

ECO 161: FOUNDATIONS OF ECONOMICS

SHOULD I LEASE A HYBRID OR a NON-HYBRID CAR?



- Suppose you are considering leasing a car and you are trying to evaluate which would be financially better (lower cost), a Honda Civic or a Honda Civic Hybrid (they are identical otherwise). You intend to lease either car for 36 months (three years).
- Leasing a Honda Civic would cost \$2,000 upfront and a monthly payment of \$149 (\$1,788 annually) for three years.
- Leasing a Honda Civic Hybrid would cost \$2,800 upfront with a monthly payment of \$199 (\$2,388 annually) for three years.
- The disadvantage of a Hybrid is that it costs more (both upfront and each month thereafter) but it uses less gas per mile driven.

For the questions below, assume the following:

Gas price: \$3.50 per gallon.

Interest rate: 4%

12,000 miles driven per year.

Miles per gallon:¹

Honda Civic: 32

Honda Civic Hybrid: 44

1. If the only thing I'm concerned about is my out of pocket cost for those three years, and given the information above, should I lease the Hybrid or the non-Hybrid? Make sure you use present value computations, show your work clearly and explain it.
2. If gas prices increased, would that make the Hybrid more or less (cost) attractive? Explain intuitively (please do not compute anything).
3. If someone drove more than 12,000 miles per year, would that make the Hybrid more or less (cost) attractive? Explain intuitively (please do not compute anything).

What is a car lease?

- Leasing a car is basically renting a car for a fixed period of time.
 - You may have to pay a one time fee upfront (when contract is signed) and a monthly fee while you lease the car.
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¹ To compute the annual gas cost, divide the annual miles driven by miles per gallon. This gives you the amount of gas needed (in gallons). Then multiplying those gallons by price per gallon will give you the annual gas cost.