

Is driving for Uber a good opportunity for a college student?

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ABSTRACT

The number of college students who are looking for jobs to support themselves is growing. In recent years, transportation network companies (TNC) have exploded in popularity. The purpose of this case is to evaluate an investment decision (buying a car) to ride for the most famous TNC, Uber by using some capital budgeting tools.

Keywords: Capital budgeting, net present value, internal rate of return



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INTRODUCTION

Uber Technologies Inc. is a transportation network company (TNC) founded in 2009 in California, U.S. TNCs are rideshare companies that connect riders and drivers through smartphone applications. As of January 2016, Uber operates in 68 countries and over 300 cities. Valued at \$51 billion without owning any cab, Uber's business model was copied by several other companies, i.e. Lyft, Side Car. A common characteristic of all these TNCs is their ability to provide higher quality taxi / paratransit services at a much lower cost than traditional taxi companies.

Uber faces several challenges from legal authorities as well as competitors and taxi companies. Economists' views on TNCs and on the deregulation of the traditional taxi market are diverse. Moore and Balaker (2006) reported that slight majority of the published research were in favor of deregulating taxicab market. A more recent survey conducted at University of Chicago Booth School's Initiative on Global Markets Forum (IGM Economic Experts Panel 2014) indicated stronger support for deregulation. Horpedahl (2015) examines the coverage of economics bloggers of TNCs.

In most cities in the U.S. and in other countries, there is no free competition in taxicab market. As a result of this, TNCs sometimes operate in unclear legal frameworks. Opponents of TNCs argue that the avoidance of large insurance policies required by traditional taxicabs lowers the costs of TNCs. Drivers working for TNCs usually see that as a part-time job in addition to their regular jobs.

The purpose of this case is to evaluate the opportunity to drive for Uber by using some of the Capital Budgeting tools.

DISCUSSION QUESTIONS

Michael Williams is a freshmen in an undergraduate finance program in Dallas, TX, who is looking for a part-time job. He does some research on Uber and collect the following data from various forums where current Uber drivers are posting:

Average earnings per hour: \$22

Average trips per hour: 2.6

Average length of trip: 7.7 miles

Average duration of trip: 17.6 minutes

The data looks attractive to Michael. He considers buying a used hybrid car for \$16,000. After making some research on various lenders, he finds out that he can obtain a 4 year loan at 5.99%. Monthly insurance on the new vehicle will be \$80. Estimated salvage value of the car at the end of 4 year is \$6,450. New hybrid car that Michael is planning to buy can get 50 mpg and he expects gas price to be around \$2 per gallon.

- a. Assuming that he can drive 20 hours per week on average for the next four years, what is the expected monthly revenue?
- b. What is the monthly car loan payments?
- c. What is the expected gas cost per month?

- d. If Michael does not drive for Uber, his alternative is to work at the campus for \$12 per hour. Assuming that he can work for 20 hours per week, what is the monthly opportunity cost of driving for Uber?
- e. What is the expected monthly cash flows (months 1 through 47) that Michael can generate after considering for car loan payments, insurance, gas and opportunity cost?
- f. What is the last month expected cash flow, assuming that Michael will be able to sell this car at the salvage value?
- g. What is the NPV of the monthly cash flows, assuming that interest rate is 5.9%?
- h. What is the NPV of annual cash flows with the same interest rate?
- i. What is the IRR of the annual cash flows?
- j. Based on NPV and IRR, should Michael drive for Uber for the next four years?

TEACHING NOTES

- a. Monthly Revenue = $20 \times \$22 \times 4 = \$1,760$
- b. Excel Formula: =PMT(0.0599/12,48,-16000)
- c. Total monthly miles driven = $2.6 \times 7.7 \times 20 \times 4 = 1,601.6$
Monthly gas expenses = $1,601.6 / 50 \times \$2 = \64.06
- d. Opportunity cost (per month) = $20 \times \$12 \times 4 = \960
- e. Monthly CF for months 1 – 47 = $\$1,760 - \$375.69 - \$80 - \$64.06 - \$960 = \280.25
- f. Last Month CF = $\$280.25 + \$6,450 = \$6,730.25$
- g. \$1,014.22
- h. Annual CFs for years 1 – 3 = \$3,456.87
Last year CF = $\$3,456.87 + \$6,450 = \$9,906.87$
NPV = \$1,014.22
- i. IRR = 8.45%
- j. This project yields a positive NPV and the IRR is exceeding given interest rate. So Michael would be better off if he drives for Uber instead of working at the campus.

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