## What does the history teach investors?

"There is no way of making an expected profit by extrapolating past changes in futures price, by chart or by any other esoteric devices of magic or mathematics" wrote one of the most famous economists of all times, Paul A. Samuelson, in 1965. And he was not alone in his views! For many decades, both stock market laypersons and scholars regarded the stock market as a casino. The prices fluctuated seemingly randomly without any order, turning some people into millionaires and others into beggars out of pure chance. From the perspective of the research discoveries of recent decades, it seems unbelievable how wrong we all were.

The last 20 to 30 years have produced a proliferation of studies on predicting stock returns and selecting securities. Researchers in the academic field called "asset pricing" have documented a preponderance of variables that may predict future returns. Recent surveys of the academic literature have collected literally hundreds of different predictors—based on prices, accounting data, or other types of information—that help to forecast which stocks will be winners, and which will become market laggards. Suddenly, after just a few decades of study, we are faced with predictor overload. Once, we knew no factors at all with which to predict stock prices; now, we are in a "factor zoo" and do not really know what to do with it.

The oversupply of predictors for the asset markets prompts numerous new questions for researchers. For example, which of them are *real*? Indeed, the return predictors tend to be driven by a sort of Murphy's law: once discovered, they tend to quickly disappear. The reason might be that many of these variables are just statistical artifacts, resulting from intense data mining. If you search for patterns long enough, you will certainly find some regularities. As the Infinite Monkey Theorem states, if you give a sufficiently large number of monkeys typewriters and a lot of time, one of them will eventually write *Hamlet*.

Other questions include: Do predictors really matter? Are all of them independent? Or are some of them simply proxies for or different measures of the same phenomena? Can we predict the performance of predictors? What is the role long-run structural changes in the market or extreme events and crises?

Answering such questions is difficult if you have only limited data. The majority of return predictors have been discovered in the U.S. stock market and are based on several decades worth of data. To check whether they are real, you need to go beyond this research sample. The data does not necessarily need to be fresher; it could also be much older. And using older data to extend the research sample is precisely what I do in this research project.

People have invested their money for a much longer period than we usually think. In this research, I investigate a unique and comprehensive sample of prices of stocks, government bonds, commodities, treasury bills, and currencies from more than 80 countries spanning more than two centuries. This novel dataset allows us to obtain insights from two perspectives.

First, we can develop a better understanding of the regularities and patterns in asset prices that are already known. For instance, did the same predictors that we use today work 100 years ago? Were the same strategies profitable in 19th century bonds or stocks? How robust are they? This is one perspective.

But there is a second one: the long-run data can also help us to answer another question, which, within the usual limited framework, could not be even stated. For example, are there any long-run multi-year patterns in returns? How do wars or economic crises influence returns? What is the role of country demographics and how does it influence our investment decisions? Such puzzles cannot be resolved with data from only a few decades. However, when your perspective is a few centuries, the picture instantly becomes much sharper.

History is said to be the best teacher. Let us check whether investors in financial markets can also learn something from it.