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TRENDS AND ISSUES

NOVEMBER 2010

WHO'S WATCHING THE DOOR? HOW IMPROVING 403(B) ADMINISTRATIVE OVERSIGHT CAN IMPROVE EDUCATORS' RETIREMENT OUTCOMES

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EXECUTIVE SUMMARY

This paper examines how different administrative and oversight models for public K-12 supplemental 403(b) plans can affect the number of providers, products, investment options, and the level of fees that educators pay on their retirement saving accounts. Examining data in four states, we find:

- The process by which plan providers are certified to offer supplemental retirement plans to educators can be sorted into two administrative levels (state or local school district) and two models of management and oversight (open access or controlled access).

- Open access management typically allows "any willing provider" access to plan participants. Plan sponsors offer 403(b) plans with limited screening and oversight of the vendors seeking certification. Plan sponsors typically do not negotiate fees prior to certification nor do they monitor the vendors after certification. States using the open access model generally have supplemental 403(b) plans with a large number of providers and investment options, a broad range of relatively high fees.

- Controlled access management limits the number of providers in the plan. Plan sponsors typically use a competitive bidding process that requires potential venders to submit proposals that include information on the investment product menu and associated fees. Fees are often a key factor in the review process. States and school districts using the controlled access model tend to have a relatively small number of choices of providers and investment products, and relatively low overall fees.

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- Participants in open access states face significantly higher asset-based fees relative to participants in controlled access states.

- Participants in open access states have a higher likelihood of paying loads (either front-end or back-end) and being subject to surrender charges. The loads significantly increase the total cost to own assets in a retirement plan. Surrender charges reduce liquidity and flexibility to move assets to more cost-competitive providers. Participants in controlled access states generally are not subjected to loads or surrender charges.

- Transitioning from an open access to controlled access model can enhance the efficiency of the 403(b) plan, resulting in lower fees, and thus increasing wealth accumulation for public school educators.

- Our simulations indicate that over a 30-year career, a educator in a controlled access state can accumulate between $60,000 and $100,000 more in real (constant 2010 dollars) retirement wealth. On an annuitized basis, this is equivalent to about $4,000 in yearly real retirement income, accounting for an additional 7 percent income replacement rate on the final year's salary.

- Assuming a standard 4 percent systematic withdrawal rule, our simulations suggest a educator in a controlled access state retiring at age 65 will generate about $65,000 more in real (constant 2010 dollars) retirement income and have about $80,000 more in real retirement assets remaining at age 85.

INTRODUCTION

Most K–12 public school educators are covered by a generous package of non-salary benefits, including health insurance, disability insurance, retirement pension plans, and retiree health insurance. In addition, most are also covered by the Social Security and Medicare system. For decades, the structure of retirement benefits has ensured that individuals who devote their working career to public education were able to move into retirement with sufficient resources for a secure, comfortable retirement. Recently, a number of long-term system stresses and short-term financial crises have combined to place increased risk and uncertainty on the future retirement security of public school educators. This confluence of events has forced many school systems to re-evaluate the generosity and objectives of their retirement benefits package, and typically includes an evaluation of the role and viability of the traditional primary Defined Benefit (DB) and supplemental Defined Contribution (DC) retirement plan structure.

In this *Trends and Issues,* we highlight the results of Clark and Richardson (2010), which finds that alternative administrative and regulatory structures for supplemental retirement plans can significantly affect the wealth accumulation of public school educators. We develop a taxonomy that shows the management of 403(b) plans by public employers can be grouped into two administrative levels (state or local school district) and two models of regulation (open access or controlled access). Open access systems typically allow "any willing provider" to offer 403(b) plans to educators. In contrast, controlled access systems restrict the number of providers, usually through a competitive bidding process in which potential providers specify the investment products they will offer and all fees that will be charged. To assess the effect of alternative administrative models, we examine the 403(b) landscape in four states. The controlled access states have substantially lower fees and provide educators with the opportunity to accumulate greater retirement wealth for the same level of contributions. We perform simulations that show, over a full working career, an educator participating in a low-fee plan in a controlled access state can potentially accumulate $25,000 to $60,000 more in real (constant 2010 dollars) retirement wealth relative to an educator in a high-fee plan in an open access state. This difference provides the educator in a low-fee plan up to an additional $4,000 in yearly real retirement annuity income, providing an additional 7 percent income replacement rate of the educator's final year's salary. Assuming a standard 4 percent systematic withdrawal rule, our simulations suggest an educator in a controlled access state will generate about $65,000 more in real (constant 2010 dollars) retirement income and have about $80,000 more in real retirement assets remaining at age 85. While a number of economic factors may explain a portion of the large disparities in fees, it appears that limiting the number of 403(b) providers through a competitive bidding process creates a better investment environment for educators.

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THE GROWING IMPORTANCE OF SUPPLEMENTAL 403(B) PLANS FOR PUBLIC K-12 EDUCATORS

Virtually all K-12 public school educators are covered by a mandatory pension plan that provides relatively generous benefits to career educators.[1] Most public educators are covered by DB pension plans, although recently some school systems have established combination or hybrid plans for new educators.[2] In addition, most are also covered by Social Security and many will be covered by employer-provided retiree health plans.[3] For most long-tenured educators, the combination of these plans provides retirement income at or near net final earnings. Educators not covered by Social Security will need to have supplemental retirement savings to achieve the desired levels of retirement income. Many other educators do not remain in the K-12 school system for the 30 or more years needed to accrue adequate levels of pension income and may not qualify for the retiree health plans. In order to achieve the desired level of retirement income, these shorter career educators should participate in supplemental retirement savings programs.

Given current economic conditions and the fiscal status of many states and localities, public pension systems have recently come under considerable pressure and scrutiny.[4] Many governmental units have already begun modifying their retirement plans to reduce the generosity of future pension and health benefits.[5] At the federal level, budget and demographic pressures make it increasingly likely that Social Security benefits will also be lower in the future. Thus, looking ahead, public school systems need to carefully evaluate and modify their retirement saving plans to ensure that the plan is effective in helping educators accumulate sufficient assets for a comfortable and secure retirement.

Virtually all public school educators also have access to an employer-sponsored DC retirement saving plan that supplements their primary DB plans.[6] These DC plans allow educators to make pre-tax contributions to the plan through payroll deductions, provide for tax deferral of any investment earnings and tax any retirement distributions.[7] However, unlike most private-sector DC plans most public school employers do not provide employer automatic or matching contributions and other features such as automatic enrollment and automatic increases in contributions are rarely used. Given the ongoing economic challenges and the resultant budget pressures faced by public school systems, it is increasingly important that educators have access to well-managed employer-sponsored DC plans that are efficiently structured and capable of generating secure retirement income.

THE STRUCTURE OF EMPLOYER PLAN CONTROL IN THE PUBLIC SCHOOL 403(B) MARKET

The differences in the regulatory environment of 403(b) plans, both across and within states, are substantial. Some educators are covered by plans managed by the local school district while in other states 403(b) plans are regulated at the state level. There are single vendor plans, small multi-vendor plans (e.g., five vendors), and large multi-vendor plans (e.g., 50 or more vendors). Some systems use a competitive bidding process for vendor access while others allow "any willing provider." This highly fragmented market structure creates system-wide inefficiencies and makes it likely that otherwise similar educators will have very different wealth accumulations due to the variation in the cost of participating in retirement saving plans. A critical component of increasing 403(b) participation is to ensure educators have access to easily understandable, high-quality and low-cost plans. This *Trends and Issues* provides a first look at the cost structure of retirement saving plans for public school educators and other school personnel.

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1 Clark and Craig (2011 forthcoming) provide an analysis of replacement rates for career teachers in all states from state retirement plans for public school educators.

2 A combination, or hybrid, plan has features of both a DB and a DC plan. Michigan and Washington are examples of states that recently transitioned to a hybrid teacher retirement plan.

3 States in which educators are not covered by Social Security include: Alaska, California, Colorado, Connecticut, Illinois, Kentucky, Louisiana, Maine, Massachusetts, Missouri, Nevada, Ohio, and Texas. For educators in these states, efficient management of supplemental pension plans is of even greater importance.

4 See, for example, Novy-Marx and Rauh (2009) or Brown and Wilcox (2009) for a discussion of issues related to public pension funding.

5 Chapter 10 of Clark, Craig, and Sabelhaus (2011 forthcoming) describe the numerous changes in public retirement plans that have been made over the last decade as state and local governments have attempted to slow the increase in the cost of retirement plans.

6 Typically these tax-qualified plans are commonly known by the relevant Internal Revenue Code section and include 403(b) plans, 457(b) plans and 401(a) plans.

7 A growing number of plans also allow for a "Roth" structure whereby all contributions are made on an after-tax basis but investment earnings and any retirement distributions are tax-free.

Administrators of public school system retirement plans have considerable latitude in determining the design, management and oversight of 403(b) plans. Employers, perhaps in conjunction with a collective bargaining unit, must decide which financial service providers will be allowed to offer 403(b) plans to educators and they also approve the specific plans that are offered as part of the retirement saving programs. This latitude has resulted in substantial variability in plan design and costs, both within and across states. A policy concern for school districts and state departments of education for school districts and state departments of education is how the choice of 403(b) regulation affects the ability of educators to save for retirement.

STATE VERSUS LOCAL CONTROL OF SUPPLEMENTAL RETIREMENT PLANS

In some states, the process of approving 403(b) plan providers and regulating their actions is done at the state level. State level regulation can result in all educators throughout the state having access to the same investment options and facing the same fee structures. Alternatively, in other states, local school districts have the regulatory authority over 403(b) plans. Local control can allow individual school districts to tailor the supplemental plans to meet the needs of their educators. Either level of governmental management can allow for open access or can control access by using a competitive selection process. With local management, the selection of providers, products, and plan design is the sole responsibility of the local school districts. As a result, the number of providers and associated products will vary across school districts. Management at the state level can leverage a larger potential asset base and may result in lower asset-based fees and prohibit loads and surrender charges. There are also likely scale efficiencies in the cost of monitoring providers at the state level relative to each school district undertaking this burden.

CONTROLLED VERSUS OPEN ACCESS MANAGEMENT

Regardless of whether the plan is administered at the state or local level, an important factor influencing the wealth accumulation of educators is the degree of control the plan sponsor maintains over the plan. In an open access model, the plan sponsor allows access to "any willing provider" with individual educators bearing the burden of deciding which provider among all of those approved to offer a 403(b) plan provides the best mixture of products, services and fees. Alternatively, a plan sponsor may utilize a controlled access model, using a competitive bidding process to limit access to the market. In a controlled access setting, the plan sponsor negotiates with providers over the mixture of products and the level of fees.

With open access, the state or local school district functions as a clearinghouse for providers who desire to offer products and services to educators. Providers register with the governmental authority and submit individual investment products for certified inclusion in the plan. A provider must disclose all fees that will be charged to plan participants. It is common for this information to be included in an online investment information bank for access by the governmental authority and plan participants. With open access, states and districts do not actively negotiate product offerings or fees, nor do they typically monitor the products and associated fees. Rather, the open access model offers a large range of certified providers for participants to access.

With controlled access, a governmental authority limits access to the 403(b) market through a competitive bidding process. Interested providers submit proposals to be a plan provider in response to the criteria established by the governmental authority. Proposals must describe the types of products and the types and level of fees. Limiting the number of providers may lower fees due to economies of scale and because fewer providers allow the plan sponsor to better oversee and monitor the providers' products. If regulation occurs at the state level, participant assets are likely to be more portable across districts due to the provider structure of the plan and because the bid process typically prohibits selected providers from charging loads or surrender charges. Figure 1 illustrates the four possible regulatory models for 403(b) plans.

FIGURE 1: MODELS OF 403(B) PLAN MANAGEMENT AND ACCESS

MANAGEMENT	ACCESS	
	OPEN	**CONTROLLED**
Local Level	• Many Providers • Large number of investment options • High variability of teacher outcomes due to local plan differences • High variability of teacher outcomes due to high variability in number of providers, investment options, and fees • Substantial management burdens on teachers • High monitoring costs • Low economies of scale	• Few Providers • Small number of investment options • High variability of teacher outcomes due to local plan differences • Low variability of outcomes due to low variability in number of providers, investment options, and fees • Low management burdens on teachers • Low monitoring costs • Possible economies of scale
State Level	• Many Providers • Large number of investment options • Low variability of teacher outcomes due to single state plan • High variability of outcomes due to high variability in number of providers, investment options and fees • Substantial management burdens on teachers • High monitoring costs • Low economies of scale	• Few Providers • Small number of investment options • Low variability of teacher outcomes due to single state plan • Low variability of outcomes due to low variability in number of providers, investment options, and fees • Low management burdens on teachers • Low monitoring costs • Substantial economies of scale

A COMPARISON OF STATE LEVEL MANAGEMENT OF SUPPLEMENTAL 403(B) PLANS

A series of key questions need to be addressed if we are to evaluate the alternative forms of regulation for their impact on the retirement security and wealth accumulation of school educators. First, does open access and relatively free entry into the 403(b) market allow the inclusion of providers who charge excess fees for their products? Second, are there economies of scale in offering retirement savings plans so that fees for the same product by the same vendor are lower in areas where there are fewer vendors? Third, how much responsibility should individual educators bear in evaluating alternative providers and investment products? Fourth, does centralized management and oversight of providers and products enhance plan efficiency and the ability of educators to accumulate retirement wealth? To provide answers to these important questions, we compare the fee structure for providers and products a small sample of states that use alternative models of plan oversight and control.

To examine the implications of the method of governmental management of supplemental retirement plans, we analyze the experience of four states to illustrate how the approval and oversight process for providers affects the product and fee structure that educators face.[8] In the following discussion, we define a provider as a financial services company that provides products and services within a specific market. Investment products include fixed annuities, variable annuities, and custodial accounts. Investment options are sub-products that participants may select under any product. For example, a variable annuity or custodial account typically has a range of mutual funds that participants may invest in. Fees are any charges educators pay for buying, holding, and selling investments in the plan.

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8   This paper focuses on state level management process due to difficulty in acquiring data on the management of 403(b) plan by local school districts.

THE IMPACT OF OPEN VERSUS CONTROLLED ACCESS ON PLAN COMPLEXITY

Table 1 shows the number of providers, products, and distinct investment options in each of the four states we consider.[9] California and Texas are open access states in which a provider may seek certification to offer products to the supplemental retirement plans. Beyond a basic certification and registration process, these states do not provide oversight to the providers.[10] In both states, local school districts must allow educators to have the opportunity to use payroll deduction for contributions to any approved registered product fund offered by an approved provider. In California, educators wishing to participate in a 403(b) plan can select from 72 providers offering 275 retirement products and almost 3,200 distinct investment options. Texas educators can choose from 54 providers, 172 products, and almost 3,400 distinct investment options.

TABLE 1: K-12 MARKET STRUCTURE BY STATE, 2009

	CA	TX	IA	AZ
Providers	72	54	5	1
Products	275	172	10	3
Investment Options	3,165	3,367	135	22

source: author calculations of California, Texas, Iowa, and Arizona data
Note: Investment options are distinct for each state

Iowa and Arizona are examples of the controlled access states that limit the number of 403(b) providers through a competitive bidding process. Iowa adopted a "multi-vendor" controlled access model and Arizona utilizing a "single-vendor" controlled access model. Both states required potential plan providers to meet specific requirements for products and services that will be offered and fees that will be charged. At the end of the bidding process, Iowa selected 5 providers with participants choosing from a menu of 10 products and 135 distinct investment options.[11] Arizona selected a single provider offering 3 products and 22 distinct investment options. The number of distinct investment choices open access state educators must evaluate is more than 23 times greater than in Iowa and 143 times greater than in Arizona. Based on our limited sample, it appears that educators in controlled access states face substantially lower information burdens in choosing a low-cost, high-quality provider. For some, the lower information cost comes at the cost of a more limited choice of providers and investment options. For example, in a state with a single provider, an unhappy investor does not have the option of switching to an alternative provider.

THE IMPACT OF OPEN VERSUS CONTROLLED ACCESS ON PLAN FEES

An educator participating in a 403(b) plan may be subject to four types of fees – asset-based fees, front-end loads, back-end loads, and surrender charges. We define asset-based fees as any fee charged as a percentage of participants' assets in a specific product or investment option. A front-end load is a sales charge or commission paid when an educator first purchases an investment. Similarly, a back-end load is incurred when an educator sells an investment. Both of these fees can be incurred with an annuity product or custodial account mutual fund. We define surrender charge as a fee for terminating an annuity contract early. Loads and surrender charges reduce a participant's investment liquidity by making it costly to transfer retirement assets into lower-cost alternatives.

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9   For purposes of this table, we define a distinct investment option as any sub-product that is offered by at least one provider. If multiple providers offer the same investment option, we only count that option once in Table 1.

10 For example, Section 25100-25115 of the California Education Code requires the California State Teachers Retirement System (CALSTRS) Board to establish a provider registration process for 403(b) plans. In Texas, Senate Bill 273, enacted in 2001, established guidelines for certifying providers who could participate in the 403(b) plans for school educators. The Texas Retirement System (TRS) was given authority to establish additional criteria for approved vendors.

11 Iowa added a 6th provider in 2010.

Table 2 provides information on the types of fees charged, mean and median fees, and the variance of fees for the total investment options offered across the four states in our sample.[12] A first observation is that neither of the controlled access states allows providers to include loads or surrender charges in the fee schedule. The prohibition on these types of fees makes it easier for participants to make effective choices on the best mix of products and investments, thereby increasing the likelihood of accumulating sufficient retirement assets. Another advantage of controlled access is that each provider will tend to have a larger share of total retirement assets under management within a school system. The scale of assets under management is important because the providers can spread fixed administrative costs over a larger asset base, thus offering the potential for lower fees per participant. By contrast, providers in open access states expect a smaller market share and will likely have less confidence about the sustainability of market share. Other things equal, these providers may need to charge higher fees to cover fixed administrative expenses and are more likely to require loads or surrender charges in order to stabilize assets under management in a highly fragmented market.

A second observation is that fees tend to be significantly higher and more complex in open access states. For example, mean and median fees charged for total investment options are significantly higher in the open access states. The mean asset-based fee is 211 basis points in California and 171 basis points in Texas. This compares to fees of 87 and 80 basis points in Iowa and Arizona, respectively. The variability of fees is also significantly higher in the open access states. For California, about two-thirds of the asset-based fees are between 89 and 333 basis points, while in Texas two-thirds of the investment options have asset-based fees ranging from 101 and 241 basis points. By contrast, the two-thirds of asset-based fees in Iowa are between 50 and 123 basis points and in Arizona between 40 and 119 basis points. In addition, educators in open access states are subject to a set of fees – front-end loads, back-end loads, and surrender charges – that increase the effective cost to own a product and make it costly to switch to a more cost-effective provider. These data indicate that the open access states have considerably higher fees and there are numerous investment options that include very high fees that can significantly reduce wealth accumulation over the lifetime.

TABLE 2: INVESTMENT OPTION FEES BY TYPE, 2009

STATE	FEE	MEAN	MEDIAN	MINIMUM	MAXIMUM	STANDARD DEVIATION	NUMBER
CA	AS	2.11	2.06	0.00	12.29	1.22	5,103
	FE	1.05	0.00	0.00	15.00	2.63	
	BE	0.14	0.00	0.00	5.00	0.56	
	SU	3.39	1.00	0.00	18.00	3.74	
TX	AS	1.71	1.75	0.00	6.10	0.70	9,056
	FE	1.38	0.00	0.00	5.75	2.33	
	BE	0.64	0.00	0.00	5.00	1.46	
	SU	1.36	0.00	0.00	10.00	2.84	
IA	AS	0.87	0.85	0.00	1.70	0.36	168
	FE	0.00	0.00	0.00	0.00	0.00	
	BE	0.00	0.00	0.00	0.00	0.00	
	SU	0.00	0.00	0.00	0.00	0.00	
AZ	AS	0.80	0.88	0.22	1.54	0.40	22
	FE	0.00	0.00	0.00	0.00	0.00	
	BE	0.00	0.00	0.00	0.00	0.00	
	SU	0.00	0.00	0.00	0.00	0.00	

source: author calculations of CALSTRS, TRS, Iowa RIC, and TIAA-CREF data
key: AS=Asset-based Fee, FE=Front-end Load, BE=Back-end Load, SU=Surrender Charge
note: Does not include Fixed Annuity products

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12 Table 1 counts the number of products and distinct investment options within a plan. Tables 2 counts all possible combinations of investment options because different providers may charge different fees for the same underlying investment.

We also calculated the types of fees charged by product for each state in our sample, using only those investment options that had a positive (non-zero) fee. In California, we find about 80 percent of fixed annuity products and 97 percent of variable annuity products are subject to a surrender charge. In Texas, about 80 percent of fixed annuity products and 78 percent of variable annuity products are subject to a surrender charge. Investment loads are also common in the open access states, with about 25 percent of investment options in California and about 45 percent of investment options in Texas subject to either a front-end or back-end load. In contrast, educators in Iowa and Arizona are not subject to any of these fees.

The large number of providers and products can result in monitoring problems. For example, Texas imposes a cap of 2.75 percent for asset-based fees. Providers may submit fees in excess on this limit, but Texas requires the weighted mean of asset-based fees for any product not exceed 2.75 percent. Providers are responsible for making sure the fee cap is not exceeded.[13] Table 2 shows the maximum possible asset-based fee is over 6 percent. Our analysis indicates a number of providers in Texas offer products that potentially exceed the cap, but we cannot determine if the providers expend the necessary resources to ensure that participants are not paying excessive asset-based fees.

An important aspect of controlled access is that improved oversight of products menus significantly reduces excessive provider fees and increases the efficiency and equity of educator retirement outcomes. Figure 2 (page 13) shows the distribution of asset-based fees for the four states in our sample. A primary difference between the open access and controlled access states is that educators in open access are exposed to providers who offer products with extremely high fees.[14] By contrast, product fees at the lower end of the fee distribution are comparable in all four states. While it is possible for educators in an open access state to select low-cost plans, this is a guaranteed outcome in a controlled access state. Also, there is a much higher likelihood that educators will experience similar retirement outcomes because the range of fees is smaller in controlled access states.

Another issue with open and controlled access is whether there are differences in the cost-to-own similar products across states. Differences in fees charged for similar products can be attributable to several sources. Providers offering the same investment options may vary their fee structure depending on the certification process, assets under management, the number of providers, or the perceived level of monitoring. First, a competitive bidding process could provide an incentive for providers to lower their fees in an effort to win the contract and be the single (or one of a few) vendors. Second, vendors with a larger share of the state or local market may gain from economies of scale. If actual costs to the vendor are lower in the controlled access states, then the plan provider can pass some of these cost savings along to the educators in the form of lower fees. Third, providers may charge excess fees if the market is highly fragmented and educators have poor information about more cost-effective alternatives. If either of the first two hypotheses is correct, then we should see lower fees for the same product in the controlled access states and higher fees in the open access states. If the third hypothesis is correct, then we may observe certain providers charging significantly higher fees but others charging similar fees across states.

Figure 3 (page 14) shows the distribution of asset-based fees for 118 specific investment options that are offered in California, Texas, and Iowa. In Iowa, the fee distribution for these investment options offered in each of the three states ranges from 0 to 170 basis points, with a mean asset-based fee of 90 basis points. The fees for the same investments offered in Texas and California are significantly higher. The majority of the common investment options have fees in excess of 250 basis points, with a mean asset-based fee of 210 basis points in California and 182 basis points in Texas. In addition, many of the common investment options offered in California and Texas include loads or surrender charges while none of the investment options in Iowa have these fees. In California, about 7 percent of the common investment options have a load and 39 percent have a surrender charge. The comparable incidence of these fees in Texas is lower, with about 5 percent

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13 Teacher Retirement System of Texas (2009)

14 Observe the long tail of high fees in the fee distribution for California and Texas in Figure 2. While no investment products in Iowa and Arizona have fees in excess of 180 basis points, many investments in California and Texas have fees that exceed these levels.

of the common investment options subject to loads and 25 percent having surrender charges. The magnitude of the loads and surrender charges add considerable cost to the investment in the open access states relative to Iowa. For common investment options with a positive load or surrender charge, the mean back-end load is 163 basis points in California and 233 basis points in Texas, and the mean surrender charge in California is 419 basis points and 877 basis points in Texas. Thereby, the cost of open access to participants is not only higher asset-based fees, but also a higher total "cost-to-own" along with a significant likelihood of loss of liquidity and flexibility to move retirement assets to more competitively priced providers.

THE IMPACT OF HIGH FEES ON EDUCATOR RETIREMENT SECURITY

The prior section documented that providers in open access states assess a wider variety of fees and charge significantly higher fees relative to providers in controlled access states. These differences in fee structures are large enough to suggest violation of the public policy principle of horizontal equity, which states that similar educators (in terms of age, tenure, pay, and contributions) should experience similar 403(b) retirement plan outcomes. The data suggest that educators in open access states face a lower likelihood of a secure retirement simply because they are subjected to a more complex plan and fee structure and higher overall fees. This section highlights some of the simulation results in Clark and Richardson (2010) that illustrate how differences in fees impact educator retirement outcomes.

Figure 4 (page 15) shows the accumulation path for real (constant 2010 dollars) asset accumulation for career educators assuming three different asset-based fee levels. We assume educators have a starting salary of $35,000 and receive annual nominal pay raises of 4 percent. Educators begin immediate participation in the supplemental 403(b) plan, contributing 5 percent of salary, earning a gross nominal return of 7.5 percent, and facing an inflation rate of 2.8 percent. We examine the impact on asset accumulation when the gross return is reduced by asset-based fees of 25, 75, or 150 basis points. At the end of a 30-year career (age 55), the educator with the low-fee plan has about $25,000 more in real retirement wealth relative to the educator in the high-cost plan. If these educators continue to work another 10 years (age 65), the difference grows to almost $59,000 in real retirement assets.

The primary objective of a retirement plan is to help workers accumulate assets that can be converted into retirement income. Figure 5 (page 16) shows the impact of different fee structures on annuitized retirement wealth. At age 55, the low-fee plan generates about $1,400 in additional real retirement income relative to the high-fee plan. Placing these amounts in terms of replacing pre-retirement income, the low-fee plan provides an income replacement rate of about 15 percent and the high-fee plan a replacement rate of about 12 percent. If the educator works to age 65, then the low-fee plan generates about $3,900 more in real retirement income than the high-fee plan. This is equivalent to a 28 percent income replacement ratio for the low-fee plan, which is 7 percentage points higher than the high-fee plan replacement rate of 21 percent.

Finally, we consider the impact on real asset accumulation and retirement income for educators who make systematic withdrawals from their 403(b) plan rather than convert the entire amount into annuity income. Figure 6 (page 17) shows real asset accumulation and decumulation using mean asset-based fees in California, Texas, and Arizona. We maintain the assumptions from the previous examples with the exception that educators in each plan begin systematic withdrawals beginning at age 66. We assume educators use a simple distribution rule of the minimum of 4 percent of assets or the Internal Revenue Service required minimum distribution.[15] Figure 6 shows that the low-cost plan generates about $52,000 more in real retirement assets at age 65. The benefit of lower fees persists throughout retirement, with the low-cost plan having about $80,000 more in real assets when an educator attains age 85. The combination of a larger initial asset base and lower fees generates substantially more income over time. Figure 7 (page 18) illustrates that the low-cast plan generates both higher real income and a greater likelihood of not outliving resources. At age 100, the low-cost plan has generated almost $500,000 in real retirement income, which is more than $200,000 more than the income generated by a high-cost plan. In addition, the low-cost plan has over $180,000 in real assets remaining, compared to about $89,000 in

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15 Required minimum distributions are the minimum amount a retired account owner must withdraw annually beginning with the year they attain age 70.5. We use the uniform lifetime table in this example. See Department of the Treasury (2009), Table III.

the high-cost plan. Overall, a low-cost controlled access model provides a more effective mechanism for helping educators achieve a comfortable and secure retirement.

CONCLUSIONS

Fees are a necessary component of any retirement plan because providers need to cover costs and earn a reasonable return for services provided. In a competitive market, we would expect fees to be at a reasonable and fairly uniform level, with any differences in fees attributable to differences asset scale, asset management, and participant services. However, the prior section documented that providers in open access states assess a wider variety of fees and charge significantly higher fees relative to providers in controlled access states. This *Trends and Issues* has examined alternative methods of regulation of 403(b) plans to determine their affect on plan complexity and fee structures.

Data from four states reveal that relative to state controlled access to the 403(b) market, the open access model is associated with higher fees for participation in the 403(b) plan. The states using the open access model have 403(b) plans with a large and potentially bewildering number of providers and investment options, with minimal monitoring of providers, and with educators bearing most of the burden in selecting a cost-effective option. Participants also face a high likelihood of reduced investment liquidity because of the high prevalence of loads and surrender charges associated with provider products. By contrast, the controlled access states in our sample use a competitive bidding process, with potential providers required to submit proposals that include information on the product and investment menu and to specify any associated fees. In general, loads and surrender charges are prohibited. As a result, median fees are lower and the variability of fees is smaller in controlled access states, increasingly the likelihood that all educators achieve a secure retirement.

A simulation analysis of wealth accumulation in 403(b) plans illustrates the adverse effect of high fees associated with open access regulation on retirement saving. Over a working career, an educator participating in a low-fee plan in a controlled access state can potentially accumulate $25,000 to $60,000 more in real retirement wealth relative to an educator in a high-fee plan in an open access state. When viewed in conjunction with back-end loads or surrender charges, the educator in a low-fee plan can generate up to an additional $4,000 yearly real annuity income, providing an additional 7 percent real retirement income replacement rate of the educator's final year's salary. These results highlight how the controlled access model improves educator retirement outcomes by generating more retirement income for a given level of contributions. Controlled access can also improve horizontal equity by reducing the variability of educator retirement outcomes. In addition, the improvement in replacement rates facilitated through the 403(b) plan can make it easier to reform the other components of educators' retirement benefits package by reducing heavy reliance on these components as the dominant source of educator retirement security.

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FIGURE 2: DISTRIBUTION OF ASSET-BASED FEES FOR INVESTMENT OPTIONS BY STATE, 2009

source: author calculations
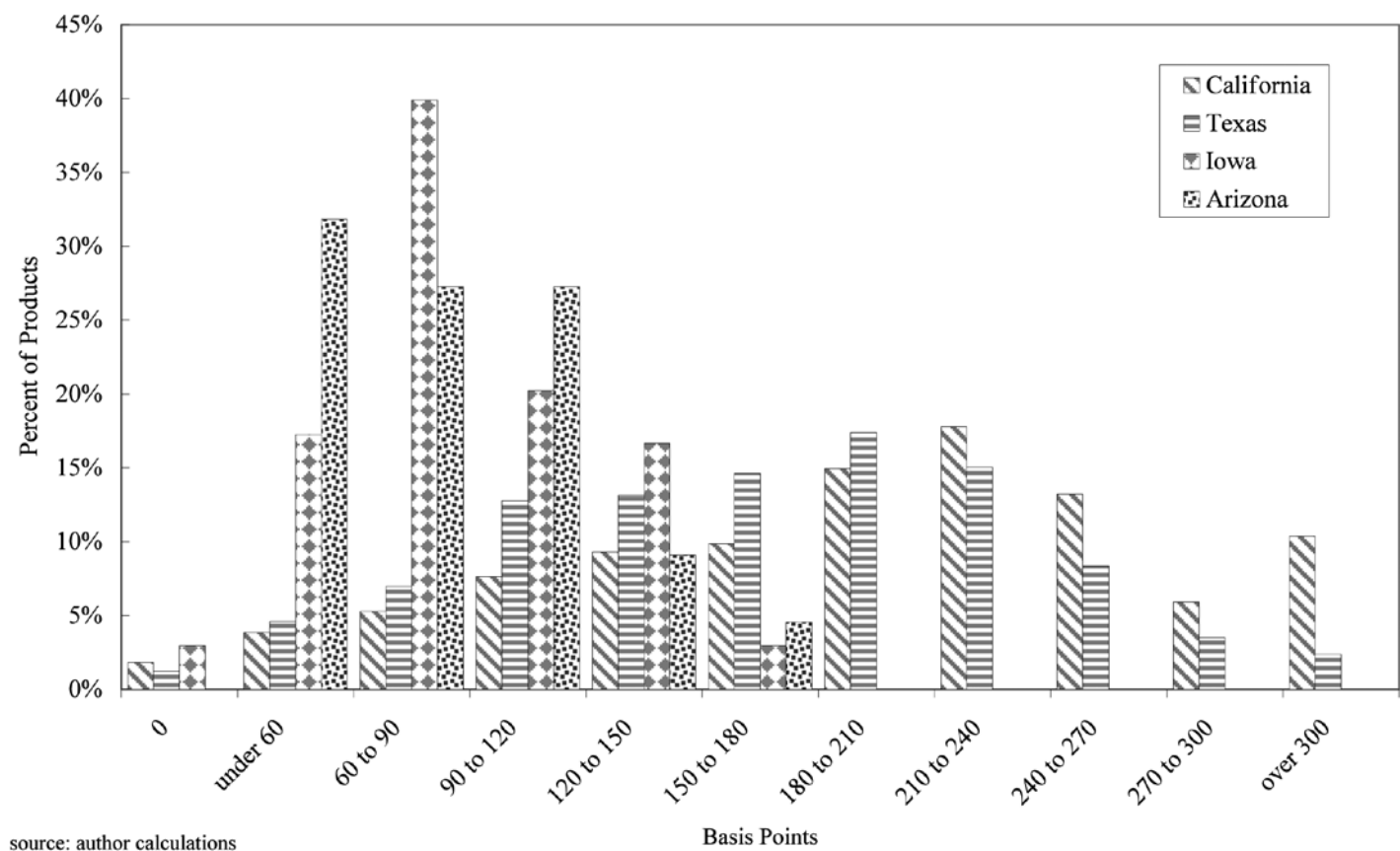
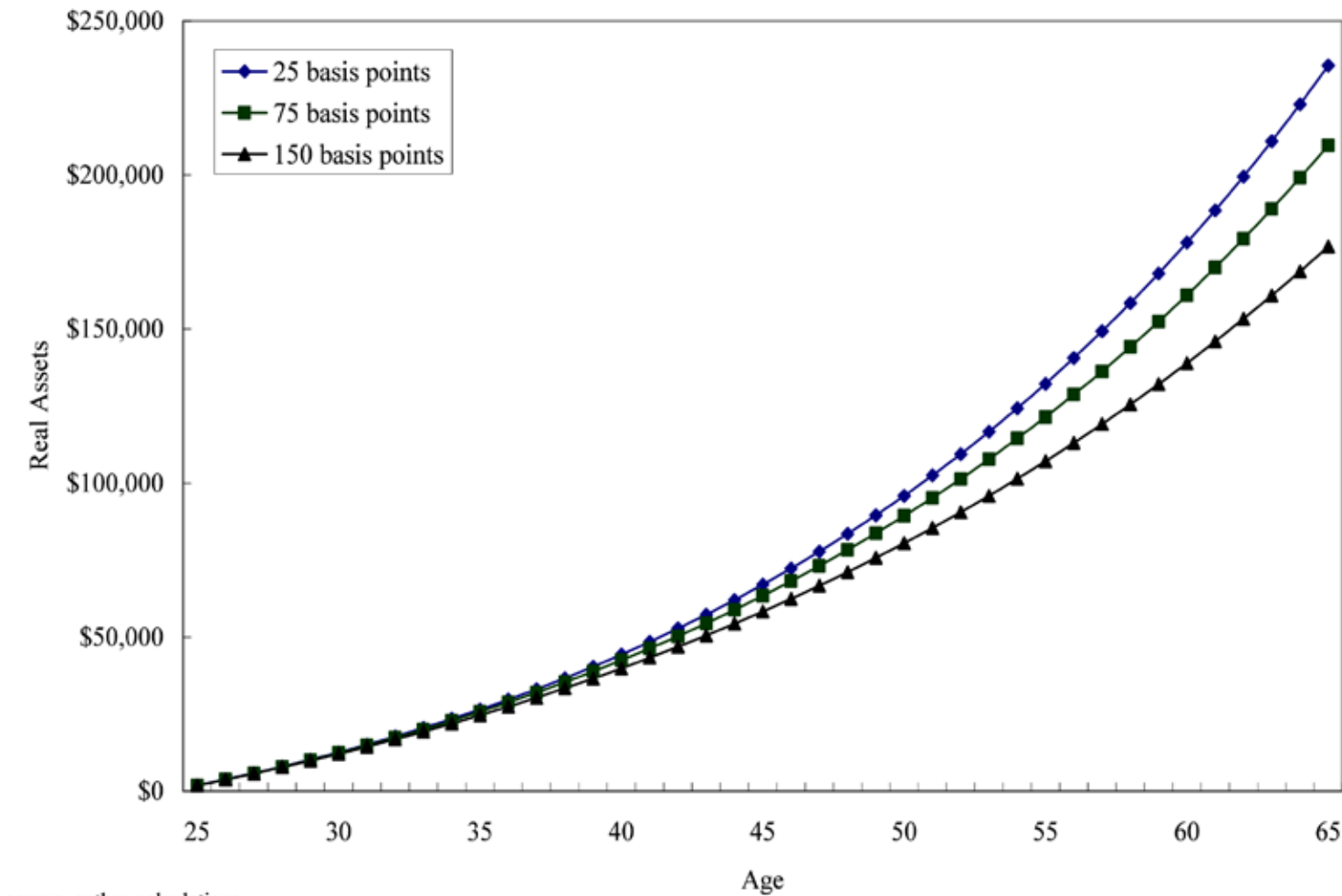**FIGURE 3: DISTRIBUTION OF ASSET-BASED FEES FOR COMMON INVESTMENT OPTIONS 2009**
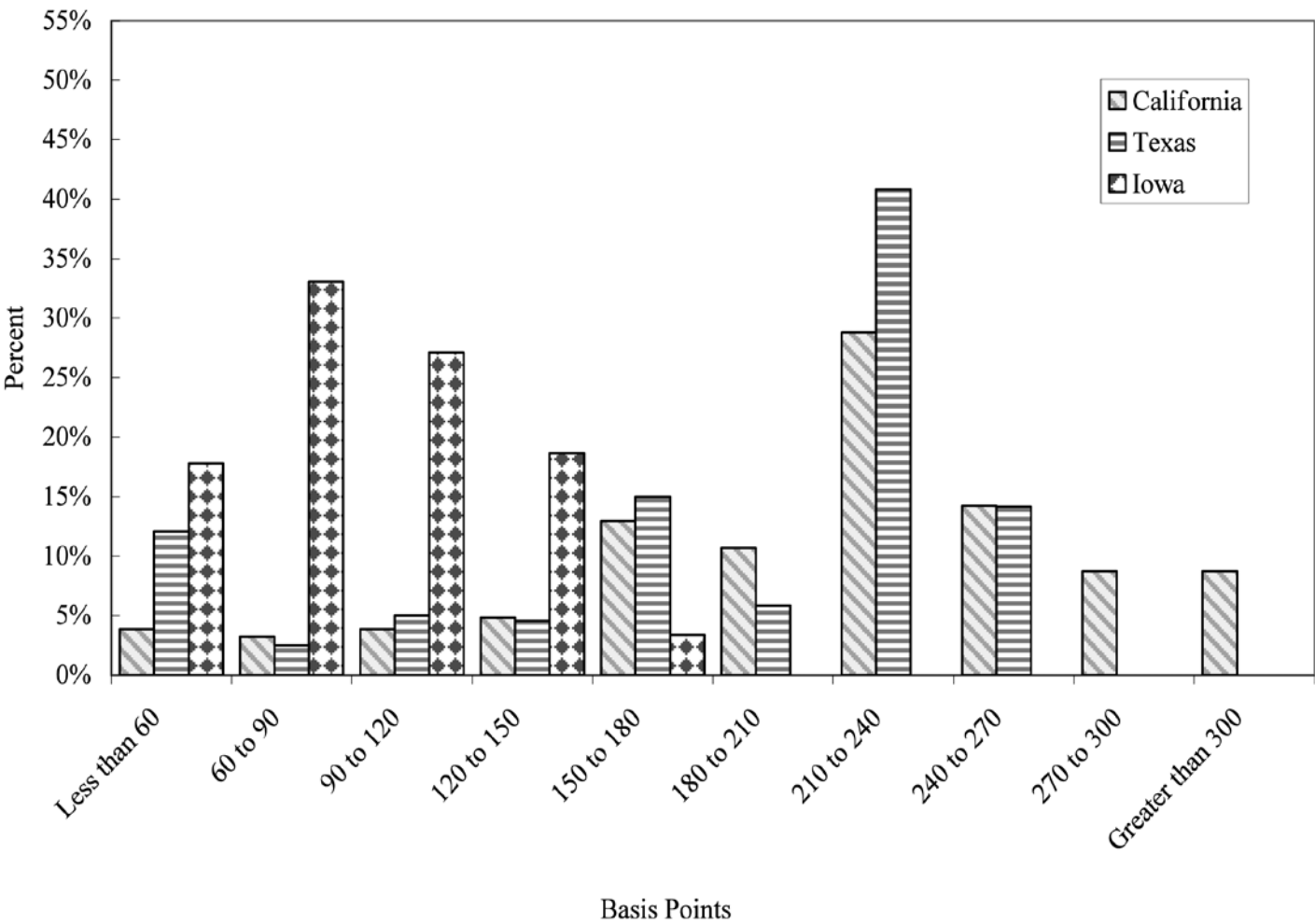
source: author calculations

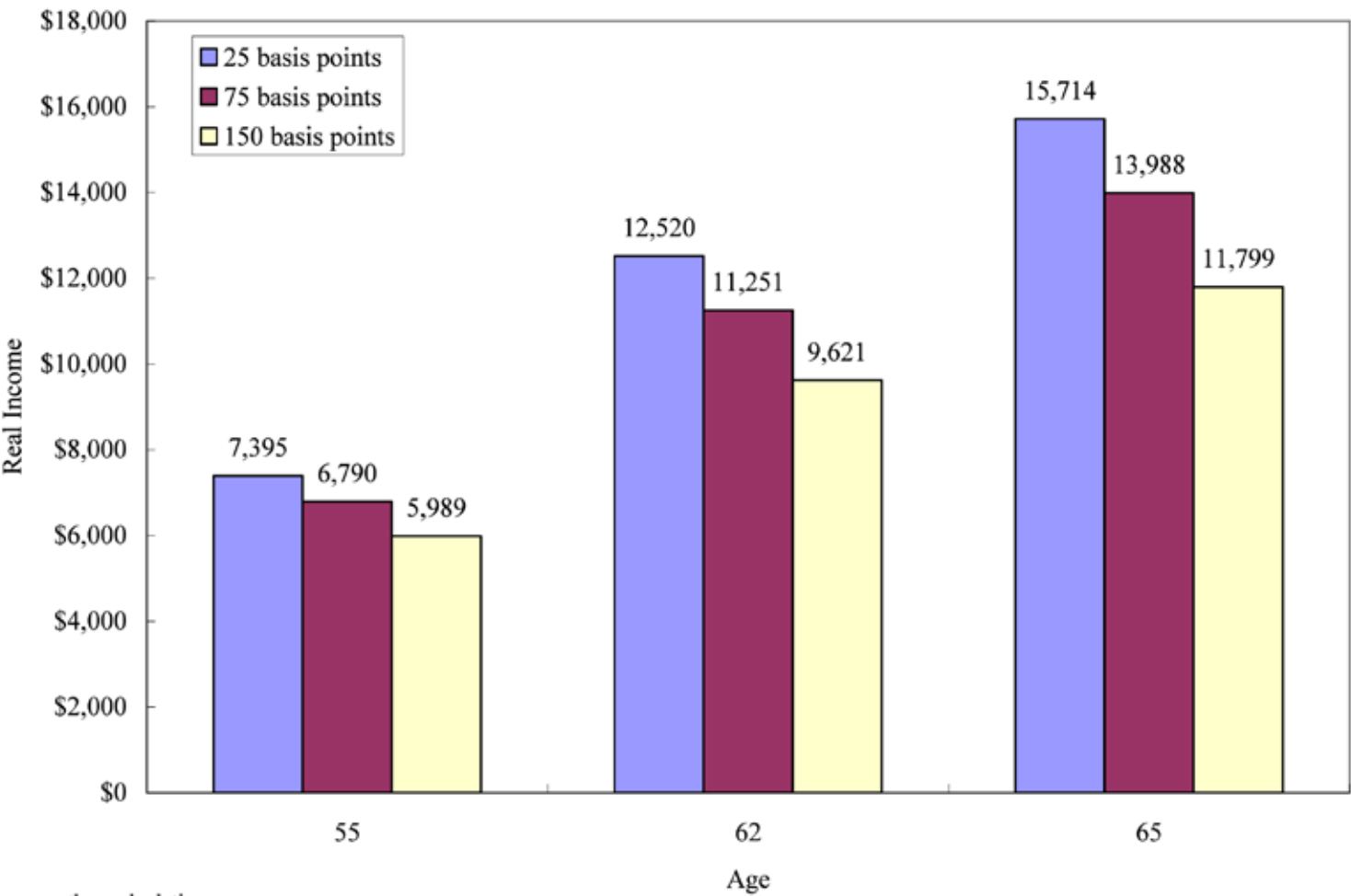**FIGURE 4: THE IMPACT OF ASSET BASED FEES ON REAL ASSET ACCUMULATION**

Assumes $35,000 starting salary, 4% salary growth, 5% contribution rate, 7.5% gross investment return, 2.8% inflation rate 2010 dollars

source: author calculations

**FIGURE 5: EFFECT OF ASSET-BASED FEES ON REAL ANNUITY INCOME**

Assumes single life annuity using TIAA-CREF mortality rates, 4% interest rate, and 2.8% inflation rate
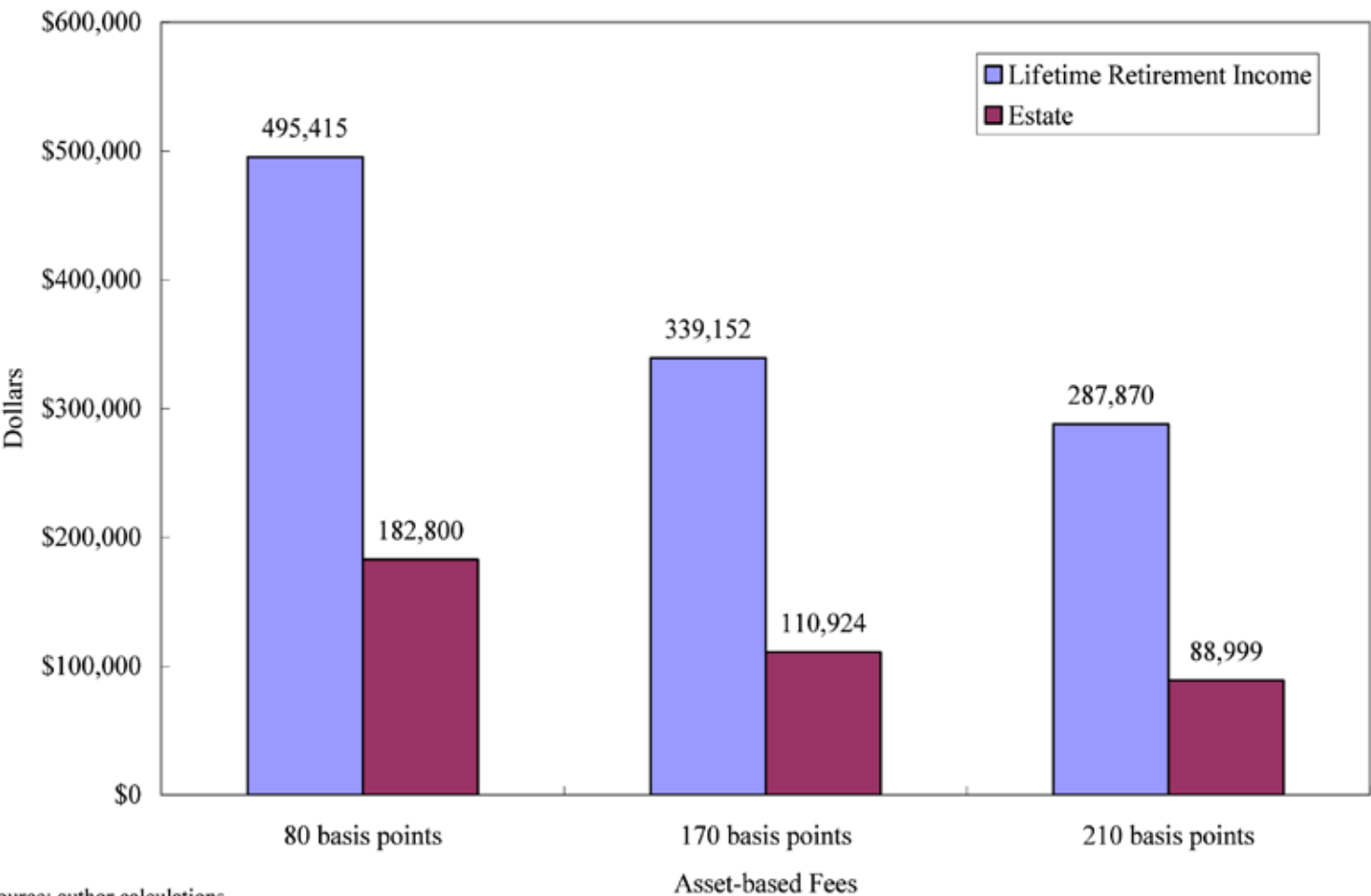2010 Dollars

source: author calculations

FIGURE 6: REAL 403(B) ASSET VALUES TO AGE 100

Assumes $35,000 starting salary, 4% salary growth, 5% contribution rate, 7.5% gross investment return, 2.8% inflation rate, distribution rate=maximum of 4% or required minimum distribution, Age 65 retirement
2010 Dollars

source: author calculations
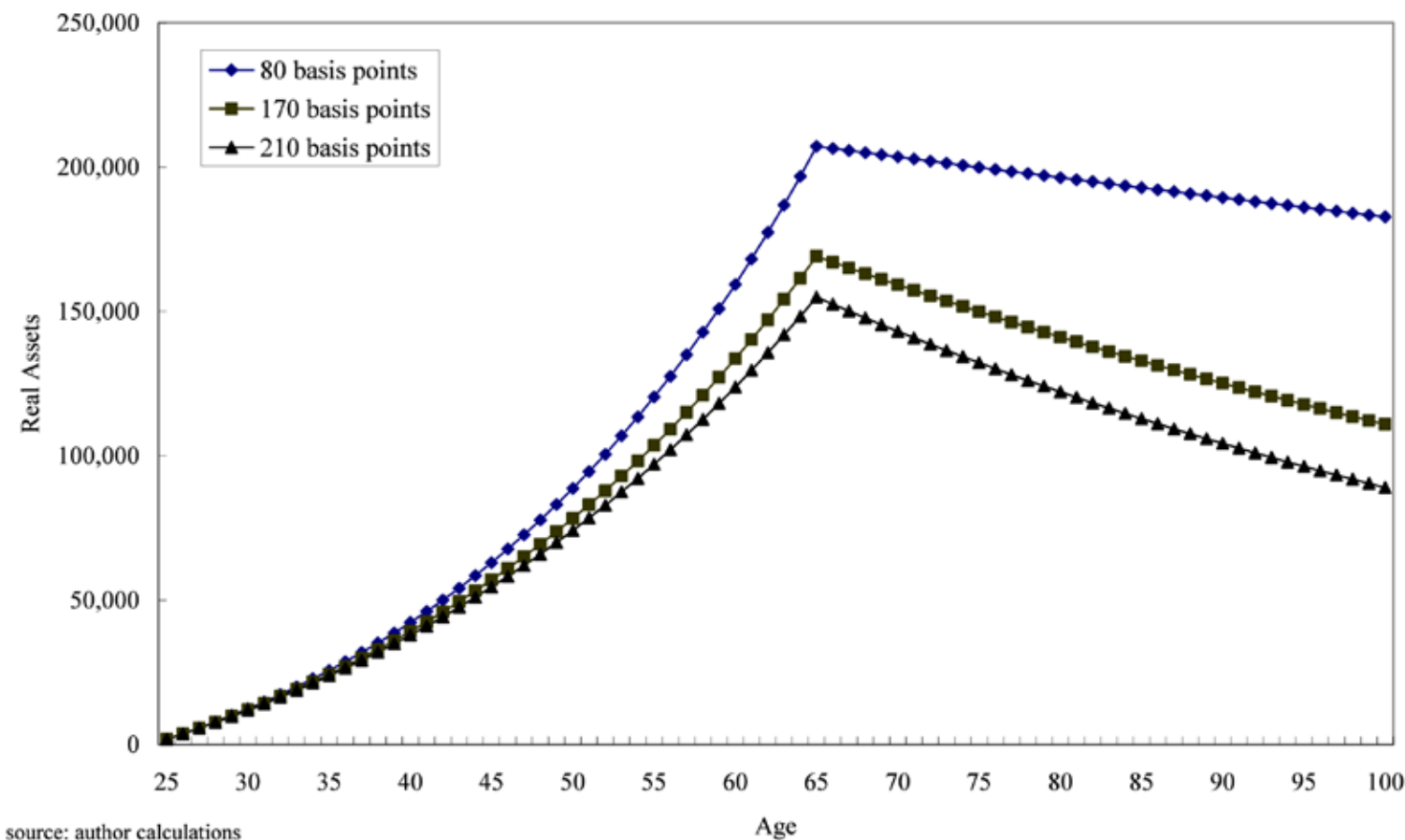
FIGURE 7: REAL LIFETIME INCOME AND ESTATE VALUE AT AGE 100

Assumes $35,000 starting salary, 4% salary growth, 5% contribution rate, 7.5% gross investment return, 2.8% inflation rate, distribution rate=maximum of 4% or required minimum distribution, Age 65 retirement
2010 Dollars

source: author calculations