

ECON 612: MONEY AND BANKING
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ADVERSE SELECTION WITH SCREENING*
SOLUTIONS AND EXPLANATIONS

COLOR LEGEND

 **HEADINGS**

 **GIVEN/PREVIOUSLY FOUND INFORMATION**

 **CONCEPTS YOU SHOULD ALREADY KNOW**

 **ANSWER**

 **ANNOTATIONS AND
EXTRA EXPLANATIONS**

*** A COPY OF THE PROBLEMS IS ATTACHED AT
THE END OF THIS DOCUMENT. THERE MAY BE
SOME DIFFERENCES BETWEEN THIS VERSION
AND THE ONE AVAILABLE ON CANVAS.**

GIVEN INFORMATION

$$\begin{aligned} n_B &= 100 \\ n_L &= 100 \end{aligned} \Rightarrow x = 100 \quad \begin{array}{l} \text{"Cm" IS THE COST} \\ \text{WITH NO INTERMEDIARY} \\ \text{SUBSTITUTE VALUES FROM} \\ \text{GIVEN INFORMATION} \end{array}$$

THE NUMBERS ARE THE SAME, SO I'M JUST CALLING THEM "x" TO SIMPLIFY.

$$c = \$25$$

- 1 FINDING C_{NI}

$$C_{NI} = 2x^2c$$

$$= 2(100)^2(25)$$

$$C_{NI} = \$500,000$$

- 2 FINDING C_{FI}

"CFI" IS THE COST WITH F.I.

$$C_{FI} = 2xc$$

$$= 2(100)(25)$$

$$C_{FI} = \$5,000$$

- 3 FINDING S

$$S = C_{NI} - C_{FI}$$

SUBSTITUTE VALUES FROM 1 AND 2

$$= 500,000 - 5,000$$

$$S = \$495,000$$

- 4 CONCLUSION

THE F.I. GETS RID OF DUPLICATED SCREENING SINCE IT ONLY EVALUATES EACH BORROWER AND LENDER ONCE.

Adverse Selection with Screening

One hundred borrowers and one hundred lenders are evaluating each other to see whether the other is “good” enough. Each evaluation costs \$25.

- (1) Find the total evaluation cost in an economy without F.I.s.
- (2) Find the total evaluation cost in an economy with F.I.s.
- (3) Find the savings.
- (4) Why are there savings?