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“Safe” Annuity Retirement Products and a Possible US Retirement Crisis

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Abstract

This paper examines a looming possible crisis in many Americans’ retirement plans due to the proliferation of annuity products in their retirement investment portfolios. As defined benefit pension plans have almost completely disappeared as a means of retirement savings and have been replaced by defined contribution retirement plans over the last 40 to 50 years, a great number of private and public sector defined contribution retirement plans have become laden with insurance contracts called annuities. Of the remaining solid defined benefit plans many, through a process called Pension Risk Transfer are being converted to high-risk single entity annuities. Such products have been sold to employers and employees as “safe” and “guaranteed’ financial instruments that that are just as good as a defined retirement benefit plan backed by Federal PBGC (Pension Benefit Guarantee Corporation) insurance. The results of the analysis in this paper calls this into question, and with so many of these annuities having ties to investments and loans related to risky assets, the authors find that many annuity products are exposed to systemic risk that could lead to a bust in the pensions of many retirees and soon-to-be retirees. The “Emperor has no Clothes” as the life insurance industry has poured billions of dollars into advertising, lobbying, commissions & trade articles with misinformation on annuities with everyone afraid to call out the obvious

fiduciary problems.   To invest in annuities one must look the other way at one of most basic investment principals -diversification, i.e., "do not put your eggs in one basket."   Excessive monopolistic profits through secret spread fees have remained hidden with no US Federal regulation or oversight. This paper shows the drawbacks, weaknesses, and pitfalls of annuities as investments for retirement plans as well as the injustices of such plans toward lower income workers.

Keywords: annuities, financialization, monopoly capital, pensions, retirement, risky assets, systemic risk.

JEL Codes: G18, G22

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Introduction

Substantial scholarship has been done on comparisons of defined contribution (DC) plans like 401(k)s to defined benefit (DB) plans or traditional pensions in providing a lifetime income stream in retirement.   Earlier in this century, some insights into the problems confronting most employer provided pension plans in the US are outlined in informative articles David Zalewski (2002) and Teresa Ghilarducci (2006) among others. Zalewski notes how at the time of his paper only around 50% of US workers participate in a pension plan and how the idea of DC plans as empowerment for employees and leading to asset/wealth accumulation for employees are used to try to convince the public of accepting the risks of DC plans. At the same time, corporate executives who lead the movement toward saving their corporations expenses through DC plans get better and safer retirement packages for themselves than their predecessors. They become less exposed to risk than their employees, who will have a hard time gauging the uncertainties of DC plans (see also Ferreiro and Serrano 2011). Ghilarducci documents how the switch in the way most pension plans have been set up over the previous 30 years or so has done more harm than good for most US workers, thereby triggering a trend of many people working beyond retirement. She notes how with most employers offering DC rather than DB plans, most US workers are not accumulating enough on a yearly basis and are behind actuarially in having enough money to retire at a normal retirement age of around 65. Defined benefits, which are more commonly offered by employers to previous generations of Americans, guarantee

a certain amount of income to retirees upon their retirement based upon a certain number of years of employment and average earnings during employment.[1]

It is interesting to note that despite the appeal to many mainstream economists of DC plans because of potential retiree wealth accumulation (for example, Poterba, et al, 2007), DB plans have greater rates of employee participation in them than DC plans among US workers when workers can opt into or out of an employer offered plans (US Bureau of Labor Statistics, 2023). Sixty-nine percent of private sector employees have access to pension plans, yet only 52% choose to participate. For state and local workers, 92% have access to pension plans and 82% choose to participate. State and local governments more frequently offer DB plans than the private sector which now mostly offers DC plans. It appears that many US workers are choosing to opt out of the riskier DC plans despite the claims of being able to accumulate a small fortune in savings versus participating in a DB plan. Deciding not to participate in a DC plan or participating in one but not accumulating enough in retirement savings could be argued to weaken the merits of concepts such as economic rationality, rational expectations, and the permanent income hypothesis, economic concepts which have been debated over the decades among economists of all backgrounds (Dusenberry 1949, Friedman 1957, Stafford 1974, Thaler 1990, Mason 2000, among many others). These concepts imply and predict that workers behave rationally and usually should save enough money for

[1] Since many change jobs over one's working life, some lose their retirement savings as they do make the change if their savings account is not "portable." For those who can take their savings with them, some choose to "cash it out" and use the money. And for many others, their salaries are really not enough to put away a certain portion for savings. The median balance for 401Ks for US workers in 2023 is estimated to be around $89,000 for those between 55 and 64 years of age (Bond 2023). Over 20 years at 5% interest per year, this yields only $7,142 per year to a retiree. The average is closer to $280,000, but the distribution is heavily skewed.

retirement in order to maintain a certain level of consumption during their retirement years inclusive of any government transfers such as Social Security. Heterodox economists instead point to consumption and savings being a function of bounded rationality and influence from conspicuous consumption (relative and socially influenced, not permanent, income effects) which present challenges to saving an adequate amount of money (Veblen 1994, Mason 2000). Predictions for adequate savings retirement seem mostly to hold for those of upper income levels and not for those of more modest income (Ghilarducci 2006 and 2024).

It is important to note that corporations favor defined contribution (DC) plans in which their contribution in a match to employee contributions is typically 5% or less, versus a match/contribution by or cost to the employer of 15% for the typical DB plan. These smaller contributions at one-third the rate of DB rates have overall resulted in accumulations less than one-half of what one needs of a typical DB plan which pays out around 60% of recent working income. In this way, they are somewhat like Social Security with a consistent monthly income-based salary with low risk and low fees. The US Pension Benefit Guarantee Corporation (PBGC), a quasi-governmental entity similar to the Federal Deposit Insurance Corporation (FDIC) for the banking system to insure depositors' savings, covers any defaults made by employers on defined benefit pensions. Because of increasing retirement obligations and the expense of managing them, plus as a way to keep more profits for themselves, beginning in the 1980s, and under the idea of "employee ownership" of one's own pension assets, DC plans become the preferred retirement instrument offered by most employers. Employees typically designate a certain amount of their pre-tax earnings to go to mutual funds but sometimes annuities

offered by a financial institution with most receiving some matching contributions by employers. More responsibility and risk are put upon the employees for their retirement at lower costs to employers. The plans become 401k plans for private sector employees; 403b plans for the non-profit sector; and 457 plans for most governmental and public sector employees. These numbers are based upon sections of the Internal Revenue Service (IRS) code. As Ghilarducci writes, many of these plans lose large amounts of money after each recessionary period, especially during and after the Great Recession of 2008-2009 when the stock market in September 2008 crashes and has difficulty recovering in the following years (Secunda and Maher 2016).

Some believe that, although not as good as having a DB plan, annuities, by offering a guaranteed income stream for life, is superior to a portfolio of investments in stocks, bonds, mutual funds, etc. because of market fluctuations which can cause uncertain monthly income payouts. Yet, as this paper notes, annuities have substantially more risk than traditional pensions. Investors in annuities can take on the single entity risk of a private insurance company, which is not a diversified portfolio with federal government protection (i.e., PBGC protection). That is, most investors in annuities basically take on the single entity risk of the insurer itself, which is the equivalent of a non-diversified bond portfolio, compared to a portfolio from 30 or more different corporate bonds and issuers in a typical bond mutual fund. The insurance company basically has to rely upon its own funds, and no others, to pay claims. One of the most basic fiduciary principles is diversification - do not put "all your eggs in one basket" (Bailey and Richards 2017). Fixed annuities make a mockery of this principle with their single entity credit and liquidity risk. That is, all the risk is borne by the holder of an

annuity, which is essentially an insurance contract. This alone does not make annuities an appropriate investment for anyone, especially for a DC or DB retirement plan (Tobe 2022). An International Monetary Fund (IMF) economist warns in a 2006 book that although annuities offer the promise of helping to improve pensions for workers around the world, they also need better regulation due to asymmetric information between buyers and sellers and adverse selection, which we see in the form of hidden fees and risks (Mackenzie 2006). Using empirical estimates, Clark and Shieber (2004) warn of a "schizophrenic" US retirement system in which the retirement age of baby-boomers and subsequent generations has been increased (and may be increased further), and yet the growing use of DC plans will leave most people less money in their retirement savings than if they could have DB plans.

Potential Problems

There is a likelihood of a crisis with annuities that continues to increase. There could also be a worse outcome than two previous crises in insurance in 1992 and 2008. In 2023 the IMF (Cortes, Diab, and Windsor 2023) and other authors are warning of potential problems with private equity firms buying life insurance companies and greatly increasing the default risk of these insurance companies (Morgenson and Rosner 2023). Life insurance companies have significant investments in commercial real estate where recent downturns could trigger serious issues. Annuities essentially have no federal backing, no federal oversight, and no federal protections for consumers. They are governed by a hodge podge of state regulators. Insurance companies basically shop for the states with the weakest laws, and then issue contracts from them (Tobe 2015). Annuities are not protected by the Securities & Exchange Commission (SEC), CFTC

(Commodity Futures Trading Commission), or CFBP (Consumer Financial Protection Bureau), and they are not protected by any of the federal banking agencies, OCC (Office of the Comptroller of the Currency) , FDIC (Federal Deposit Insurance Company) , etc. or even under the Federal Reserve with the exception of 3 companies that the Fed helped after the 2008 financial crisis (Tobe 2015).

US Federal government reforms after the 2008 crisis such as Dodd-Frank come up with the concept of a systemically important financial institution (SIFI) which is a bank, insurance company, or other financial institution whose failure may trigger a financial crisis (Tobe 2015, Liberto 2023). These entities would have much higher capital reserve requirements and increased governmental scrutiny. The US Government names 3 insurance companies, Metlife, AIG, and Prudential as SIFIs, or "too big to fail" (Zajac and Katz 2015). AIG shrank its balance sheet to comply, Metlife sued to get out of this oversight, and Prudential lobbied to get out of this oversight (Kress 2018).

The US federal government enacts a strong law called the Employee Retirement Income Security Act (ERISA) in 1974 to protect private retirement plans by requiring the plans to be fiduciaries. However, DC plans called 401(k)s are allowed without the federal insurance protection of the PBGC. Only DB or traditional pension plans are covered because of the stronger ERISA standards. Currently the insurance industry is in a dispute with the Biden Administration over new, annuity junk fee disclosure rules because existing rules now only apply to ERISA plans (Tobe 2023). The outcome of this dispute is uncertain, however.

The bulk of annuity products in ERISA use a "guaranteed" investment contract (GIC) structure as a fixed annuity in which they get a yield determined by the insurer

without principal fluctuation (like a traditional bank certificate of deposit at 3%). These GICs are sometimes called "stable value" and are basically like a money market fund with slightly higher returns and significantly higher risks of which participants for the most part are not aware. Most of the largest plans do not hold these single entity fixed annuities because of the fiduciary liability. Not one of the largest 50 DC 401(k) plans holds a single fixed annuity as an option such as Boeing, IBM and Dell. Of the next 50 largest, only 8 insurance companies hold a fixed annuity (Larkspur-RIXTRIMA 2024).

In recent years, insurance companies are trying to expand their business by pushing lifetime income to annuitants. However, participants, when they look at the amount of monthly income offered by these lifetime income options, typically reject them because the income paid is too low (Cumbo 2015). For example, assume a potential annuitant is a 60-year-old male with a life expectancy of 82, and he earns $70,000 a year and has accumulated $200,000 in his 401(k) (well above the median of $89,000 for his age range). In an old-fashioned DB pension, 60% of income would give him $42,000 a year in retirement income which is in line with expectations. However, a lifetime annuity from a single insurance company (assuming 4% return) wipes out his 401(k) by the purchase for $200,000 of an annuity and only pays out $13,307 a year.[2] The harsh reality is that most people prefer having $200,000 in an account and collect $8,000 (or 4% of the $200,000) a year in income to turning over everything to an insurance company and getting $13,307 a year. The lifetime income products which

[2] See https://www.bankrate.com/investing/annuity-calculator/

have appeal with policy makers and academics apparently do not have as much appeal with many potential retirees.

The vast majority of annuity products in DC retirement plans in a contract from the issuing insurance company simply guarantee the invested principal amount and pays a specified rate of return (which may adjust periodically) for a certain period of time. The issuer takes the cash investment and puts it on its own balance sheet and uses it to buy underlying assets owned and managed by the issuer. Thus, with these retirement annuities also known as GICs, the contractual guarantees are based solely on the issuer's claims-paying ability (Tobe 2004). If the insurance company goes into default, you could lose some or all of your investment. The Federal Reserve in their 1992 paper refers to them in this way:

> *GICs lack even the trappings of an insurance contract...... The guarantee referred to in their name is just the insurance company's promise to pay a fixed rate of interest for a specified period on funds invested at or after the signing of the contract. Unlike SPDAs, however, GICs are not sold to individual investors. Instead, they are typically bought by a pension fund on behalf of employees contributing to a defined-contribution pension plan. The contract is thus between the insurance company and the pension fund, not between the insurance company and the individuals contributing to the pension fund, even though the pension fund does little more than pass money between its contributors and the insurance company. GICs are therefore known as unallocated contracts, which means that the liability of the insurance company selling a GIC is not assigned to specific individuals. This liability feature becomes significant when insurance companies fail and policyholders attempt to collect on their stated guaranty funds* (Todd and Wallace 1992).

There is another troubling use of annuities in destroying traditional DB plans or other traditional pensions, and this is called pension risk transfer. That is, the company swaps out a diversified pension backed by stocks and bonds and federal PBGC insurance for a much higher risk annuity. The annuity does not pay out a fixed rate, but

mimics the payout formula of the DB plan. This is not as widespread as the annuities in DC plans, but is a growing problem (Secunda and Maher 2016, Morgenson 2020). It has led to major lawsuits against AT&T and Lockheed in early 2024. Prior to the trend toward switching, none of the largest 50 DB pension plans hold a single fixed annuity as an investment. This makes the pension risk transfer of DB plans into single entity annuities especially troubling. The pension risk is shifted from the company to the retirees with a big payoff to the insurance company. While this paper emphasizes annuities in DC plans, all the issues brought up are the same for these products destroying DB plans. A recent Federal Reserve paper claims that thanks to post Great Recession fears and regulation in the banking sector, and due to Covid, many insurance companies are becoming "shadow banks" by lending to risky clients and taking on more and more risks that other companies in lending and finance do not want (Foley-Fisher, Heinrich, and Verani 2023).

Risks

There has been no secret among prudent retirement fiduciaries at least since 1992 that annuities provide excessive risk to retirement plans. A commentary in *Benefits Pro* by fiduciary consultant Mitch Shames (2022) states, "Annuity contracts are not investment securities. Instead, they are individually negotiated contracts entered into and between an insurance company and the annuity-holder. The fiduciary will also need to be a prudent expert in the selection of the annuity. That is a pretty tall order. Annuity contracts may be the straw that breaks the back of the fragile fiduciary infrastructure employed by plan sponsors under the Employment Retirement Income Security Act of 1974 (ERISA) ."

After the first annuity risk crisis in 1992, Todd and Wallace (1992) of the Minneapolis Federal Reserve write a major paper on the weaknesses of state protections in the insurance business and indicate that the life insurance industry has created a significant moral hazard. They write that the 50 State Insurance Guarantee Associations are nothing like Federal Deposit Insurance and are somewhat misleading the public in causing a false sense of safety with no assets to back up their claims of providing protection. The 1992 Federal Reserve Paper goes on to say that the mere existence of these regulators in all 50 states contributes to the perception that insurance companies are safe, and that perception is bolstered by the tendency of state governments and life insurance companies to foster that perception. Political influence plays a big role in insurance company regulation at the state level (Perez 2016). A recent paper suggests that when private equity firms buy insurance companies it introduces risks that rating agencies appear to ignore (Kirti and Sarin 2020).

Since insurance companies are mostly regulated at the state level, and since insurance companies can basically choose which state regulates them in their choices of corporate headquarters locations and other means and with some states offering more favorable regulation than others, there are calls for changes in how the products are regulated. In 2005, AIG, one of the world's largest insurance companies, is AAA rated, and some in the trade press say that AIG is as safe as US government bonds. Yet by 2008, it is in default and has to be "bailed out" financially by the US government. AIG ends up being the largest recipient of US assistance during the financial and housing crises and stock market crash of 2008 (Associated Press 2022). In 2009, Federal Reserve Chairman Ben Bernanke says about annuity products, "Workers whose 401(k)

plans had purchased $40 billion of insurance from AIG against the risk that their stable-value funds would decline in value would have seen that insurance disappear." (Bernanke 2009). In the future, it is possible that government help to prevent such a possible disaster may not occur.

Many investment professionals believe that a plan sponsor is taking a severe fiduciary risk by having a single contract with any one entity, such as AIG. It can be argued that a plan is taking less risk by assuming that the single insurance company backing the stable value option is too big to fail and has an implied government guarantee. Taking 100 percent single entity credit risk is a clear breach of fiduciary duty. Especially since the year 2000 most of the largest DC plans and responsible fiduciaries have moved to diversified synthetic stable value to replace the single entity credit risk of fixed annuities. *The Handbook of Stable Value* says single entity credit risk annuities have ten times the risk of diversified stable value (Fabozzi 1998). The single entity fixed annuities from traditional insurance companies normally have at least 10 times the risk of a diversified security-based product, and this could easily be 20 times the risk in some of the private equity (PE) firms purchased life insurance annuity products.

Single Entity Liquidity Risk

A fiduciary managing a bond portfolio sells a bond when it is downgraded to a level allowed in the investment policy. Most annuities are not allowed to be sold or redeemed when their issuer is downgraded. They have no liquidity. If the issuing firm is downgraded, the credit risk is multiplied as a participant or contract holder has to ride

it down to default. Noted *Morningstar* analyst John Reckenthaler states in April 2022 that in selecting 401(k) investment options, "Inappropriate are investments that don't price daily (Reckenthaler 2022)." Annuities do not price or mark to market daily. That is, contrary to the improvement in accounting and legal practices by the SEC since the Enron debacle in the early 2000s, annuity providers under weak state regulation do not have to adjust the value of their assets on a timely basis. There is a secondary market for retail annuities provided by firms like JG Wentworth and Peachtree, which many times only pay 80 percent on the dollar. So, if you bought an annuity and want to sell it the next day on the secondary market, you will take a 20 percent loss. Investors are mostly unaware of this risk based on flimsy state guarantees which the Federal Reserve has said have little worth because of limited payout rates and little if any reserve funds (Todd and Wallace 1992). The International Monetary Fund (IMF) has been concerned that private equity (PE) firms are committing regulatory arbitrage in the insurance companies they control (Cortes, Diaby, and Windsor 2023).

In the 401k DC market many fixed annuities label themselves stable value portfolios of investment grade bonds, but they are a totally different product than the leading diversified synthetic stable value portfolios, the two leading ones being the Fidelity MIPS (Managed Income Portfolio) and the Vanguard RST (Retirement Savings Trust). See Table 1. Comparing the most conservative and most highly rated fixed annuity TIAA to the Vanguard RST portfolio tells a story of two very different products. Vanguard holds 74% in high quality (AA & above) rated securities while TIAA only holds 12.5% in rated securities   While the Vanguard is nearly 96% liquid in public securities, the TIAA portfolio is only 48%, which is typical. The TIAA portfolio profile

is typically or slightly better than all the other traditional insurers such as Prudential, Principal, Met Life, but not as risky as the PE based portfolios.

(Insert Table 1 around here)

Life insurers owned by PE companies are also changing their balance sheets and risk profiles. Those insurers have increased illiquid investments in complex structured products used to fund leverage in other sectors of the economy. Kirti and Sarin (2020) demonstrate that once a takeover transaction is finalized, the investment portfolios of PE-influenced life insurers quickly move to riskier assets such as private asset–backed securities (ABS). Cortes, Diaby, and Windsor (2023) write that PE firms love the ability to bypass ratings agencies and rate investments themselves under insurance laws.

> PE-influenced life insurers more aggressively take advantage of a post-global financial crisis regulatory change by US state insurance regulators where external ratings of ABS, which were significantly downgraded after the global financial crisis, were replaced by a rating based on the difference between book value and modeled expected loss on the relevant ABS. This process is through the NAIC's Securities Valuation Office where individual securities are assigned an NAIC designation used for determining capital charges in the US state regulators' RBC framework. This process led to declines in capital required to be held for ABS. For other securities, NAIC designations are mapped to rating agency ratings. Kirti and Sarin also demonstrate that the use of affiliated reinsurance transactions reduces the tax rates paid by these PE-influenced life insurers (Cortes, Diaby, and Windsor 2023).

Morgenson and Rosner (2023) write how Leon Black evolved from selling junk bonds with Michael Milkin that helps bring down Executive Life in 1992 to founding Apollo, a private equity firm. Apollo, after Executive's default, buys their junk bond portfolio for $3.2 billion and later sells it for $5.2 billion, which ends up being declared illegal by courts in Illinois & Pennsylvania. Policyholders in Executive Life are only paid up in 2 of the 50 states Illinois & Pennsylvania. Policy holders lose $3.9 billion. By 2021, thirty years has passed since the devasting failure of the Executive Life

Insurance Company. Almost nobody recalls the losses that its policyholders have been forced to absorb, or the billions in gains the disaster produced for Leon Black and his new partnership, Apollo. But the story of the company's collapse and takeover- including its crucial lessons about the risks insurance companies investments can pose to policyholders- has been forgotten for the most part (Morgenson and Rosner 2023). Apollo creates its own insurance company, Athene, in 2009. Morgenson and Rosner (2023) see it as a receptacle for assets it may have difficulty selling elsewhere, and to invest alongside to leverage its private equity deals (private debt). By 2013 it has $6.1 billion in annuities outstanding. As Morgenson and Rosner (2023) write, "But as the Executive Life disaster had shown, insurers must also weigh the risks in the investments they buy. The greater the risks, the greater chance that policyholders could lose big in a market dislocation, or worse, an insurance company failure." And, Dr. Eileen Appelbaum, Co-Director of the Center for Economic and Policy Research, states the following,

> Riskier investments are expected to yield higher returns. But annuity policyholders may not benefit, either because the investment fails or because higher fees eat up the increase in earnings. These assets include highly leveraged companies that have to refinance their debt every few years. Debt taken on in a low interest rate environment may be difficult or impossible to refinance, as we see in the current environment where the interest rate has increased rapidly. Defaults on this debt and even bankruptcy may occur (Applebaum 2023).

In the 1992 review of failed insurance companies by the Minneapolis Federal Reserve, Todd and Wallace (1992) note "Through mortgage lending and direct investment, Mutual Benefit Life of New Jersey was heavily exposed to risky commercial real estate ventures." In their paper for the Federal Reserve, Fisher-Foley,

Heinrich and Verani (2023) note the growing presence of PE firms in the insurance industry with a special concern on debt (CLOs or collateralized loan obligations) related to commercial real estate. TIAA is the third largest commercial real estate manager in the world.[3] A commercial real estate crisis, that many think is highly possible (because of record office vacancy rates throughout most office buildings and towers throughout the US), could be an adverse event for TIAA and other insurers as landlords and owners may find it more difficult to pay on loans. The National Bureau of Economic Research (NBER) in December 2023 publishes a paper on the fragility of the US Commercial Real Estate market (Bahney 2024). As Figure 1shows, office vacancies have been climbing before, during and after the Covid-19 pandemic and are not expected to decline soon as office vacancy rates set a record in 2023. Some major metro areas saw vacancy rates as high as 30% (Colliers International 2023).

(Insert Figure 1 around here).

In recent years characterized by a low interest rate environment, the ability of insurance companies to use higher risk investments such as private placements, real estate, high yield bonds, hedge funds, and equity and also to use leverage on their balance sheets, can give them a yield advantage over many other versions of stable value (as we explored earlier in our Vanguard, TIAA example). However, this yield advantage comes at a much higher risk than a diversified synthetic product, and the spread is usually not high enough to compensate for the additional risks. As interest rates rise, the risks become greater.

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[3] https://en.wikipedia.org/wiki/TIAA

Excessive Profits Through Hidden Fees Spread and Expenses

Prudential, in a 2013 conference documented by Bloomberg, bragged that they have secret hidden spread fees of over 200 basis points. "We're getting more than 2 percentage points of fees from the assets that are part of our annuity business. In your businesses (banking), you probably would dance in the street over 40 or 50 or 60 basis points" (Tracer 2013). This loophole easily allows insurance companies to hide as much 2% or 200 basis points (bps) in yearly spread profits. In addition, they continue to pay commissions out of the hidden spread which incentivizes more sales. The National Association of Government Defined Contribution Administrators, Inc. (NAGDCA) in September 2010 creates a brochure with this characterization of general account stable value:

> Due to the fact the plan sponsor does not own the underlying investments, the portfolio holdings, performance, risk, and management fees are generally not disclosed. This limits the ability of plan sponsors to compare returns with other SVFs [stable-value funds]. It also makes it nearly impossible for plan sponsors to know the fees (which can be increased without disclosure) paid by participants in these funds—a critical component of a fiduciary's responsibility (NAGDCA 2010).

Both the US Government Accountability Office (GAO) and SEC studies show losses of over 25% of retirement savings from excessive fees (US Government Accounting Office 2021, US Securities and Exchange Commission n.d.). Insurance products differ from investment management products in that much of the profit comes from spread not fees. Insurance companies compare this to the spread a bank makes on CDs. Spread is a main profit generator for insurance companies and banks, where their investments make more than their cost of deposits or funds. As stated in the NAGDCA

brochure, “It also makes it nearly impossible for plan sponsors to know the fees (which can be increased without disclosure) paid by participants in these funds—a critical component of a fiduciary’s responsibility.” Spread is complicated to measure because you have to quantify what a plan should be compensated for taking on the single entity risk of the insurance company.

A “spread” is the difference between general account return minus the return paid to participants, and the latter is often of an unspecified amount. It is a contract whose rate is set at the sole discretion of the insurance company. When a participant elects to invest funds in the plan, the sponsor shifts money from participants’ individual accounts to the insurance company which places the funds in their general account. They are free to invest the funds, free of any contractual restrictions, without disclosing the difference in the crediting rate paid to the participants and the returns they earn on its general account. The spread on the product is equal to the returns of the general account less the crediting rate paid to the participants. Most insurance companies do not disclose the spread to its clients or the public, and information on costs is usually not disclosed (Donnely, Guillen, and Nielsen 2014).

Monopoly profits are enabled by a lack of competitive bidding. Secunda and Maher (2015) suggest a competitive bidding process:

> “1. annuitizations should be subject to a bidding process in which at least three annuity providers are invited to submit proposals.
> 2. plan fiduciaries should be obligated to retain an independent state expert to prepare a written report on the fitness of the individual state guarantee funds that back each bidder.
> 3. once a winning bid has been chosen, an enrolled actuary should certify that the annuity chosen by the plan is—as compared to the annuity offered in the other bids and those available in the market generally—the ‘most protective annuity.’”

Inadequate Returns

Closed platform, monopolistic pricing allows vastly different returns and profits for different insurance companies offering almost identical general account. fixed annuities. Since fees and profits on these annuity products is treated as a secret, the only way to back into these excessive fee products is to look at the rates. But even the rates are mostly secret so as to hide these excessive fees. In 2015, many of the rates for Corporate 401ks are disclosed on their 5500-Form to the Internal Revenue Service and US DOL, but after only 1 year of transparency, in 2016 the insurance industry lobbies to hide rates again (US Government Accountability Office 2021). As of 2023 they are still not disclosed publicly. Some public plans which are exempt from Federal ERISA laws do disclose rates most likely to comply with state laws. Table 2 shows rates by leading providers of annuity products.[4]

(Insert Table 2 around here)

One of the co-authors knows through 7 years' experience in pricing general account annuity products at Prudential that TIAA has by far the lowest spread, but that it still has over 100 basis points. This probably means that other firms are taking spreads of 300-500 basis points. For example, in Tennessee, for state government employees, the plan pays only 1.36% whereas the City of Memphis employees currently get 4.20% rate for a similar product from the same provider. This means fees may be triple that made by the insurance company at the expense of employees of the State of Tennessee over that of City of Memphis. Because of the obvious fiduciary liability and risk of litigation

[4] This is from a proprietary database, FI360- Stable Value Analysis 8/18/23 – data as of 6/30/23 https://www.fi360.com/ .

most of the largest 401(k) plans have been moved out of these products for the last several decades. As litigation migrates down to midsize and large plans (between $200 million to $1billon) there are around 10% of these plans with high risk and low return investments. Most of these plans with annuities are in 403(b) plans, which because of securities laws, cannot invest in low risk diversified stable value funds like the Vanguard RST. One can make an argument that a solid fiduciary in a 403(b) plan for high single entity risk annuities is acceptable if the rates are significantly above low risk money market funds. The firm providing the most competitive rates is TIAA CREF, which currently has an annuity that yields around 7%., while other plans have 2-4% returns. Even money markets have around a 4-5% return now. If you are an investor, it is recommended to avoid these high risk, low return products if possible. PE backed life insurance annuities have resulted in higher risks for participants, and higher profits for PE firms. The PE industry accomplished this by lobbying for much lower capital requirements for their holdings of self-rated private-label asset backed securities (ABS). Kirti and Sarin (2020 claim that these are looser regulations, and they refer to them as the new "expected loss" framework. They also note how the ratings agencies have ignored this higher portfolio risk.

> "…PE firms' direct premiums from their insurance subsidiaries toward risky alternative investments, like ownership stakes in other portfolio companies. It is possible that some of the benefits from capital and tax savings that PE-backed insurers receive enable them to price more aggressively relative to their competitors and capture greater market share (Kirti and Sarin 2020)."

A US DOL 2023 hearing comment points out the huge differences in spread (over 130 bps) between a less risky portfolio like Met Life and the private equity insurer Athene (US Department of Labor 2023). PE investments in the life insurance industry have grown ten-fold since the financial crisis, primarily in fixed-annuities business—the

segment with the potentially most unprotected investors. Finally, Figure 2 displays the growth in inflation adjusted retirement annuity levels since the year 2000, and Figure 3 shows the inflation adjusted pension liability levels of insurance companies over time. Overall levels have climbed in this century.

Figure 4 shows that most annuities offered are under what can be called a Risk-Return Efficient Frontier (Markowitz 1952), and given the results, most should not be offered by fiduciaries in retirement plans. Points on or above the frontier (the blue dots going upward from left to right) would be considered good values. Because of the lack of regulation and transparency many of the risk and return numbers in the graphs are based on a variety of sources, including the co-author Tobe's own experiences, and estimates based on other numbers from source materials referenced and detailed earlier in the paper (Todd and Wallace 1992, Tobe 2015, Secunda and Maher 2016, US Department of Labor 2023). Legal or civil damage estimates from fixed annuities in DC plans using dynamics like this graph have resulted in at least 2 multi-million verdicts (Manganaro 2021, Steyer 2024). Attorney James Watkins (2022) writes on how annuities violate fiduciary laws on costs and risks, and cites Dr. William Reichenstein, finance professor emeritus at Baylor University who documents an example using index annuities. The US DOL has a standard for replacing defined benefit plans with annuities that calls for the safest available annuity products (US Department of Labor 2023). No annuities are often safe when compared to other diversified options on an efficient frontier such as government bonds. As the US DOL has shown no interest to enforce their own annuity recommendation, it has been up to the courts to try to protect retirement participants via ERISA class actions. For the courts to measure the damages

to retirement plans, a “floor” or minimum of damages is created by looking at the returns of the least bad annuities available versus what the plan participants actually receive. For example, currently TIAA is the closest, marketed product to the efficient frontier, so you take the differences participants would have made in that TIAA annuity minus what they actually have made in an annuity with similar risk. While this does not measure all the damages, it comes the closest since risk is hard to measure, and it allows for a TIAA level of excessive profit along with capital charges and other expenses. US District Courts have allowed settlements based on these principals in two ERISA cases (Manganaro 2021, Steyer 2024). Federal Government workers in their DC plan, the Thrift Savings Plan (TSP), have a fixed annuity called the G fund issued by the US Treasury. Comparing spreads from annuity providers to the G fund in pension risk transfers could measure any risk damages.

(Insert Figures 2, 3 and 4 around here)

While Figure 4 is designed for the annuity damages in DC plans it can be adapted to measure damages when annuities are used to replace DB Plans. However, the insurance company portfolios to benchmark are far less risky because they are PBGC insured and have only slightly less returns due to PBGC premiums. The only counter is that insurance company portfolios are so risky they would be in violation of ERISA and denied PBGC insurance. Again, all the risk to borne by participants whereas profits are secretly split between the company or plan sponsor and the annuity provider.

In the retirement industry that is outside of the federal protection of ERISA but that of public workers, teachers and some non-profits, the providers of annuities allegedly have paid handsome incentives to various organizations. The largest teachers’

union, the National Education Association (NEA), in 2023 allegedly makes millions of dollars through a companion organization (NEA Member Benefits) that sells annuity products to teachers, school districts, and other organizations in education (Siedle 2023). Some *Forbes* articles document how annuity firms, such as ING-VOYA and Nationwide, have paid millions in fees and commissions to non-profit organizations such as the National Association of Counties, the New York State United Teachers and the Alabama State Employees Association in order to get business (Weinberg 2007, Siedle 2011).

Conclusion

The life insurance industry has poured billions of dollars into advertising, lobbying, commissions, and trade articles that contain a certain amount of hype regarding annuities. To invest in annuities, one must look the other way at one of most basic investment principals -diversification i.e., "do not put all of your eggs into one basket." Monopolistic profits through secret spread fees have remained hidden with little federal regulation or oversight. A greed commission driven culture with monopolistic pricing has led to excessive risks and inadequate returns for buyers of fixed annuities in the 401(k), 403b and 457 retirement product markets. A potential pension fund crises and the current problems in retirement annuity markets are further symptoms of a system which has made the financialization of accumulation over the last several decades as its main vehicle for absorbing economic surplus even though the role of finance sometimes has been considered unproductive work in that it creates nothing tangible or useful. Workers being shortchanged through weak and risky pension plans exacerbates the exploitation that they receive through low pay and sometimes

economically unstable working lives. Somehow, and perhaps due to billions of dollars in lobbying, advertising, and other forms of promotion, regulators have been conditioned to put on blinders when it comes to annuities and their shortcomings.

After the AIG debacle in the 2008 financial crisis there are a few years of tougher regulation, but it is soon undone by subsequent deregulation. Unfortunately, the government's lax enforcement and regulation has forced any type of control on the insurance industry probably to result in more litigation in the courts. Annuities have some of the highest risks and lowest returns in retirement plans. Again, one of the most basic fiduciary principles is diversification. Annuities actually do not follow this with their single entity credit and liquidity risk. Single entity fixed annuities probably have many times the risk of a diversified security-based product, and their risks are not often fully disclosed.

One of the main causes for low annuity returns are excessive fees primarily in spreads that are generally hidden from the public. The Biden Administration's US DOL attempt to put some transparency on these annuity junk fees with its new fiduciary rule probably will result in millions of dollars more spent in lobbying by the insurance industry to block annuity fee and rate disclosure.

By and large the Fortune 500 Corporations have avoided these insurance company products in their 401(k) plans since 1992. This is not because of fear of regulators, but because of fear of lawsuits filed by employees under ERISA. Thus, many of these non-transparent insurance products are in smaller company plans which are not cost effective for plaintiffs to litigate individually. However, as litigation goes forth, there are over 9 thousand plans from $100 million to $3 billion, many of which have

annuity assets. It is these mid to large plans which need to resist the annuity marketing push into guaranteed income funds. _It will be interesting to see if this monopolized industry triumphs over consumers and workers. If past trends in the financialization of accumulation (or the financialization of capital) continue, reform will be uncertain and difficult. Only until a wave of annuity contract failures occur could something substantive be done. With commercial real estate markets currently not doing well, a wave of failures could be coming soon. These woes would add to the list of pension problems and lead to a possible pension crisis about which some scholars write in the beginning of this century.

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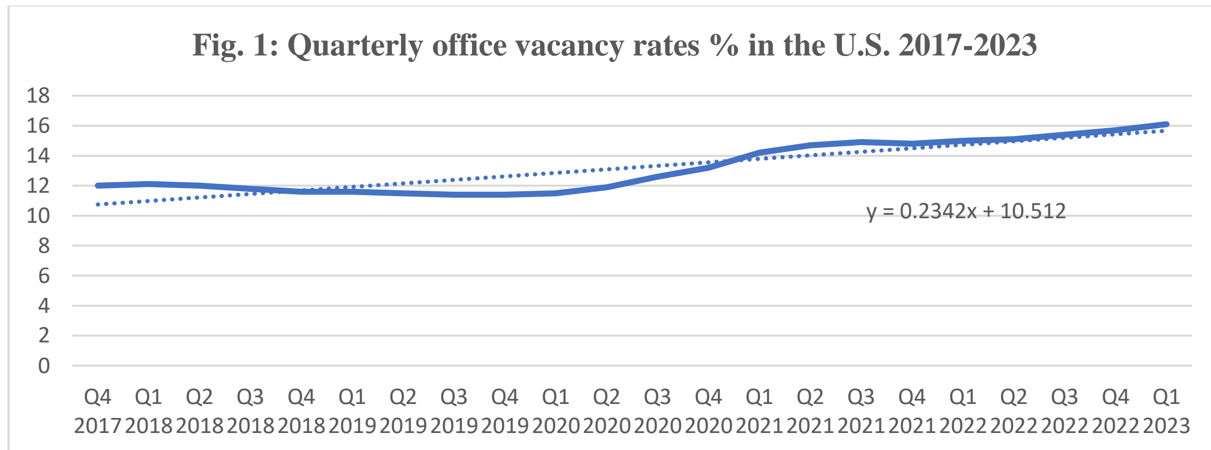
Table 1—Investment Portfolios

	TIAA	Vanguard Trust SV
Public Securities	48.0%	96.7%
Gov AAA	7.8%	63.8%
AA	4.7%	10.1%
A	14.0%	21.5%
BBB	16.6%	0.0%
Below Investment Grade	3.7%	
Non-rated Public Securities	1.2%	4.6%
Other AA GICS		3.3%
Private Fixed Income	22.0%	0.0%
Private Mortgages	13.3%	0.0%
Real Estate	4.5%	0.0%
Other Non-Securities	9.6%	0.0%
Natural Resources	2.9%	0.0%

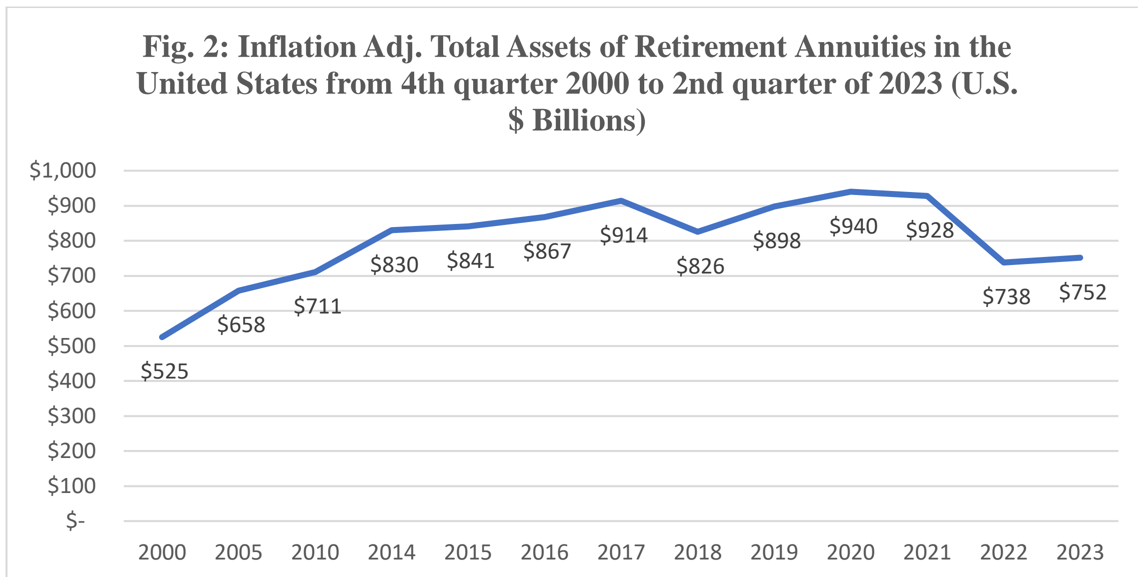
Sources:
https://www.tiaa.org/public/pdf/performance/retirement/profiles/TIAA_Gen_Act_Fin_Strength.pdf
https://personal.vanguard.com/us/funds/holdings?FundId=0348&FundIntExt=INT&APP=PE&SelectedPlanId=093725&InstFund=true&RedemptionFee



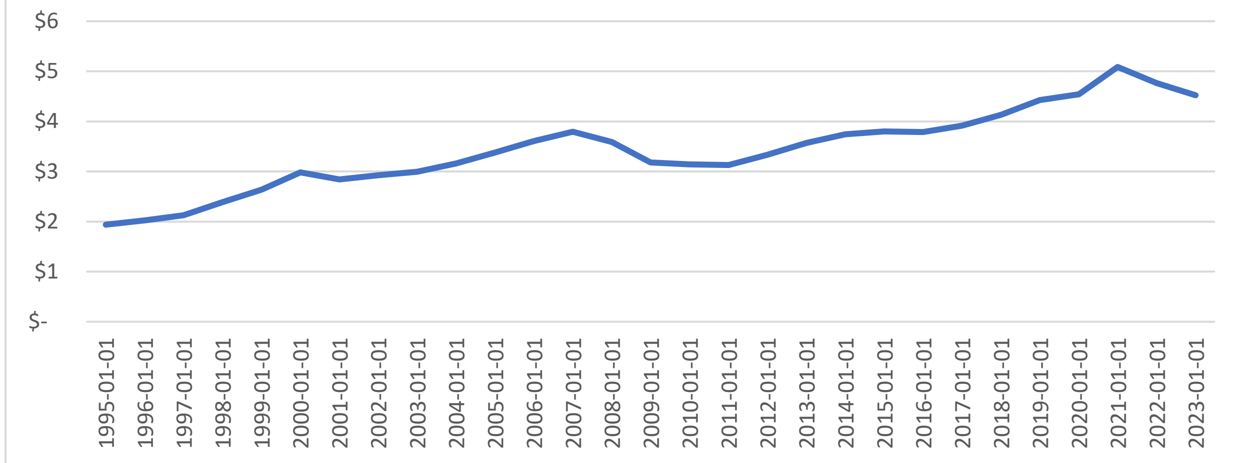
Source: Colliers International, 2017-2023

Table 2—Rates of Return FI360- Stable Value Analysis 8/18/23 – data as of 6/30/23

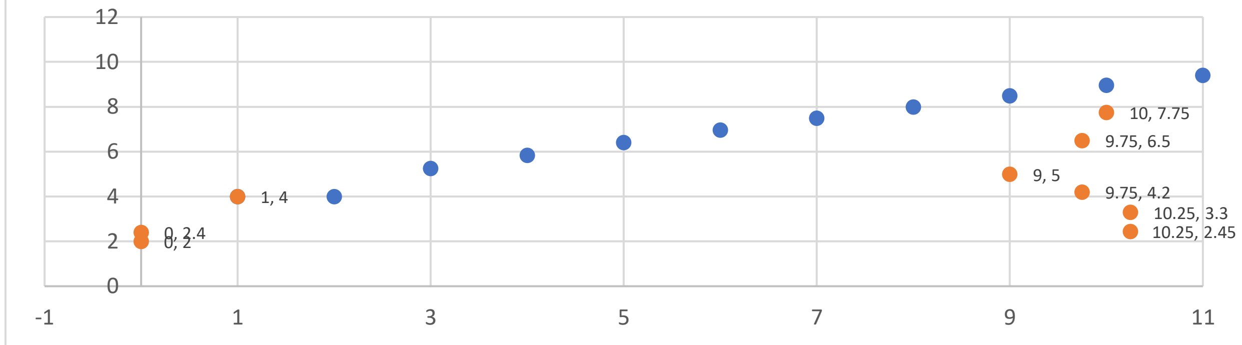
Empower Fixed Account Series VI	2.45
John Hancock Stable Value Guaranteed Income Fund	3.50
Lincoln Stable Value Account (LNGXAQ233)	4.00
New York Life Guaranteed Interest Account	4.20
Principal Guaranteed Option	4.45
Prudential Guaranteed Income Fund	3.30
TIAA Traditional Retirement Choice annuity	6.50
The Standard Preservation Income Fund	2.60



Source: Proquest (2019).



Source: Board of Governors (US)



Risk %	Return %	Investment
0	2	Vanguard Treasury Money Market
0	2.4	G Fund
1	4	Vanguard Diversified Stable Value RST
9	5	Mass Mutual Separate Account GIC
9.75	4.2	New York Life Guaranteed Interest Account 10
9.75	6.5	TIAA Traditional Retirement Choice annuity
10	7.75	Portfolio General Account Traditional
10.25	2.45	Empower Fixed Account Series VI
10.25	3.3	Prudential Guaranteed Income Fund
12	8.75	Portfolio General Account Aggressive Private Equity
12	5.2	Athene Annuity