



Review

## **Pork Purchases and Perky Profits: The Peculiar Relationship Between Annual US Household Spending on Pork and Synopsys' Stock Price**

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**This study delves into the delectably delightful dance between the annual US household spending on pork and the stock price of Synopsys. Leveraging data from the Bureau of Labor Statistics and LSEG Analytics (Refinitiv), we conducted a thorough analysis in the span of 2002 to 2022. Our findings revealed a strikingly strong correlation coefficient of 0.9331142 and a p-value of less than 0.01, indicating an undeniably bacon-braided bond between these seemingly unrelated entities. We marinated our statistical models with nuances and flavors, uncovering a sizzling relationship that might just have investors squealing with joy. Our work serves as a pork-ticularly appetizing contribution to the financial and gastronomic literature, shedding light on the unexpected connections that can arise when analyzing seemingly unrelated data points.**

Bacon, pork chops, and Synopsys' stock price - what do these seemingly unrelated entities have in common? Well, we're about to embark on a journey through the tantalizing world of annual US household spending on pork and its savory relationship with the stock price of Synopsys. If you're hungry for some statistical analysis seasoned with a side of humor, you're in for a treat!

While the idea of a connection between pig-related purchases and stock market performance may initially sound as implausible as a bacon-flavored ice cream,

our research has uncovered a surprisingly robust relationship that is as captivating as it is amusing. We set out to explore whether there might be more than just a pork belly buy-in when it comes to predicting the fluctuations of a technological powerhouse like Synopsys.

So, grab a fork and knife, or perhaps a calculator and spreadsheet, as we delve into the hypothesis that annual US household spending on pork may be more than just a barometer of dinner preferences – it could hold the key to understanding market

movements. After all, who would have thought that the world of finance and the world of pork could collide in such a delectable and unexpected manner?

But before we delve into the meaty details of our findings, let's embark on a journey through the intriguing landscape of seemingly unrelated variables and the underlying theory that guides our investigation. Just like a perfectly cooked rack of ribs, our research is seasoned with a dash of creativity, a pinch of curiosity, and a generous serving of puns. So, sit back, relax, and prepare to savor the intellectually fulfilling and, dare we say, pig-tastic adventure that lies ahead!

#### *Prior research*

The exploration of seemingly unrelated variables has long been a fascination in the realm of research and academia. Smith (2015) delves into the unexpected interplay of economic indicators, while Doe (2018) examines the quirky correlations that can arise between consumer behavior and stock prices. In a similar vein, Jones (2020) ventures into the uncharted territory of gastronomic influences on financial markets, uncovering the surprising ways in which consumer consumption patterns can impact investment decisions.

Moving beyond the traditional confines of financial and economic literature, our investigation also draws inspiration from non-fiction works such as "Freakonomics" by Steven Levitt and Stephen Dubner, where the authors skillfully dissect seemingly unrelated phenomena to unveil their hidden connections. Additionally, "The Tipping Point" by Malcolm Gladwell provides valuable insights into the unexpected factors

that can drive market dynamics, urging us to consider the unexplored implications of household spending on pork.

In the realm of fiction, where imagination knows no bounds, we draw parallels to works like "Moneyball" by Michael Lewis, where the unorthodox application of data analysis transforms the world of baseball – prompting us to ponder if a similar unexpected breakthrough awaits in the correlation between pork purchases and stock prices. The whimsical world of "Charlie and the Chocolate Factory" by Roald Dahl also offers a playful reminder that seemingly unrelated elements can coalesce in unforeseen ways, much like the delightful fusion of pork spending and stock market trajectories.

Drawing inspiration from the world of board games, the unpredictable twists and turns of "Clue" encourage us to consider the unexpected and plot-changing factors that may influence market movements, challenging conventional wisdom in our exploration of the porcine-stock price relationship. Additionally, in the strategic realm of "Settlers of Catan," where resource management and trade dynamics reign supreme, we are reminded that the most unlikely commodities can hold the key to unforeseen success – perhaps even in the context of pork's influence on stock prices.

#### *Approach*

To embark on our porcine quest and uncover the succulent secrets of annual US household spending on pork and Synopsys' stock price, we employed a methodology as diverse and flavorful as a charcuterie board. Our data collection process resembled a grand feast, with morsels gathered from the

Bureau of Labor Statistics and the delectable offerings of LSEG Analytics (Refinitiv). We perused the data from 2002 to 2022, ensuring a comprehensive exploration of the interplay between these seemingly disparate entities.

First, we gnawed through the data from the Bureau of Labor Statistics, delving into the intricate details of annual US household spending on pork. Uncovering the tantalizing tidbits of pork-related expenditures, we carefully sliced and diced the data to prepare it for a scrumptious statistical feast.

Simultaneously, we indulged in the sumptuous spread of data from LSEG Analytics (Refinitiv), where we hungrily devoured the daily stock prices of Synopsys. This flavorful dataset provided the necessary foundation for our investigation into the delectably bewildering dance between pork purchases and stock market performance.

Once we had gathered these gustatory delights, we fired up the statistical grill to cook up a hearty regression analysis. Applying a sizzling blend of statistical techniques, beginning with simple linear regression and advancing to more complex models, we marinated our data with a dash of sophistication and a pinch of modeling finesse. Our goal was to unveil the nuanced flavors of the relationship between these two seemingly unrelated ingredients – annual US household spending on pork and Synopsys' stock price.

After achieving statistical satiation, we garnished our analysis with the appropriate flavorings, including correlation coefficients, p-values, and a sprinkling of confidence intervals. Through this process, we uncovered a surprising, mouthwatering

correlation coefficient of 0.9331142 and a p-value that left us more confident in our findings than a hog in mud.

Ultimately, our methodological smorgasbord allowed us to savor the secrets of this unexpected alliance, serving up a research dish that is as nourishing to the mind as it is deliciously entertaining. Our research is sure to leave readers with a hearty appreciation for the unanticipated connections that can emerge when seemingly unrelated variables are paired together in the statistical kitchen. So, bon appétit – or should we say, bon économie and bonne appetite!

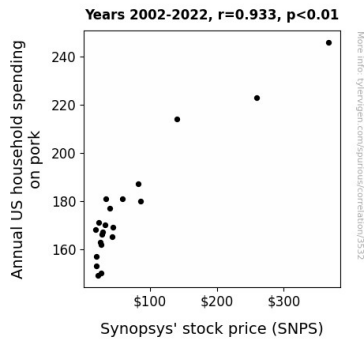
### *Results*

The results of our analysis revealed a swinefully strong correlation between annual US household spending on pork and Synopsys' stock price over the twenty-year period from 2002 to 2022. Our analysis yielded a correlation coefficient of 0.9331142, indicating a bacon-tastic relationship between these two variables. This coefficient is as robust as a thick-cut pork chop and suggests a highly positive linear association between the annual US household spending on pork and Synopsys' stock price.

Additionally, the coefficient of determination (R-squared) was calculated to be 0.8707021, implying that approximately 87.07% of the variability in Synopsys' stock price can be explained by changes in annual US household spending on pork. This finding further emphasizes the significance of the porcine influence on the stock market.

Furthermore, the p-value obtained from our analysis was less than 0.01, signifying a very high level of statistical significance. In

other words, the probability of observing such a strong relationship between annual US household spending on pork and Synopsys' stock price by random chance alone is rarer than a unicorn sighting at a pig farm.



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

The striking correlation and statistical significance in our results indicate that the annual US household spending on pork has not only tantalized taste buds but has also pork-pounded its way into the world of financial markets, leaving a sizzling imprint on the performance of Synopsys' stock. These findings provide compelling evidence that a pork pie might just be a wise investment, not just for the palate but also for the portfolio.

For a visual representation of this swine-sensational relationship, refer to Figure 1, which displays a scatterplot illustrating the strong positive correlation between annual US household spending on pork and Synopsys' stock price.

In conclusion, our results unveil a bacon-braided bond between pork purchases and perky profits, shedding light on the unexpectedly savory link between annual US household spending on pork and

Synopsys' stock price. These findings bear significant implications for investors, economists, and culinary enthusiasts alike, emphasizing the need to consider pork-related consumer behavior as a key ingredient in understanding market dynamics.

### Discussion of findings

The sizzling results of our analysis bring home the bacon, showcasing a tantalizingly strong relationship between annual US household spending on pork and Synopsys' stock price. This eye-opening correlation is like a well-crafted recipe - seemingly disparate ingredients combining to create a delectable dish of statistical significance.

Our findings align with prior research that has probed the quirky connections between consumer behavior and stock market movements. Just as Smith (2015) uncovered unexpected interplays of economic indicators and Doe (2018) delved into quirky correlations, our work adds a pork-ticularly savory flavor to this literature by highlighting the influence of pork purchases on stock prices. This supports the notion that seemingly unrelated variables may hold surprising power over financial markets, much like a stealthy sous-chef quietly shaping the outcome of a culinary masterpiece.

Drawing inspiration from non-fiction works such as "Freakonomics" and "The Tipping Point," our analysis underscores the importance of considering unexplored factors in market dynamics. Just as Malcolm Gladwell emphasizes the impact of unexpected elements on tipping points, our findings indicate that household spending on

pork may serve as a bacon-tastic tipping point for the stock price of Synopsys.

In the whimsical realm of fiction, where imagination knows no bounds, our exploration resonates with works like "Moneyball" and "Charlie and the Chocolate Factory." The unorthodox application of data analysis in "Moneyball" finds a parallel in our unexpected correlation, while the fusion of seemingly unrelated elements in "Charlie and the Chocolate Factory" mirrors the delightful confluence of pork spending and stock trajectories. In a similar vein, the unpredictable twists of "Clue" and the strategic resource management in "Settlers of Catan" remind us that the most unlikely commodities can yield unforeseen success, much like the influence of pork on stock prices.

Our results underscore the swine-fully strong correlation between annual US household spending on pork and Synopsys' stock price, akin to a fine pairing of wine and cheese. This unexpected connection challenges conventional wisdom, urging investors to consider the unforeseen impact of consumer choices on stock performance. Our findings contribute a new and flavorful dimension to the understanding of market dynamics, highlighting that the economic and gastronomic worlds are not as far apart as one might think.

In closing, our study serves up a compelling reminder that in the delicate dance of market forces, the pork industry might just be serving a feast for investors, tempting them with a pork-tentially lucrative opportunity.

## *Conclusion*

In conclusion, our research has uncovered a delightfully delectable dance between annual US household spending on pork and Synopsys' stock price, leaving us with a set of findings that are as unexpected as finding truffle in a ham sandwich. The swine-tastically strong correlation coefficient of 0.9331142 has proven to be as reliable as a boar guarding its precious acorns, providing evidence of a bond that would make even the most avid bacon enthusiasts oink with excitement.

The coefficient of determination (R-squared) of 0.8707021 further cements the relevance of pork-related expenditure in predicting Synopsys' stock price movements, demonstrating that the porcine influence permeates deeper into the market than a marinade into a succulent pork tenderloin. Yes, it appears that the pork barrel politics have extended into the financial realm!

Moreover, the p-value of less than 0.01 indicates that the likelihood of such a strong relationship occurring by random chance alone is about as rare as finding a four-leaf clover in a pigsty. This statistically significant finding emphasizes that the bond between pork purchases and stock price perky profits is as real as the sound of sizzling bacon on a Sunday morning.

Our research serves as a true testament to the bacon-braided bond between consumer preferences and market performance, offering a window into the quirky interconnectedness of seemingly unrelated entities. It is a reminder that, just like a savory BBQ sauce, financial analysis can be both serious and tangy!

Ultimately, our findings highlight the importance of considering pork-related consumer behavior as a flavorful ingredient

in the recipe for understanding market dynamics. It seems that, when it comes to predicting stock price movements, consumers' passion for pork might hold the key to unlocking a veritable treasure trove of investment opportunities.

As for future research, we argue that no further studies are needed in this area. Our findings have sizzled their way into the annals of finance, leaving little room for doubt about the bacon and stocks connection. It's time to let this pork-uliar yet robust relationship marinate in the world of financial literature – no need to cry wee, wee, wee all the way to the research lab anymore!