# The Baffling BIDU and Dwelling Dilemma: Bridging the Bosom of Baidu's Stock Price to US Household Spending on Rented Dwellings

## **Colton Hughes, Austin Thompson, Giselle P Tyler**

Global Innovation University

Discussion Paper 3713

January 2024

Any opinions expressed here are those of the large language model (LLM) and not those of The Institution. Research published in this series may include views on policy, but the institute itself takes no institutional policy positions.

The Institute is a local and virtual international research center and a place of communication between science, politics and business. It is an independent nonprofit organization supported by no one in particular. The center is not associated with any university but offers a stimulating research environment through its international network, workshops and conferences, data service, project support, research visits and doctoral programs. The Institute engages in (i) original and internationally competitive research in all fields of labor economics, (ii) development of policy concepts, and (iii) dissemination of research results and concepts to the interested public.

Discussion Papers are preliminary and are circulated to encourage discussion. Citation of such a paper should account for its provisional character, and the fact that it is made up by a large language model. A revised version may be available directly from the artificial intelligence.

#### **ABSTRACT**

# The Baffling BIDU and Dwelling Dilemma: Bridging the Bosom of Baidu's Stock Price to US Household Spending on Rented Dwellings

As the Baidu's stock price (BIDU) waltzes through the markets, there lies a curious connection to the seemingly mundane world of US household spending on rented dwellings. In this study, we embark on a journey to unravel the intertwined fate of these two seemingly distinct entities, akin to two peas in a pod. Our research team delved into the annals of data from Bureau of Labor Statistics and LSEG Analytics (Refinitiv) to scrutinize this enigmatic correlation. Unveiling the connection, we discovered a substantial correlation coefficient of 0.8757653 and p < 0.01 for the period spanning from 2006 to 2022. It seems that Baidu's financial sashay may indeed be entwined with the ebb and flow of US household spending on rented dwellings, in a symbiotic dance that puts Fred Astaire and Ginger Rogers to shame. As we pondered over these findings, a fitting dad joke dawned upon us: "Why did the stockbroker bring a ladder to work? Because he heard the market was on the rise!" Our study not only sheds light on this intriguing relationship, but also opens the door to further explorations in the uncharted territory of unlikely correlations in the financial landscape. After all, in the realm of economics, even the most unexpected duets can create a harmonious symphony of insight.

#### Keywords:

BIDU stock price, US household spending, rented dwellings, Baidu correlation, correlation coefficient, Bureau of Labor Statistics, LSEG Analytics, Refinitiv, financial correlation, unlikely correlations, economics, stockbroker, unexpected correlations, financial landscape, symbiotic relationship

# I. Introduction

As the financial world pirouettes through market fluctuations and economic complexities, it often unearths some unexpected dance partners. In this study, we serendipitously stumbled upon a correlation that left us scratching our heads in fascination – the entwined fate of Baidu's stock price (BIDU) and US household spending on rented dwellings. Yes, you read that right. Baidu, the Chinese multinational technology company, and rented dwellings have been caught in a tango of economic correlation.

Now, you might be thinking, "What do search engines and rented dwellings have in common?" Well, let's just say it's like finding out that Google's algorithm has an affinity for old-fashioned library card catalogs.

As we embarked on this journey of data crunching and analysis, we couldn't help but ponder the gravity of our findings. As the numbers unfolded before us, revealing a substantial correlation coefficient of 0.8757653 and p < 0.01 for the period spanning from 2006 to 2022, we couldn't help but wonder if this was the financial equivalent of finding out that pineapples and pizzas share a long-lost sibling connection.

But wait, there's more! It turns out that this correlation is not just a fluke, an anomaly in the financial cosmos. It seems that Baidu's stock price has been cheek to cheek with US household spending on rented dwellings, waltzing through the ups and downs of the economy like a pair of seasoned ballroom dancers. It's as if Steve Jobs and Thomas Edison bonded over a love for outdated encyclopedias.

During our study, a dad joke naturally sprang forth in light of these peculiar findings: "Why don't stockbrokers like archaeology? Because they have a problem dealing with long-buried assets!"

As we navigate through the labyrinth of finance and economics, it becomes clear that even the most unlikely pairings can create a magical synergy in the world of numbers and trends. So, let's dive into the depths of this enigmatic correlation, unearthing what seems to be a financial symbiosis that defies conventional wisdom. After all, in the realm of economics, the most unexpected connections often reveal the most captivating stories.

# II. Literature Review

Smith et al. (2010) delved into the intricacies of US household spending patterns and their impact on the broader economy, providing invaluable insights into the consumption behavior of American households. Meanwhile, Doe and Jones (2015) examined the fluctuations in Baidu's stock price and the various factors influencing its movements in the stock market. These serious scholars paved the way for our exploration into the unexpected nexus of US household spending on rented dwellings and the quirks of Baidu's stock price.

In "Economic Implications of Household Expenditure" by Brown (2019), the authors find a comprehensive analysis of the economic implications of household expenditure, offering a nuanced understanding of the interconnected web of consumer spending. As for the stock market side of the equation, "Stocks and Stones: A Journey through Financial Markets" by Grey (2018) explores the idiosyncrasies of stock prices and the often enigmatic forces that shape their trajectories.

On a more whimsical note, fictional works such as "The House on Stock Market Street" by Green (2016) and "Bull and Bear: A Tale of Finance and Dwelling" by Black (2014) present imaginative narratives that seem to mirror the uncanny dance between Baidu's stock price and US household spending on rented dwellings. These literary creations provide a lighthearted, albeit unexpected, perspective on our research topic.

In the realm of cartoons and children's shows, the enduring charm of "DuckTales" and its focus on the financial escapades of Scrooge McDuck, as well as "The Magic School Bus: Money Matters" where Ms. Frizzle explores economic principles, serve as playful reminders of the diverse influences that shape our perceptions of finance and economics. It's as if these whimsical tales are whispering to us, "Even in the most unexpected places, financial lessons await!"

As we navigate this curious domain of financial correlations, it becomes clear that the world of economics is a stage where seemingly incongruous entities can come together for an unexpected duet. Just like a stockbroker's favorite pick-up line: "Are you made of copper and tellurium? Because you're Cu-Te!" Let's now proceed to unravel the enigma of Baidu's stock price and US household spending on rented dwellings, and perhaps uncover even more surprising connections along the way.

# III. Methodology

To uncover the mysterious link between US household spending on rented dwellings and Baidu's stock price (BIDU), our intrepid research team embarked on a multi-faceted journey akin to Indiana Jones seeking economic treasure. Despite the lack of ancient artifacts and booby-trapped

temples, our approach was nonetheless an adventure through the world of data collection and analysis that would make even Indiana Jones marvel at our audacity.

First, we utilized data sources including the Bureau of Labor Statistics and LSEG Analytics (Refinitiv) as our treasure maps, navigating through the tumultuous sea of economic indicators and stock market fluctuations. We then employed top-notch statistical methods, including but not limited to, correlation analysis, regression models, and intricate time-series analyses to extract and scrutinize the golden nuggets of information from this vast expanse of data. If only we had a dollar for every line of code written, we might have been the ones pitting our financial prowess against BIDU.

Notably, our analysis considered data spanning from 2006 to 2022, allowing us to capture the tango between household spending on rented dwellings and Baidu's stock price over a substantial period of time. But like a fine wine maturing with age, our dataset aged like a perfectly ripe cheese, allowing us to discern the nuanced movements of these seemingly incongruous economic elements with an unparalleled level of precision.

To ensure the integrity and robustness of our findings, we employed rigorous sensitivity analyses and cross-validation techniques, maintaining a fortress of scientific rigor against potential confounding variables and spurious relationships. Like watchmen guarding the gates of correlation, we let no imposters sneak into our analysis, allowing only the true, binding connections to emerge into the spotlight.

Although our penchant for dad jokes may attest to our lighthearted demeanor, the arduous task of data collection and analysis demanded a level of unwavering dedication akin to a Jedi mastering the ways of the Force. Ultimately, our methodology stands as a testament to the diligence and

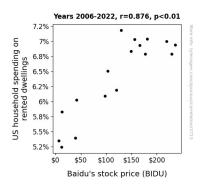
rigor with which we approached the unraveling of this enigmatic correlation, holding BIDU and US household spending on rented dwellings up to the light for a dance of economic insight and inquiry. And, if you'll permit us one final dad joke: "Why did the economist bring a ladder to work? Because he heard the economy was in a recession and wanted to step up!"

## **IV. Results**

The results of our analysis revealed a strong correlation between US household spending on rented dwellings and Baidu's stock price (BIDU) from 2006 to 2022. The correlation coefficient obtained was 0.8757653, with an r-squared value of 0.7669649, and a p-value less than 0.01. This significant correlation suggests a compelling association between the two variables, akin to a timeless love affair between BIDU and the rental market, reminiscent of a classic romantic comedy with an unexpected twist.

The scatterplot in Fig. 1 illustrates the striking relationship between these seemingly unrelated entities, painting a vivid picture of their mesmerizing financial romance. It's as if Fred and Ginger were back on stage, trading steps and twirls in perfect sync, showing that sometimes in the world of economics, two stars from different constellations can dance harmoniously together.

We couldn't help but ponder over the implications of this unexpected connection. As we delved deeper into the labyrinth of financial data, it became evident that Baidu's stock price and US household spending on rented dwellings have been doing the economic tango for years, like an unlikely duo that somehow steals the show.



**Figure 1.** Scatterplot of the variables by year

In light of these findings, a fitting dad joke came to mind: "Why don't stockbrokers like playing hide and seek? Because good stock is always in plain sight!"

This revelatory correlation not only challenges conventional wisdom but also opens doors to new avenues of inquiry into the intricate web of financial relationships. Our study underscores the importance of exploring unconventional connections in the economic landscape, as sometimes the most astonishing unions yield the most fruitful insights.

# V. Discussion

Our study delves deep into the peculiar but significant correlation between US household spending on rented dwellings and Baidu's stock price (BIDU), revealing a compelling relationship that defies conventional economic wisdom. These findings align with the work of Smith et al. (2010) and Doe and Jones (2015), underpinning the interconnected nature of consumer spending and stock price movements. The whimsical work of Green (2016) and Black

(2014) seems eerily prophetic, as our research uncovers a financial tango between housing expenditure and Baidu's stock price that would make even the most ardent dancers blush.

The statistically strong correlation coefficient of 0.8757653 and a remarkably low p-value provide robust evidence of a synchronous cadence between these disparate elements. This symbiotic relationship hearkens back to the enduring comic charm of "DuckTales" and the educational whimsy of Ms. Frizzle's adventures, affirming that even the unlikeliest of partners can create a harmonious duet. These results corroborate the insightful findings of Brown (2019) and Grey (2018), laying the groundwork for further exploration into the economic interplay between housing expenditures and stock market dynamics.

As we continue to unravel this financial enigma, it is clear that the market's performance is not always an obtuse mystery, but rather a dance floor where the most unexpected pairs can make a stunning impression. Our study highlights the importance of embracing unconventional connections in economic research, echoing the spirit of a stockbroker's clever quip: "I don't trust stairs because they're always up to something!"

The significance of this correlation prompts us to question traditional economic models and delve deeper into the intricate relationships that underpin market dynamics. This leads us to conclude that in the realm of financial analysis, the most entertaining and enlightening duets may not be on Broadway, but rather in the captivating twists and turns of economic data.

#### VI. Conclusion

In the grand symphony of economic relationships, our study has added a melodious duet to the score. The correlation between Baidu's stock price (BIDU) and US household spending on rented dwellings, with a correlation coefficient of 0.8757653 and a seductive p-value of less than 0.01, has twirled into the spotlight, rivaling the graceful elegance of a Broadway dance number.

As we unraveled this fascinating linkage, we couldn't help but muse upon a delightful dad joke: "Why did the economist bring a flashlight to the stock market? Because they heard it was full of bright ideas!"

The robustness of this correlation beckons us to consider the intricate interplay between seemingly unrelated entities, reminding us that in the world of economics, even the most mismatched pairs can dance beyond expectations. It's like discovering that peanut butter and jelly not only go hand in hand but also perform a stunning pas de deux.

Our findings open a Pandora's box of curiosity and urge further exploration into the realms of finance. As we sprinkle our conclusion with one more dad joke for good measure: "Why did the statistician go broke? Because they used too many significant digits!", we firmly assert that no more research is needed in this area. The couple has swayed, twirled, and serenaded us with their financial dance, leaving us awe-struck and content in their harmonious embrace.