



When prices are more than prices
and not everything of value is priced

Ken Kurani, ITS-Davis

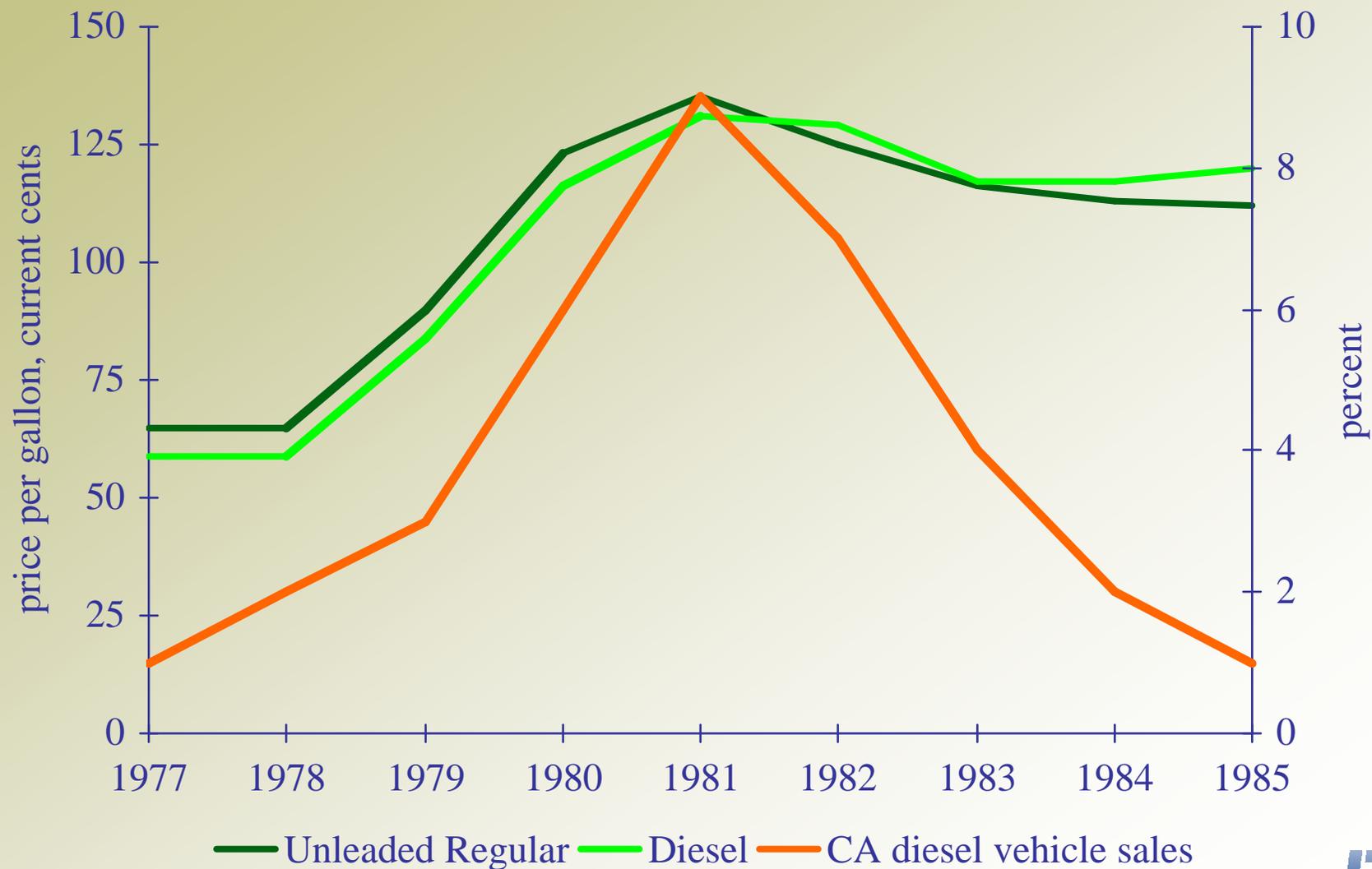
Prepared For:
ARB/ITS-Davis Workshop
Reducing Greenhouse Gas Emissions from Passenger
Vehicles, “What’s Next?”
March 21, 2003



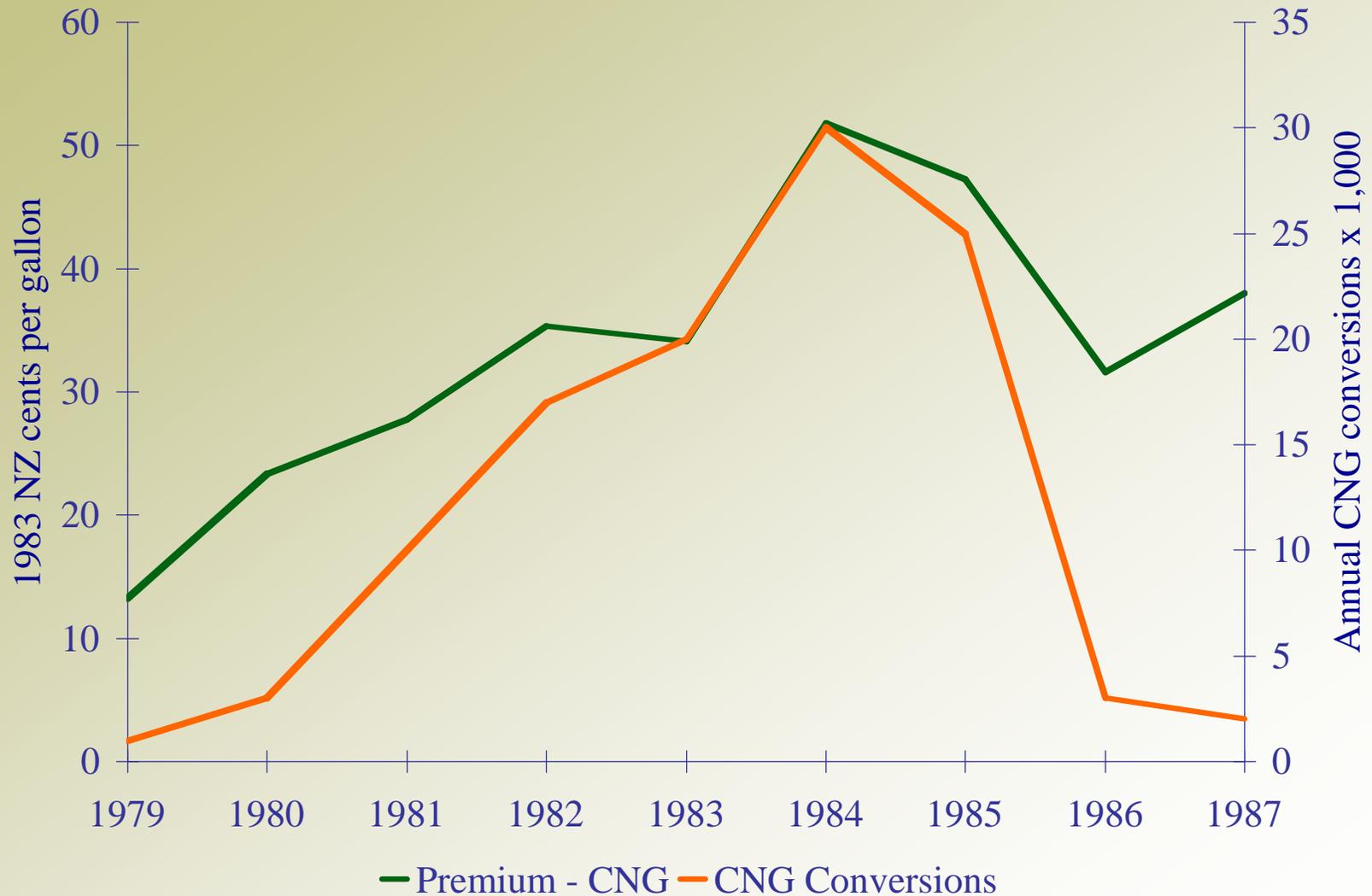
- Shortcuts and symbols: when prices are not used by consumers solely, or at all, as part of algorithmic calculations, but as...
 - Hueristics, rules of thumb
 - Shortcuts are “normal,” common
 - Signs of meanings other than the value of exchange
 - Support for desired goals, commitments to the future, corporate conspiracy
 - It is a mistake to measure only prices, sales, and functional (vehicle and fuel) attributes—and to then assume we have measured everything that matters

- Policies affecting prices will be effective if they (prices and policies) are easily incorporated in consumers' "shortcuts" and if they mean something.
 - It matters whose money is on the line
 - ...which prices are the subject of policy
 - ...whose policy it is
 - ...why prices are being affected
 - ...how and when those prices are paid

1970s-80s, CA diesel cars: fuel prices



1970s-80s, Dual-fuel CNG Vehicles in New Zealand: government policies affecting vehicle and fuel prices



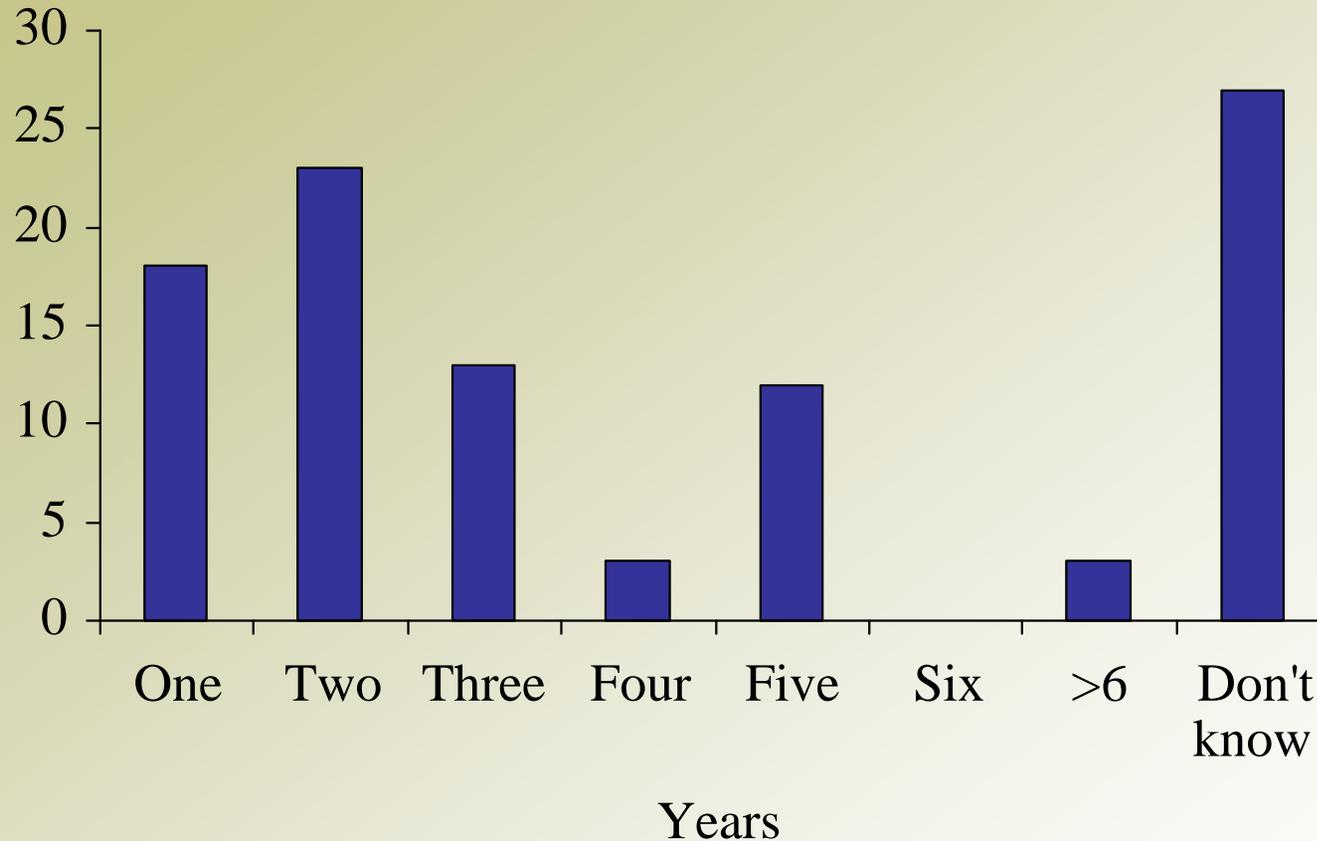
What are the prospects for changing consumer behavior through prices alone?

Prices? Which prices?

2002-03, CA Fuel Economy

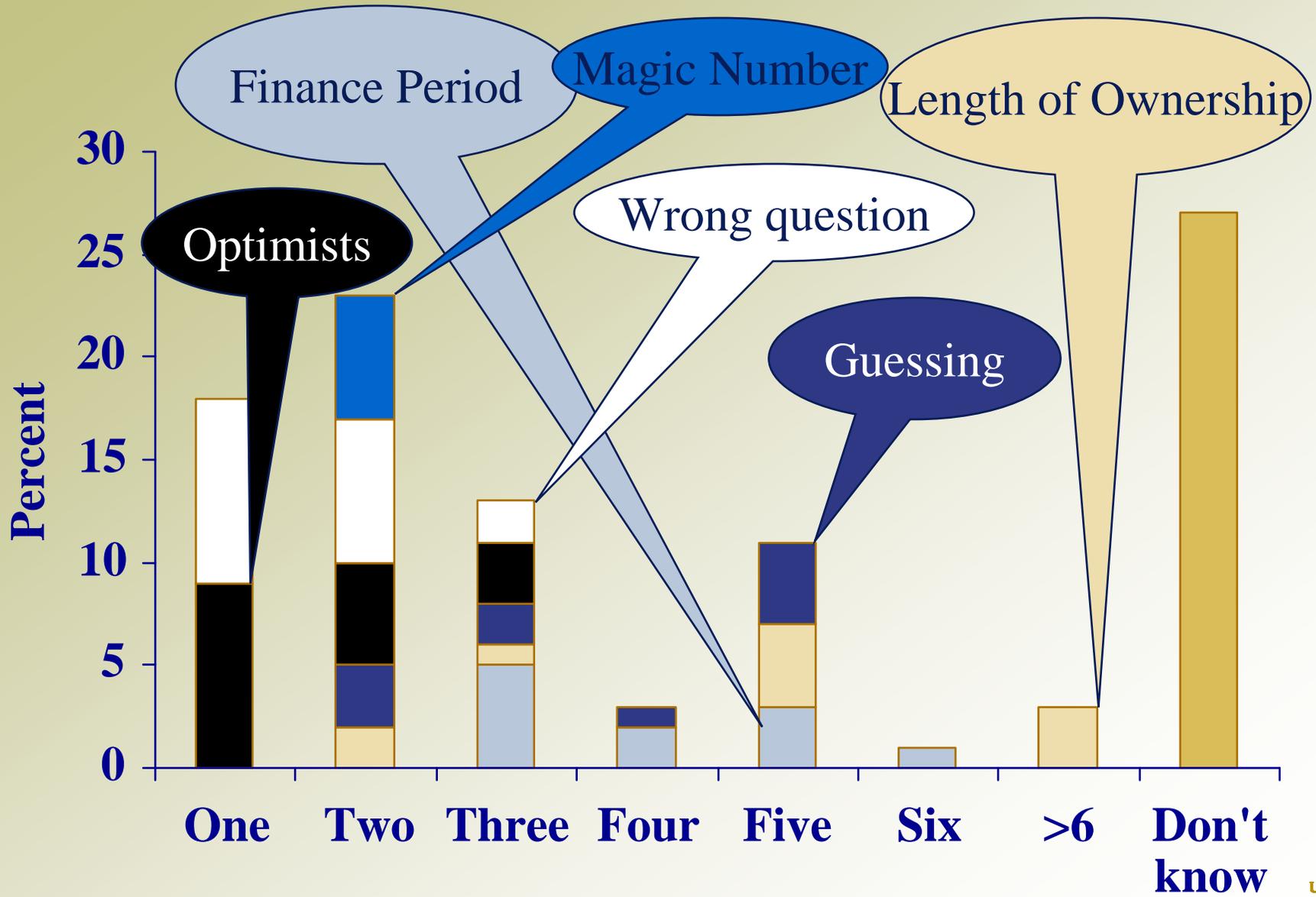
Measurement: Do we know what this graph means?

Do we know what prices influence consumers answers?



How soon, in years, would the fuel savings have to pay back the additional cost to persuade you to buy the higher fuel economy option?
(ORCI for NREL, 2002. N = 1,000)

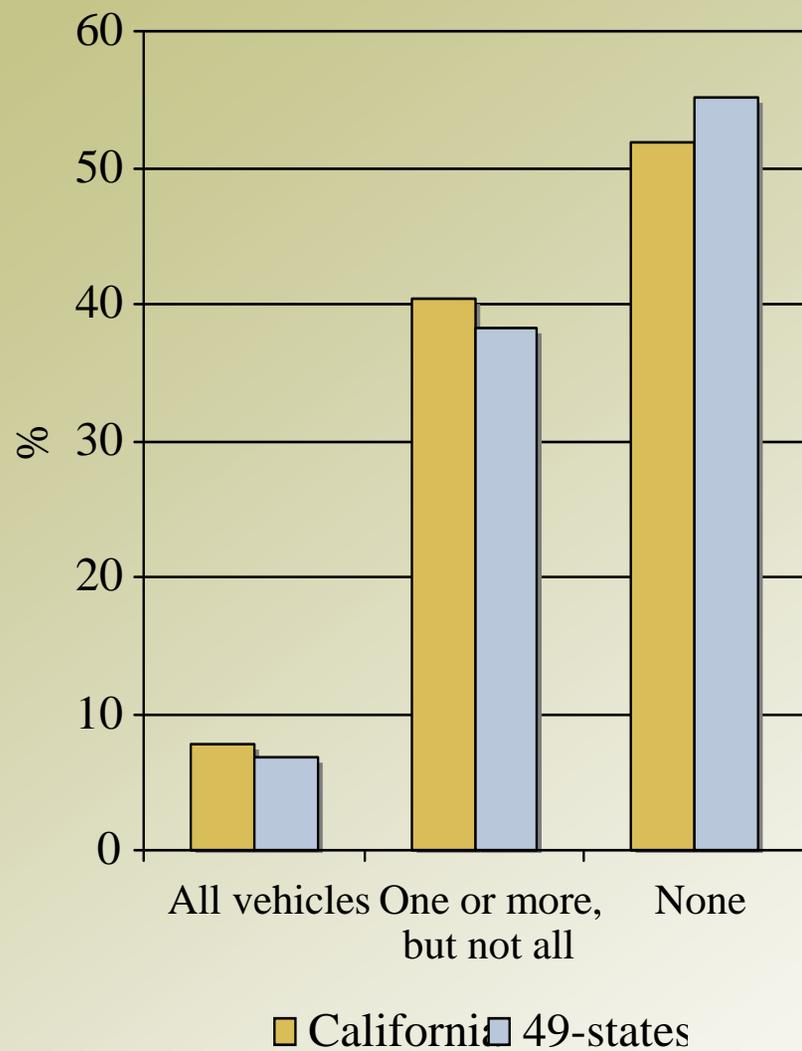
Do we know what prices influence consumers answers?



Some findings about consumers and prices

- People don't know the price of gasoline, how far they drive, how much they spend on gasoline
 - People ignore or don't know lots of price information when buying cars, e.g., cost of insurance
- Are car and truck buyers making fuel economy a priority?
 - Not in either their recent or many of their past vehicle purchase decisions.
 - Remember the time frame of this conclusion: 2002-03
 - Prices exist in specific historical and comparative contexts

2007 PHEVs: People don't know what they are paying gas

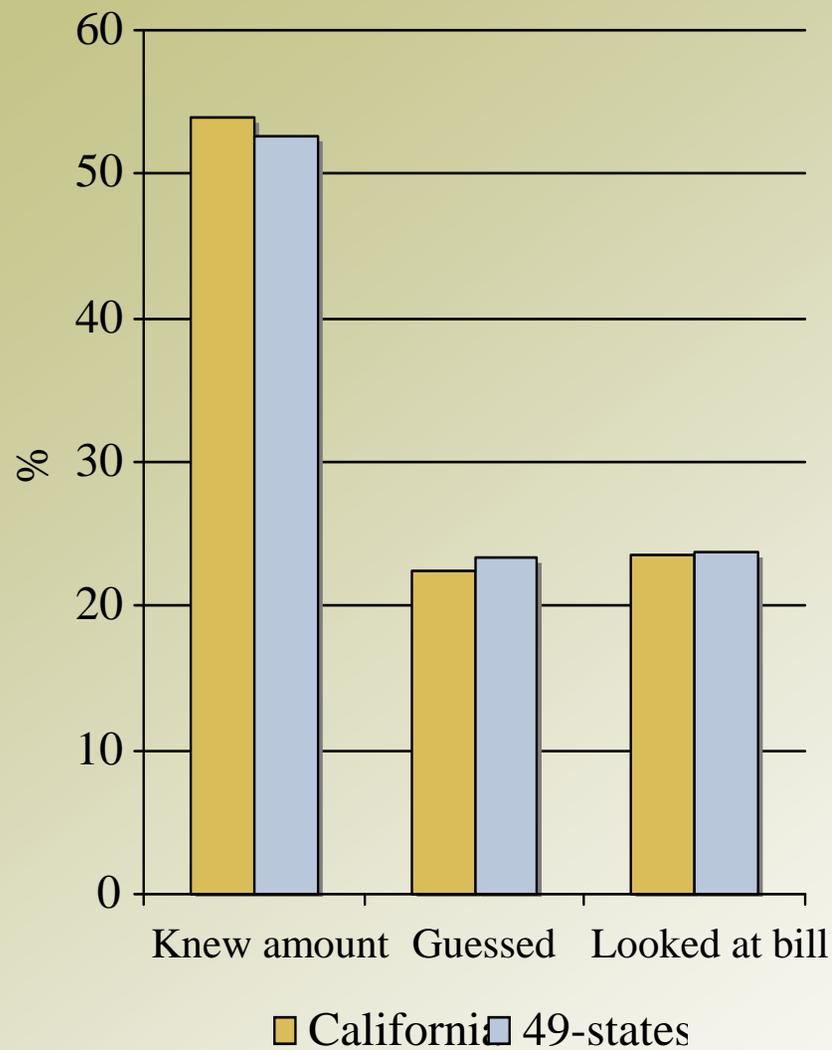


We asked people whether and how they tracked fuel use and cost. Then we asked them for which household vehicles they did so.

Only 7 to 8 percent claim to track fuel use for all vehicles.

More than half of households claim they don't track fuel use for any vehicle.

2007 PHEVs: People don't know what they are paying for e-



First, we asked how much they paid for electricity, then asked how they knew.

Things look better than for gasoline, but still...

...52 to 54 percent claim they knew the amount they paid per month for electricity “off the top of my head”

Everyone else either said they looked at their bill or guessed.

What happens if we (analysts and policy makers) interpret value only in terms of price?

HEVs are “not worth it.”

“Higher gasoline prices would be needed to make even the mild hybrid economically logical for a typical consumer.”

Argonne National Laboratory (2001).

“On straight economics, these vehicles, make little sense at today’s prices...”

Autoweek. (2005).

“Most Hybrid Vehicles not as Cost-Effective as they Seem, Reports Edmunds.com”

Edmunds.com (2005).

What did early HEV buyers buy?

Early hybrid buyers did not buy just lower private fuel cost.

They bought a car that means...

...a piece of the future.

...a less-consumptive lifestyle.

...they are a smart consumer.

...clean air, lower oil consumption, less terror.

...high-tech, high-quality

They used shortcuts and especially symbols

Though in this case, few were prices.

Of course prices matter!

- But we shouldn't confuse them for value.
 - Further, some things we value are not priced at all—nor do we want them to be
- Prices are complicated signals
 - Market exchange; Shortcuts; Symbols of the sacred (and the profane)
 - People may respond to prices in ways that have little to do with effects expected if prices are only about exchange
- Cost effectiveness is not a sufficient condition for policy
- People may not know prices, but they'll know when policy makers try to change them
 - Get citizen/consumers on the side of policy by connecting prices to all the things they value
 - Social marketing; advertising

End