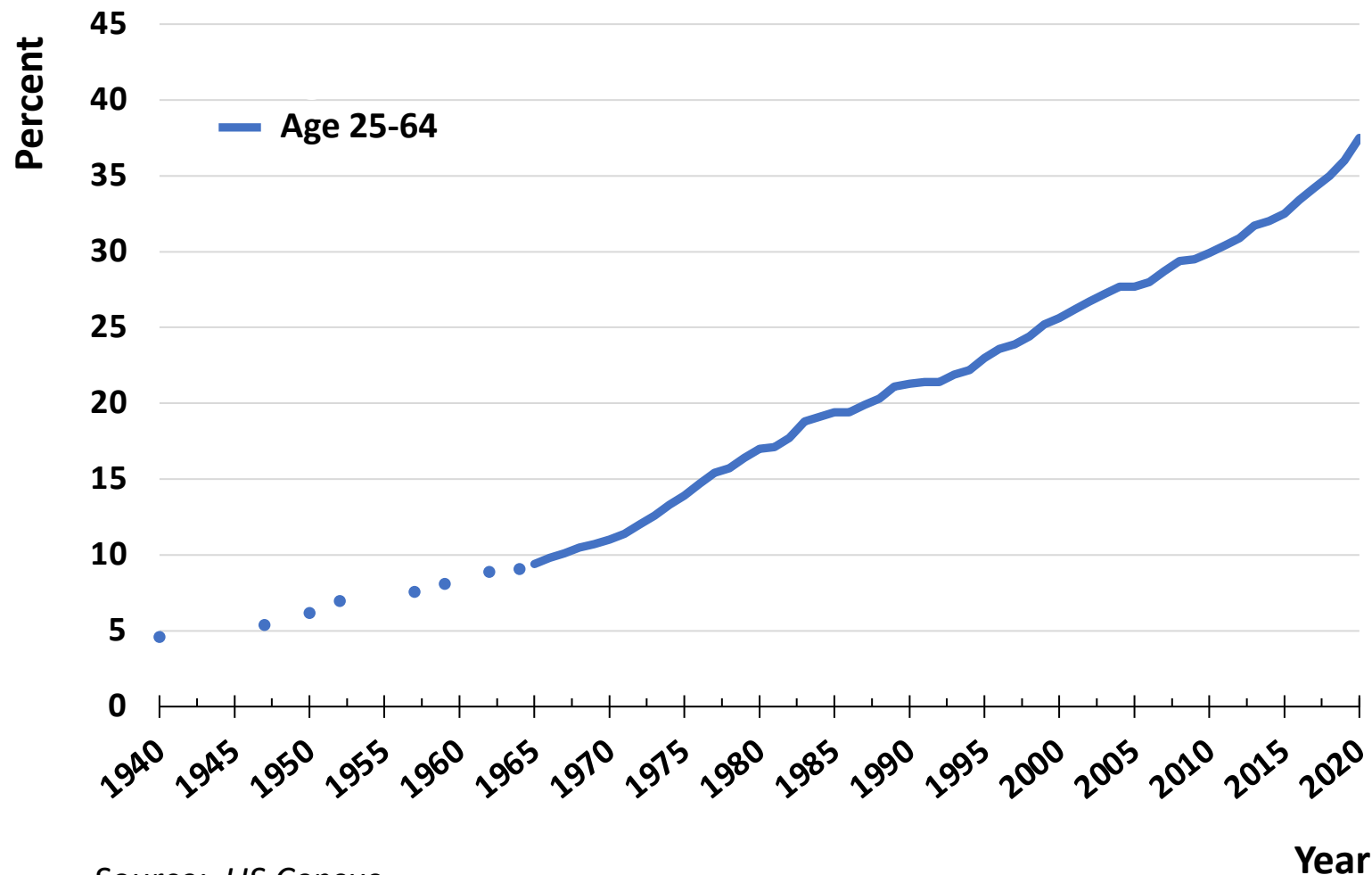


# Topic 3: Investing in Yourself

---

- Three key trends
  - The growing number of people investing in a college education
  - The growing cost of this education
  - And the rising reliance on student debt to help fund this expense
    - Total = \$1.75 trillion (2021)
    - 2<sup>nd</sup> largest type of consumer debt (after home mortgages)
- Issues:
  - Return on your college investment
  - Problem of excess student debt
    - Financial pressure of large payments relative to income
    - Reduced ability to finance other purchases (like a home - TBD)
    - Inability to get out of this obligation - TBD
  - A digression on saving & paying for college

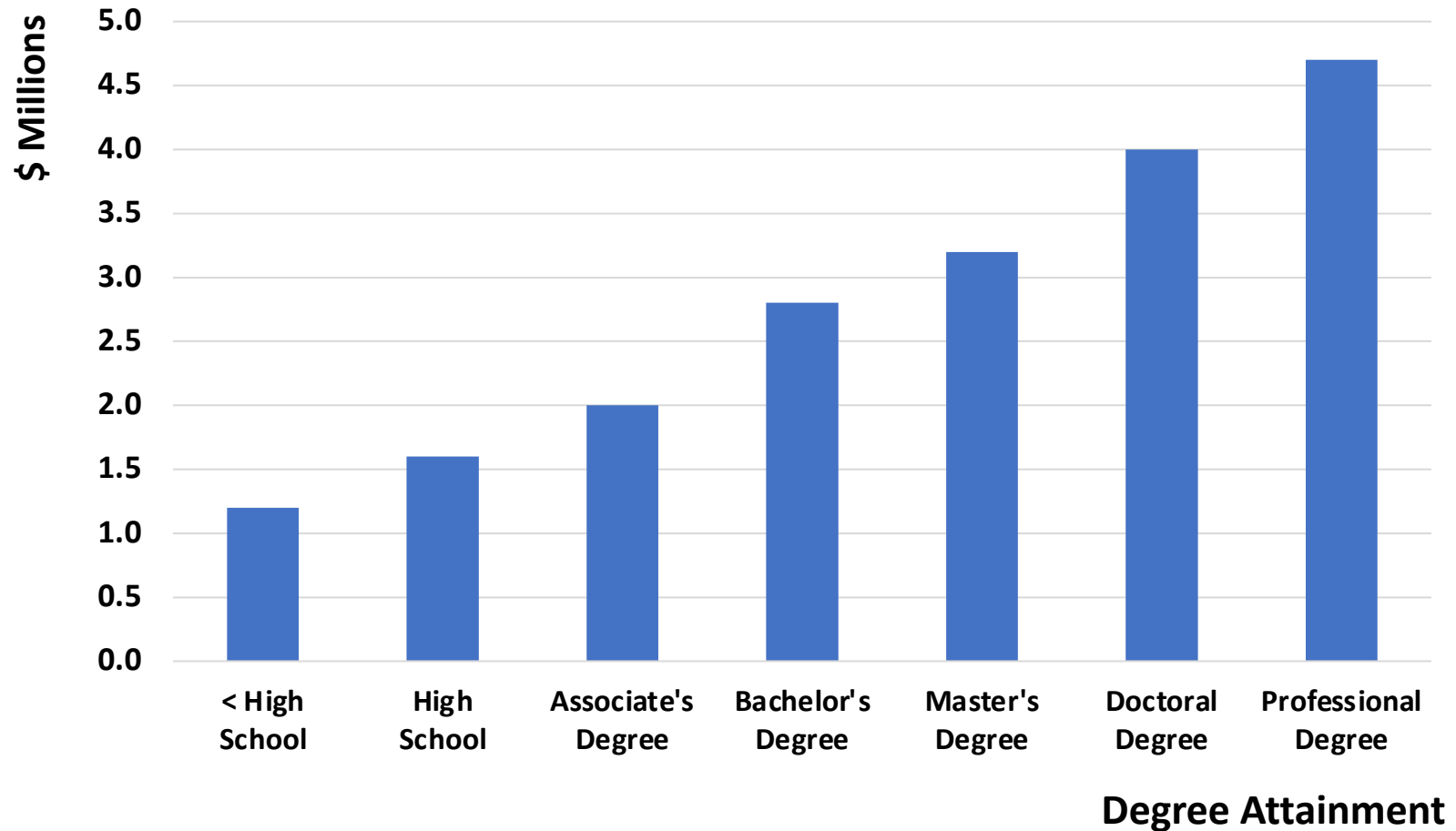
# US Working-Age Adults With BA Degree or Higher



Source: US Census

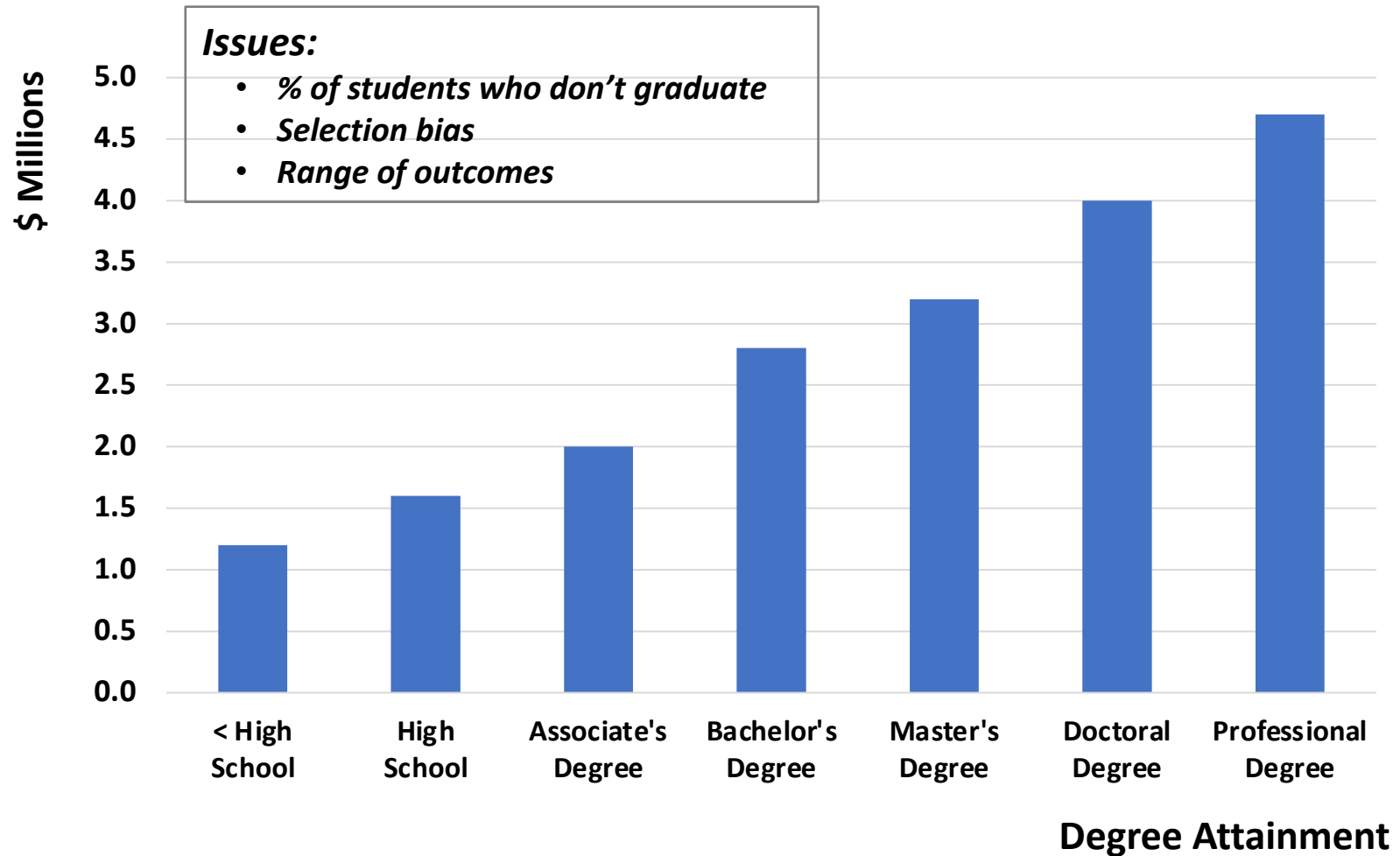
# Median Lifetime Earnings

---



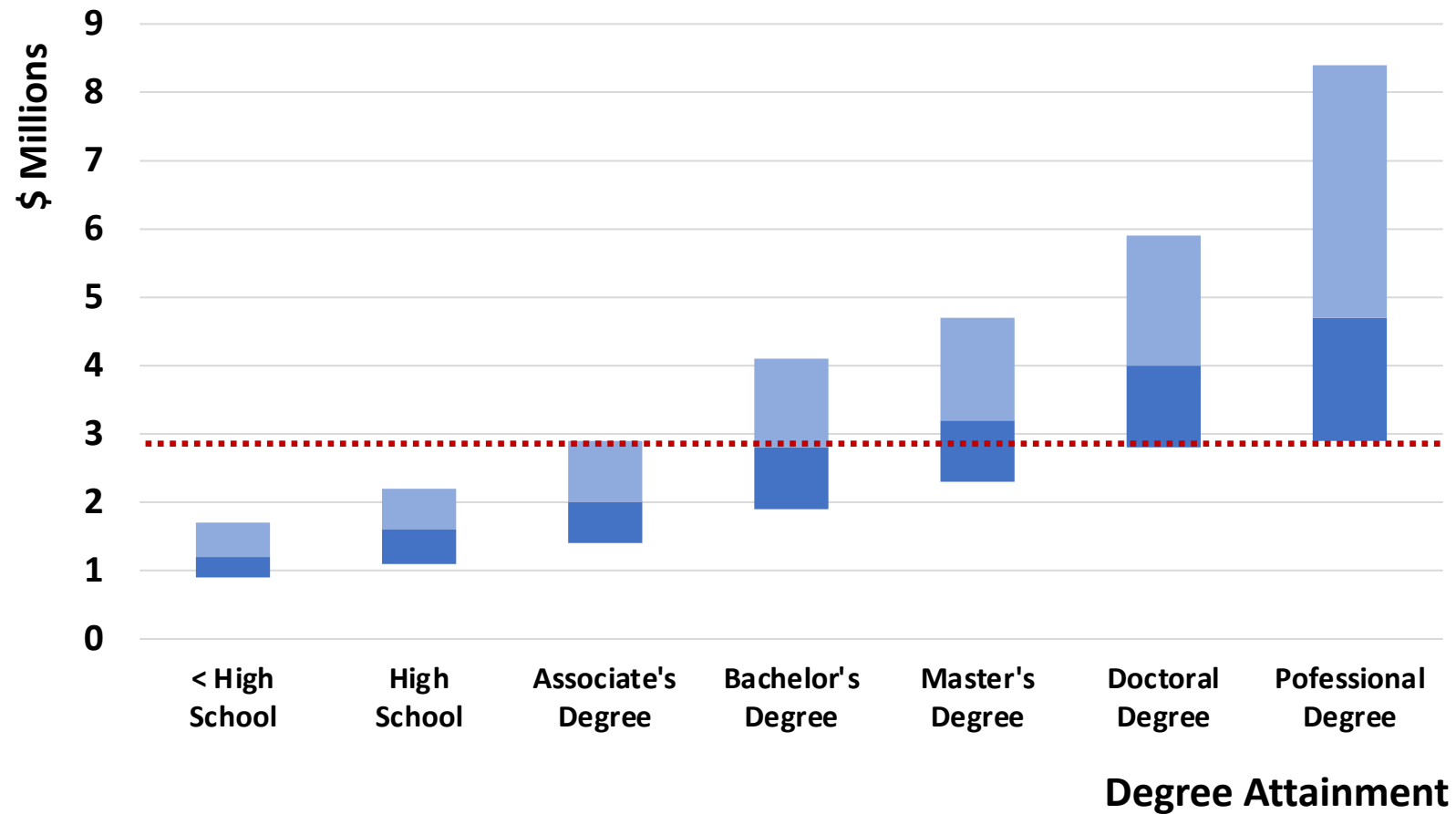
Source: Carnevale, Cheah & Wenzinger, "The College Payoff: More Education Doesn't Always Mean More Earnings" Georgetown Center on Education and Welfare, 2021

# Median Lifetime Earnings



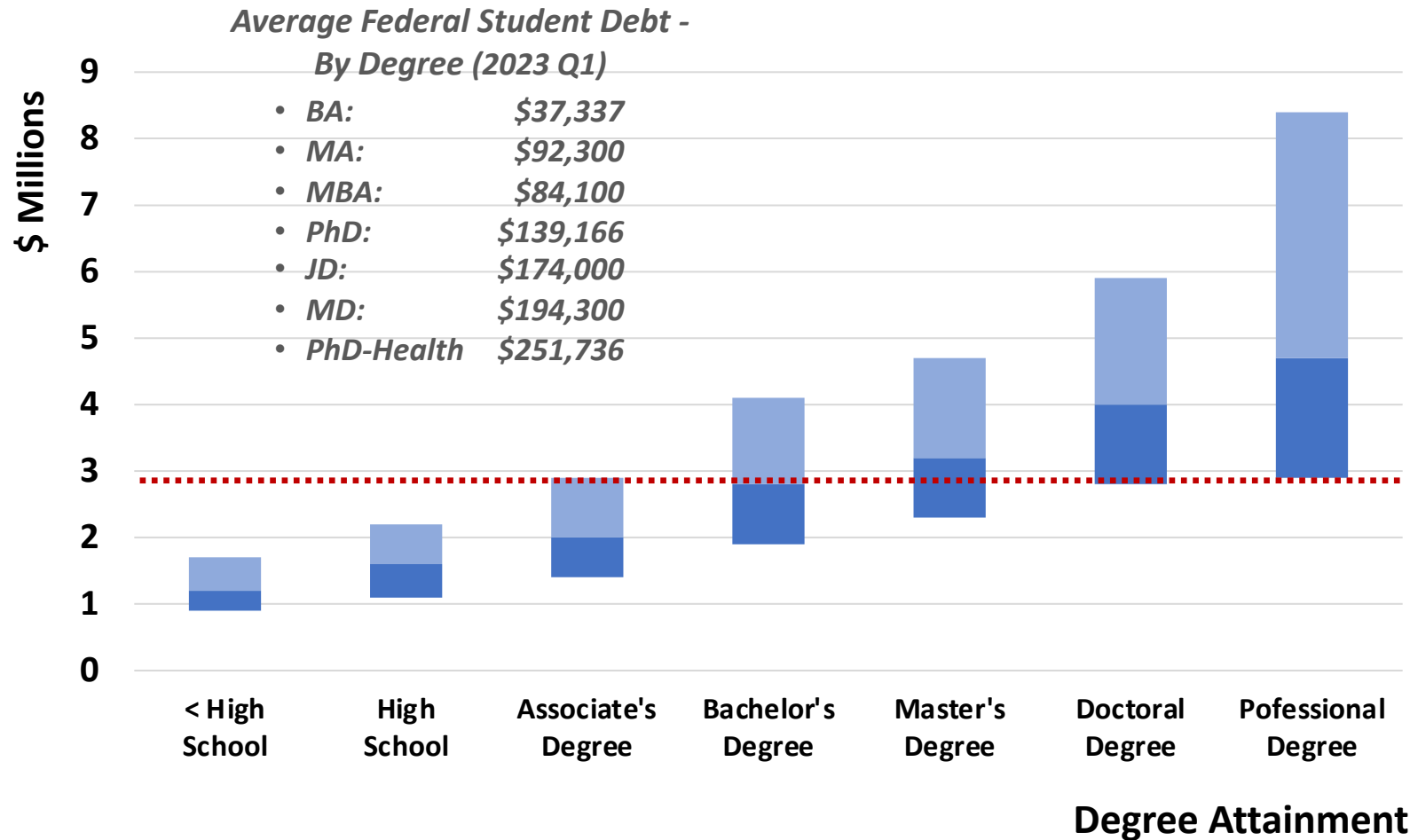
Source: Carnevale, Cheah & Wenzinger, "The College Payoff: More Education Doesn't Always Mean More Earnings" Georgetown Center on Education and Welfare, 2021

# Lifetime Earnings – 25<sup>th</sup>, 50<sup>th</sup>, & 75<sup>th</sup> Percentiles



Source: Carnevale, Cheah & Wenzinger, "The College Payoff: More Education Doesn't Always Mean More Earnings" Georgetown Center on Education and Welfare, 2021

# Lifetime Earnings – 25<sup>th</sup>, 50<sup>th</sup>, & 75<sup>th</sup> Percentiles

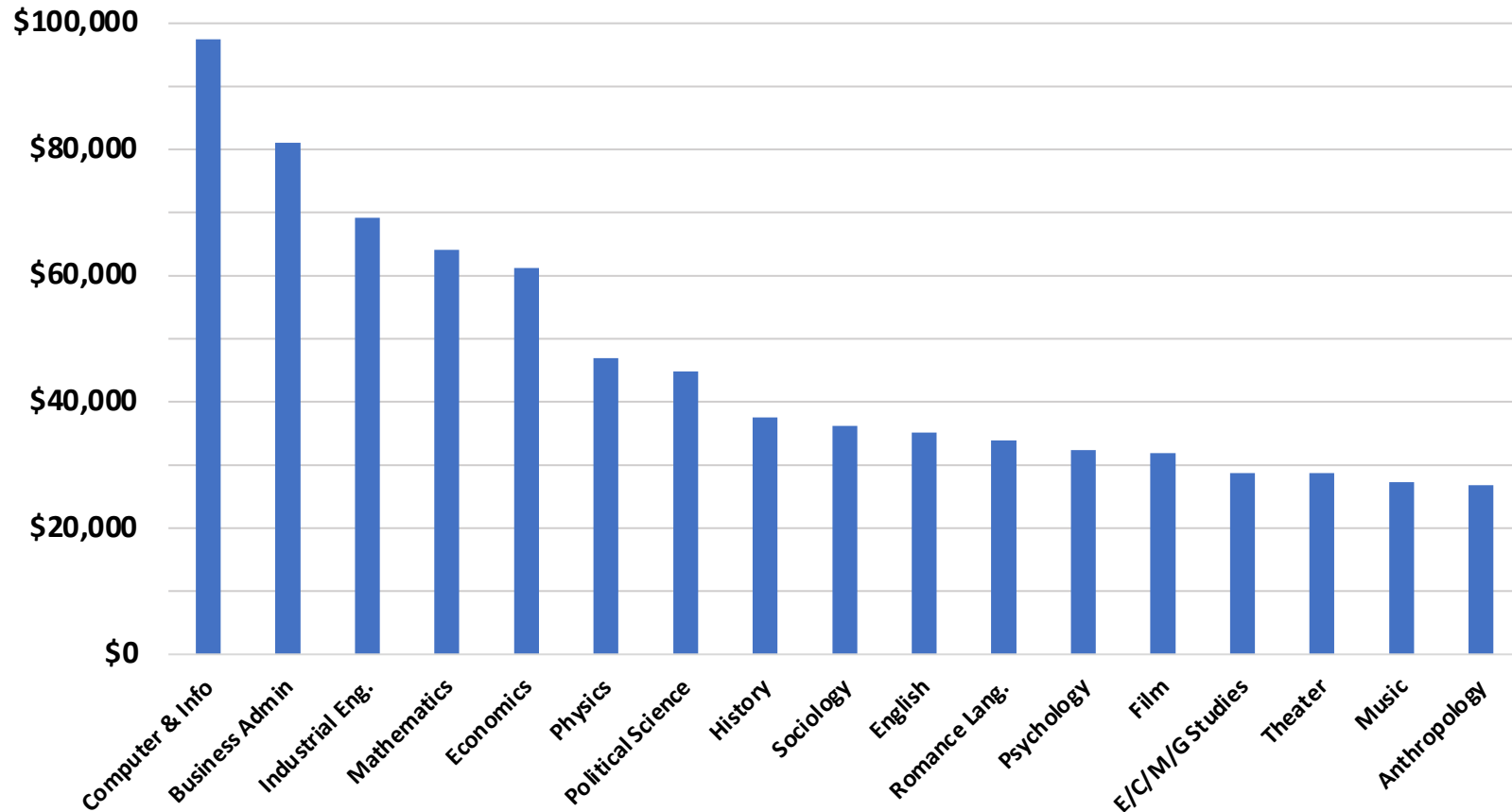


Sources: Carnevale, Cheah & Wenzinger, "The College Payoff: More Education Doesn't Always Mean More Earnings" Georgetown Center on Education and Welfare, 2021

Average Graduate Student Loan Debt, Melanie Hanson Education Data Initiation, May 2023

# Median Earnings By College Major

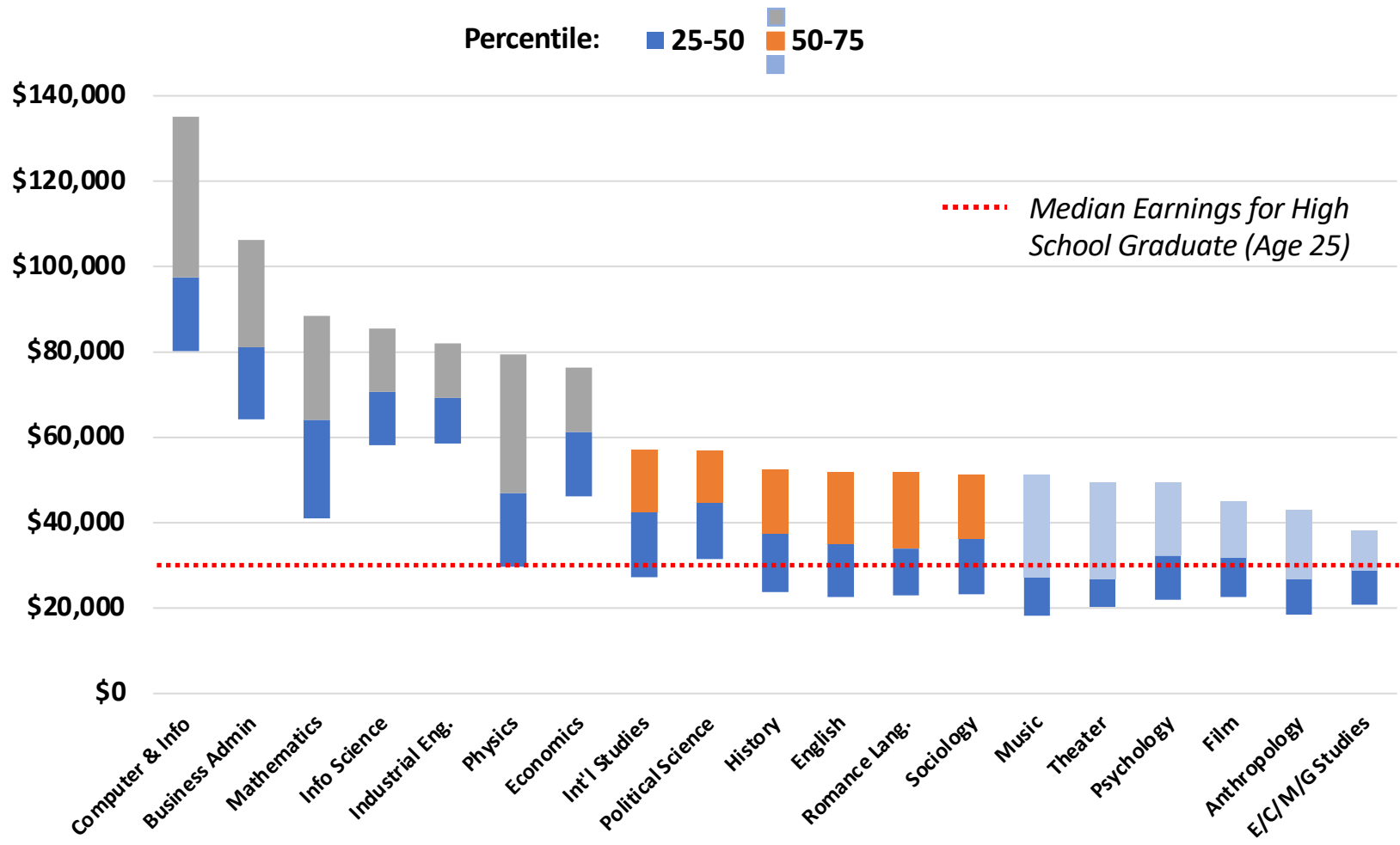
*1 Year after graduation, University of Michigan BAs, 2016-18 Cohort*



*Source: American Community Survey*

# Earnings Range By College Major

*1 Year after graduation, University of Michigan BAs, 2016-18 Cohort*

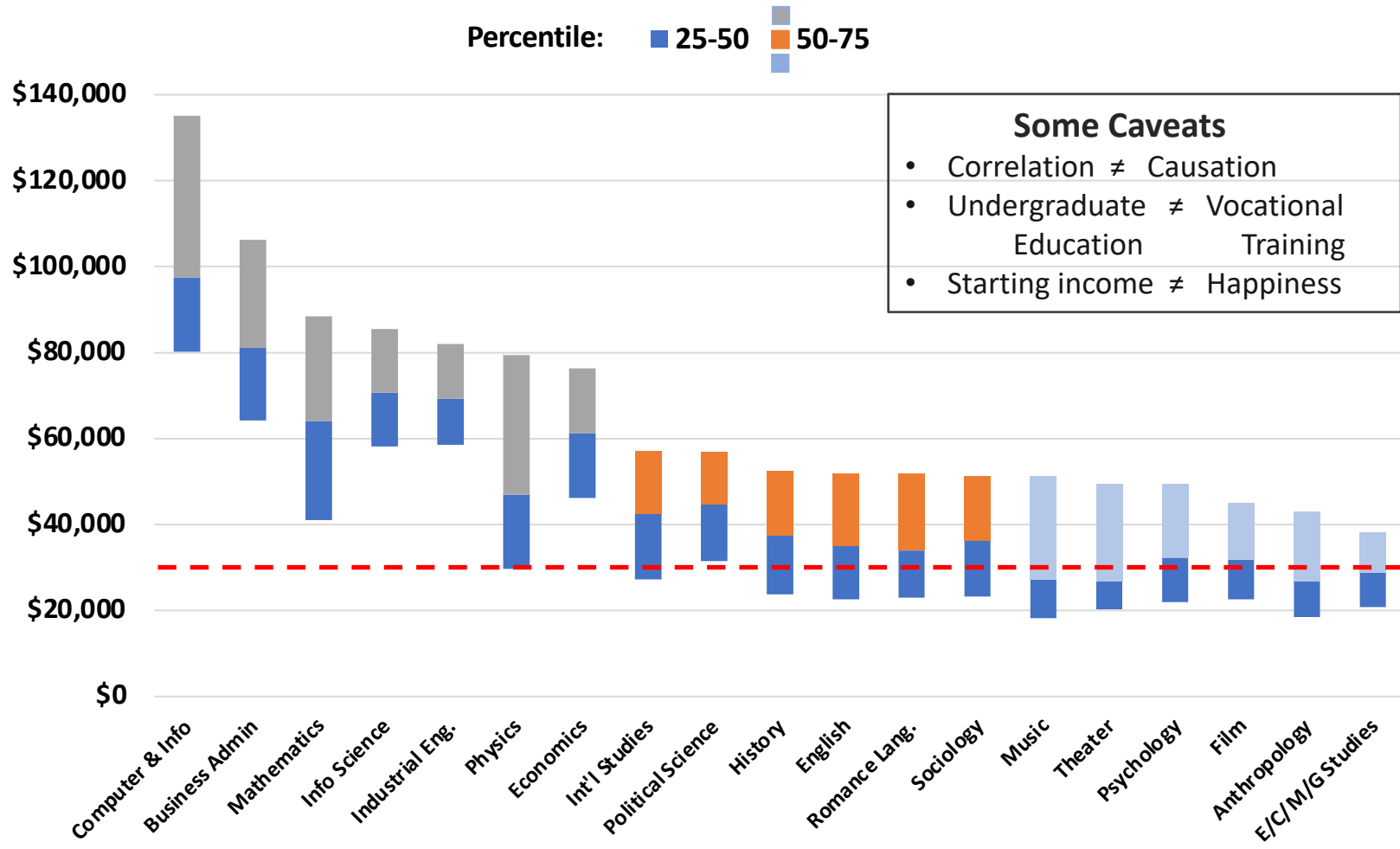


Source: American Community Survey



# Earnings Range By College Major

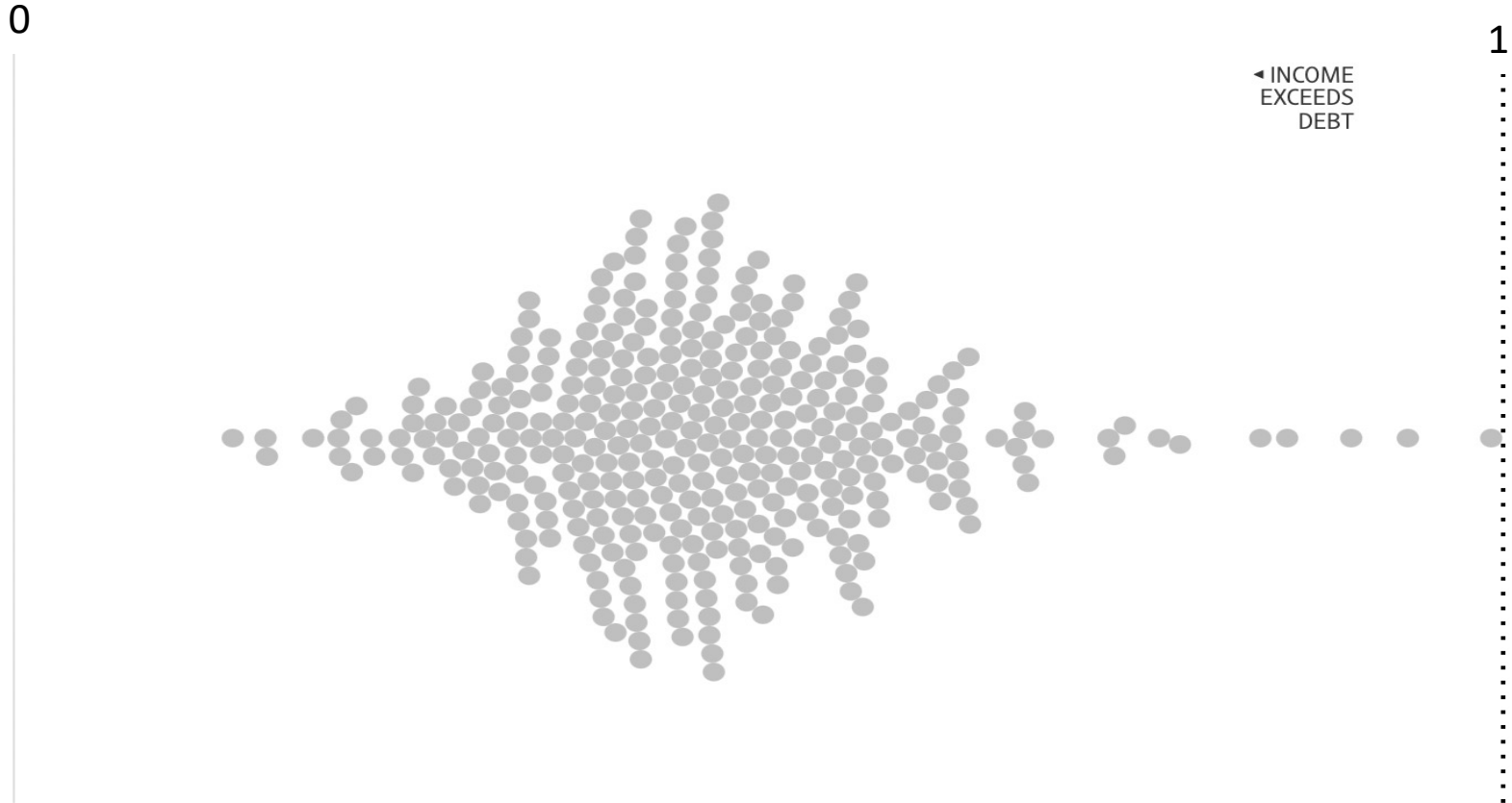
*1 Year after graduation, University of Michigan BAs, 2016-18 Cohort*



Source: American Community Survey

# Comparison: Debt to Income Ratio – Finance BA

*Median student debt vs. median income 2 years after graduating (2015-2016)*



*Note: Each dot represents a different college/university*

*Source: Using tool supplied by Wall Street Journal Article , “Financially Hobbled For Life”  
July 8, 2021. Data from the Department of Education*

# Comparison: Debt to Income Ratio – Anthropology BA

---

*Median student debt vs. median income 2 years after graduating (2015-2016)*



*Note: Each dot represents a different college/university*

*Source: Using tool supplied by Wall Street Journal Article , “Financially Hobbled For Life”  
July 8, 2021. Data from the Department of Education*

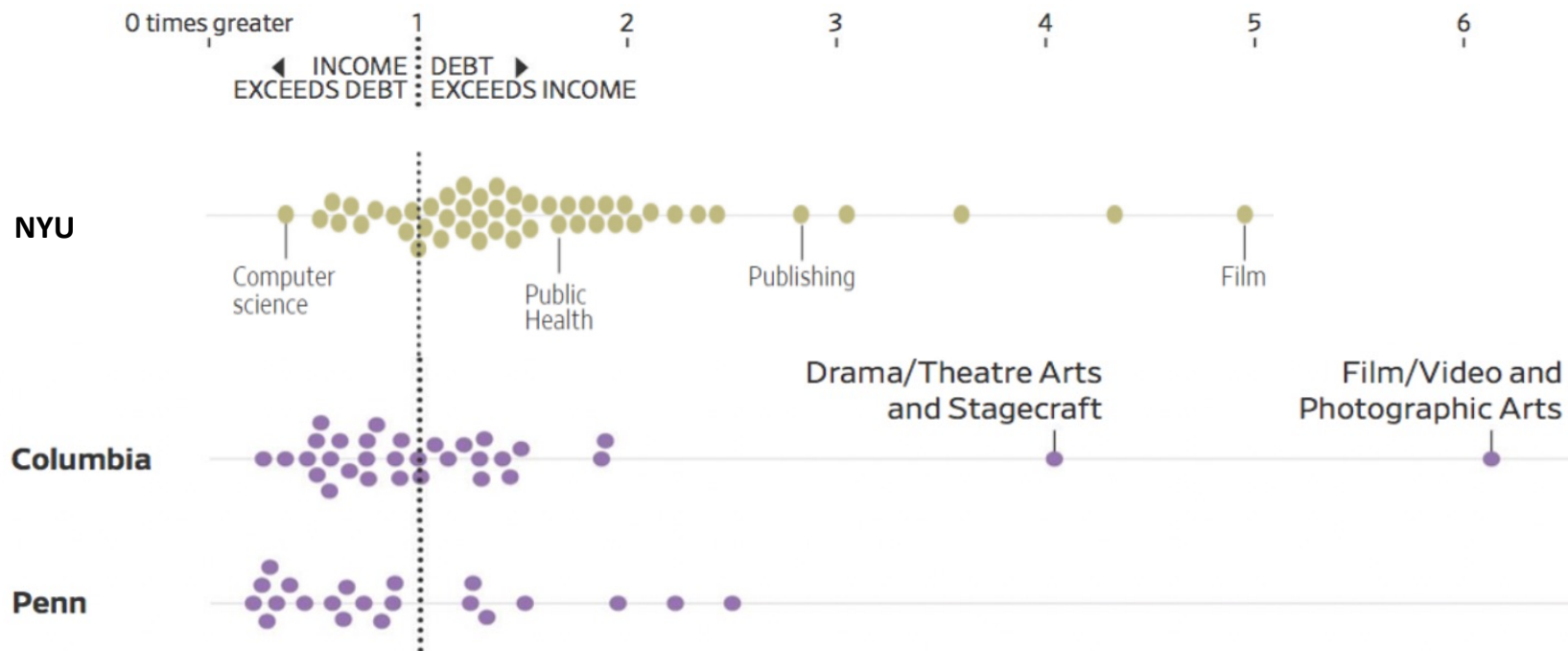
# Getting Into Financial Hot Water

---

- Undergrad
  - Using credit cards and other high cost financing to pay for college
  - Using repayment plans that allow college debt to grow (TBD)
- The grad school decision
  - Much more directly linked with vocational choice
  - Often greater out-of-pocket expense
    - Higher tuition for professional training
    - Fewer resources devoted to addressing financial need
    - With higher loan limits on size of Federal graduate school “Plus” loans than on BA loans
  - Result, about ½ of student debt is held by people with a graduate degree (2021)
    - With much higher interests rates than those on BA loans

# Debt vs. Income For Some Master's Degrees

*Median student debt vs. median income 2 years after graduating (2015-2016)*

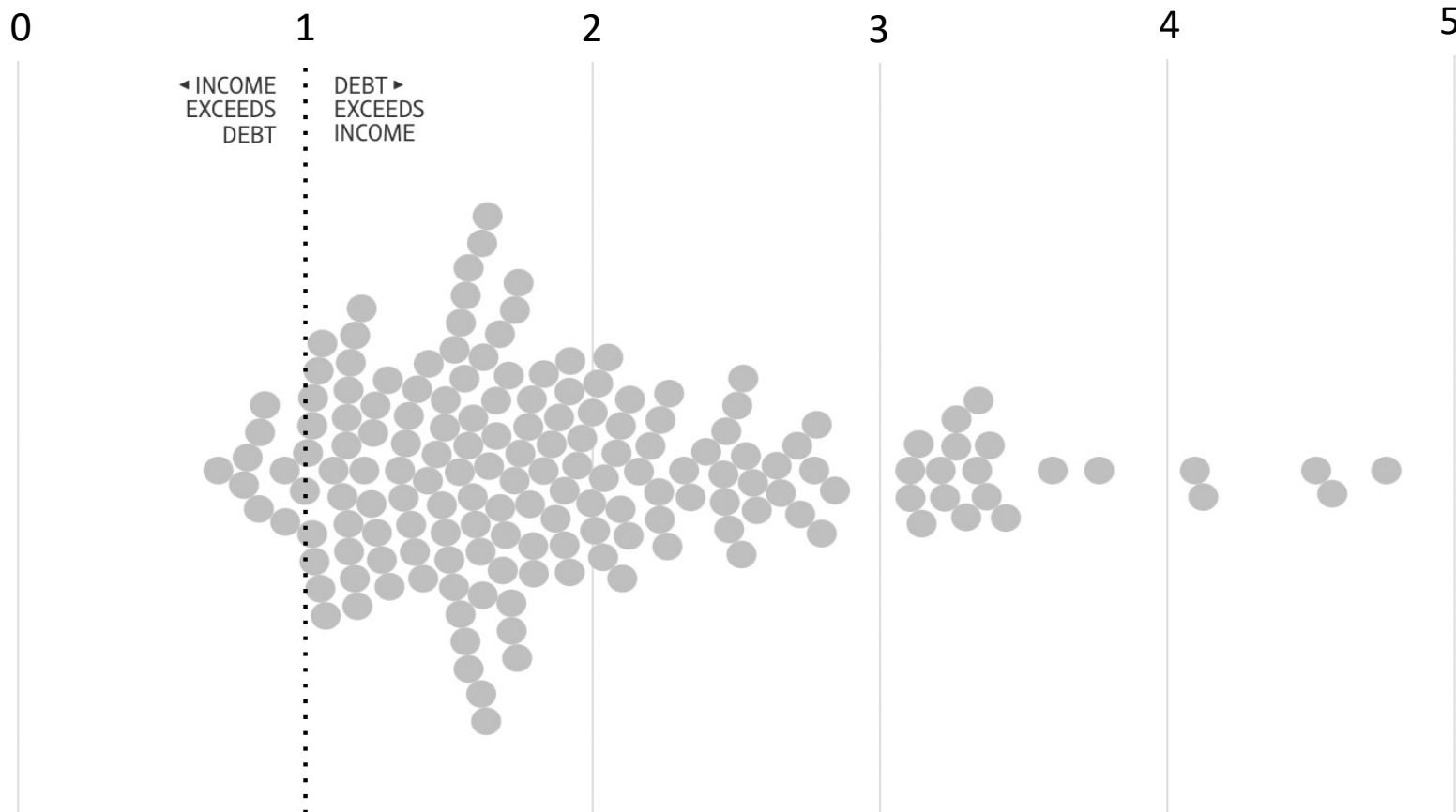


*Sources: Wall Street Journal, "NYU Tops Ranks – in Debt for Grad Students Parents," Dec 20, 2021*

*"Financially Hobbled For Life: The Elite Master's Degrees That Don't Pay" July 8, 2021*

# Debt to Income Ratio – Law Degree

*Median student debt vs. median income 2 years after graduating (2015-2016)*



*Note: Each dot represents a different college/university*

*Source: Using tool supplied by Wall Street Journal Article , “Financially Hobbled For Life” July 8, 2021. Data from the Department of Education*

# Key Take-Away

---

***Before you go to grad school ..... DO YOUR DUE DILIGENCE!***

# Key Take-Away

---

*Before you go to grad school ..... DO YOUR DUE DILIGENCE!*

- Placement of their recent graduates
  - Did they all get jobs?
  - What kind of jobs?
    - Who is hiring them?
    - What kind of work?
    - And for what kind of pay?
- Precise implications of your financial package
  - Total cost?
  - Grants?
  - Teaching offsets?
  - Carrying cost of expected final debt



# Due Diligence And Your BA Degree

---

- Three interesting questions
  - What kind of job do I want?
  - What kind of jobs do people with my degree get?
  - What should I be doing to get the career choices I want?
- Two types of issues
  - Needed skill sets
  - Signaling
- Four easily-accessible information sources
  - BLS Occupational Employment and Wage Statistics (BLS.gov)
    - Data on 867 careers
  - Website Replacedbyrobot.info (*website on AI risks for various jobs*)
  - College career counselling section (see what fellow degree holders did)
  - Networks - Alumni, employer, neighbor, etc.

# Student Debt

---

- High level of federal involvement (92% of total debt)
- Features of federal student loans
  - Often subsidized
  - Availability & cost is less sensitive to credit record if no adverse credit events (*e.g. no bankruptcy, foreclosures, loan charge offs, etc.*)
  - Wider range of repayment features
  - More opportunities for deferment/forbearance
  - Possible forgiveness
- Just remember
  - Federal BA loans limited to \$10,000 year
  - Private debt can be cheaper if you have a good credit record
    - Especially graduate loans
    - But are not eligible for Biden forgiveness programs

# Cost of Student Debt (June 2023)

---

Type	Interest Rate	Origination Fee	Grace Period
Federal			
Direct subsidized	4.99%	1.057%	Yes
Direct unsubsidized	4.99%	1.057%	X
Graduate Plus	7.54%	1.057%	X
Parental Plus	7.54%	4.228%	X
Private			
Fixed & Variable*	2 - 14%	NA	X

*\* Depends on credit score*

# Value of Having A Grace Period

---

*Loans with a grace period do **NOT** accumulate interest while you are in school.*

## **Amount You Owe At Graduation If You Borrow \$10,000 a Year For 4 Years\***

Interest Rate	Grace Period	No Grace Period	Difference
3%	\$40,000	\$43,135	7.8%
4%	\$40,000	\$44,243	10.6%
<b>5%</b>	<b>\$40,000</b>	<b>\$45,384</b>	<b>13.5%</b>
6%	\$40,000	\$46,560	16.4%
7%	\$40,000	\$47,771	19.4%
8%	\$40,000	\$49,017	22.5%
9%	\$40,000	\$50,303	25.8%

*\* Assuming you borrow the money and pay tuition at the start of each year*

# Student Loan Forgiveness

---

- Federal & Private
  - May be discharged if they resulted from predatory behavior or if school closed
  - Examples: ITT, Corinthian, Westwood
- Biden proposals (Federal loans only)
  - Originally done by executive order
    - Blocked by Supreme Court
  - Has largely reinstated proposals via rule making (by relevant agency)
    - Will need to see final rules and results of any legal challenges
    - But have a much better chance of succeeding
  - Will only apply to Federal loans, not private loans

# Updated Biden Proposals (Federal Loans Only)

---

- Covid forbearance has ended
  - Interest resumed in September
  - Payments resume in October
    - But with transition period before unpaid debts are treated as delinquent.
- One-time forgiveness
  - May still be in college
  - Eligibility: Income < \$125K(individual), <\$250K (family)
    - Parental income included if you are declared as a dependentgiveness (\$20K *for students with Pell grants*)
- Income Driven Repayment (TBD)
  - Biden proposals likely have biggest impact here

# Cost Of Biden Original Forgiveness Actions & Proposals

---

*Preliminary take\**

- Total cost > \$1 trillion
- Breakdown (*rough numbers*)
  - Covid forbearance: \$200 billion.
  - \$10K/\$20K forgiveness: \$300 billion
  - IDR change; \$500 billion  
(*Dynamic estimate – from Penn Wharton Budget Model*)

*\* Initial impressions only. Please consult the relevant office at your college.*

# Repayment Options – Federal Loans

---

- Preset Path (4 Options)
  - Regular or Extended Term (i.e. 10 years or 25 years)
  - Fixed or graduated payments
    - Graduated payments start low but rise every 2 years
- Income-Driven Repayment Options (TBD)



# Repayment Options – Example 1

---

**For A \$40,000 Direct Unsubsidized Loan with a 4.99% Interest Rate**

	Standard	Graduated	Extended	Extended Graduated
Term	10 Years	10 Years	25 Years	25 Years
1 <sup>st</sup> Monthly Payment	\$424	\$240	\$234	\$165
Last Monthly Payment	\$424	\$720	\$234	\$385
Total Payments	\$50,888	\$53,694	\$70,081	\$76,710

*Source: Loan Simulator, Federal Student Aid Website (<https://studentaid.gov> )*

*Note: This simulator can also estimate payments for the income-based options!*

# Repayment Options – Example 2

---

**For A \$40,000 Plus Loan with a 7.54% Interest Rate**

	Standard	Graduated	Extended	Extended Graduated
Term	10 Years	10 Years	25 Years	25 Years
1 <sup>st</sup> Monthly Payment	\$476	\$277	\$297	\$251
Last Monthly Payment	\$476	\$830	\$297	\$406
Total Payments	\$57,077	\$61,913	\$88,991	\$95,940

*Source: Loan Simulator, Federal Student Aid Website (<https://studentaid.gov> )*

*Note: This simulator can also estimate payments for the income-based options!*

# What Should You Do?

---

- Don't just look at the monthly payment
- Big issue, what do you plan to do with the lower payment?
  - Use the savings to pay down other higher interest rate debt?
  - Invest the savings at a (hopefully) higher ***after-tax*** rate of return?
  - Spend the money?

# Repayment Options – Federal Loans

---

- Preset Path (4 Options)
  - Regular or Extended Term (i.e. 10 years or 25 years)
  - Fixed or graduated payments
    - Graduated payments start low but rise every 2 years
  - Not eligible for standard loan forgiveness programs
    - But eligible for Biden's \$10K loan forgiveness (TBD)
- **Income-Driven Repayment Options (IDR)**
  - **Payment generally set as a percentage of “discretionary income”**
  - **Loan balance forgiven at the end of a specified period**
  - **Issues**
    - **Definition of discretionary income**
    - **Does interest accumulate if max payment < loan interest?**
    - **When is loan forgiven?**
    - **Is loan forgiveness treated as taxable income?**

# The PSLF\* Program

---

*\* Stands for Public Sector Loan Forgiveness Program  
In place before Biden proposals*

- Must work full time in a government organization, qualifying nonprofit. AmeriCorps, Peace Corps, or a qualifying religious organization
- Make 10 years of payments (120 payments) on time for full amount due
- Apply and be granted forgiveness
  - Average balance discharged has been > \$80,000
  - Forgiveness is tax free if approved

# The PSLF\* Program

---

*\* Stands for Public Sector Loan Forgiveness Program  
In place before Biden proposals*

- Must work full time in a government organization, qualifying nonprofit. AmeriCorps, Peace Corps, or a qualifying religious organization
- Make 10 years of payments (120 payments) on time for full amount due
- Apply and be granted forgiveness
  - Average balance discharged has been > \$80,000
  - Forgiveness is tax free if approved
- **Problem, only 1-2% of PSLF applications were approved pre-Biden**
  - **Approval rate has moved up to 5-10% (10% recently)**
  - **But that still means a 90=95% denial rate**
  - **Otherwise loan only forgiven after 10-25 years under IDR plan**

# Other IDR Plans – Pre Biden

---

- Generally had to work 20-25 years before loan is forgiven
- Interest accumulated on debt if monthly payment did not cover interest
- Eventual loan forgiveness was treated as taxable income
- Which could result in a huge tax bill when loan was forgiven
  - And the IRS wants its money
- Example of \$100K grad school “Plus loan” with 7½% interest
  - Suppose you did not have to make any monthly payments
  - Would owe \$609,000 when loan was forgiven 25 years later
  - Which means your taxable income that your would increase by \$600,000.
  - And that would result in a very large tax bill.

# IDR Payments & Forgiveness

Issue	Pre-Biden	Old Biden Proposal	New Biden Proposal
Discretionary Income*	Amount > 150% of poverty level	Amount > 225% of poverty level + \$30K	Amount > 225% of poverty level
Maximum payment	10-15% of discretionary income	5% of discretionary income	5% of discretionary income
Loan forgiveness	PSLF: 10 Years IDR: 20-25 years	10 years	PSLF: 10 years IDR: 10 years or more**
Interest accumulation	Yes	No	Generally No***
Taxable income?	PSLF - No Other – Yes****	No	PSLF-No Other-Unsure****

\* Based on previous-year tax return;

\*\* 10 years + 1 year for every \$1K original loan is over \$12K

\*\*\* IBR program still has interest accumulation

\*\*\*\* Not taxable income if loan is forgiven between 2021-2025, not sure after that



# What If You Get Into Trouble?

---

- **Loan forbearance (*in cases of for economic hardship*)**
  - **Federal loans:**
    - Can apply to defer payments for up to three years
  - **Private loans:**
    - Typically can only defer payments for 1 year
  - ***Note: All loans under forbearance continue to accrue interest (with exception of earlier Covid 19 forbearance)***

# What If You Get Into Trouble?

---

- Loan forbearance (*in cases of for economic hardship*)
  - Federal loans:
    - Can apply to defer payments for up to three years
  - Private loans:
    - Typically can only defer payments for 1 year
  - *Note: All loans under forbearance continue to accrue interest (with exception of earlier Covid 19 forbearance)*
- **Handling of delinquencies**
  - **Federal Loans:**
    - Enter default after 270 days of nonpayment
    - After that, usually have options to restore your good credit standing
  - **Private Loans**
    - Typically in default after 30 days of nonpayment
    - May be charged off in as little as 120 days of nonpayment
    - Very limited options to get out of default after loan is charged off

# What If You Get Into Trouble? - 2

---

- But implications of a default are very different!
  - Private Loans:
    - Rely on court system to sue and collect a judgment
    - And are subject to your state's statute of limitations
    - But you still really want to avoid living through this
  - Federal Loans:
    - Debt collectors can bypass courts and directly seize your tax refund or garnish your wages
    - And then can do this indefinitely!!! (*Income and Social Security payments*)
    - (*That is, federal student debt is generally **NOT** wiped out by bankruptcy*)
    - In other words, you can't get out of this debt
    - So make sure you can afford to carry this debt.

# Two Final Topics

---

- Impact of student loans on your ability to use debt to buy a house, car, etc.
- Digression: College costs and your kids

# Two Final Topics

---

- **Impact of student loans on your ability to use debt to buy a house, car, etc.**
  - **Debt capacity - the DTI ratio:**  $\frac{\text{All Monthly Debt Payments}}{\text{Gross Monthly Income}}$
  - **Generally banks will want this to be under 36%**
  - **So large debt payments in one area will reduce your ability to borrow in another**
- **Digression: College costs and your kids**

# Two Final Topics

---

- Impact of student loans on your ability to use debt to buy a house, car, etc.
  - Debt capacity - the DTI ratio:  $\frac{\text{All Monthly Debt Payments}}{\text{Gross Monthly Income}}$
  - Generally banks will want this to be under 36%
  - So large debt payments in one area will reduce your ability to borrow in another
- **Digression: College costs and your kids**
  - **Financial aid calculations and # of kids attending college**
  - **Financial aid calculations and**
    - **Income**
    - **Retirement savings**
    - **Other savings**
    - **529 Savings**
    - **See Kotlikoff**