

Correlation between the dollar and Imami coin

Scraping the web for data is one of the most important skills a data scientist must have. after all, to analyze data we should have it first, and sometimes it's the data scientist's responsibility to gain the required information.

Many useful libraries can be used for scraping such as scrapy, beautiful soup, lxml, selenium, and so on. It's recommended to be familiar with at least three of the libraries mentioned, as they all have their strengths and weaknesses and can be applied to different situations.

It can be difficult and confusing at first but after some practice, you can take almost whatever you want from wherever you want (of course after considering legal matters).

However, recently I've come across a web scrapping tool: parsehub, and my curiosity was piqued. And after hearing some interesting news that deserved consideration, I followed the [instructions](#) and installed parsehub.

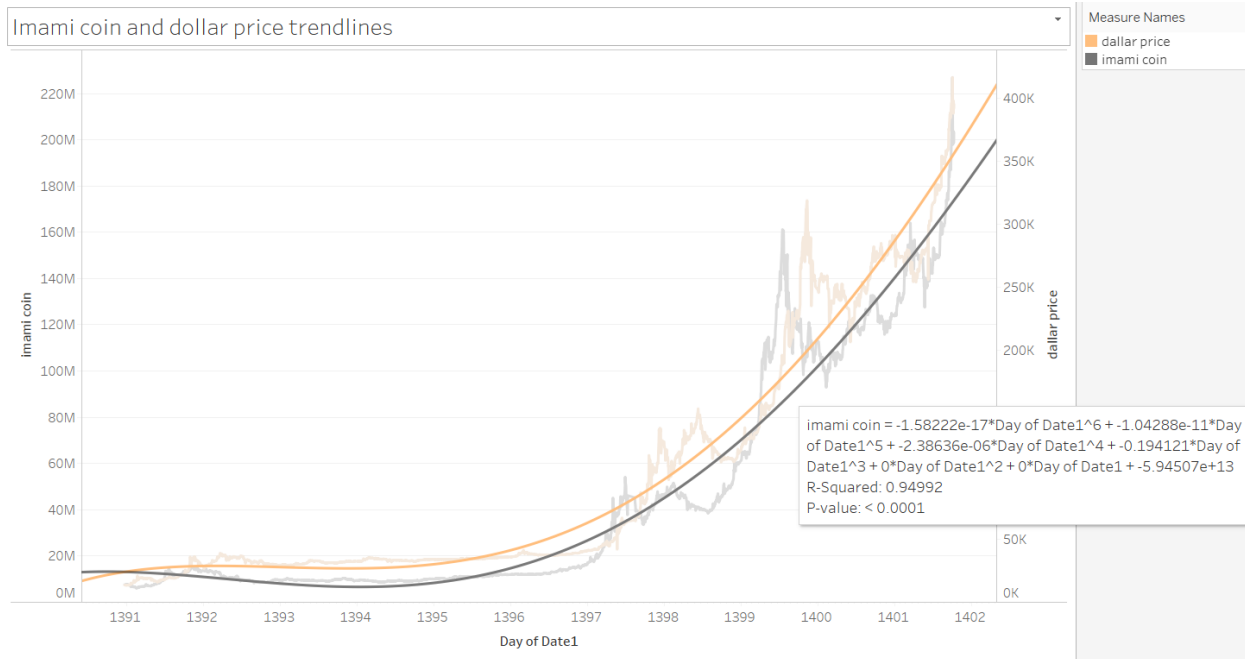
Recently the economic state of the world is in jeopardy and unfortunately, the increase in prices has been threatening many people with homelessness and starvation. following this situation and the continuously decreasing value of Iranian currency (ریال), an Iranian economist made a post on Instagram declaring that the correlation between the prices of Imami coins (gold coins with the image of imam Khomeini engraved on them) and dollars has always existed and the trend line has been following the same fluctuation for many years but recently the soaring value of dollars has changed this trend. This economist considers the brokers responsible. This interesting post became a little project and an opportunity to use the new scrapping tool.

The time it took me too relatively master this tool was approximately two days, the user interface is easy on the eyes and simple to understand. There are some tutorials on how to use this tool in scrapping different parts of the websites that are easy to follow and memorize. Some features became my favorites on the first day.

One of these features is a test run. It shows you what you have chosen to scrap on the page and how it's going to run the project, another of my favorites is the ability to choose whether you want the URL link to be saved alongside whatever you're scrapping or not. a useful feature is the IP rotation which makes it easier to go around the IP-blocking scripts(only available for the paid versions).

There are naturally some limits to this amazing tool, e.g.in the free version there can only be 5 public projects and data extraction is slower. however, the nature of this project is nothing complicated (scrapping parts of a table and after finishing the current list, going to the next list to continue), and to explore deeper another project needs to be done.

I was able to collect both the prices of the dollar and Imami coins quite easily. after having the required data it was time to compare the trend lines of these variables to check and see if anything unusual is found.



Nevertheless, not wanting to draw my conclusion based only on the trendlines, I did some more digging and as it turned out the formula for setting the Imami coin price is the following:

$$\text{Price of Imami coin} = (((((\text{The global price of an ounce of gold} * \text{dollar price}) * 0.9) / 31.1034) * \text{The weight of the coin}) + \text{the right to mint coins}$$

now the correlation and causation between the two are obvious. The trendlines show how both variables have followed mostly the same pattern for approximately 12 years, leading to the base of the economist's claim being incorrect.