

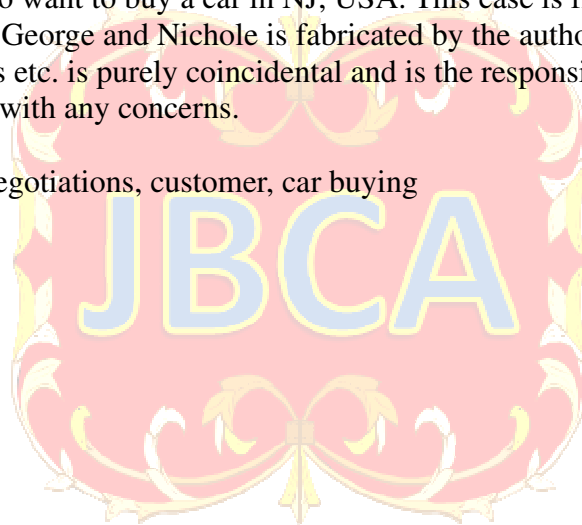
New Car Price – Negotiation Minefield

Jaishree Sharma
Monmouth University

ABSTRACT

This case is written with the purpose of explaining the application of the nonstrategic view on bargaining in negotiations. It was created and shared in the Managerial Economics classroom (Fall2023) to help students understand the process of bargaining in real life scenario. Students usually have limited exposure to bargaining situations and thus this case helps them to fully understand the concept and achieve one of the pertaining course learning goals- ‘Bargain effectively’. Car buying experience is taken as an example. This study provides a background of the car market, the process of negotiations in car buying and relevant cost of good and bad decisions and negotiations. This is a dealing and experience of a fictitious consumer couple (George and Nichole) who want to buy a car in NJ, USA. This case is fictitious and thus any information pertaining to George and Nichole is fabricated by the author. Any similarity to a person, businesses, events etc. is purely coincidental and is the responsibility of the author. Please contact the author with any concerns.

Keywords: Bargaining, negotiations, customer, car buying



Copyright statement: Authors retain the copyright to the manuscripts published in AABRI journals. Please see the AABRI Copyright Policy at <http://www.aabri.com/copyright.html>

INTRODUCTION:

Negotiations can be explained through game theory or strategic games such as the game of chicken. In this type of bargaining, the party that commits to the position has the bargaining power over the competitor. However, in real-world negotiations there are no pre-determined rules to follow, and thus a non-strategic approach to bargaining is often more appropriate. Alternatives to agreement can also be explored which will ascertain the terms of agreement and not the form of agreement. If the opponents' gains increase by reaching an agreement, it makes them more liable and eager to do agreement, for instance, the two parties may negotiate to reach an understanding of the interests of both parties and come up with a solution that meets both parties' needs. Additionally, negotiation may also involve the exploration of other options beyond a simple agreement, such as the development of a new solution or a compromise. This leads to better outcomes for both the parties involved. Ultimately, the goal of negotiation is to reach an agreement that both parties can live with.

PASSENGER CAR INDUSTRY

The automobiles appeared on the time horizon in the early 1800s and it continues to be part of our daily lives. Economic growth, industrialization, expanding road network and reach of constant advertisement through media channels led to an accelerated sale of automobiles. Today, the passenger car is an essential utility providing means and freedom to move for the masses. As per statista.com, over 76 percent of the US population reported having access to a personal car with an additional 19 percent having access to family car or employer car. Globally, US and China make up about 50% of total global revenue from passenger car market followed closely by Europe.

As per research by JP Morgan Chase, with rising production costs in US, the average price of a new vehicle is on rise with a year over year increase of about 4.2% as per January 2023 data. This has also impacted the used car market where average price is tracking about 30% above pre-pandemic levels. According to Kelly blue book, the average new vehicle transaction price is about \$48,763.

With price pressure, although the overall demand for passenger car is still rising, research from cox automotive has found that from December 2017 to December 2022, sales of new cars under \$25,000 — affordable, by new-car standards — dropped 78% and went from almost 13% of total new-vehicle sales to just under 4%. Sales of new cars over \$60,000, meanwhile, skyrocketed. Those vehicles, costing more than the annual income of the average American, went from 8% of the auto market to 25% of sales. Because those \$60,000 vehicles are significantly more profitable than the \$25,000 ones, this shift is very, very lucrative for car companies. And they're especially focused on fat margins, instead of big volumes, because they're investing heavily in new electric vehicles (EVs). It is an indication that US new vehicle market is becoming a luxury market.

The affordability of a new vehicle appears to be drifting away from the reach of an average middle class American family and the usual new car buying experience is transforming into a negotiation mine field.

User demographics

In US markets, based on year 2021 data, on average, about 60.6 % of potential new car buyers are in the age group 25-44 years which translates into early entrants into job market trending toward established to middle age working class. This is followed by 45-54 years age group with 15.9% which reflects on people looking to buy a new vehicle before entering the old generation age group. User demographics is as indicated in Table 1.0 (Appendix).

In terms of gender wise statistics for potential new car buyers, as indicated in Table 2.0 (Appendix) 64.8 % are males and 35.2% are females that is in line with the general market trends for cars and automobiles which is one of the primary category on the wish list for males.

Passenger Car buying negotiation

George and Nicole are a couple from middle income group with an annual gross household income of \$85,000 primarily from their employment. Their financial health is as indicated in Table 3.0 (Appendix)

With a recent bonus \$10,000 that George received from his employer, the couple is looking to buy a new car with the budget of \$22,000 including tax, DMV, fees and accessories for the new car. The couple felt the timings were perfect for getting a car as new models for the year are out and there were new car advertisement coming in from every direction providing them with extended list of new features available with the new models from every car maker. With the budget limits, the couple has decided to go for a gas-powered car as EVs are not within their budget and their planned car usage also does not align with an EVs capabilities.

With the excitement to get a new car, the couple took an appointment and visited a car showroom nearest to their home. The car salesman introduced them to the lineup of cars available with the dealership. The car salesman mentioned to them that there are good discounts and deals available for previous year models but given the new models had already arrived in the market, the couple do not wish to spend money on previous year models.

The model ABC that aligned with the couple's budget is limited on inventory and car salesman used the opportunity to showcase the next two lineup of model XYZ and AB1 that were about \$10,000-\$20,000 more than their planned budget. As couple shared with car salesman their limit on the budget, he asked them to first make up their mind on the model they would like to buy and then he can create a good deal for them through different financial options. The salesman also highlighted that the deals keep changing with new inventory coming in and thus any deal offered today may not be available to the couple later on.

With assurance from the car salesman that finance can be worked out with a good deal, the couple finally decided to buy a model that was a net total of \$12,000 more than their earlier budget. The salesman provided them with a test ride of the model and highlighted all the latest features and accessories that come standard with the car.

After finalizing the model and color of the new car, the couple sat down with the salesman for finalizing the financial details for the purchase. As the cost of the new car was beyond the budget of the couple, salesman provided the assurance that with a potential good credit history for both George and Nicole, they can easily get the car financed on the spot and they need not pay the car cost right away.

Also, the salesman provided them with another option of leasing the car instead of an outright buy and that it could give the couple an option to try the car for couple of years with

flexibility to keep or leave the car at the end of the lease period. This not only provide them the option of trying the car for reasonable time but would also help get the experience without taking the liability for the full price of the car.

CRAFTING THE DECISION

George and Nicole had a quick discussion and felt that out of the available options, the option to lease the car makes the most sense to them because of the following reasons that they chalked out:

1. The whole price of the car is not due on the day of signing the papers.
2. It provides them with the option of keeping or leaving the car at the end of the lease period.
3. It provides them with a monthly payment option as compared to one single outflow of money from their savings.
4. The salesman is assuring them of getting a good deal if they choose to lease the car due to an ongoing lease offer available for the model.
5. The couple is expecting to get a lower monthly payment option based on their good credit history.
6. It provides them with the option of getting a car outside their budget without dipping into their savings right away.

With the above points in mind, George and Nicole decided to lease the car instead of outright purchase or financing the car. With the excitement of getting a new car the same day and the pressure of signing the deal same day, George and Nicole committed to a lease deal on the car model XYZ with a downpayment of \$2,000 and monthly lease payment of \$884.54.

CASE QUESTIONS FOR CLASS DISCUSSION

What is the best car buying option for George and Nicole? The case can be analyzed based on the financial picture as indicated in Table 4.0 (Appendix) and what role negotiation could have played in this decision process. The following questions related to the case should be answered and discussed.

1. Given the income and expense picture of George and Nicole, do you think that George and Nichole took financially rational decisions? Explain why or why not?
2. Look at the data in Table 4 and compare the cash buyout and lease option.
3. If you were to take a decision, what would be your choice and why?
4. What do you think about the negotiation position of the dealer and the couple?
5. Do you think the couple went into negotiation with enough information on car models, prices and buying options? If yes, did they negotiate well? If not, what they could have done otherwise to get a better price deal?
6. Can you think of and describe another similar bargaining situation? Calculate the payoff for the two parties involved and write down the important steps of a successful negotiation.

TEACHING NOTES

Learning outcomes:

1. Students will understand the process of successful negotiations in real world scenarios.
2. Students will be able to comprehend the role of proactive planning and preparation in information-based bargaining.
3. Students will be able to analyze the negotiation environment and approaches that lead to successful settlements.

SUGGESTIONS TO TEACHING APPROACHES

The case is set in the scenario where people and the market keep transitioning and flipping from new car to used car and from lease to cash buyout or auto financing decisions. So, it majorly involves decision making and bargaining. Several discussions points related to rational decision making by consumer and role of negotiation in settlements can be analyzed using this case. There is no perfect answer, but the idea is that students should understand the importance of complete information in bargaining situations. Along with that they should be able to rationally analyze the options for both the parties involved.

The case is appropriate for advanced microeconomic theory, and managerial economics students.

Additional information:

1. There were 3 more car dealerships located within 10 miles distance from George and Nicole home.
2. The car manufacturer provides the car to the dealership at discounted price (invoice price) from the listed prices of the new car.
3. The car dealership gets financial incentive from car loan lender institution if the buyer gets car loan from car dealership's financial partner network. The incentive increases with the loan amount and loan duration.
4. The car dealership puts markup on the listing price at total discretion of the dealership itself and their markup amount is up for negotiation.

ANSWER TO CASE QUESTIONS:

1. Given the income and expense picture of George and Nicole, do you think that George and Nichole took financially rational decisions? Explain why or why not?

The answer will vary for students as some may feel they have enough saving while others may figure out that car lease payment in addition to the other existing monthly expenses will take them to a negative balance each month.

2. Look at the data in Table 4 and compare the car financing and lease option.

Looking at details of finance option potentially saves more money (\$3,000 approx.) compared to leasing option and financially make more sense in long term. In the option of financing, the interest portion can be reduced by doing partial early payments or full loan payment earlier than the loan term.

3. If you were to take a decision, what would be your choice and why?

Students should work out on numbers and their own financial situation to make financially rational decisions and should also try to make a profitable bargaining deal for themselves. Negotiation steps and payoff matrix as given in appendix should be utilized.

4. What do you think about the negotiation position of the dealer and the couple?

George and Nicole did not do any preparation, including gathering information on car makes, models, car dealerships, and financing options. Lack of information gave them limited negotiation power. They went to just one dealership with limited to no information, that provided the dealer with an upper hand in the deal and allowed the dealer to drive George and Nicole toward a particular option that they themselves may or may not have chosen if they had right information and mindset to negotiate better deal.

5. Do you think the couple went into negotiation with enough information on car models, prices and buying options? If yes, did they negotiate well? If not, what they could have done otherwise to get a better price deal?

George and Nicole did not have information on different car models, their price range, the dealer information on markup they are charging, financing options available in the market etc. They could have done following:

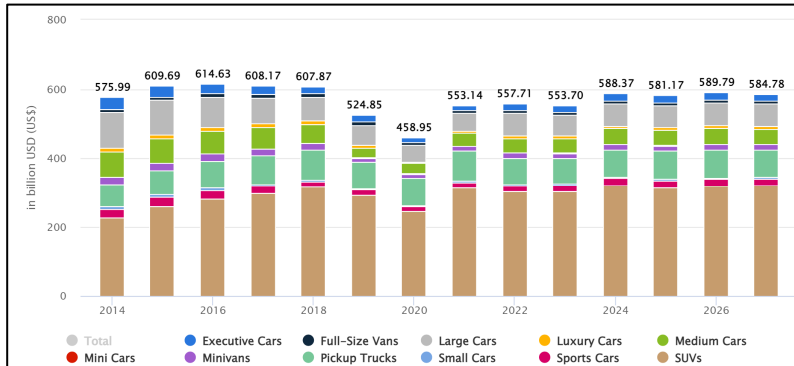
- Decide what car and features they want to buy.
- Do some research on car dealerships actual cost of that car model (factory price etc.) and do some calculations on a price where dealer can also make some profit without them overpaying for the car.
- Take first mover advantage by offering a price and create a credible threat to leave the deal if dealer do not agree to that term/price.

6. Can you think of and describe another similar bargaining situation? Calculate the payoff for the two parties involved and write down the important steps of a successful negotiation.

Students answer will vary but the check box matrix and steps for successful negotiation can be used for any similar situation.

Appendix A:

Figure 1.0 – Passenger car revenue by segment (US Markets)



Source: Statista

Table 1.0 – Potential new car buyers – by age

#	Age Group	Percentage of New car buyers
1	18-24 Years	12.2 %
2	25-34 Years	30.3 %
3	35-44 Years	30.3 %
4	45-54 Years	15.9 %
5	55-64 Years	11.2 %

Source: Statista

Table 2.0 – Potential new car buyers by gender (Year 2021)

#	Gender	New Car buyers' percentage
1.	Male	64.8 %
2.	Female	35.2 %

Source: Statista

Table 3.0 Combined Income and expenses

Income		Expenses	
Annual Gross Income	\$85,000	Rent	\$1,200
Savings (Cash)	\$40,000	Household Expense	\$800
Interest bearing accounts	\$10,000	Credit Card Debt	\$2000
Stocks & Bonds	\$2,500	Outstanding loans	-

Note. This table provides fictitious information on the financial health of George and Nicole.

Table 4.0

Components	Cash Buyout	Finance (5 Year)	Lease (3 Years)
Base Price	30,000	30,000	30,000
Markup	2000	1000	2000
Down Payment	-	2000	4000
Interest Rate / Money factor	0%	5.0%	4%
Interest Cost	0	4,387.53	1883.95
Residual Value	-	-	16400
Fees + taxes (7%)	2740	3000	3200
Total Cost of ownership	34,900	38,387.53	37083.95

Note. This table provides fictitious information on the options available to George and Nicole.

Negotiation Checklist		
Information Gathering		
1	Car Market information in terms of what is available from different car manufacturers.	<input type="checkbox"/>
2	Features set available for the new car models and prioritization based on the individual needs	<input type="checkbox"/>
3	Narrow down on the car makes and models available in the market that meets the need matrix and budget.	<input type="checkbox"/>
4	Availability of new car models and deals offered by different car dealers in the region.	<input type="checkbox"/>
5	Feedback available from different sources on car dealerships in the region.	<input type="checkbox"/>
6	Financing options available from different financial institutions.	<input type="checkbox"/>
7	Various fees and taxes associated with new car purchases.	<input type="checkbox"/>
Approach to Negotiation		
1	Be firm with your needs and limits with car sales personnel.	<input type="checkbox"/>
2	Upfront provide your expectation on the gross total price you are looking to pay for the new car and the model you are considering to buy.	<input type="checkbox"/>
3	Show openness to consider options that incentivize car sales personnel.	<input type="checkbox"/>
4	Share any competitive offers you have at hand from other car dealers in the region.	<input type="checkbox"/>
5	Commit to close the deal soon if expectations are met.	<input type="checkbox"/>
6	Focus on paid price of the car instead of monthly payments to be made	<input type="checkbox"/>

REFERENCES

Annual U.S. Motor Vehicle Production and Domestic Sales | Bureau of Transportation Statistics.

(2022, September 15). Www.bts.gov. <https://www.bts.gov/content/annual-us-motor-vehicle-production-and-factory-wholesale-sales-thousands-units>

Froeb, L. M., Mccann, B. T., Mikhael Shor, & Ward, M. R. (2018). *Managerial economics : a problem solving approach*. Cengage Learning.

J.P. Morgan. (2022, November 14). *When Will Car Prices Drop?* | J.P. Morgan Research.

Www.jpmorgan.com. <https://www.jpmorgan.com/insights/research/when-will-car-prices-drop>

John M., J. M. (2019, December 30). <https://cars.usnews.com/cars-trucks/advice/how-to-negotiate-the-best-price-on-a-new-car#h-2-arm-yourself-with-information>. US News.

<https://cars.usnews.com/cars-trucks/advice/how-to-negotiate-the-best-price-on-a-new-car#h-2-arm-yourself-with-information>

Nash, J. F. (1950). The Bargaining Problem. *Econometrica*, 18(2), 155.

<https://doi.org/10.2307/1907266>

Rexhepi, A., Hasanaj, P., Rexhepi, B., & Meha, A. (2020). Models of Decision-Making in Enterprises. *ÆCONOMICA*, 16(3). [https://journals.univ-](https://journals.univ-danubius.ro/index.php/oeconomica/article/viewFile/6454/6224)

[danubius.ro/index.php/oeconomica/article/viewFile/6454/6224](https://journals.univ-danubius.ro/index.php/oeconomica/article/viewFile/6454/6224)

Shabatura, J. (2022, July 26). *Using bloom's taxonomy to write effective learning objectives | teaching innovation & pedagogical support*. Uark.edu; University of Arkansas.

<https://tips.uark.edu/using-blooms-taxonomy/>