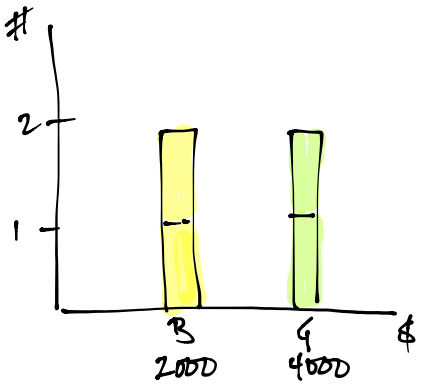
Example model

The market for lemons – Akerlof

4 cars
Each either good (G) or bad (B)
G worth $4000
B worth $2000

Car	Cond.	Value
1	G	4000
2	G	4000
3	B	2000
4	B	2000



Now add information asymmetry:

* Sellers know true condition of ther car
* Buyers know only distribution of conditions

How much should buyer offer?

What about average or expected value?

$$EV = \sum_{i=1}^{N} f_i x_i$$

f_i: probability i

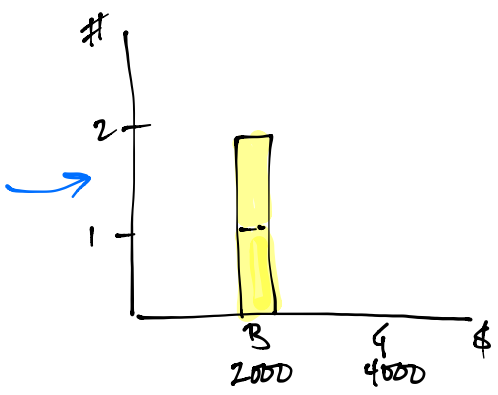
x_i: payoff i

N: possible outcomes or "states"

$$EV = \left(\tfrac{1}{2}\right)(4000) + \left(\tfrac{1}{2}\right)(2000) = \$3000$$

But, how would sellers react?

Car	Cond.	Value	Sell?
1	G	4000	NO
2	G	4000	NO
3	B	2000	yes
4	B	2000	yes



only B cars left

→ Information asymmetry → "Adverse Selection"

In equilibrium:

$EV = (1)(2000) + (0)(4000) = 2000$

$P = \$2000$, only B cars trade