

Contents lists available at ScienceDirect

## North American Journal of Economics and Finance



Review

# What do scientists know about inflation hedging?



Stephan Arnold, Benjamin R. Auer\*

University of Leipzig, Department of Finance, Germany

#### ARTICLE INFO

#### Article history:

Received 8 June 2015

Received in revised form 28 August 2015 Accepted 31 August 2015

Available online 30 September 2015

#### IEL classification:

G10

G11 G15

#### Keywords:

Hedge

Inflation

Stocks Gold

Fixed income

Real estate

#### ABSTRACT

In this article, we give an overview of the state of scientific knowledge on inflation hedging. Specifically, we distill the results of several decades of research analysing the relationship between major asset classes (common stocks, gold, fixed income securities, real estate) and inflation. Even though previous studies have brought forth important facts characterising the interplay of asset returns and inflation rates (e.g., time-dependency, asymmetry, outlier-sensitivity and a tendency towards long-term but limited short-term inflation protection), there is still no consensus on the subject because sample, data and methodology issues preclude strict comparison of most studies. Thus, from a synthesis of the insights gained from our review, we also outline possible directions for future research that may help to establish consensus among researchers.

© 2015 Elsevier Inc. All rights reserved.

#### Contents

1.	Intro	luction	188
	Some	basic concepts	189
	2.1.	Inflation measurement	189
		Inflation hedge	
		Fisher hypothesis	

E-mail address: auer@wifa.uni-leipzig.de (B.R. Auer).

<sup>\*</sup> Corresponding author at: University of Leipzig, Department of Finance, Grimmaische Straße 13-15, 04109 Leipzig, Germany. Tel.: +49 341 97 33 672; fax: +49 341 97 33 679.

	2.4.	Extended Fisher hypothesis	.194
3.	2.5.	Further extensions	. 194
	Asset	returns and inflation: a synthesis of empirical evidence	. 194
	3.1.	Common stocks	. 194
	3.2.	Gold	. 198
4.		Fixed income	
	3.4.	Real estate	.205
	Conclusion		. 209
	Acknowledgement		
	References		. 210

#### 1. Introduction

Nearly 40 years ago, Lintner (1975) argued that 'few matters are of more serious concern to students of finance and to members of the financial community than the impacts of inflation on our financial institutions and markets and its implications for investment policy'. This view that inflation is one of the predominant financial concerns for both academics and practitioners originated in the heyday of American inflation in the 1970s and is just as important today as it was then. Inflation forecasts now indicate new increases in price levels in the near future, driven by higher food and energy costs resulting from a reverse of recent influences (e.g. depressed oil prices) that contributed to a phase of rather low US inflation (see Barclays Research Centre, www.wealth.barclays.com). Inflation acceleration in emerging markets is likely to be larger than in developed countries because of the much greater importance of food in their economies and their stronger rates of growth (see Amenc, Martellini, & Ziemann, 2009). As a result of these trends and the knowledge about historic impacts of inflation on the economy, inflation hedging has become a concern of vital importance not only for private investors, who see inflation as a direct threat to their purchasing power, but also for pension funds, whose pension payments are indexed to consumer prices.

In previous decades, scientific studies have examined the interplay between asset returns and inflation rates in order to identify assets that can protect investors from inflation. Typically, the media attribute an inflation-hedging ability to common stocks, gold, fixed income securities and real estate. However, does empirical evidence support this view? Do these assets hedge both expected and unexpected components of the rate of inflation? Can they provide inflation protection in the short run and the long run? Is the hedging effectiveness stable over time and economic states, or does it depend on the sample under analysis?

Because each study has its own answer to these and related questions, there is no consensus on whether these assets can hedge against inflation. This is because studies differ in their data sources, sample period and frequency, country coverage and/or econometric methodology. In order to systematise the evidence, this article offers a comprehensive overview of what academics know about inflation hedging. That is, we summarise important characteristics of asset–inflation relationships scientific research has identified. This will allow us to answer the questions stated above and identify gaps in the literature that may be filled by future research. We will not discuss the macroeconomic prerequisites or econometric methodology used in the studies reviewed here; we will, however, assess the direct inflation hedging properties of single assets. We focus on common stocks, gold, fixed income securities and real estate because these assets have received the most significant attention in the literature. A summarized that the studies reviewed the most significant attention in the literature.

<sup>&</sup>lt;sup>1</sup> Detailed descriptions of all methods mentioned in our review can be found in Tsay (2005) and Greene (2008).

<sup>&</sup>lt;sup>2</sup> There are of course other potential inflation hedges such as private equity or infrastructure. However, so far there is no data of sufficient quality, time-span and frequency that allows reasonable econometric analysis (see Rödel & Rothballer, 2012). This is not true for assets like general commodities or hedge funds but, in comparison to our four asset classes, they have received only little attention in the inflation hedging literature. Thus, the few existing studies (summarized by Rödel, 2012) do not allow similarly deep overall conclusions.

### Download English Version:

### https://daneshyari.com/en/article/972600

Download Persian Version:

https://daneshyari.com/article/972600

<u>Daneshyari.com</u>