



Choice:

ECONOMICS MATERIALS FOR
SUCCESS

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Worksheet – Asymmetric information, Moral hazard

Related news article: [With new SAVE repayment plan for student loans, college costs barely matter](#) (Forbes, November 10, 2023)

Summary: This worksheet could be used for in-class or homework practice. Students will be asked to read a short article about the SAVE repayment plan that lowered student loan payments. More than half of the American borrowers enrolled in the plan qualified for \$0 monthly payment. Students will be asked to recognize the moral hazards of the SAVE plan. Potential unintended consequences will also be discussed. **Answers are provided at the end of this document.**

Learning objectives:

At the end of this worksheet, students will be able to:

- o Recognize real-world examples of moral hazard;
- o Analyze scenarios to recognize analogies;
- o Discuss the moral hazards of the SAVE plan;
- o Discuss some potential reasons why borrowers might try to keep college costs low even if the SAVE plan is available to them;
- o Discuss why the SAVE repayment plan could provide an incentive for colleges to increase tuition;
- o Understand that there are both winners and losers of the SAVE repayment plan.

Economics concepts: Moral hazard, Unintended consequences, Adverse selection, Signaling, Screening, Incentive



Suggested excerpts:

“This new plan [SAVE repayment plan] aimed to cut the average student loan payment for undergraduate loans in half, with a considerably higher number of Americans qualifying for \$0 monthly payments based on their income and family size. And the current statistics show over half of borrowers who have enrolled in SAVE are paying \$0 monthly. What's more, the SAVE plan would help borrowers who don't qualify for \$0 monthly payments save at least \$1,000 per year compared to other income-driven plans.”

“... borrowers with the SAVE plan would have their remaining balances forgiven after being on the program for 20 to 25 years.”

“... there are several moral hazards and disincentives built in. For example, some borrowers may not see the point of trying to increase their income if their student loan payment is just going to go up.”

“Plus, there's no reason to pay down student loans faster when remaining balances you owe are going to be forgiven in 20 to 25 years, right? In fact, there's a whole financial game that borrowers can play to minimize the loan payments in order to maximize loan forgiveness - especially for those with large loan balances.”

“... plans like SAVE could even embolden institutions to charge higher tuition since they know that their “customers” don't actually have to pay more after graduation.”

“Borrowers Should Still Keep Costs Down.... While forgiven student loan balances are currently exempt from being treated as taxable income through December 31, 2025 thanks to the American Rescue Plan Act of 2021, nobody knows how forgiven student loan balances will be treated in years after that.”

“The SAVE income-driven repayment plan is just like any other federal program in the fact it's going to have its share of both winners and losers. The winners are existing student loan borrowers who can qualify for \$0 monthly payments or low monthly payments for the foreseeable future due to having a low income, and the losers are every future college student that will have to deal with the consequences of zero accountability of schools to control costs.”



Questions

1. The purpose of the SAVE repayment plan is to:
 - a. Decrease the average undergraduate student loan payment.
 - b. Decrease the willingness of people to look for a job.
 - c. Encourage colleges to increase tuition.
 - d. Discourage students from working part time during college.

2. True or false? According to the article, more than half of American borrowers enrolled in the SAVE repayment plan make \$0 monthly payments based on their family size and income.

3. Suppose that a borrower who has a student loan used to look for a more secure and more highly paid job. Then, he gets enrolled in the SAVE plan, and decides to stop looking for a better job. This scenario provides an example of:
 - a. Adverse selection.
 - b. Signaling.
 - c. Screening.
 - d. Moral hazard.

4. Which of the following scenarios does the situation described in Question 3 resemble the most?
 - a. A college student starts attending fewer economics class sessions once he learns that his economics professor does not take attendance.
 - b. A college student regularly attends office hours to signal that he wants to improve his performance in class.
 - c. A college student decides to postpone taking an economics class because the only section of the necessary class is taught by a professor who is known for giving challenging exams.
 - d. A college student asks other students to provide feedback about different professors who teach economics to choose a professor to take microeconomics with.

5. Fill in the blanks. If borrowers enrolled in SAVE start earning a higher income, their student loan payment is likely to _____ (increase/decrease).



In addition, their remaining balances would be forgiven after they have been on the SAVE program for 20 to 25 years. These facts provide a(n) _____ (incentive/disincentive) for borrowers to look for ways to increase their income.

6. According to the article, “there are several moral hazards and disincentives built in” the SAVE plan. What are the moral hazards of the SAVE plan?

7. In which of the following scenarios could someone who borrowed \$20,000 to obtain an undergraduate degree in marketing, someone else who borrowed \$70,000 for the same degree, and a third person who worked during college and borrowed only \$5,000 have the same monthly payment if they are all enrolled in the SAVE plan?

- a. They have earned the same GPA at college.
- b. They are all currently unemployed.
- c. Their family size and income are the same.
- d. These three individuals will always have to pay different amounts.

8. The article mentions that although many borrowers will not have to pay back their student loans, “borrowers should still keep costs down.” What might be one reason to do so?

9. According to the article, the SAVE repayment plan could discourage colleges from controlling costs, and they might increase the tuition. Why is this a possible unintended consequence of the plan?

10. The article explains that like any government program, there are winners and losers of the SAVE repayment plan. Who are the winners? Who are the losers?



Answer Key

1. The purpose of the SAVE repayment plan is to:

- a. Decrease the average undergraduate student loan payment.
- b. Decrease the willingness of people to look for a job.
- c. Encourage colleges to increase tuition.
- d. Discourage students from working part time during college.

Answer: A.

2. True or false? According to the article, more than half of American borrowers enrolled in the SAVE repayment plan make \$0 monthly payments based on their family size and income.

Answer: True. The article states that “the current statistics show over half of borrowers who have enrolled in SAVE are paying \$0 monthly” “based on their income and family size.”

3. Suppose that a borrower who has a student loan used to look for a more secure and more highly paid job. Then, he gets enrolled in the SAVE plan, and decides to stop looking for a better job. This scenario provides an example of:

- a. Adverse selection.
- b. Signaling.
- c. Screening.
- d. Moral hazard.

Answer: D. Moral hazard is a situation in which one party in an agreement changes its behavior and becomes more likely to take risks *after* the agreement has been made. Adverse selection is a situation where one party has more information than another party before an agreement has been made.

4. Which of the following scenarios does the situation described in Question 3 resemble the most?



- a. A college student starts attending fewer economics class sessions once he learns that his economics professor does not take attendance.
- b. A college student regularly attends office hours to signal that he wants to improve his performance in class.
- c. A college student decides to postpone taking an economics class because the only section of the necessary class is taught by a professor who is known for giving challenging exams.
- d. A college student asks other students to provide feedback about different professors who teach economics to choose a professor to take microeconomics with.

Answer: A. Both situations provide examples of moral hazard.

5. Fill in the blanks. If borrowers enrolled in SAVE start earning a higher income, their student loan payment is likely to _____ (increase/decrease). In addition, their remaining balances would be forgiven after they have been on the SAVE program for 20 to 25 years. These facts provide a(n) _____ (incentive/disincentive) for borrowers to look for ways to increase their income.

Answer: Increase, disincentive.

6. According to the article, “there are several moral hazards and disincentives built in” the SAVE plan. What are the moral hazards of the SAVE plan?

Answer: First, if borrowers start earning more, their loan payment is likely to increase. Second, the amount that the borrower has not paid back will be forgiven after 20-25 years, so “there's no reason to pay down student loans faster.”

7. In which of the following scenarios could someone who borrowed \$20,000 to obtain an undergraduate degree in marketing, someone else who borrowed \$70,000 for the same degree, and a third person who worked during college and borrowed only \$5,000 have the same monthly payment if they are all enrolled in the SAVE plan?

- a. They have earned the same GPA at college.
- b. They are all currently unemployed.



- c. Their family size and income are the same.
- d. These three individuals will always have to pay different amounts.

Answer: C.

8. The article mentions that although many borrowers will not have to pay back their student loans, “borrowers should still keep costs down.” What might be one reason to do so?

Answer: Answers will vary. The article explains that “while forgiven student loan balances are currently exempt from being treated as taxable income through December 31, 2025 thanks to the American Rescue Plan Act of 2021, nobody knows how forgiven student loan balances will be treated in years after that.”

9. According to the article, the SAVE repayment plan could discourage colleges from controlling costs, and they might increase the tuition. Why is this a possible unintended consequence of the plan?

Answer: Answers will vary. One possible answer is that colleges would know that students (i.e., the “customers”) would not be the ones paying after graduation.

10. The article explains that like any government program, there are winners and losers of the SAVE repayment plan. Who are the winners? Who are the losers?

Answer: The winners of the SAVE repayment plan are “existing student loan borrowers who can qualify for \$0 monthly payments or low monthly payments.” The potential losers are future college students who “will have to deal with the consequences of zero accountability of schools to control costs.”