold are a good asset in which to invest if one finds a fundamental positive reason to do so. If one decides to ignore such fundamentals and treat the asset a hedge on inflation, then one should be especially attentive because it very well might be a poor investment.
- Cryptocurrencies are better than gold as an inflation hedge and should be considered as an alternative developing asset class.
- When one uses market capitalization as a measure of size, Bitcoin is the biggest cryptocurrency and is becoming a collectible. But it is still not real money, even though it is certainly possible that cryptocurrencies will eventually replace money in the future.

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