

# May 10, 2024 FPA of Greater Indiana

## Student Loans and an Individual's Financial Future

1) Assuming they have to be paid off, is paying them off quicker than required a wise strategy?

- What's the long-term financial impact?

2) Assuming the interest rate is the same as the rate of return on investing, how bad are they?

- What's the long-term financial impact?



# Sources for Questions 1) and 2)

1) Geisler, Greg, and Bill Harden. 2023. “Maximizing Tax Alpha in both Accumulating and Decumulating Retirement Savings” in *Journal of Financial Service Professionals*. Volume 77 (March): pages 46-58.

2) Geisler, Greg, and Bill Harden. 2024. “Excessive Student Loans: The Harbinger of Death to Your Financial Future” in *Journal of Financial Service Professionals*. Volume 78 (March): pages to be determined.



# Source 1)

Geisler\_Harden\_JFSP publication March 2023\_Maximizing Tax Alpha in Both Accumulating and Decumulating Retirement Savings.pdf - Adobe Acrobat Pro (64-bit)

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## Maximizing Tax Alpha in Both Accumulating and Decumulating Retirement Savings

by Greg Geisler, PhD  
J. William Harden, CPA, ChFC, PhD

**ABSTRACT**  
Tax-efficient accumulation and decumulation of retirement funds are the subjects of prior research. The analysis in this article applies both of these tax-efficient strategies and compares them to some common ways such

**M**aximizing the benefits of financial planning for retirement encompasses both the accumulation of funds as well as the decumulation of those funds. The most tax-efficient decision involves several factors that have been discussed individually in earlier research involving either the accumulation (e.g., Geisler<sup>1</sup>) or decumulation (e.g., Geisler, Harden and Hulse;<sup>2</sup> Cook, Mever, and Reichenstein;<sup>3</sup> and Reichen-



# Source 2)

Page Proofs March 2024 JFSP\_Excessive Student Loans article.pdf - Adobe Acrobat Pro (64-bit)

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## Excessive Student Loans: The Harbinger of Death to a Financial Future

by Greg Geisler, PhD  
J. William Harden, CPA, ChFC, PhD

**ABSTRACT**

Currently in the United States, outstanding higher education student loans total over \$1.7 trillion. High levels of student loan debt create numerous issues for clients. For example, student loan debt has been associated with lower home ownership. This study demonstrates the devastating impact excessive student loan debt has on the ability to accomplish long-term tax-advantaged savings and to have a successful financial future.

### Introduction

The year 2023 witnessed much debate regarding issues related to student loans for higher education. One event that caught significant press attention was the Supreme Court's decision in *Biden v. Nebraska*, No. 22-506 (decided June 30, 2023). In this case, the Court found that the Biden administration did not have the authority under the Health and Economic Recovery Omnibus Emergency Solutions (HEROES) Act to establish a program that would have eliminated approximately \$430 billion in student loans. As part of the proposed plan, borrowers with income below \$125,000 in either 2020 or 2021 would have qualified for up to \$10,000 of debt for-



# 1) Is paying them off quicker than required a wise strategy?

Who recommends paying them off quicker than required?

Popular media figure/financial adviser Dave Ramsey is who!

His “7 Baby Steps” (“to take control of your money” and “build wealth”):

- 1) \$1,000 starter emergency fund
- 2) Pay off all debt except house
- 3) Save 3-6 months of expenses in an emergency fund account
- 4) Invest 15% of income for retirement
- 5) Save for children’s college
- 6) Pay off your home debt early
- 7) Build wealth and give



# What does Maximizing Tax Alpha in Accumulation [phase] say?

The following rank-ordering (after higher education completed):

- 1) and 2) Contributing the maximum to an HSA while contributing just enough to a 401(k) to get the maximum employer match (assume 50%)
- 3) Paying down & paying off high-interest rate debts (e.g., credit cards)
- 4) Contributing to a Roth IRA (which is an effective Emergency fund)

In the future, insert around 3) Contribute to IN College Choice 529 Education Savings Account for child(ren) (immediate return is 25%!)

- 5) Contributing to an unmatched (by employer) retirement account
- 6) Pay off moderate interest rate debts
- 7) Invest in nonqualified (i.e., “taxable”) accounts



# FACTS USED / COMPARISON

Client is Single.

Completed their graduate degree and begins working full-time age 25.

Employee for 40 calendar years;

- first 10 years: \$90,000 salary and \$50,000 spending

- last 30 years: \$180,000 salary and \$107,000 spending

Retired for 25 calendar years;

Passes away at age 90;

Tax-efficient accumulation VERSUS Prioritize Student Loan payoff



# Tax-efficient accumulation

## Rank ordering:

(includes required monthly student loan repayment for 10 years):

Contributing the maximum to an HSA;

Contributing to 401(k) to get the maximum employer match;

    Specifics: Contribute 6% of salary to 401(k)

    Get the maximum employer 401(k) match (3% of salary);

Contributing to a Roth IRA.

NOTE (assume 6% on everything)... i.e.,

Return on investing in Qualified Account = Student loan interest rate.





# Student loan debt payoff prioritization

## Rank ordering:

(1<sup>st</sup> 28 months) All after-tax cash goes to payoff \$50,000 student loans;

Then...

Contributing to 401(k) to get the maximum employer match;

Specifics: Contribute 6% of salary to 401(k)

Get the maximum employer 401(k) match (3% of salary);

Contribute any remaining after-tax cash to unmatched 401(k).

NOTES:

Return on investing in Qualified Account = Student loan interest rate.

Don't use HSA; Don't contribute to Roth IRA;



# Wealth at Retirement

**TABLE 3**

**Accumulated Pre-Tax Wealth at the End of Working (i.e., Year 40) if Contributed to 401(k) Every Year**

<u>Account Balances</u>	<u>Wealth Maximization</u>	<u>Debt Prioritization</u>
Health Savings Account	\$652,593	\$0
Roth IRA	241,398	0
401(k)	2,449,029	3,314,907
Less: Student Loan Balance	- 0	- 0
<b>Total</b>	<b><u>\$3,343,020</u></b>	<b><u>\$3,314,907</u></b>



# Tax-efficient Decumulation versus Conventional Wisdom

Financial planning professionals can make both tax-efficient accumulation and decumulation recommendations to clients.

These tax-efficient recommendations, as opposed to making three common mistakes, can significantly increase how long a client's wealth lasts during retirement as well as increasing their legacy.

The mistakes include:

- i) Paying off student loans quicker than required
- ii) Not contributing the maximum to an HSA (if High Ded. Health Ins.)
- i) and ii) mistakes made on Debt Prioritization scenario prior slides
  
- iii) Tax-Efficient Decumulation (on following slides)



# Tax-efficient decumulation

FACTS: Debt Prioritization accumulation strategy only has 401(k) funds

Tax-efficient accumulation strategy has HSA, Roth IRA, and 401(k)

Social Security starts at age 70 (i.e., after 5 years of retirement)

Need \$100,000 for spending every year after retiring

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Tax-efficient decumulation includes significant Roth conversions to top of the 15% rate (assumes tax rate cut to 12% does not continue to future)

Debt prioritization decumulation must pay “IRMAA tax” every year



# Tax-efficient decumulation (continued)

Large withdrawals from HSA in early years of retirement (reimburses qualified medical expenses from 40 years of working & retirement years)

Later years of retirement:

401(k) distributions more than enough to meet RMDs every year

“IRMAA tax” above first threshold in Tax-efficient decum. scenario

“IRMAA tax” above second threshold in Debt prioritization decum. scenario



# Difference in Wealth (i.e., Legacy) at death

**TABLE 7**

**Accumulated Pre-Tax Wealth when individual dies at age 90**

<u>Account Balances</u>	<u>Wealth Maximization</u>	<u>Debt Prioritization</u>
Health Savings Account	\$0	\$0
Roth IRA	422,085	0
401(k)	714,750	831,754
Less: Student Loan Balance	- 0	- 0
<b>Total</b>	<b><u>\$1,136,835</u></b>	<b><u>\$831,754</u></b>



# CONCLUSIONS from being Tax-efficient

≈ \$300,000 more tax-free wealth to heir(s)

OR

“Nest egg” would have lasted a few years longer if individual had not passed away at age 90.

-DON'T prioritize student loan debt payoff

-DO follow Tax-efficient accumulation rank order



# NEXT article

What if instead of \$50,000 student loans after graduate school, individual had \$100,000, \$150,000, \$200,000, or \$250,000?

What impact would it have on Wealth at retirement?

Key point: How much wealth (i.e., net worth) at retirement declines as student loans 40 years ago become excessive.





# Facts Used

Client is Single.

Completed their graduate degree and begins working full-time age 25.

Employee for 40 calendar years;

- first 10 years: \$100,000 salary and \$52,000 spending

- last 30 years: \$200,000 salary and \$114,000 spending

What is wealth at retirement given 5 different student loan balances?

One other Assumption (6% on everything!):

Return on investing in Qualified Account = Student loan interest rate.

In all student loan balance scenarios, Tax-efficient accumulation



# Tax-Efficient Accumulation

Rank order for investing that maximizes wealth while making monthly student loan repayments for either 10 or 25 years:

1<sup>st</sup>) Contribute to 401(k) up to 6% of salary to get 50% match (i.e., employer match is up to 3% of salary)

2<sup>nd</sup>) Contribute up to maximum in Health Savings Account (HSA)

3<sup>rd</sup>) Contribute to Roth IRA (which can also be used as a home down payment fund or emergency savings fund) or “Backdoor” Roth IRA

4<sup>th</sup>) Contribute to 401(k) unmatched by the employer



# Loan Pay-off Term

- At student loan levels of \$200,000, and \$250,000, the loan cannot be fully paid off in ten years, so it is assumed such loans both have a 25-year payoff term.
- At \$150,000 of student loans, a 10-year payoff is possible, but little would be available to contribute to the 401(k), so almost all of the employer 401(k) match would be missed.
- Instead, the individual wisely chooses the 25-year loan term at the start of employment.



# Summary of Article

Table 1:

Balances in HSA and Retirement Accounts after 40 Years of Employment and Five Different Beginning Student Loan Amounts

<u>Loan Amount</u>	<u>Loan Term</u>	<u>HSA</u>	<u>401(k)</u>	<u>Roth IRA &amp; Roth 401(k)</u>	<u>Combined Investments</u>
\$50,000	10 years	\$652,593	\$3,205,494	\$627,285	\$4,485,372
100,000	10 years	577,175	3,132,917	187,591	3,897,683
150,000	25 years	423,616	2,466,167	193,809	3,083,592
200,000	25 years	196,010	1,850,629	33,663	2,080,302
250,000	25 years	106,961	847,745	33,663	988,369



# What happens when student loans go from \$50K to \$100K?

## Biggest Changes:

- Monthly student loan repayment is double
- So, little can be contributed to Roth IRA first 10 years and little Nondeductible IRA contribution followed by immediate conversion to Roth IRA (i.e., “Backdoor Roth”) in last 30 years
- Total Combined Investments at Retirement drops from about \$4.5 million to about \$3.9 million



# What happens when student loans go from \$100K to \$150K?

## Biggest Changes:

- As mentioned earlier, At \$150,000 of student loans, a 10-year payoff is possible, but little would be available to contribute to the 401(k), so almost all of the employer 401(k) match would be missed. Instead, the individual wisely chooses the 25-year loan term.
- No money available for HSA contribution in years 11 through 25 because maximum matched 401(k) contribution doubles
- Maximum unmatched 401(k) contribution not possible years 11 - 25
  - When loan paid off (end of year 25), HSA maximum contribution and 401(k) maximum contribution resumes
- Total Combined Investments at Retirement drops from about \$3.9 million to about \$3.1 million.
  - HSA down about \$150K and 401(k) down about \$650K



# What happens when student loans go from \$150K to \$200K?

## Biggest Changes:

- No money available for HSA contribution in years 4 through 10 due to assumption that Tax Rate Cuts expire.
- Maximum *matched* 401(k) contribution not possible years 11 - 25
  - Instead, half of the employer match is “left on the table”
  - When loan paid off (end of year 25), HSA maximum contribution and 401(k) maximum contribution resumes
- Total Combined Investments at Retirement drops from about \$3.1 million to about \$2.1 million.
  - \$1 million decline on an additional \$50,000 in student loans!
  - HSA down more than half (i.e., over \$200K) and 401(k) down over \$600K and Roth IRA down over \$150K



# What happens when student loans go from \$200K to \$250K?

## Biggest Changes:

- Practically NO Tax-Advantaged Savings can be done the first 25 years until \$250K of student loans are fully paid off.
  - All of the employer 401(k) match is “left on the table”
  - When loan paid off (end of year 25), HSA maximum contribution and 401(k) maximum contribution resumes
- Total Combined Investments at Retirement drops from about \$2.1 million to slightly less than \$1 million.
  - ≈ \$1.1 million decline on an additional \$50,000 in student loans!
  - HSA down almost \$100K and 401(k) down over \$1 M





# Implication and Practical Considerations

Excessive Student Loan debt can ruin one's financial future (before their future ever gets started!)

- In the last couple of cases, the individual should qualify for an Income Driven (Student Loan) Repayment plan which will cut the monthly student loan repayment for the 25 year term.
- Still, it is obvious from Table 1 that excessive student loans can ruin a financial future... So,
- College Choice Planning is a worthwhile endeavor with clients
- Show them the numbers! (ND vs. IU example)
- Compare different university choices and the approximate loan debt!
- “Dream schools” can turn out to be a “nightmare” financially!



# Thoughts, Questions, Real Life Examples?

Please raise your hand and share.

Thanks for being here and listening!

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