

**Investing in America's future:
meeting the financial imperative for affordable higher education**
How to offer nearly-free tuition while using minimal taxes from the public coffer

January 2024 policy paper from the **Kelso Institute** (view online [here](#))

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Executive Summary

Skyrocketing student loan debt—\$1.6 trillion for more than 45 million borrowers—is a significant burden on America's future. It especially impacts middle and lower-income families, with a Department of Education analysis finding that the typical undergraduate student now graduates with tens of thousands of dollars in debt. Upon leaving college, these borrowers struggle with high monthly payments and ballooning balances, with about 40 percent of federal student loan borrowers – nearly [nine million people](#) – recently missing their first monthly payment. This makes it harder for them to build wealth that could be used for [buying homes](#), [starting small businesses](#) and families, or [putting away money for their eventual retirement](#). No other advanced democracy in the world has established a higher education system in which young people exit college with so much debt that, in some cases, leaves them financially strapped for decades.

The Biden administration announced the SAVE plan which will [cost as much as \\$475 billion](#) over ten years. During a time of economic uncertainty, there are many competing societal needs and demands on government revenues, even as tuition and other education costs continue to soar.

But what if there was a way to pay for future student tuition without either indebting the students or costing the taxpayers very much money?

In this policy paper, a financing mechanism is presented, called “*future returns investment*”, that takes advantage of the same financing strategies used by university endowments, the Social Security Trust Fund, President Franklin Roosevelt, Treasury Secretary Alexander Hamilton, major corporations, wealthy investors and the Alaska Permanent Fund to catalyze ongoing wealth creation out of future earnings realized from investments stretching over a defined time horizon.

In the 1970s, corporate lawyer and investment banker Louis O. Kelso established a number of financing vehicles capable of diffusing wealth creation to greater strata of the population. Kelso is best known as the inventor of the ESOP – Employee Stock Ownership Plan – in which capital ownership of thousands of companies has been diffused to each company's employees. Today, nearly [14 million US workers](#) are covered by ESOPs, almost as many as are members of labor unions. While ESOPs benefit the employees of a particular company, Kelso proposed other related financing vehicles as part of a vision for “universal capitalism” designed to include broader sectors of society. These financing mechanisms can be deployed to pay for student tuition for millions of individuals while using minimal taxpayer dollars.

This policy paper provides details and discussion about how such a proposal, called the Youth Education Security (YES) Fund, could work. It will cost both students and the federal government a fraction of the Biden administration's SAVE plan, and students' loan obligations would be paid off in half the time.

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PART I. INTRODUCTION: HOW WEALTH IS GENERATED

Since 1980, the total cost of both four-year public and four-year private college has [nearly tripled](#), even after accounting for inflation. Many low- and middle-income families have been left with no choice but to borrow heavily for their children's education. Federal support has not kept up. Pell Grants once covered [nearly 80 percent](#) of the cost of a four-year public college degree for students from working families, but now only cover a third. That has left many students from low- and middle-income families with no choice but to borrow if they want to get a degree. Or, as college enrollments have [declined](#) in recent years, already before the pandemic, it's clear that increasingly the choice for students and their families is to not attend higher education at all, halting their studies for economic reasons. Recognizing the blow this reality deals to the American Dream of middle-class inclusion and economic competitiveness, the Biden administration has been trying to find a legal and effective bailout for the current situation. But those bailouts are not cheap, each with a price tag of nearly half a trillion dollars.

The problem has proven to be intractable. Governments at both the federal and state levels are scratching their heads over how to help future students to pay for their university education and keep up enrollment. For decades, a university education has been part of the ticket to the middle class, which in turn has stabilized not only families but the US macroeconomy on the bedrock of aggregate demand stemming from the "middle class society." But as tuition costs escalate and young people go deeper into debt, and some drop out of college altogether or never enroll, an increasing number of people worry if the future of the middle-class society is threatened.

But what if there is a way to pay for a university education, as well as the cost to attend technical or trade schools, or vocational training in areas like nursing, computers, truck driving, plumbing or carpentry, for those young people who want to pursue those occupations, without costing the taxpayers very much money? Does that sound too good to be true?

There is a way to do just that. There is a financing vehicle available, a version of which is used by wealthy investors, major corporations and university endowments all the time. It is called "*future returns investment*."

The corporate model of wealth creation

Do you know how major corporations like Apple, GM, Toyota and IBM fund future growth and investment? The popular perception is that they earn profits, and then invest those profits in new inventions and factories which result in more profits. And it is also believed that they raise money for investment through the sale of new common stock.

But that's not how most new capital and investment is paid for. Most of the time corporations use their awesome credit power and worthiness to borrow tons of money for new investment. On average, over \$2 trillion of new capital is created annually, most of it through debt financing and retained earnings. Corporations raise only a small amount of new capital through the sale of new common stock, around five percent. Instead, they *borrow* large amounts of capital, knowing that their new investments will attract more customers and earn more revenue and profits, allowing them to pay off the loans out of future earnings.

That mechanism is key: *they pay for new investment out of future earnings, not out of current profits or savings*. Over time, the successful corporations get richer and richer, as do the relatively small handful of investors who bought those companies' stocks. Since nearly 90 percent of stocks in the United States are owned by the [wealthiest 10 percent](#) of Americans, who are rich enough to risk a cash investment in the short-term volatile stock market, this is a winners game that only

a handful of people can play. It's as if, in a strange twist of capitalism, eligibility to acquire new capital is restricted to those who *already own large amounts of capital*.

And since oftentimes the new investment and increased profits is spurred by the introduction of new technologies, that means only the wealthiest of Americans benefit *as investors* from innovation and technology. Of course, all Americans benefit as consumers from new technologies introduced into the fields of healthcare, energy efficiency, home economics, transportation and more. But the tiniest fraction of people become investors in those companies and reap the money-in-the-bank profits from these new innovations.

The basic principles of business finance allow wealthy businesses and investors to borrow money for investment purposes, and then pay off the loans out of future profits. Indeed, most wealth in the world is derived from capitalizing on investments *which pay for themselves over time out of their own future earnings*. Financial wealth accumulates even more wealth, and it does that much faster over time than does wage income, which is how most everyday people earn their living. Economist Thomas Piketty captured this reality in his now-famous formula $r > g$ (the rate of return on capital exceeds the economic growth rate), which demonstrated why the small 10 percent elite of wealthy people get richer, while the vast 90% majority of wage-earners tread water or worse.

In addition, to borrow money a condition is always attached: to qualify for a loan the borrower must put up some kind of collateral to ensure that the loan will be repaid. Usually only the wealthy can meet this condition. This is the essence of each and every investment and ensures that the already-wealthy are the ones who benefit from capital's ability to pay for new investment and capital accumulation out of future earnings from the new investment.

Using future earnings to pay for student's college education

But what if there is a way to deploy this financing mechanism to benefit more than a tiny privileged few, and instead to benefit a greater swath of Americans? For example, what if future returns investment could be used to solve one of today's most challenging political and financial dilemmas – that of young people trying to get ahead by receiving a college education or vocational training without having to go deep into debt?

Sixty years ago, lawyer and investment banker Louis Kelso thought of a way to do just that. Kelso was the inventor of the Employee Stock Ownership Plan (ESOP). In the 1970s, ESOPs were the rage, with hearings in Congress, a *60 Minutes* interview of Kelso, and thousands of companies establishing stock ownership plans in which capital ownership of the company was diffused to all employees. Today, [14 million US workers](#) are still covered by over 6000 ESOPs, almost as many workers as are members of labor unions, providing over \$1.4 trillion of employee benefits.

There is a version of this kind of financing, in which investments to create new wealth are paid for out of future profits, that could be deployed to pay for an individual's higher education or vocational training. It also could be used to pay for any number of public goods, such as middle-class housing or to finance public ownership of an energy utility like PG&E, without dipping into the public tax coffers. Here's how that would work.

Future returns investment for the public good – paying for higher education

Under this financing proposal, the federal government charters a non-profit endowment fund that would raise money by selling long-term US Treasury Bonds. The proceeds would be used to purchase shares – stocks and bonds – in a large and diversified number of successful publicly-traded firms. The investment portfolio held by the endowment fund is managed by a professional investment firm. The long-term gains on these investments would then be used, after paying back the Treasury bond investors, to pay for students' college tuition and vocational training.

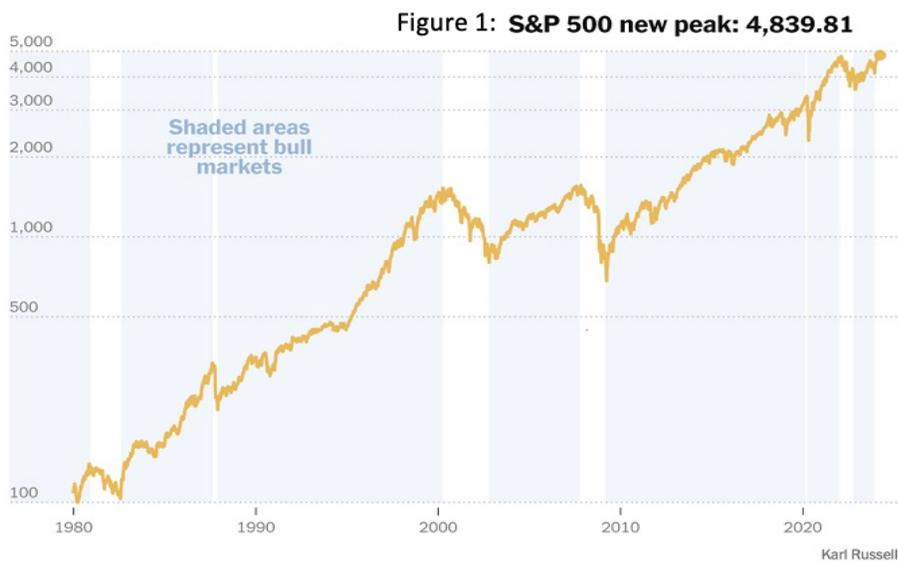
This kind of structure is similar to how universities such as Harvard, Yale and Stanford manage and grow their [enormous endowment funds](#). Harvard has a \$53 billion fund – larger than the state budgets of 41 states – and it is managed by the Harvard Management Company, which has realized a nearly [34 percent return](#) on investment in recent years, despite a troubled global economy. These university endowment funds have [grown robustly over the years](#) by investing in a diversified portfolio of investments. For example, Harvard’s endowment is made up of [more than 13,000 individual funds](#) invested as a single entity.

This higher education focused endowment fund is called the *Youth Education Security Fund (YES Fund)*. Eligibility would be decided based on appropriate criteria, depending on the fund's goal – for example, it could be means tested in some way or be universally available to all young people who borrow educational loans. Tuition reimbursement to the fund’s student beneficiaries are delayed at first to give the fund time to grow. But payments begin over the appropriate timeframe as fund investments appreciate and dividends accumulate. Government expenditure helps cover interest on student loans, but the amount would be much less than the nearly half a trillion dollars that the Biden administration is proposing to bail out current student borrowers.

The Treasury bond itself, which would pay an interest rate of 4.35% per annum to investors, is also paid off over time out of the accrued, tax-exempt wealth of the YES Fund. Once the Treasuries have been fully repaid, the remaining funds are used to pay for student’s tuition and vocational training. Structured this way, tuition for education and skills training would evolve into an ongoing fund able to pay off tuition for students in full.

The question of stock market volatility

A natural concern would be that this financing mechanism would tie the fortunes of the YES Fund to the stock market, which can be volatile. But [historically speaking](#), over a 5 to 10 year horizon, the stock market nearly always goes up. [Since 1928](#), the U.S. stock market has risen *on average* nearly 10% per year, and the market is up roughly 3 out of every 4 years as Figure 1 shows.



So, volatility is not the problem. The real problem is whether the stockholder has the wherewithal to tolerate the risk of the ups and downs of the gyrating market. Poor and middle-class people rarely possess this capability. Having a financial cushion to tolerate risk is an advantage that upper income people enjoy, and is one of the primary

reasons why they alone predominantly benefit from the incessant wealth-creating machine of the financial markets. Ironically, those who already own a lot of wealth and capital are the ones who most benefit from the acquisition of new capital.

Kelso’s “universal capitalism”

Louis Kelso called this type of financial investment “universal capitalism” – the idea that *everyone* should be able to benefit from the medium-and long-term growth of the stock market, instead of

just a tiny wealthy sliver who can afford the risk. Kelso, the author of several books including *The Capitalist Manifesto* and *Democracy and Economic Power*, believed that every human being should benefit from the most powerful economic growth engine that humans have ever devised – capital investment.

Instead, the way the US economy is structured, only a handful of people pocket the vast amounts of generated wealth, while only the crumbs trickle down into everyone else's pockets via wages (which mostly have been stagnant for decades) and government redistribution. But as income tax rates on corporations and high net worth individuals have declined precipitously in recent decades, there has been a lot less to redistribute.

By allowing everyday people – such as young people at the outset of their careers – to benefit from the remarkable ability to pay for new investment and capital accumulation out of future earnings, we can better ensure that the benefits of investment, economic growth and technological innovation will be more broadly distributed and “*universal*”.

Kelso implemented a version of this financing innovation plan, the Consumer Stock Ownership Plan (CSOP), as early as 1958. This first CSOP allowed a consortium of 4,580 farmers in the Central Valley of California to become co-owners of an artificial fertilizer plant, Valley Nitrogen Producers. Despite fierce opposition from major oil companies who monopolized the industry, Kelso was able to secure a loan to finance building the new plant to be paid for out of its future earnings. Breaking the monopoly of the fertilizer industry, the prices for the most common fertilizer dropped from \$250 per ton to \$66 per ton. In a little over nine years the acquisition loan was paid back, and the farmer-shareholders received substantial dividends and maintained their influence over the fertilizer market. With an investment of \$120 million, which inflation-adjusted into today's dollars corresponds to roughly \$1.3 billion, the Valley Nitrogen Producer CSOP illustrated the scalability and effectiveness of Kelso's financing techniques.

This type of financing innovation is similar to how the Alaska Permanent Fund and the Social Security Trust Fund work. The Alaska Permanent Fund – also originally initiated by Kelso – harnesses the return on investment in Alaska's oil wealth to provide an annual stipend to every Alaskan resident. The Social Security Trust Fund uses as its chief source of investment the revenue from the payroll contributions of every American worker, which it then invests in US Treasury bonds. Over time the value of the Social Security Trust Fund grows larger than the sum of workers' contributions. When workers eventually retire, they reap a dividend paid for out of their own contributions combined with the future earnings from the investment activities of the Social Security Trust Fund.

For both the Social Security Trust Fund and the Alaska Permanent Fund, each participant is essentially a shareholder in those respective Funds. One difference with the Youth Education Security Fund, however, is that, unlike with Social Security where the funds for investing come from workers' wages, in this case the initial investment funds will come from the federal government's sale of US Treasury bonds.

In fact, historically various presidential administrations used “*future returns investment*” to capitalize important infrastructure projects. President Franklin Roosevelt utilized the [Reconstruction Finance Corporation](#) (RFC) to finance manufacturing and development. For liquidity it issued bonds, most of which were bought by the federal government. The RFC then made loans to local governments and productive small businesses at below-market rates. Cities issued “revenue bonds” and repaid them and the RFC loans with the revenues generated by the works funded by the loans. Using such funding mechanisms, the RFC was able to lend or invest over \$40 billion from 1932 to 1957, funding the New Deal and World War II and eventually returning a net profit to the federal government of \$690 million. Similarly Secretary of the Treasurer Alexander

Hamilton’s “American System” created [a national development bank](#) that issued credit to the government and private interests for manufacturing, infrastructure improvements and other economic development. Infrastructure and productivity flourished during that period.

These kinds of innovative financing mechanisms have long existed in multiple forms in the real world. Why not utilize the power of “*future returns investing*” to invest in our nation’s youth? Not only could “*universal capitalism*” finance the best of what America has to offer, it also would help encourage a large group of young people, most of whom possess little to no discretionary income in their early years, to have a stake in the nation’s future. It would free up the income of these indebted young Americans, that they normally would have to use to pay back debt over many years and provide a new stream of wealth which then could be invested in new homes, businesses, inventions, real estate and more. Young people would become stakeholders in the economy.

PART II. HOW MUCH WILL EACH STUDENT PAY FOR THEIR EDUCATION?

The investment strategy of the Youth Education Security Fund would be to create a type of endowment composed of a mix of investments that realizes sufficient gains to pay students’ tuition as soon as possible. Under this approach, it will take several years for the endowment to build up enough value to pay off the bond investors, and to eventually provide benefits to the student beneficiaries.

Let’s assume that across the US, there are approximately 2.3 million new university students each year (based on a freshmen enrollment in 2022 of [2.34 million](#)). And of those new students, based on historical data, [approximately 38 percent](#) will be awarded loan aid, or about 874,000 new students each year receiving educational loans.

The average annual loan amount for students at 4-year colleges has ranged in recent years from \$8,000 per year to \$11,000 per year, and the average annual loan amount for students at 2-year colleges ranges from \$8,000 to \$10,000 per year. The total student debt over four years in most states ranges from \$35,000 to \$40,000. So, let’s assume that the typical student borrows \$10,000 each year for 4 years.

If the Youth Education Security Fund offering students free tuition were to begin in 2024, the fund would need to raise roughly \$8.74 billion per year (\$10,000 annual average loan amount times 874,000 new students), with the amount increasing by 5% per year to account for inflation.

Under this scenario, the investment assumptions are:

1. The YES Fund will sell 15-year US Treasury bonds to raise the \$8.7 billion, and those federal tax-exempt bonds will pay to investors an annual interest rate of 4.35%.
2. The YES Fund, which will be invested in prosperous companies listed on the various stock exchanges, will earn an average rate of return of 7.5% per annum (a conservative estimate, based on the historical average of stock market investment returns).
3. The federal government will pay the annual interest payout that goes to investors, which will amount to approximately \$378 million, so that the Fund can obtain the maximum benefit from compounding a 7.5% annual rate of return.

Under these assumptions, at the end of 11 years¹ in 2035, the Fund will have doubled in size and be able to sell off all the stocks in its diversified portfolio, pay off the Treasury bonds to investors

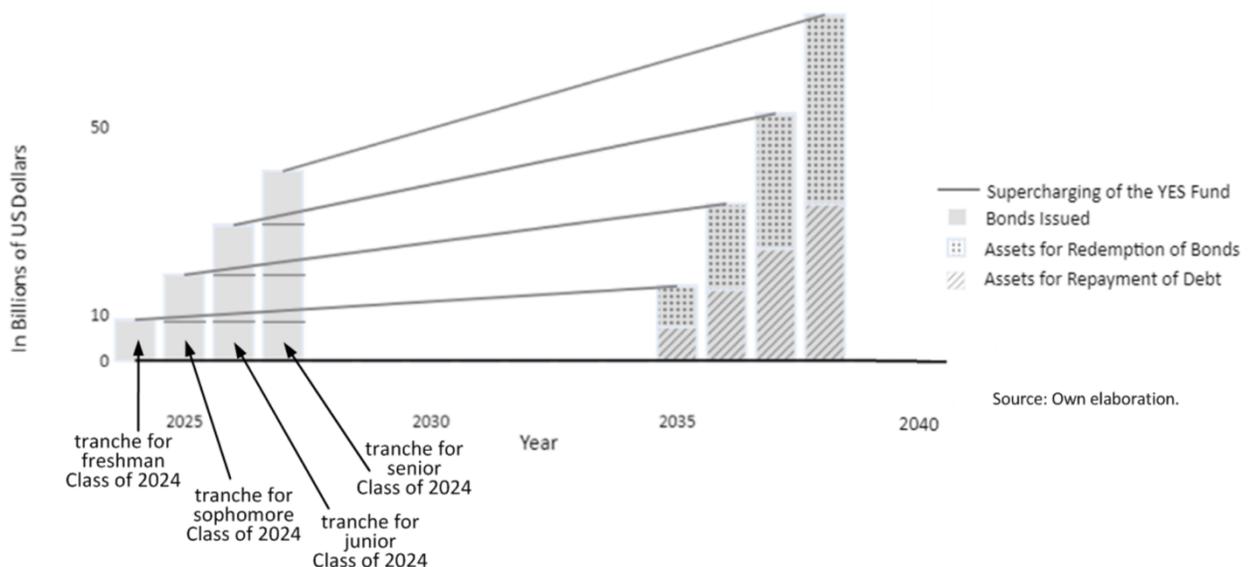
¹ The Treasury bonds are issued for 15 years, but the YES Fund is projected to fully charge in 11 years. These extra four years provide a buffer in case the YES Fund investments do not perform as projected. If the investments overperform, additional reserves will be available for future loan repayments.

plus interest, and then use the remaining accrued fund capital to pay down the tuition debt for students with loans, eventually canceling their debt. The Fund would repeat this cycle each and every year, making adjustments for any changes in the number of student-borrowers, inflation, increases in tuition and other parameters.

Once a student graduates from university, she/he would be responsible for paying *half* the interest – but not the principal – on her/his student loans for approximately 10 years, and the federal government would pay for the other half of the interest. At that point, the investment fund will have reached full maturity and each student-borrower’s loan principal would be paid off by the YES Fund over the next four years, as long as the student has maintained payments on her/his 50% share of interest expenses. By requiring students to repay some of the interest, it ensures that students with loans have a commitment to the program. The amount of money that the students contribute into the YES Fund will make it possible to achieve more rapid compounding of the principal and help to fiscally sustain the program.

It is important to note that this delay of 11 years in paying off the principal of each student’s debt, allowing time for the fund to appreciate in value from investment returns, is inherent in all applications of the “*future returns investment*” strategy. For example, the Social Security program had a similar initial delay. The Social Security Act was passed in 1935 but the first beneficiaries did not receive benefits until 1940. And for the first 15 years after its creation, Social Security benefit payments were meager, since the fund needed time to “supercharge” the Trust Fund by accumulating the investment returns needed to underwrite the benefits. Like the Social Security Trust Fund, the YES Fund must accumulate earnings from its stock investments – in this case for about 11 years – to supercharge the Fund sufficiently to provide financing for students’ university costs as illustrated in Figure 2 (please note: the amount of bonds issued increases yearly with each new class starting to study; only the bottom tranche of each bond issue is dedicated to the 2024 class).

Figure 2: Launch of the YES Fund for the class of 2024



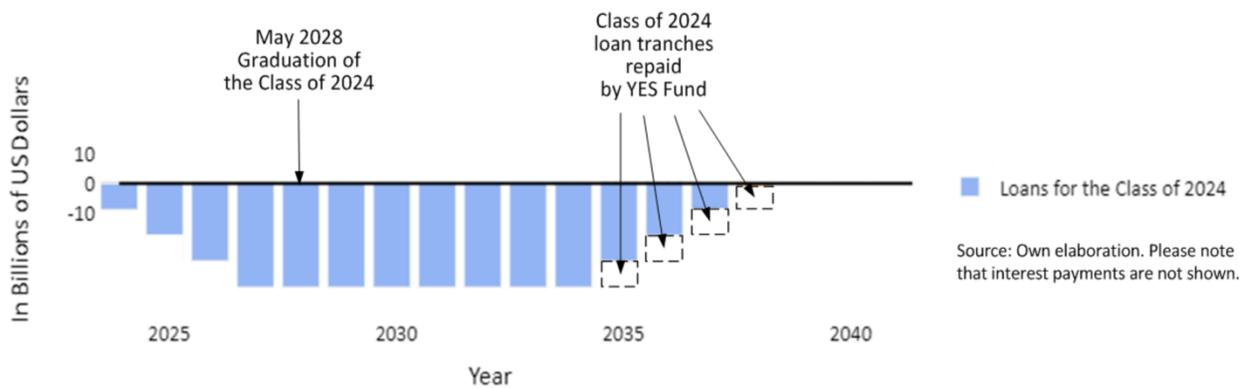
A YES Fund program would be launched for each new freshman class, and that program would be continued when they are sophomores, and then juniors, and then seniors. So, at any one time there would be four YES Fund programs going, and the seniors would be in the fourth year of the program, the juniors in their third year, the sophomores in their second year and the freshman in their first year.

How and when the “Class of 2024” students would receive benefits

Starting with the Class of 2024, the 874,000 students needing loans would borrow the average of \$10,000 in the first year. With tuition costs increasing by approximately 5% per annum, that means the class of 2024 students would borrow \$10,000, then \$10,500 in the second year, \$11,025 in the third year and \$11,576 in the fourth year, for a total of \$43,101 in student loan debt. Each year’s loan would accrue interest at the rate of 5.0% per annum starting with the student’s freshman year, which results in approximately \$2,155 in interest. The student would be responsible for paying half (2.5%, \$1,079) of this accrued interest, while the federal government would be responsible for paying the other half. By the time the Class of 2024 graduates, each student will owe, on average, about \$44,200 of principal plus interest. The student would start paying monthly payments on only the interest six months after graduation.

Paying down principal. To pay for the principal of each student’s debt, in 2024 the YES Fund would sell \$8.7 billion of federal bonds and invest that revenue in a diversified portfolio of stocks. Eleven years later starting in 2035, after the Fund has realized investment gains for the purpose of making tuition grants (and repaying bondholders), one year of loans for the students from the Class of 2024 who graduated in 2028 would be paid off by the Fund, as shown in Figure 3.

Figure 3: Building up and repayment of the four loan tranches of the Class of 2024



Then, at the end of 2025, the Fund would sell \$18.37 billion of federal bonds and invest in stock market shares for the purpose of making tuition grants in 2036 for students who graduated in 2028 and 2029. Using those investment gains, another year of loans would be paid off by the Fund (which is the *second* year of loan repayment for the students that graduated in 2028 and the *first* year for students that graduated in 2029).

At the end of 2026, the Fund would sell \$28.92 billion of federal bonds for the purpose of making tuition grants in 2037 for students who graduated in 2028, 2029 and 2030 to repay one year of their loans (which is the *third* year of repayment for students that graduated in 2028, the *second* year for students that graduated in 2029, and the *first* year for students that graduated in 2030).

At the end of 2027, the Fund would sell \$40.48 billion of federal bonds for the purpose of making tuition grants in 2038 for students who graduated in 2028, 2029, 2030 and 2031 to repay one year of their loans (which is the *fourth* year of repayment for the student that graduated in 2028, the *third* year for the student that graduated in 2029, the *second* year for the student that graduated in 2030, and the *first* year for the student that graduated in 2031).

Each years’ loans would be paid off by the YES Fund 11 years later. By 2038, the students who graduated in 2028 have gotten all four years of their tuition repaid, those who graduated in 2029

three of their four years, those who graduated in 2030 two of their four years, etc. So, for the students who graduated in 2028, they had to pay 50% of their loan interest until 2038 (though the interest would decline each year as one year’s principal was paid off in 2036, then 2037, then 2038) when the entire four years of tuition would have been paid for.

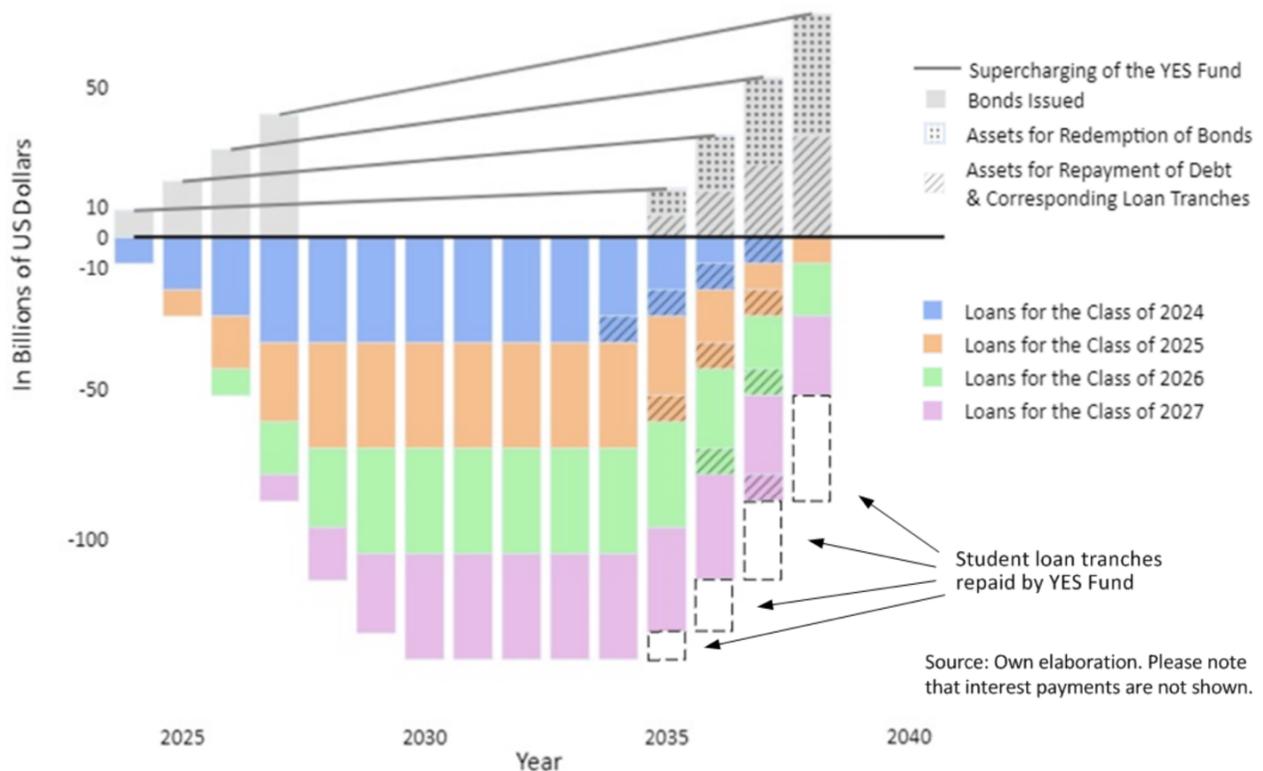
How much in total will students (and the government) pay?

To compare with conventional approaches, it is instructive to examine how much of that approximate \$44,200 plus interest would student-borrowers ultimately pay, and how much the federal government would pay.

By the time the Class of 2024 graduates in 2028 and the loans come due six months later, each student will have accrued on average \$2,155 in interest. In addition, each student will accrue more interest at a 5% rate each year on the \$44,200 owed until 2035, another \$2,210 per year for an interest total of \$13,260. The student-borrower and the federal government will each pay 50% of this interest, i.e., \$6,630.

By 2035, the YES Fund will have matured and will pay off, for each student from the Class of 2024, their first year of principal on their loans, which was \$10,000, leaving remaining principal of \$33,101 for the other three years of tuition. Over the next year, approximately \$1,655 in interest will accrue on the new principal amount. In the following year, 2036, another year of principal will be paid off in the amount of \$10,500, leaving a remaining principal of \$22,601 and additional accrued interest of \$1,130. The following year, 2037, the third year of principal will be paid off in the amount of \$11,025, leaving a remaining principal of \$11,576 and additional accrued interest of \$579. In the following year, 2038, the fourth and final year of principal will be paid off and, after making final interest payments, the student’s loan obligation will be over. Figure 4 shows the dynamic of building up debt and repayment via the YES Fund for four Classes.

Figure 4: Overview of government expenditure and student contributions covering four years of tuition for four classes (2024, 2025, 2026, 2027) under the YES Fund



During the repayment period, the student will have accrued a total of \$18,779 in interest. The student will be responsible for paying 50 percent of that, or \$9,390. The federal government will be responsible for paying an equal half of that amount. So, from the time of graduation and interest payments beginning in 2028 until loan retirement in 2038, the student will be responsible for repaying approximately \$1043 per year, or \$87 per month. The total principal plus interest per student, on average, will total $\$43,101 + \$18,779 = \$61,880$, so the student's payments of interest represent only about 15% of the total cost of her/his loan obligation.

The federal government also would be paying 50 percent of the interest payments, the same amount as the student, or roughly \$9,390 per student, until the principal amount of the student's loan is paid back in 2038. That would amount to a federal annual expenditure of approximately \$8.2 billion per year (\$9,390 per student x 874,000 new students per year). The federal government would also pay the annual interest payout that goes to the bond investors, which would amount to approximately \$378 million in 2024 and each subsequent year for 11 years, a total of about \$4.2 billion. The total federal obligation would amount to about \$12.4 billion per year. This amount is only a quarter of the estimated \$47.5 billion per annum price tag for the Biden administration's SAVE program.

Comparisons to the Biden administration's SAVE program

The Biden administration's SAVE program deserves credit for trying to tackle a national crisis – the extreme levels of indebtedness of young people trying to pay for their university education. However, compared to the YES Fund, the SAVE program is hugely expensive, both for the federal government, i.e. taxpayers, as well as student-borrowers, and will take far longer for students to fulfill their loan obligations – in many cases, twice as many years.

Comparative features of the SAVE program:

Duration for students – approximately 20 years. After monthly payments are made (both principal and interest) for a set number of years -- for most students, about [20 years](#) -- any remaining balance will be paid off.

Cost to students – payments on [undergraduate loans](#) of 5 percent of discretionary income. While the amount of discretionary income can vary from individual to individual, generally the figure of [30% of total income](#) is used to estimate discretionary income. Using that estimate, an individual earning \$80,000 per year would have \$24,000 in discretionary income, and 5% of that would be \$1200 per year. Calculated over 20 years that would result in a total repayment of approximately \$24,000. An individual earning \$50,000 per year would repay about \$750 per year and \$15,000 over 20 years (under the SAVE program, if a borrower's annual income is less than \$32,000 – \$15 per hour – their monthly payment [will be \\$0](#) until income levels pass \$32,000).

Cost to the federal government – SAVE is expected to cost [\\$475 billion](#) over 10 years, or \$47.5 billion per year, according to a [Penn Wharton analysis](#).

Comparative features of the YES Fund

Duration for students – the program is designed so that from the time the student graduates and starts paying on their loan until their four years of college loans are paid back from the YES Fund will take approximately 10.5 years. That's about half the time that most students will require under the SAVE plan.

Cost to students – students in the Class of 2024 will be responsible for paying 50 percent of all interest on their loans but no principal. Their half of interest payments comes to a total of approximately \$9390, about \$1043 per year or \$87 per month. That's only 40 to 60 percent of the amount they will pay under the SAVE program. The total debt per student, on average, will total

\$61,880, so the student’s payments of interest represents a mere 15% of the total cost of her/his loan obligation (this analysis has not factored in a separate repayment schedule for the lowest income student-borrowers, like SAVE has, but with the enormous federal savings resulting from the YES Fund it would certainly be possible to include that feature).

Cost to the federal government – the total federal obligation would cost about \$12.4 billion per year, which is only a quarter of the estimated \$47.5 billion price tag for the SAVE program.

In the United States, the student loan system has become an enormous federal program, and going forward will continue to be a challenge to maintain funding levels with taxpayer dollars, given other social and economic needs of the American people. This proposal provides a way to bridge an enormous gap in the system before it grows even bigger and more difficult to fund through taxpayer subsidies alone.

PART III. HOW STATES COULD PLAY A COMPLEMENTARY ROLE

A YES Fund has great potential to contribute to a foundation of stable funding for the education of the nation’s students. It also creates opportunities for willing states that would like to assist their state’s student population by plugging any deficits in the funding scheme. Besides tuition, some students need help with ancillary costs such as housing, books, health fees, transportation, school supplies (such as a laptop) and more. Also, the federal YES Fund program requires student-borrowers to pay 50 percent of the interest on their student loans, and willing states might choose to assist their state’s students by paying some or all of the interest costs.

Already, nearly half the 50 states have created programs and initiatives that seek to cover at least some tuition costs for some of their students. However, these programs range significantly from state to state in their comprehensiveness and coverage, and most of them focus on making two-year community colleges more affordable. States such as Rhode Island, Massachusetts, [Tennessee](#), New York, [Michigan](#), [Texas](#) and Oregon limit their “free college” assistance to students attending two-year [community college](#) or [technical school](#), offering free tuition for qualified students. But very few states offer much funding for students attending four-year universities beyond existing loan programs.

A closer look at programs in three specific states, California, New Mexico and Washington, shows how a voluntary federal-state partnership could foster affordable post-secondary education and training opportunities for millions of young people.

California. As the nation’s largest state, California is particularly impacted by the high cost of education and student indebtedness. A total of 3.8 million Californians owe [\\$142 billion in federal student loans](#), according to the Public Policy Institute of California. Each year in California, approximately \$30.8 billion of new student loans are issued. About a third of students attending one of the public universities, University of California (UC) or California State University (CSU), took on loans, and an even greater percentage of students – 46 percent – going to private institutions had to borrow. Altogether, 18% of existing borrowers made regular payments that did not shrink their debt, while another 38% were in forbearance or deferment.

Like many other states, California has tried to assist its student-borrowers. In December 2022, the Golden State launched a program, the [California College Corps](#), that provides to low-income college students a \$10,000 stipend to spend on tuition and living expenses in exchange for completing 450 hours of community service (about 15 hours per week). The goal is not only to help some students reduce their debt, but also to empower civic action by requiring many hours of

community service to tutor, mentor, take climate action, go to food banks and do other important work that addresses other state challenges such as food insecurity, education gaps and climate change.

This four-year program is funded by approximately \$300 million in state general fund money, and about 13,000 students are expected to enroll through 2026. That's a small proportion of the nearly [2.6 million enrolled students](#) each year (both undergraduate and graduate), but it's a start. California has other student aid programs targeted at certain individuals, such as those from a family with income of less than \$80,000 a year (called the [Blue and Gold Opportunity Plan](#)), or a "[middle class scholarship](#)" for undergraduates and students pursuing a teaching credential.

But all of this is being funded by taxpayer money, which means it must compete with other urgent societal funding needs such as housing, healthcare and environmental mitigation. California, with a state gross domestic product of \$3.6 trillion (larger than France, the UK, India or Russia), could launch its own version of a YES Fund and provide a more generous tuition stipend to more California students than any of its current programs allow. Like the federal program, the Golden State could float a bond of the appropriate amount and maturity horizon, then invest that money in a diversified portfolio of stocks in the S&P index and use the future returns on these investments to supercharge its state YES Fund. That would be used to pay for every California student's tuition.

Alternatively, it could better utilize its current financial commitment by supplementing the federal YES Fund program to help California students pay for their interest payments on federal loans, as well as pay for housing, books, health fees and school supplies.

New Mexico. New Mexico, one of the nation's poorest states, has the most generous tuition-free program in the country that financially assists all state residents who wish to attend post-secondary school. Its program has the ambitious and admirable goal of seeking to treat college as a free resource, like primary and secondary education. The state government allocates [almost 1% of the state's budget](#) toward covering tuition and fees at one of the state's public colleges and universities, community colleges and tribal colleges. All state residents, from new high school graduates to adults enrolling part-time, are eligible regardless of family income. Students must maintain a grade point average above 2.5 and a certain minimum of credit hours per semester. Impressively, its program has managed to win bipartisan support from both Republicans and Democrats.

How is poor New Mexico able to afford this? There are two factors. First, the \$75 million program received a big booster shot of \$63 million from federal pandemic relief funds. But that pandemic money will not be a recurring funding source, so the program needs to draw from other streams if it is to keep going. Fortunately, New Mexico now ranks as the [second-largest](#) oil producing state in the country behind Texas, eclipsing North Dakota and Alaska. So, the ongoing plan is to pour oil revenues into funding the free tuition program.

And yet this is not the best use of the state's petrodollars. Instead, New Mexico could create its own version of the YES Fund by setting aside \$75 million of its oil revenues each year over the next 10 years and investing that money in a diversified portfolio of stocks. The future returns on this investment would then be used to supercharge its own state YES Fund. And unlike the federal government, which is using Treasury bonds as the funding source for its YES fund, with principal and interest subject to being repaid to bondholders, New Mexico would be using oil revenues to fund this program so it would have no investors that need to be repaid. The fund would compound very quickly and reach maturity faster.

In effect, New Mexico would be able to *double* its money over time, allowing it to pay for not only higher education for its residents but for other public services as well. This seems particularly

important to do because, in this era of climate change and carbon emissions, petroleum will eventually become a depleting asset that over time is destined to lose value as it is replaced by greener sources of energy. Today's petro bounty will be tomorrow's bust, so investing these funds wisely in a way that benefits from future returns on investments will allow the bounty to continue much longer into the future.

Or New Mexico could use its petro resources to supplement the federal YES Fund and help its students to pay for their interest payments on federal loans, and other needs such as housing, books, health fees, school supplies and more. That would require a lot less than \$75 million, leaving funding for other social and economic needs.

Washington. The Evergreen State enacted its [Workforce Education Investment Act](#) into law in 2019, providing state aid grants that cover much or all tuition for Washington residents who are income-eligible. The most innovative aspect of this program is how it integrates the business community into its design. Employers in Washington state have long complained about the "skills gap" and how hard it is to [find skilled workers locally](#). Since the program benefits employers that hire workers with advanced skills, businesses are being tagged with paying for most of it. Technology-based businesses with gross revenues [over \\$100 billion](#) – meaning Amazon and Microsoft, which are based in Washington – pay as much as a \$7 million annual fee per firm. The firms' willingness to pay [increased fees](#) in order to educate and train more of the workers they need in-state was a big factor in building legislative support for this proposal. The law also helps those who need vocational training that does not involve college, such as for [registered apprenticeship](#) programs.

While it makes sense to ask large and successful companies to contribute to the education and training of their future employees, if the business tax is too high it could negatively impact competitiveness and the business climate, possibly even drive away employers. Instead, Washington state could launch its own YES Fund to cover more students' needs and pay for all of their education and vocational training via future returns investments. Or it could supplement the federal YES Fund with employer contributions that help students pay for the interest on their student loans, or for other ancillary expenses such as housing, books, supplies and health fees.

PART IV. SUMMARY OF THE YOUTH EDUCATION SECURITY FUND'S THREE PHASES

Phase I would start in 2024 with the YES Fund selling approximately \$8.7 billion of federal Treasury bonds to finance loans for 874,000 new college students who will start school in 2024. The revenue from these bonds will be invested in a diversified portfolio of stock equities which would accrue an average annual return of 7.5 percent (a conservative estimate, based on historical returns). The federal government will pay 100% of the interest-bearing expense on the Treasuries so that the Fund can obtain the maximum benefit from compounding at a 7.5 percent annual rate of return. These bonds will be redeemed at the end of 11 years, which will supercharge the Fund with \$15 billion of funds available for making student loans.

Phase II would consist of making four annual tuition loans to new students starting in 2024, and then continuing this process each year for new students starting in 2025, 2026, 2027 and beyond. The interest on the student loans is accrued, but not paid, until 6 months following the student's graduation. The accrued principal amount that would be owed by a four-year student from the class of 2024 at the end of 4 years of college in 2028 would be \$43,101 in student loan debt. Each year's loan would accrue interest at the rate of 5.0% per annum starting with the student's freshman year, which results in approximately \$2,155 in interest. Starting six months after graduation, the student would be responsible for paying half (2.5%, \$1,079) of this interest, while the federal

government would be responsible for paying the other half. So, by the time the student graduates, each student will owe, on average, about \$44,200. But the student will not be responsible for paying the principal, only half of the interest due.

Phase III would begin in 2035, which is the date when the YES Fund launched in 2024 will mature. At this point, seven years following the Class of 2024's graduation from college in 2028, the first year of the principal on their student loans will be repaid by the YES Fund. Each subsequent year, the principal on the loans from one year of each eligible student's education would be paid off. In the meantime, the student will continue to make interest-only payments of 2.5% per annum. As long as the student's interest payment obligations have been satisfied, each year the student's annual loan obligation would be paid off, year after year, until all principal has been retired and no further interest payments are due.

A federal student tuition program of this scope and ambition has great potential to ensure that the costs of higher education and post-secondary training will not become an obstacle to an educated populace and will contribute greatly to maintaining the "middle class society" and keeping the US economy competitive.

FURTHER READING

[Democracy and Economic Power: Extending the ESOP Revolution through Binary Economics](#) by Louis O. Kelso and Patricia Hetter Kelso

Joseph Blasi, Richard Freeman and Douglas Kruse, *The Citizen's Share: Reducing Inequality in the 21st century*, Yale University Press, [Institute for the Study of Employee Ownership & Profit Sharing](#)

[John D. Menke](#) and Dickson C. Buxton, [The Origin and History of the ESOP and Its Future Role as a Business Succession Tool](#)

Jens Lowitzsch, [Consumer Stock Ownership Plans \(CSOPs\)—The Prototype Business Model for Renewable Energy Communities](#)

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