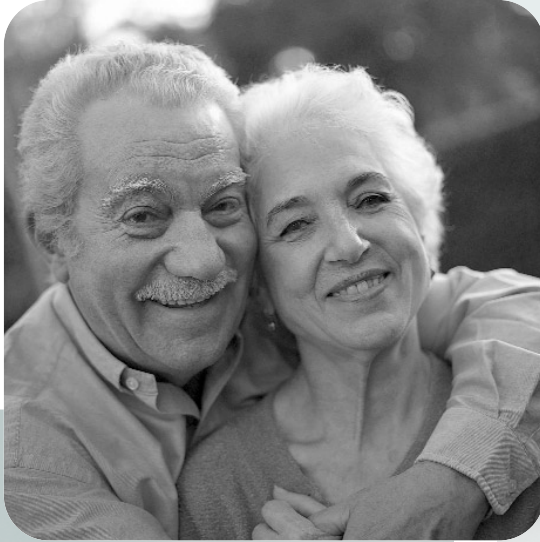


The Graying of Massachusetts:

*Aging, the New Rules of Retirement,
and the Changing Workforce*



A JOINT PROJECT OF:

MassINC

THE MASSACHUSETTS INSTITUTE FOR A NEW COMMONWEALTH

Publisher of *CommonWealth* magazine

A Project of the Economic Prosperity Initiative

CENTER FOR
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MassINC is a non-partisan, evidence-based organization. We reject rigid ideologies that are out of touch with the times and we deplore the too-common practice of partisanship for its own sake. We follow the facts wherever they lead us. The complex challenges of a new century require a new approach that transcends the traditional political boundaries.

MassINC is a different kind of organization, combining the intellectual rigor of a think tank with the vigorous civic activism of an advocacy campaign. Our work is organized within four Initiatives that use research, journalism and public education to address the most important forces shaping the lives of middle-class citizens:

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- **Lifelong Learning**—Building a ladder of opportunity through the continuum of learning
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Through the Economic Prosperity Initiative MassINC works to improve the overall economic well being of Massachusetts citizens by pursuing answers to a range of economic questions. Among them: How hard are people working and for what kinds of rewards? How secure are their futures? How healthy are our families? What are the strengths and limitations of state government in promoting economic activity? What is the role of the private sector? And, what are the keys to our future economic success?

MassINC has a long history of work within this initiative. Past research projects include: *Mass.Migration* (2003), *The State of the American Dream in Massachusetts, 2002* (2002), *The Changing Workforce: Immigrants and the New Economy in Massachusetts* (1999), *The Road Ahead: Emerging Threats to Workers, Families, and the Massachusetts Economy* (1998), and *Lessons Learned: 25 Years of State Economic Policy* (1998). Recent articles in *CommonWealth* magazine include: "Blue Collar Blues" (Spring 2004), "Job (Dis)Qualifications" (Fall 2003), "Mass. Production" (Summer 2003), "The Sprawl Doctor" (Spring 2003), "Life After Lucent: A region tries to adjust" (Winter 2002), and "Heritage Road, Five Years Later: The American Dream, Still Elusive in Suburbia" (Spring 2001). All of MassINC's research and *CommonWealth* articles are available free-of-charge through our website, www.massinc.org.

The Graying of Massachusetts:

Aging, the New Rules of Retirement, and the Changing Workforce

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June 2004

Dear Friend:

MassINC is proud to present *The Graying of Massachusetts: Aging, the New Rules of Retirement, and the Changing Workforce*, a report produced in partnership with the Center for Retirement Research at Boston College and made possible by the generous support of Blue Cross Blue Shield of Massachusetts.

MassINC is at the leading edge of a huge demographic shift to a much older population. At the same time, the rules of retirement have changed, shifting much of the responsibility onto individual families. This change occurs as many of the state's 1.87 million Baby Boomers are getting ready to start retiring. Our research indicates that many people are not prepared for the new world and instead are falling through the cracks as the nature of pensions have rapidly changed from traditional pensions to employee-directed plans like 401(k)s. A stunning number of full-time workers do not have access to any form of 401(k) or other pension coverage from their current employer, and about one-quarter of those who have access to a 401(k) don't use it. In addition, savings rates remain at historic lows, and the average 401(k) balance is relatively small for households approaching retirement.

All of these changes point to a reversal of a 20-year trend. Since the mid-1980s, American workers have been retiring in their early 60s. Going forward, it is likely that workers will have to delay their retirement. There is a bit of a silver lining to this grim picture. It appears that Massachusetts residents are better equipped than their peers across the country to adjust to the new rules by working longer: Bay State residents are healthier, better educated, and our jobs are less physically demanding.

Finally, the shift to an older population has huge implications for the Massachusetts labor market. Absent a substantial increase in new immigrants, there could be a shortage of prime-age workers. In Massachusetts, over the next 25 years, the number of people under age 55 will decline in absolute terms. Older workers may offer a way to stem the impending labor shortages, but a number of challenges exist to be able to capitalize on this mutual interest.

In presenting these findings, we owe a debt of gratitude to our partners: Alicia Munnell, Kevin Cahill, Andrew Eschtruth, Steven Sass and their colleagues who conducted the research. We would also like to thank the many reviewers whose critical insights have strengthened the final report. Lastly, we owe special thanks to Dana Ansel, MassINC's Research Director, for her excellent work in conceptualizing this important research and shepherding it to such a successful conclusion. Finally, we would like to thank our sponsors at Blue Cross Blue Shield of Massachusetts, who have been generous and enthusiastic partners, encouraging the authors to go where the data led them.

We hope you find *The Graying of Massachusetts* an informative and timely resource. We believe policymakers and civic leaders across the state should initiate a conversation about the implications of an aging Commonwealth. As always, we welcome your feedback and invite you to become more involved in MassINC.

Sincerely,



Ian Bowles
President & CEO



Gloria Cordes Larson
Co-Chair



Peter Meade
Co-Chair

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Executive Summary

Massachusetts is on a collision course. The Bay State faces a huge demographic shift to a much older population. At the same time, the rules of retirement that shaped our expectations of the “golden years” are in a state of transition. Changes to Social Security and private pensions mean that if workers want to maintain their standard of living, they will be forced to retire later than expected. And everyone will have to take more responsibility for managing their retirement savings. To add a dose of confusion, many of the state’s 1.87 million baby boomers who are on the brink of retirement will be caught in limbo between the new and old rules of retirement.

The degree of change depends on a worker’s age. For example, the oldest boomers, who will turn 63—the average age of retirement in Massachusetts—in less than five years, may not see a dramatic shift in their expected retirement income. The younger boomers and subsequent generations, however, will likely be forced to play by the new rules. Yet, while the world of retirement has fundamentally changed over the last decade, there has been surprisingly little financial education to prepare families.

The nation will soon enter uncharted territory about how to meet the needs of an older population. At the state level, Massachusetts must tackle many of the same issues. There are enormous public policy implications to an aging population: Housing, healthcare, and workforce development—to name a few policy areas—will confront dramatically new and different challenges. And the financial implications of this demographic shift loom large. How the Social Security system and Medicare will accommodate the growing number of seniors remains a hotly contested question.

While academics, policymakers, and advocacy organizations have been grappling with different pieces of this puzzle nationally, there has been little work at the state level. The shift to a much older population poses both enormous challenges and opportunities for Massachusetts. The good news is that there is time. Because the most rapid increase of older Bay Staters is expected between 2010 and 2030, there is a small but critical window for education and planning.

The purpose of this study is to begin the process. This research focuses on three specific questions:

- ✓What does this demographic shift look like?
- ✓How well prepared are families for retirement?
- ✓How will this demographic shift impact the Massachusetts labor market?

What we find is that Massachusetts, as the 12th oldest state in the nation, is at the leading edge of this coming age shift; indeed, some Massachusetts counties are already older than the oldest states in the nation. So the effects of this demographic change evident nationwide

MASSACHUSETTS IS AT THE LEADING EDGE OF THE COMING AGE SHIFT.

are likely to be felt sooner here. How prepared are Massachusetts families—and the Massachusetts economy—to make this adjustment? The picture is mixed. Higher incomes ought to give families the means to save for retirement, but a high cost of living and low rate of homeownership offset some of that financial advantage. A slightly higher percentage of Massachusetts workers are covered by pensions than their national counterparts, but at least one-third of all full-time workers have

no access to any form of pension coverage at their workplace. There is, unfortunately, every reason to believe that Massachusetts families approaching retirement age are without sufficient resources and will have to consider working well past age 63, the current average age of retirement.

On the positive side, Massachusetts residents appear better equipped than their peers

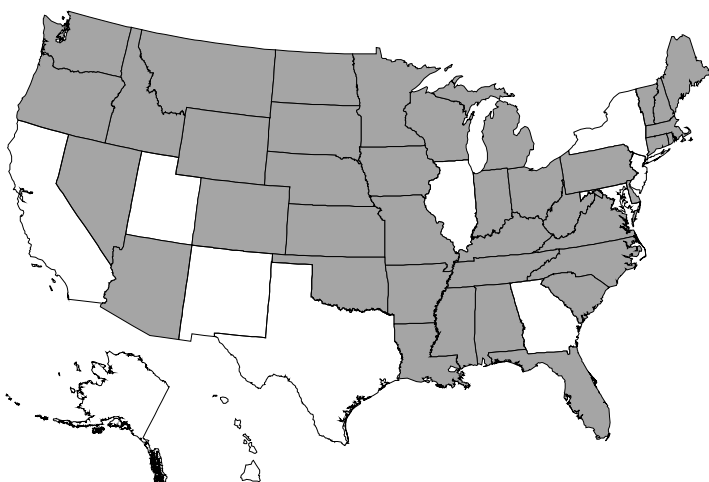
across the country to work longer. Over the last several years, large numbers of older workers in our state have already been postponing retirement and/or re-entering the labor force. This recent trend could benefit Massachusetts companies, because in just a few years, there could be a shortage of prime-age workers. Thus, if businesses can prepare for both the opportunities and challenges of a mature workforce, a mutually beneficial solution can potentially be forged between older workers who need to work longer and employers who will be searching for workers.

ES FIGURE 1. States with 18 Percent of the Population 65 and Over, 2000 and 2025

TODAY



TOMORROW



Source: Committee for Economic Development. 1999. *New Opportunities for Older Workers*. New York: Research and Policy Committee of the Committee for Economic Development. Updated with the 2000 Census. [Available at: <http://www.census.gov/population/cen2000/phc-t13/tab03.pdf>].

The Graying Population: “A Nation of Floridas”

Our nation is growing older, and it is happening quickly. Today, one out of every eight people is 65 years or older. By 2030, one out of five people (20%) will be 65 years or older. Consider that, today, the state with the oldest population is Florida, where 18 percent of the population is at least 65 years old. In the five youngest states, that number is less than 10 percent. By 2025, 39 states will look like Florida does today, which has led one commentator to describe the future United States as a “nation of Floridas.”¹

Two simple factors explain why the nation is aging: 1) individuals are living longer; and 2) women are having fewer children than in previous generations, and they are having them later in life. The increases in a person’s life expectancy in the United States are dramatic. In 1935, at the time that Social Security was enacted, men were expected to live 12 years after the Social Security age (65 years old), while women were expected to live 13 years. Today, the life expectancy for 65-year-olds has increased to 16.6 years for men and 19.6 years for women.

At the same time that people are living longer, fertility rates have declined, and women are having children later. In 1800, an average woman gave birth to seven children; today, she has about two children. Because women are having fewer children, the new supply of younger people is limited, while the increase in life expectancy means that there are greater numbers of older people.

An Aging Massachusetts

Massachusetts is already an older state, and New England is the oldest region in the country. As of 2000, the Commonwealth was the 12th oldest state in the union, with 13.5 percent of its population older than 65 years. By 2025, that number will jump to 18 percent.

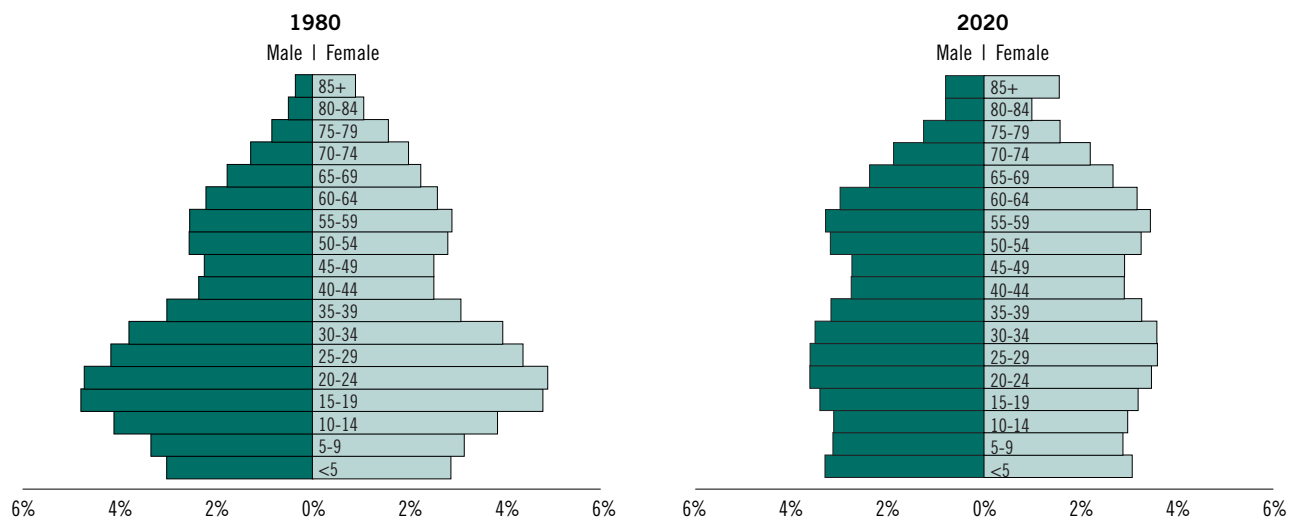
Within Massachusetts, Barnstable County and Berkshire County, the oldest counties, are at opposite ends of the state. Both of these counties have a significantly higher proportion of older residents than the other Bay State counties. Indeed, even today, the populations in these two counties are already older than the state of Florida. In Barnstable, 23.1 percent

of the population is older than 65, and in Berkshire, 17.9 percent—compared to 17.6 percent of Floridians. Nonetheless, as the most populous county, Middlesex is the home to the greatest number of older people, with 187,000 people over age 65.

So far, the social and economic implications of the aging population have been masked by what could be called a “demographic holiday.” Many of today’s elderly were born during the 1920s and 1930s, a period when there was a sharp drop in fertility rates. At the same time, the huge number of baby boomers has swelled the non-aged population. As a result, today’s retirees are a relatively small group compared with the working-age population. But this holiday is about to end.

Over the next 20 years, the United States will see a rapid acceleration of its aging population because of the baby boom generation—the 80 million people born between 1946 and 1964. The oldest baby boomers will turn 62—the nation’s average retirement age—in 2008. At that time, the boomers will begin a massive shift to retirement.

ES FIGURE 2. Massachusetts Age Distribution, 1980 and 2020



Source: U.S. Census 1980 and 2000.

How Well Prepared Are Families for Retirement?

As the baby boomers prepare for retirement, fundamental changes in the sources of retirement income point to a reversal of a 20-year trend. For the last two decades, the average retirement age for men has been stable at about 63.² For women, it has remained steady at about 61. In Massachusetts, the average age of retirement is slightly higher; for men, it is 64, and for women, 62.³ Compare this to the early 1900s when the national average age of retirement for men was 74. The retirement age declined dramatically in the last century because of increased prosperity, but the new retirement realities seriously call into question whether future retirees will have the choice of retiring in their early 60s.

Before examining the sources of income, it is important to consider the issue of what income people need to retire. Ideally, families in retirement should be able to maintain the same standard of living that they enjoyed while working. This is not an unreasonable goal: Retirees typically need less money because they have

lower costs than working people. They have lower clothing and transportation expenses as a result of not working; they no longer pay payroll taxes; many have paid off their mortgages; and they have less need to save money. Financial planners assume that households need 65 to 85 percent of their pre-retirement income to maintain their standard of living.

That calculation may be changing, though. As life expectancy increases, more and more baby boomers face the additional and unknown responsibilities of caring for elderly parents. The rising costs of long-term care and health care also add uncertainty to the equation. A recent study by the Employee Benefit Research Institute (EBRI) finds that routine, unreimbursed medical expenses can drastically reduce the share of Massachusetts households that have adequate retirement income.⁴ Overall, our ability to forecast the future is complicated, making it difficult to prepare for retirement.

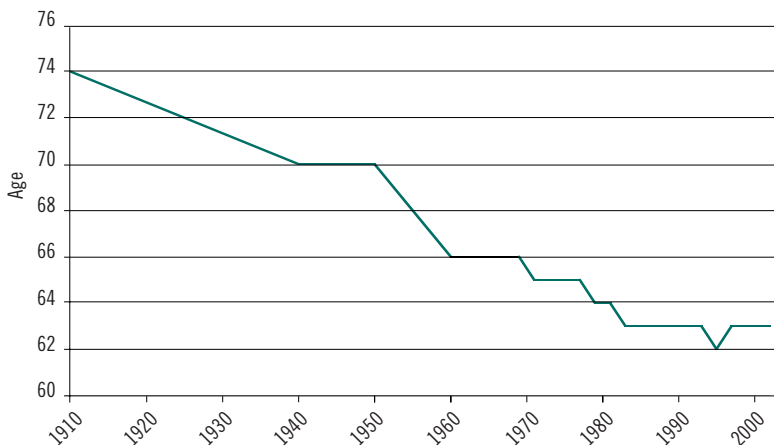
Anxiety among Massachusetts families is already evident. According to the MassINC survey *The Pursuit of Happiness*, almost one quarter of families have no money set aside for retirement. Fully 75 percent of families headed by someone between the ages of 50 and 64 years old say that they are “somewhat” or “very” concerned about not having enough money for retirement. Younger respondents voice similar concerns.⁵

Sources of Retirement Income:

Social Security

The sources of retirement income are often described as a three-legged stool: Social Security, private pensions, and savings.⁶ Currently, Social Security is the biggest source of retirement income. In 2000, in the typical household headed by an individual age 65 or older, Social Security benefits accounted for nearly

ES FIGURE 3. Average Retirement Age of Men, 1910-2002



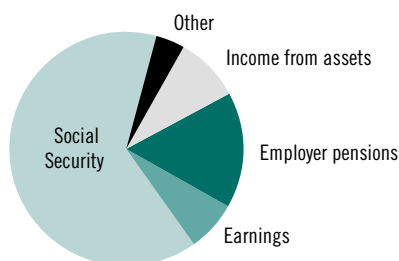
Source: Gary Burtless and Joseph F. Quinn. 2002. “Is Working Longer the Answer for an Aging Workforce?” Issue Brief No. 11. Chestnut Hill, MA: Center for Retirement Research at Boston College, (December). Authors’ calculations using BLS data.

two-thirds (64%) of its income.⁷ Indeed, for one-third of all older households, Social Security accounted for at least 90 percent of their income. Going forward, however, Social Security will replace less of retirees' pre-retirement income than it does now.

The serious long-term financial deficit of Social Security, a “pay-as-you-go” system, has been well documented. What is less well understood is that the Social Security law has already changed to address some of the structural problems, and these changes are now being implemented. Perhaps the most significant change is the increase of the Normal Retirement Age, from age 65 to age 66 and then to age 67. People born between 1943 and 1959 will have to wait until they are at least 66 years old to collect the maximum amount of Social Security benefits each year, and people born in 1960 or later will have to wait until they are at least 67 years old. Thus, these changes will affect all of the baby boomers.

Today, the majority of people collect their benefits before they reach age 65. As a result, they receive less money each year for the rest of their lives. In 2001, 54 percent of all men and 58 percent of all women started claiming their benefits at age 62. Consider that an aver-

ES FIGURE 4. Retirement Income by Source, Households Age 65 and Older, Middle Income Quintile



Source: U.S. Social Security Administration. 2002. *Income of the Population Aged 55 and Older, 2000*. Washington, D.C. (February). http://www.ssa.gov/policy/docs/statcomps/inc_pop55/2000/incpop00.pdf

KEY FACTS

- Fundamental changes in the sources of retirement income point to a reversal of a 20-year trend. Since the mid-1980s, American workers have been retiring in their early 60s. In Massachusetts, the average retirement age is 64 for men and 62 for women. Going forward, the increase in the Social Security age and low savings rates are just two factors that make it likely that workers will have to delay retirement.
- About one-third of full-time workers in Massachusetts lack any form of pension coverage—including a 401(k)—at their current workplace.
- Of those households that do have pensions, the nature of pension coverage has changed dramatically. Since 1992, the percentage covered by a traditional pension plan decreased from 40% to 20%. During the same time, the share of those with a tax-deferred retirement account at the workplace, such as a 401(k), increased from 38% to 58%. The new type of pension shifts a substantial portion of the responsibility for retirement to the employee.
- About one-quarter of people eligible to participate in pensions do not.
- The average 401(k) balance of households approaching retirement (ages 55-64) is only \$55,000.
- At slightly more than 2%, the personal savings rate of 2001 was at its lowest point since the Great Depression.
- As the Social Security age increases from 65 to 67, future retirees will either have to work longer or accept a reduction in their monthly Social Security benefits.
- In less than five years, the 1.87 million baby boomers in the Bay State (29% of the population) will begin to retire.
- Several key factors suggest that Massachusetts residents are better positioned to work longer. Compared with their national peers, Bay State residents approaching retirement are healthier; they have higher levels of education; and their jobs are less physically demanding.
- One important disadvantage is the state's lower rate of homeownership, a key finding since a home is the primary asset for most people. Slightly less than 76% of Massachusetts households approaching retirement (ages 55-64) own their homes, compared with almost 80% of their peers nationwide. The gap widens to 10 percentage points for household heads over the age of 65.
- Old-age poverty is concentrated among single women. In Massachusetts, 10,312 single women over 65 years old (28% of all women in this age group) are poor or near poor.
- In 2000, Massachusetts was the 12th oldest state in the U.S., with 13.5% of its population older than 65 years. By 2025, that number will jump to 18%.
- Massachusetts labor markets could face labor shortages as the number of people under 55 is projected to decline in absolute terms between 2010 and 2025. As older workers become a growing portion of the labor force, they could provide a new source of labor.

ES TABLE 1. Percent of Men and Women Claiming Social Security Benefits, by Age, 2001

	AGE 62	AGE 63-64	AGE 65	AGE 66+	TOTAL
Men	53.6	21.5	20.7	4.1	100.0
Women	57.6	20.9	14.4	7.2	100.0

Source: U.S. Social Security Administration. 2002b. Social Security Bulletin, Annual Statistical Supplement. Table 6.B5. Washington, D.C.: U.S. Government Printing Office, (December). <http://www.ssa.gov/policy/docs/statcomps/supplement/2002/supp02.pdf>.

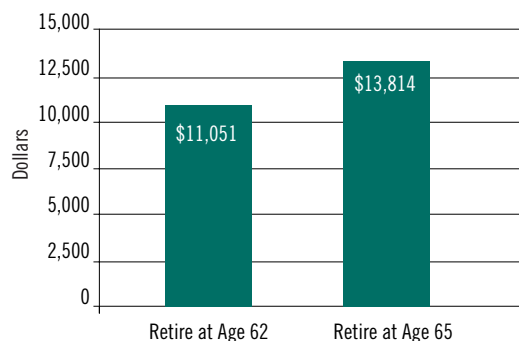
age earner who retires at age 62 will receive \$11,051 per year, compared with the \$13,814 if that person waited until 65 to start collecting benefits.⁸ If the Normal Retirement Age were 67 today, a person who retired at age 62 would collect only \$9,670 per year. Future retirees will face the stark choice of working longer or retiring before age 67 and receiving a significant reduction in their monthly benefits.

Other changes in the law will also decrease the amount of pre-retirement income that individuals will receive, due to an increase in the Medicare premiums and a greater number of people subject to taxes on a portion of their Social Security benefits because the income threshold is not indexed for growth in wages or for inflation. Moreover, it is likely that additional cost-saving changes in the future will be necessary to address the structural deficit. Taken together, these changes mean that Social Security will replace a smaller share of income for retirees, even if they work until age 67. If they continue to retire at an earlier age, then monthly benefits will be even lower.

Pensions: The Dawn of the 401(k)

The second key source of retirement income is private pensions provided by employers. Since the 1970s, the portion of U.S. workers who have a pension plan has remained stable. A slightly higher proportion of workers in Massachusetts have pension coverage. In the Bay State, 58.5 percent of full-time workers

ES FIGURE 5. Social Security Benefits for the Average Earner, 2003



Source: Social Security Administration

participate in a pension plan, compared with 55.8 percent of workers nationwide.⁹

While the overall participation rate has remained static, the nature of pension coverage has fundamentally changed over the last 10 years. Traditionally, most people with a pension had what is called a “defined benefit” plan. These pensions pay a lifetime annuity at retirement. For instance, a typical annuity might be worth \$50 per month for each year of service. So, a worker with 20 years of service would receive \$1,000 per month at age 65. In these types of plans, employers finance benefits at no direct cost to the employee. Employers also hold the assets in trust, direct the investments, and ultimately bear the risk.

Today, the world of pensions looks very different. There has been a huge shift from traditional pensions (defined benefit plans) to a new style of pensions (defined contribution

ES TABLE 2. Percent of the Private Workforce Participating in a Pension, 1980 and 2002

	MA		US	
	1980	2002	1980	2002
Aged 25-64, full-time only	63.9	58.5	61.8	55.8
Aged 25-64, all workers	49.0	51.6	50.7	48.7
All ages, all workers	42.7 ^a	44.8	40.7	41.1

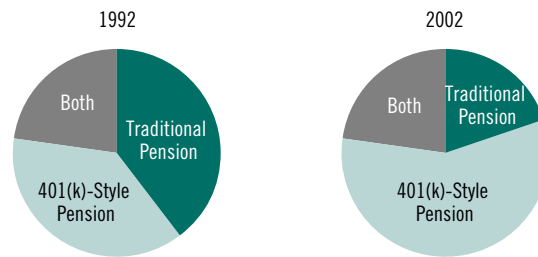
Source: Authors' calculations using the March CPS, 1980 and 2002. a. The Massachusetts coverage figure comes from the 1981 survey.

plans)—most often a 401(k). Since 1992, of all the households with pension coverage, those covered by a traditional pension plan decreased from about 40 percent to 20 percent. During this same period the percent of households with a 401(k)-type pension increased 20 percentage points, from 38 to 58 percent.

The new type of pension shifts a substantial portion of the responsibility for retirement income to the employee. First, unlike the traditional pensions, participation in these plans is voluntary. Second, an employee must sacrifice money today to save for retirement. If an employee decides to participate, he or she must determine how much to contribute, how to invest the assets, and, at the time of retirement, how to use the assets, which are generally received as a lump sum. Moreover, workers can withdraw money from their 401(k) before they retire, although they pay a steep penalty fee to do so.

In theory, workers could accumulate substantial pension wealth under 401(k) plans.

ES FIGURE 6. Types of Pension Coverage



Source: Authors' calculations from the Survey of Consumer Finances.

But *in practice*, they do not. Nationally, the average household approaching retirement has accumulated only \$55,000—not much money to support a couple for two decades. In the new world of retirement, almost all of the burden of saving and investing for retirement falls on employees, and many make poor choices or mistakes at every step. One-quarter of those eligible do not even participate in a plan. Of those who do participate, less than 10 percent contribute the maximum amount of money allowable by law. Further, over half of partici-

The Retirement System for Massachusetts Public Employees

Unlike their counterparts in other states, the nearly 290,000 public employees in Massachusetts are not covered by Social Security. When Social Security was originally passed, there were constitutional concerns about the federal government's ability to tax the individual states. However, as Social Security expanded over the next thirty years, coverage was extended to public employees on a voluntary basis. Only Nevada, Ohio, and Massachusetts opted to stay out of Social Security and instead provide state and local employees with their own defined benefit pension plans.

The Massachusetts pension plan for public employees has both some advantages and disadvantages relative to the Social Security system. The benefits of the Massachusetts system are quite generous, but it is important to remember that they replace both Social Security and private pensions for these workers. In addition, the state provides health and life insurance for almost all public employees. On the other hand, the state plan lacks several important features of Social Security. The most important is inflation protection. Social Security benefits are adjusted annually for increases in the cost of living. In contrast, the state system makes some ad hoc adjustments on the first \$12,000 of benefits. Second, Social Security pays at least 50 percent of the employee benefit to spouses without sufficient earnings to claim a higher benefit on their own. The state system provides no such allowance. Finally, the Massachusetts system offers more limited survivor benefits for young widows and widowers.

pants fail to diversify their investments, and almost none re-balance their investments as they age or in response to market returns. Finally, many cash out of their 401(k) when they change jobs, paying substantial penalties and wiping out their retirement nest egg.

These problems underscore the fundamental challenge of shifting all of the responsibility for managing one's pension to the individual worker. At best, these are difficult financial decisions for people to manage on their own. Considering the magnitude of the shift, the accompanying financial education has been meager, despite research indicating its positive impact on people's savings behavior.¹⁰ Still, those with pensions are the lucky ones; about one-third of all full-time workers in Massachusetts work for employers who do not offer any form of pension coverage.

Individual Savings

In 2001, individual savings, the third leg of retirement, were at their lowest rate since

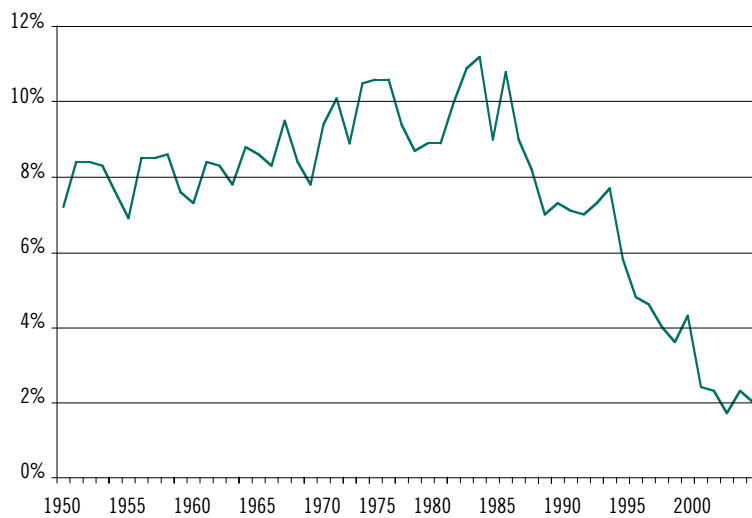
the Great Depression. In 1980, the personal savings rate was 10 percent of disposable personal income, and in 2001, it was just over 2 percent. According to a recent national survey, about 4 in 10 workers are currently not saving any money for retirement.¹¹ Moreover, the amount of assets that families do have is relatively small. According to the 2001 Survey of Consumer Finances, excluding the value of a person's primary home, the median value of family assets is only \$47,000. The amount of savings varies by a person's age. For workers between the ages of 45 and 54 years old, prime earning years for retirement savings, 30 percent have saved less than \$25,000 (excluding the value of a primary residence).¹² These data indicate that few boomers have enough money to bridge the inevitable gap between Social Security and pensions and what they will need to maintain their current standard of living in retirement.

In short, we are currently in a transition to a new set of rules for retirement. In the new world, people will have to defer retiring until they are 67 years old, compared to the average age of retirement of 62 today, or be prepared to collect substantially less money each year from Social Security. Individuals will also have to take much greater responsibility for saving and managing their retirement money. Many of the 1.87 million baby boomers in Massachusetts who are on the brink of retirement age will be caught between the old and new rules of retirement.

Older Women Are Most at Risk

Women, and especially women living on their own, are the most at risk for not having enough money in retirement, and as a consequence, living in poverty. Non-married women account for 71 percent of all senior

ES FIGURE 7. Personal Saving in the United States as a Percentage of Disposable Personal Income, 1950-2003



Source: Bureau of Economic Analysis. 2003. National Income and Product Accounts (NIPA) data. <http://www.bea.gov/bea/dn/nipaweb/SelectTable.asp?Selected=Y>

households in Massachusetts who live in poverty. About 10,300 single women over age 65 (28%) live at or near the poverty line. The two main reasons that so many women end up poor are: 1) the retirement system in our country is based on earnings and women tend to have low earnings; and 2) women live longer than men, and the retirement income of married women drops significantly when their husbands die.

The Low Earnings of Women

Women have low lifetime earnings compared to men because: 1) they have lower wages; 2) they are more likely to work part-time; and 3) they spend fewer years in the labor force. In Massachusetts, the earnings of female full-time workers equal only 74 percent of their male counterparts. The wage gap is due to a number of factors, including different work histories, different levels of education, different occupations, possible gender discrimination, etc. In addition, because more than twice as many women work part-time compared with men (25% vs. 11%), their lifetime earnings are lower. Finally, of the women who retired in 1999, the typical woman worked 32 years compared with 44 years for the typical man. Lower lifetime earnings lead to low benefits for women, both in terms of Social Security benefits and pension benefits.

Women Live Longer

Married women who share their husbands' benefits fare better than single women. But even the situation for married women is precarious, because women tend to live longer than men. Because the life expectancy for a 65-year-old woman is 19.6 years compared with 16.6 years for a similar man, many women end up widowed. When the husband dies, the cou-

ple's Social Security benefit is reduced between one third and one half. The couple's private pension is either reduced or completely disappears. Upon the death of their husbands, women suffer a severe decline in their income.

WOMEN ARE THE MOST AT RISK FOR NOT HAVING ENOUGH MONEY IN RETIREMENT.

The Financial Future for Older Women

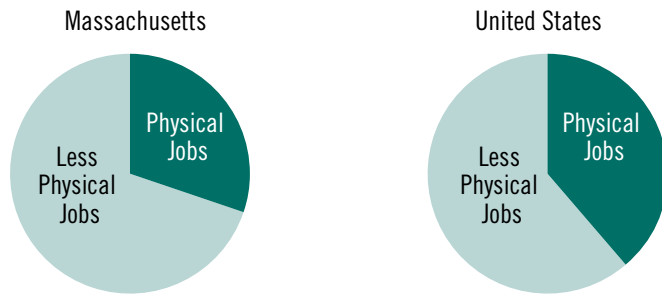
Because more women are working, in the future, women will have higher earnings, which will tend to improve their retirement income prospects. However, the large increases in divorced and never-married women are likely to negatively affect women's financial security because of their lower earnings. In addition, a greater reliance on 401(k) plans does not bode well for women because of the low balances in these accounts. The financial future for women appears to be a mixed story, but it seems likely many will continue to be at risk for poverty.

What Does This Mean for Massachusetts Families?

The story for Massachusetts families is a mixed one. Overall, the changes in the retirement system will affect Massachusetts families in much the same way that they will affect their peers across the nation. The impact of the increase in the Social Security age and the change in the nature of pensions should be the same for families here as they are for families elsewhere. There are some indications, however, that Massachusetts workers may have some advantages in making the transition to the new world of retirement.

First, Massachusetts families might not be

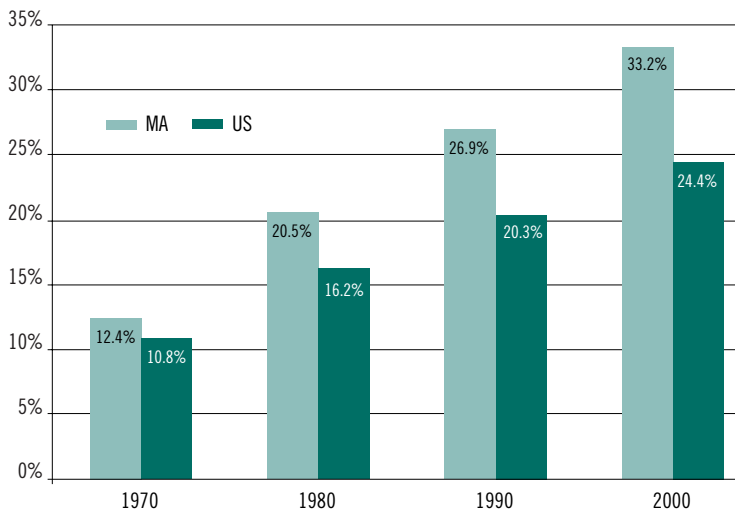
ES FIGURE 9. Job Status of Workers, 2000



Source: U.S. Bureau of the Census. 2003. Summary Social, Economic, and Housing Characteristics (Massachusetts and U.S. 2000). [Available at: <http://www.census.gov/prod/cen2000/phc-2-23.pdf> and <http://www.census.gov/prod/cen2000/phc-2-1-pt1.pdf>].

Note: “Physical” jobs include the following occupations: Farming, Fishing, and Forestry; Construction and Maintenance; Production and Transportation. “Less physical” jobs include Service, Sales and Office, and Management and Professional.

ES FIGURE 10. Percent of Persons 25 and Over with a Bachelor’s Degree or More, U.S. and Massachusetts, 1970-2000



Source: Authors’ calculations using the Census one-percent file, 1970, 1980, 1990; U.S. Bureau of the Census. 2003. United States: 2000 - Summary Social, Economic, and Housing Characteristics. PHC-2-1. <http://www.census.gov/prod/cen2000>

as strapped financially as their national counterparts. Massachusetts households have higher incomes—20 percent above the national average in 2000. Of course, this average conceals the vulnerable members of the Commonwealth—those who have low incomes, poor health, and little or no higher education. In addition, income inequality is more extreme in Massachusetts than in most other states.

The cost of living in Massachusetts is also higher than in other parts of the country, which eats into our incomes. Still, our higher earnings and income suggest that Massachusetts residents, on average, might be more able to save for retirement on their own than individuals in other states.

In addition, if Massachusetts families do not have sufficient money to retire in their early 60s, they also appear in a better position to work longer. According to the Health and Retirement Study, Massachusetts residents approaching retirement appear to be healthier than older Americans generally.¹³ Both men and women in Massachusetts were half as likely to report their health status as “poor” compared with older workers nationally. Older Massachusetts women were much more likely to rate their health status as “excellent” or “very good” (65% versus 53%). Our general good health will enable workers to work to a more advanced age, if they need to.

Moreover, the mix of jobs in Massachusetts is less physically demanding than in the nation as a whole. In 2000, only 30 percent of jobs in the Bay State were considered physical, compared with 39 percent of jobs nationally. For obvious reasons, jobs that require less physical activity tend to be a better fit for older workers. Finally, that Massachusetts workers are highly educated makes them attractive to employers. In 2000, one-third of all Bay State residents age 25 and older had at least a bachelor’s degree, compared with about one-quarter of all U.S. residents, and the gap in educational attainment between older and younger workers is diminishing.

There is some indication that older workers in Massachusetts (and across the nation) have begun to adjust to the new rules. In recent years, older workers (ages 55 to 64) appear to

be postponing retirement and/or re-entering the labor force. Nationally, from 2000 to 2002, the labor force participation rate for older men increased from 67.3 to 69.2 percent, and the rate for older women increased from 51.8 to 55.2 percent. The magnitude of the increase appears to be even greater in Massachusetts than in the nation, although we need more data to verify this trend.¹⁴ Given the long-term trend toward earlier retirement, this increase in labor force participation by older workers is noteworthy. While we cannot say for certain why workers are postponing retirement or re-entering the labor market, some analysts believe it is related to the recent downturn in the financial markets. An interesting question remains about whether the greater increase of older Massachusetts workers indicates that our older workers are better able and willing to work or whether they have greater financial anxiety about their future.

One key area where Massachusetts families are at a disadvantage is homeownership. For most families, their home represents their main financial asset in retirement. Massachusetts has one of the lowest rates of homeownership in the country. Of the pre-retirement households (ages 55 to 64 years old), slightly less than 76 percent of Massachusetts households own their homes, compared with almost 80 percent of their peers nationwide.¹⁵

The Impact of an Aging Population on the Massachusetts Labor Markets

The challenges of an aging population will not be limited to individual families. Little noticed is the profound impact that the shift to an older population will have on the Massachusetts (and national) economy. Absent a substantial increase in new immigrants, there could be a shortage of prime-age workers.

ES TABLE 3. Massachusetts Population, 1980-2025^a

YEAR	AGE			TOTAL (15-64)
	15-24	25-54	55-64	
1980	1,110,141	2,147,705	588,349	3,846,195
1990	923,573	2,619,912	515,055	4,058,540
2000	820,016	2,863,136	546,407	4,229,559
2010	962,439	2,681,435	742,765	4,386,639
2015	947,870	2,644,240	819,690	4,411,800
2020	921,232	2,602,950	870,711	4,344,893
2025	919,815	2,599,192	834,412	4,353,419

Source: U.S. Bureau of the Census. 2002. "State Population Projections." <http://www.census.gov/population/www/projections/stproj.html>; U.S. Bureau of the Census. 2003. "Census 2000 Gateway." <http://www.census.gov/main/www/cen2000.html>.

a. Projections use the Census Bureau's middle assumption about immigrants.

This shortage may lead employers to view older workers as an important source of labor, which, in turn, has the potential to reshape the workplace in terms of new types of careers starting at older ages, more part-time work opportunities, more opportunities for gradual retirement, and other changes reflecting an older workforce.

Labor Shortages Ahead

As the baby boomers age over the next two decades, older workers will be a growing portion of the labor force across the country. Because older workers will still account for a small fraction of the labor force, the United States labor force is projected to grow at a relatively slow rate, which suggests a potential for future labor shortages.

In Massachusetts, despite our current relatively high unemployment rates, future labor shortages could be even more serious than the nation's. Unlike the nation, in Massachusetts the number of people under age 55 will decrease in absolute terms. In 2000, there were 2.86 million people between the ages of 25 and 54 years old in Massachusetts. In 2025, that number is projected to be 2.60 million people—a decline of 263,944 prime-age workers.

(This projection assumes the current rate of immigration, which is fairly high by historical standards.) If additional workers are not found, the state's economic base will shrink, threatening future prosperity.

Massachusetts labor markets will likely become significantly tighter over the next 20 years. If there is a lack of qualified workers, the ability of existing firms to expand will be limited and they may opt to do so elsewhere. In addition, efforts to recruit new firms could become increasingly difficult. Although the rest of the country will also be shifting to an older population, Massachusetts already suffers from one of the nation's lowest labor force growth rates. Further, there will more young people in other parts of the country. The bottom line is that the search for workers is likely to be a top business concern over the next several decades.

Conventional Sources of Labor Supply

Given the impending shortages, where will the labor supply come from? Traditional sources of supplemental workers include: immigrants, domestic migrants, and women. As we shall see, these traditional sources will likely not be sufficient to compensate for the decline of prime-age workers.

During the 1990s, Massachusetts relied heavily on immigrants to meet its labor force needs. In fact, without immigrants, the Massachusetts labor force would have shrunk.¹⁶ The current labor force projections forecasting a decline of prime-age workers assume the same immigration patterns of the 1990s. Given today's much more restrictive environment, it is hard to imagine the much higher levels of immigration that would be needed to solve future labor shortages.

Domestic migration is also unlikely to yield enough new workers. Recent MassINC and

UMass research, *Mass.Migration*, documented that over the last 12 years, on net, Massachusetts lost 213,000 domestic migrants. Even during the economic boom of the late 1990s—despite the Bay State's low unemployment rates and high vacancy rates—the state lost more people than it gained every single year. Thus, neither domestic nor international migration is likely to solve future labor shortages.

The number of new women workers who can be lured into the labor market also appears limited. Massachusetts already outpaces the rest of the nation in terms of the percentage of women in the labor force. In the Bay State, 62.3 percent of all women work outside the home, compared with 59.6 percent of women across the country. Massachusetts employers appear to be close to fully tapping into the supply of women workers, making it unlikely that they will be able to close the labor force deficit solely by hiring more women.

Unconventional Sources of Labor Supply: Older Workers

Older workers—those over the age of 55—are a less conventional source of labor, but they may offer a way to stem the impending labor shortages. Consider that in 2000, there were 546,407 people in Massachusetts between the ages of 55 and 64. By 2025 that number will increase by 53 percent to 834,412 people. The number of Massachusetts residents between the ages of 65 and 74 is also projected to increase significantly—from 427,830 in 2000 to 690,777 in 2025.

Because of the high labor force participation rates of older workers in Massachusetts, there is an opportunity for older workers to offset the decline of prime-age workers. In 2003, the labor force participation rate of workers between the ages of 55 and 64 years

old was 72.3 percent. If those rates remain, in 2025 there will be roughly 606,000 older workers in this age range. There will also be more workers over the age of 65. These workers could be enough to offset the decline in prime-age workers and, at the same time, maintain a growing labor force. It does mean that the age mix in the workforce will shift to include a greater number of older workers, and it is unclear how their presence will alter the workplace.

Potential Demand for Hiring Older Workers

Three important factors suggest that there may be a demand for tomorrow's older workers: 1) older workers are well educated; 2) they are healthier than in the past; and 3) jobs are no longer as physically demanding.

The educational gap between older and younger workers is diminishing. While people over 65 years old have substantially less education than their younger counterparts, the educational levels for men aged 45 to 64, which includes the bulk of the baby boomers, is about the same as levels for younger men. The picture for women is a bit more complicated, but the gap between older and younger women is also getting successively smaller.

While older workers have increased levels of education, whether they have the skills to fill future jobs is an open question. Over the next decade, over half of the new jobs in Massachusetts are projected in professional, managerial, and technical jobs. This includes computer analysts, engineers and scientists, teachers, and health practitioners. Service workers, such as nursing and home health aides, cooks, janitors, etc., are the next largest component of job growth. Of the 345,000 new jobs projected over the period of 1998 to 2008, over half will require at least a bache-

lor's degree, and 62 percent will require at least an associate's degree. At the same time, there will also be a large number of replacement jobs—i.e., job vacancies due to workers who retire, change jobs, or advance up the career ladders. Many of these jobs will be in less skilled occupations.

A key factor in determining a person's job prospects is the ability to learn new skills or update existing skills. A common employer perception is that older workers are not as able to adapt to the changing skills requirement. The state's workforce development programs will need to play a bigger role in helping older workers attain the skills they need to be competitive in the job market. Changes will be necessary because, for the most part, these programs are not currently geared to older workers. The Blue Ribbon Commission on

THE STATE'S JOB TRAINING PROGRAMS MUST MEET THE NEEDS OF OLDER WORKERS.

Older Workers has offered a number of important steps that the workforce development system could take to better align the programs with the needs of older workers.¹⁷ For instance, community-based organizations, plus community colleges and other post-secondary institutions, should do more outreach and training of older workers. As the workforce ages, it is essential that the state's training programs adapt to meet the needs of older workers.

The news is positive when it comes to the health of the elderly. Today's elderly are increasingly healthy and getting even healthier. This should help make them attractive to employers. Recall that older people in Massachusetts are even healthier than the national

average. In addition, because the nature of employment has changed dramatically over the last 20 years, jobs are now much more concentrated in knowledge-based activities, not in physically demanding tasks. This new generation of older workers should be very appealing to employers.

Although the stage seems set for hiring older workers, a number of stumbling blocks still exist. First, older workers are more expensive for a number of reasons. Their earnings tend to be higher than those of younger workers—beyond what can be attributed to productivity gains. In addition, the cost of benefits such as health insurance also rises with age. In particular, for jobs that require little training, the cost of older workers is likely a serious impediment.

HOW CAN WE BEST PREPARE FAMILIES TO TAKE GREATER RESPONSIBILITY IN MANAGING THEIR RETIREMENT SAVINGS?

In addition, the structure of the workplace does not tend to match the preferences of older workers. Older workers consistently prefer to work part-time, while employers have traditionally resisted part-time work. Indeed, during the 1990s, the percent of workers employed part-time declined and is currently slightly less than 12 percent of all workers. Part-time work is concentrated in small businesses and in companies in the service sector. If some of the fixed costs associated with hiring and training workers could be reduced, perhaps part-time workers would look more attractive. Older workers also prefer phased retirement, where they gradually reduce their work effort as they approach retirement. But

few firms offer such an option. For companies, there are often legal complications concerning the treatment of benefits.

While increased employment of older workers is clearly in the interest of workers and employers, a number of challenges to capitalizing on this mutual interest remain.

Concluding Thoughts

Our nation and the Commonwealth are on the brink of a huge demographic change. Over the next several decades, the population will age rapidly. At the same time, the rules of retirement are changing. Because of changes in the Social Security law and the nature of private pensions, it is likely that most people will no longer be able to retire in their early 60s as they have been doing for the last 20 years.

While there are some indications that Massachusetts families might be better positioned to transition into the new world of retirement by working longer, transitions such as this one are difficult. It will require attitudinal and behavioral shifts at all levels of society, including individuals, employers, and policymakers. There are clearly a number of ways that the federal government, as the biggest provider of income and services to older citizens, can help ease this transition for families. Putting the finances of Social Security and Medicare on sound long-term footing is critical. While the federal issues are critical, they have already attracted significant policy attention. In contrast, there has been much less of a focus on issues at the state level, both within and outside of government. Our goal is to get business, labor, and community leaders and people at all levels of government to work together to help families better prepare for retirement and, at the same time, prepare the Commonwealth for its aging population.

The key issues at the state level include: How can we best prepare families to take greater responsibility in managing their retirement savings? How can we make it as easy as possible for employers to offer a pension plan, ideally with some form of a matching contribution? And, finally, how can we help older workers remain competitive in the job market and help employers find the employees they need? To start the conversation, we offer six ideas for action:

✓ *Increase access to retirement savings plans at the workplace.*

About one-third of full-time workers in Massachusetts do not have access to any form of pension—including a 401(k)—at their current place of employment.¹⁸ Saving works best when it is directly deducted from a paycheck, and the limits on personal IRAs are much lower than those of 401(k)s. Given these realities, efforts to expand access should focus on the workplace.

Not surprisingly, workers at small businesses are the least likely to have pension coverage. Among the reasons that small employers offer for not providing coverage are: high employee turnover and the preference of their employees for cash wages, the cost of setting up and administering the account, and uncertainty about future earnings. Efforts to increase access have focused on federal law and policy. However, there are opportunities at the state level for creative policymaking. There is a range of possible ways to expand pension coverage. Ideas include:

- Business associations offering group retirement savings plans, like the group health care plan model, for its members to help reduce the cost for individual businesses;
- Using its power of persuasion, the state

playing an intermediary role connecting small businesses and financial institutions;

- Allowing small employers to participate in the state's 457-pension plan.

These are complex ideas that require consensus. To do this, government should convene a task force of small businesses, regional chambers of commerce, business associations, financial institutions, and other stakeholders to develop a strategy to help more small businesses offer private pensions. The goal of this taskforce should be to create a plan to increase pension access that includes outreach to small businesses.

✓ *Employers should consider ways to help increase employee participation and help employees manage their retirement savings.*

Employers have an opportunity to help their workers better plan for retirement. About one-quarter of eligible workers do not participate in 401(k)s, and of those who do participate, their account balances tend to be low. There are a number of ways employers can encourage employees to participate. First, research indicates that participation rates are higher when there is an employer match. Whenever possible, as many already do, employers should share in the responsibility of helping workers prepare for retirement.

In addition, some employers offer what is called “automatic enrollment” (or “presumptive” enrollment) in 401(k)s. In these companies, an eligible employee is automatically enrolled in a 401(k) plan with a specific percentage of their salary deducted and deposited in the retirement account. Employees are, of course, free to opt out of the plan or change the amount of the deduction at any time, but few actually do so. Rather, research finds that automatic enrollment can have a dramatic effect on retire-

ment savings.¹⁹ Automatically deducting money from a worker's salary should never be taken lightly, even if the money is for the worker's own retirement. In companies that offer an employer match, however, employees who do not participate are sacrificing a portion of their benefits. These employers, in particular, should consider trying automatic enrollment. Again, if they do so, employees must be fully informed and able to opt out easily.

✓The state should take a more active role in the financial education of its citizens.

Everyone agrees that more financial education is necessary. The changes to the new rules of retirement have happened with virtually no accompanying financial education, despite the evidence that such efforts do make a positive difference. State government, labor unions, business associations, employers, and community-based organizations all have a role to play in this public education effort.

With its large-scale convening powers, the state is in a unique position to offer leadership on such an effort. The goal is not to offer investment advice, but rather to give people a wake-up call and offer general information about the need to save, possible savings vehicles, etc. There are already many existing offices and organizations within government that could sponsor these programs. For several years, the Office of the State Treasurer has offered financial education programs focused on young people and women. These efforts could be expanded to include retirement planning for all ages. One option could be a new Retirement Planning Initiative, using the visibility of top elected officials to shine a light on this issue. Part of this initiative should include a marketing campaign to highlight the benefits of saving for retirement.

The workplace is the best place to reach workers. While most large employers already offer some form of financial education, there is a gap at many small businesses. In partnership with regional Chambers of Commerce, business associations, and small employers, the state should consider spearheading an effort to offer retirement financial education for employees at small businesses. Most of this work could be done through the existing infrastructure with little additional funding. If additional funds are needed, corporate or foundation support could be sought. The state could also consider spinning off the financial education component, once it is established, into its own nonprofit, as the state of Delaware did in 2001. An independent nonprofit offers better fundraising opportunities, but it is critical that the state provide oversight and quality control.

✓For individuals, we hope this report serves as a wake-up call.

In the new world of retirement, individuals must take more responsibility for their retirement finances. Fading fast are the days when workers could retire in their early 60s, expecting Social Security and private pensions to provide them with most of the income they need. Baby boomers and younger generations will need to save more on their own and manage that money wisely. They will also need to commit themselves to lifelong learning. Today's workers need to constantly upgrade their skills, and, whatever their age, they must be able to adapt to the demands of the workplace.

✓ The workforce development system should improve opportunities for job training of older workers.

Historically, the workforce development system has focused on younger workers, displaced workers, and low-skilled workers. As the workforce ages, the state's job training and post-secondary education programs must adapt to meet the needs of older workers. Programs and services should be designed to accommodate the physical challenges faced by many seniors. In addition, a key factor in determining a person's job prospects is the ability to learn new skills or update existing skills. The state's workforce development programs could play a bigger role in helping older workers attain the skills they need to be competitive in the job market. In order to change the status quo, the State Workforce Investment Board and the Board of Higher Education should develop a specific focus on older workers, led by the Department of Labor and Workforce Development. The Department should track the number of older workers served by the Career Centers. It should develop a strategy for additional outreach to older workers. And, finally, it should evaluate the outcomes of older workers who are served by state-funded workforce development programs.

✓ Policymakers and civic leaders should initiate an ongoing statewide conversation about the implications of the aging Commonwealth.

The topics addressed in this report are just the beginning. The shift to an older population will affect our communities in many different ways. It will influence housing, transportation, public safety, workforce development, volunteerism, and health care. There is a critical window of opportunity to prepare for these

changes. The Executive Office of Elder Affairs is beginning some of this work through its Boomer Ready Initiative, which will help prepare municipalities for the aging population. Such efforts are critical. Policymakers should initiate an ongoing public conversation with business and labor leaders, local officials, non-profit organizations, foundations, and civic leaders about the upcoming demographic changes and what they will mean for the Commonwealth.

ENDNOTES

1. Peter G. Peterson. 1996. *Will America Grow Up Before it Grows Old?: How the Coming Social Security Crisis Threatens You, Your Family, and Your Country*. Random House.
2. In this report, the average retirement age is defined as the youngest age at which half of the population is out of the labor force.
3. Our special thanks to Andrew Sum and his colleagues at the Center for Labor Market Studies at Northeastern University for supplying the Massachusetts retirement data. Their work also shows that the average age of retirement varies by the education of the worker. The average age of retirement for male workers with a master's degree is 67-68 years, compared with 60-61 years for workers who lack a high school diploma.
4. VanDerhei, Jack L. and Craig Copeland. "2002 Massachusetts Future Retirement Income Assessment Project: Third Draft." Mimeo. Washington, D.C.: EBRI Education and Research Fund.
5. Princeton Survey Research Associates. 2003. *The Pursuit of Happiness: A Survey on the Quality of Life*. MassINC.
6. AARP considers health insurance to be the fourth leg of retirement, with Medicare covering major expenses but supplemental insurance as an additional need for most retirees.
7. "Typical" household refers to households in the middle quintile of the income distribution.
8. These amounts are actuarially fair, meaning that the average individual will receive the same lifetime benefit regardless of what age they start claiming benefits.
9. The data refer to individual workers at one point in time. Over a lifetime and on a household—rather than an individual—basis, coverage rates are somewhat higher. In addition, coverage varies by income, with high-income households having much more coverage.
10. Choi, James, David Laibson et al., *Defined Contribution Pensions: Plan Rules, Participant Decisions, and the Path of Least Resistance*, NBER Working Paper No. w8655, December 2001.
11. Employee Benefit Research Institute, American Savings Education Council, and Mathew Greenwald & Associates, Inc., *2004 Retirement Confidence Survey*.
12. *Ibid.*
13. According to the survey, those Massachusetts residents who were aged 51-61 in 1992 appeared to be healthier than older Americans generally.
14. The labor force participation rate comes from the Current Population Surveys. Because of the small sample size for Massachusetts, we need additional years of data to determine the robustness of this finding.
15. Depending on the educational level of the household, the gaps in the rates of homeownership are either much larger or non-existent. The rates of homeownership among the Commonwealth's better educated households are comparable to their national peers, but those for the less educated households are significantly lower than their national peers. Our thanks to Andrew Sum and his colleagues at the Center for Labor Market Studies at Northeastern University for sharing this insight.
16. Sum, Andrew M., W. Neal Fogg, et al. 1999. *The Changing Workforce: Immigrants and the New Economy in Massachusetts*. MassINC.
17. Commonwealth of Massachusetts Blue Ribbon Commission on Older Workers. 2000. *Older Workers: An Essential Resource for Massachusetts*.
18. Our special thanks to Nelson Gerew at the Federal Reserve Bank of Boston for supplying us with this number.
19. Choi, James, David Laibson, et al., *For Better or For Worse: Default Effects and 401(k) Savings*, NBER Working Paper No. w8651, December 2001.

Findings

✓The Graying Population: “A Nation of Floridas”

Today, 1 out of every 8 people in the United States is 65 years or older. In 2030, 1 out of every 5 people will be 65 years or older. . . .32*

In Massachusetts, today, 1 out of every 7 people is 65 years or older.34

The Northeast is the oldest region in the country, and Massachusetts is the 12th oldest state.35

Barnstable and Berkshire are the oldest counties in the state. Nantucket and Suffolk counties are the youngest35

In Massachusetts, women account for over 68 percent of the residents who are 80 years or older35

The most rapid increase in the number and share of people over 65 years old will take place between 2010 and 203034

✓How Well Prepared Are Families for Retirement?

Financial planners estimate that retired households need 65 to 85 percent of their pre-retirement income to maintain their standard of living39

The average retirement age has declined dramatically among men for much of the last century. In 1910, the average retirement age was 74 years old for men. Today, it is 63 years old for men and 61 years old for women. In Massachusetts, the average retirement age is slightly higher63

In recent years, however, more older people are working. Between 2000 and 2002, labor force participation rates of workers aged 55 to 64 increased by about 2-3 percentage points73

Some studies indicate that one reason for the increased labor force participation of older workers is the decline in stock market wealth74

Up to the 1990s, the retirement income system provided financial incentives for early retirement, but in recent years, many of those incentives have been eliminated69

Financial incentives influence workers’ decisions about when to retire70

In 2008, the oldest baby boomers will begin to retire. At that time, the boomers will begin to shift from ages when most people work to ages when most people withdraw from the labor force27

Social Security

In 2001, Social Security was by far the largest asset of the typical household approaching retirement. Social Security accounts for nearly two-thirds of retirement income for the typical household40

As people get older, Social Security accounts for a larger and larger share of their income.42

Most people start collecting Social Security at age 62. More than 75% of people start collecting their benefits before they turn 6541

*Refers to page number.

In 2003, an average earner who starts collecting Social Security at age 62 will receive \$11,051 per year. A person who waits until age 65 will collect \$13,814 per year.41

The Normal Retirement Age for Social Security is gradually increasing from age 65 to age 6742

The premiums for Medicare Part B, which are automatically deducted from Social Security benefits, are scheduled to increase, which will decrease the amount of people's Social Security benefits43

Today, only about 20 percent of Social Security recipients pay taxes on their benefits. Going forward, a significantly higher percentage will be subjected to taxes43

Private Pensions

About half of private sector workers participate in employer-sponsored pension plans44

Massachusetts workers have slightly higher pension coverage, but still more than 40 percent of full-time workers lack pension coverage45

Over the last 20 years, pension coverage has generally decreased for male workers and increased for female workers45

Participation in pensions is closely correlated with earnings, with greater coverage for workers in the top earnings quintile45

The nature of pension coverage has shifted over the last twenty years from defined benefit pensions to defined contribution pensions. . .46

In 2001, of those households with pensions, 58 percent had a defined-contribution pension plan—most often a 401(k)46

One-quarter of those eligible to participate in retirement plans do not46

Balances in 401(k) plans are surprisingly low—the average balance of households approaching retirement (ages 55-64) is \$55,000 . . .46

Individual Savings

The personal savings rate of 2001 was at its lowest point since the Great Depression . .49

In 2001, the personal savings rate, as a percentage of disposable income, was just over 2 percent, compared with 10 percent in 1980 . .49

Outside of employer-sponsored pensions, people seem to have almost no additional savings.50

✓What does This Mean for Massachusetts Families?

The median Massachusetts household income is 20 percent higher than the national average36

Massachusetts residents approaching retirement are healthier than older Americans generally36

Massachusetts workers have higher levels of educational attainment than their national counterparts36

The jobs in Massachusetts are less physically demanding than those in the rest of the nation (39% vs. 30%)36

More workers in Massachusetts remain in the labor force at older ages compared with their national counterparts74

The homeownership rates for older Massachusetts households is 10 percent lower than that of their national counterparts37

Employee Benefit Research Institute (EBRI) research finds that regular unreimbursed health care costs sharply reduce the share of Massachusetts households with adequate income at retirement50

The System for Massachusetts Public Employees

Unlike most other states, the nearly 290,000 public employees in Massachusetts are not covered by Social Security48

Relative to Social Security, there are both advantages and disadvantages to the state's pension plan48

✓Older Women are Most At Risk

Old-age poverty in the Commonwealth, as in the nation, is concentrated among single women55

Non-married women account for 71 percent of all older Massachusetts residents living in poverty. In 2000, 28 percent of single older women in Massachusetts (about 10,312 state-wide) are either poor or near poor.55

Women are at greater risk of old-age poverty because the retirement income system in the country is based on earnings. Women have low earnings because they have lower wages, they are more likely to work part-time, and they spend fewer years in the labor force56

Massachusetts is ahead of the nation in terms of labor force participation of women, especially for older women82

Because the life expectancy for women at age 65 is 19.6 years compared with 16.6 years for men, most women end up widowed. When a husband dies, the couple's Social Security benefit is cut between one-third and one-half, and the couple's private pension either disappears completely or is reduced58

Since more women are working, women will have higher future earnings, and perhaps more savings and pension benefits.60

On the other hand, the number of divorced women and never-married women has increased, and both groups have high poverty rates. In addition, some of the changes in Social Security and the nature of pensions are likely to adversely affect women60

✓The Impact of an Aging Population on the Massachusetts Labor Markets

Older workers will constitute an increasing proportion of the labor force over the next two decades77

All of the growth in the Massachusetts labor force over the next two decades will come from older workers78

Nationally, the number of younger workers will remain constant between 2010 and 202578

In Massachusetts, the number of people under age 55 is projected to decline in absolute numbers between 2010 and 202578

Massachusetts labor markets will likely become significantly tighter over the next 20 years, and there could be labor shortages78

Conventional sources of labor are unlikely to compensate for this decline78

Current levels of immigration are already relatively high, and the projected decline of prime-age workers already assumes a substantial number of new immigrants79

Given the state's historic patterns of domestic out-migration, it seems unlikely that domestic migrants will fill the gap80

Massachusetts employers already appear close to fully tapping the supply of women workers81

Older workers are a less conventional source of labor, but they may offer a way to stem the impending labor shortages83

Both part-time work and self employment are much more common among older workers.72

Older workers in Massachusetts are more likely to be working part-time and less likely to be self-employed than their national counterparts72

Potential Demand for Older Workers

Older workers are well-educated. The educational gap between older and younger workers is diminishing.83

Older workers are healthier than in the past. The share of the elderly with severe disabilities has declined84

Across the nation, jobs are no longer as physically demanding. In Massachusetts, there is an even greater concentration of knowledge-based jobs than in other states85

Impediments to Hiring Older Workers

Older workers are expensive. Their earnings are higher than those of comparable younger workers, and the cost of benefits also rises with age85

Older workers may not have the required skills for the jobs88

Employers resist part-time employment, while older workers prefer it90

Few firms offer phased retirement, which many older workers desire92

Older workers must combat age discrimination94

Regulatory restrictions constrain employers in implementing flexible work arrangements that appeal to older workers92

CHAPTER 1 | Introduction

The population of the nation in general and Massachusetts in particular is about to gray rapidly over the next three decades. Aging is not a new phenomenon; the population has been growing older since the nation was founded. This long-term trend is the result of declining births and rising life expectancy. The speed at which the population will age over the next 20 years is unprecedented, however, and makes it difficult for individuals, business and labor leaders, and policymakers to appreciate the magnitude of the upcoming change.

Right now, the nation is enjoying a “demographic holiday.” The over-65 population is growing very slowly, reflecting the low level of births during the 1920s and 30s. At the same time, the non-elderly population is swelled by the ranks of the post-war baby boom generation—those born between 1946 and 1964. But the baby boomers are on the cusp of traditional retirement ages. In fact, the oldest boomers will turn 65 in 2011 and the youngest boomers in 2029. The aging of the baby boom will both dramatically increase the numbers of older people and deplete the ranks of the non-elderly. As a result, the share of the population age 65 and over will increase very quickly—from 12 percent in 2000 to 20 percent in 2030.¹ This dramatic demographic shift has profound implications for everything, from voting patterns to the nature of consumer products. This report primarily focuses on the key social and economic challenge of population aging: the ability of the baby boomers to enjoy a decent standard of living in retirement. The report is also concerned with the potential for widespread labor shortages as growth in the workforce slows.

Ensuring retirement income security for an aging population will be a major challenge.

The same factors that cause the graying of the population will put enormous pressure on existing retirement income programs. The Social Security system, for example, is largely financed on a pay-as-you-go basis. So its costs will rise rapidly as the ratio of retirees to workers soars to unprecedented levels. In response to the projected shortfalls, 1983 reform legislation included a provision that is gradually increasing the age for full benefits from 65 to 67. This is equivalent to an across-the-board benefit cut. More specifically, benefits are reduced by 5/9th of one percent for each month they are received prior to the Normal Retirement

THE SPEED AT WHICH THE POPULATION WILL AGE OVER THE NEXT 20 YEARS IS UNPRECEDENTED.

Age (NRA). With an NRA of 65, a person who claims benefits at age 62—the earliest age to collect Social Security benefits—receives monthly benefits 20 percent lower than the full amount.² The scheduled increase in the NRA from age 65 to 67 raises the actuarial reduction for claiming benefits at age 62 from 20 percent to 30 percent.³ As a result, those who continue to retire at 62 will see their benefits relative to pre-retirement earnings decline by 12.5 percent by the time the extension in the retirement age is fully phased in.

The aging population, combined with constantly improving medical technology, will also sharply increase the cost of the Medicare program. In fact, Medicare premiums paid by retirees are projected to rise from 6.8 percent of Social Security benefits today to 10.2 percent in 2030.⁴ Since Medicare Part B premiums

(which go to cover doctor visits) are subtracted from Social Security benefits before the checks are issued, they will further reduce Social Security's ability to replace pre-retirement income.

Social Security also continues to face a serious long-term deficit. Assuming that some of that gap will be closed by cutting benefits, the program will be far less generous by 2030 than it is today. The 20 percent of those 65 and over who rely entirely on Social Security for their retirement income will be at considerable risk, as will another 20 percent who lack meaningful savings or private pension benefits.⁵

Those future retirees who are fortunate

401(K) PLANS SHIFT A SUBSTANTIAL PORTION OF THE BURDEN TO THE EMPLOYEE.

enough to have an employer-sponsored pension plan will be better off. But pension coverage is not as reliable as it once was. Most people with pensions now have a defined contribution plan—most often a 401(k). In contrast to traditional defined benefit plans, 401(k) plans, which are like savings accounts, shift a substantial portion of the burden for providing for retirement to the employee; the employee decides whether or not to participate, how much to contribute, how to invest the contributions, how to adjust those investments over time, and how to use the assets at retirement. In addition, workers have some access to their 401(k) funds before retirement, adding another element of individual responsibility.

Balances in 401(k) plans are much lower than one would think. The median in 2001 for households approaching retirement was only \$55,000.⁶ The reason for these relatively low

balances appears to be that many people make mistakes at every step along the way. For example, a quarter of those eligible to participate in a plan fail to do so. Less than 10 percent of those that do participate contribute the maximum. Over half fail to diversify their investments, many over-invest in company stock, and only a few re-balance their portfolios in response to age or market returns.⁷ Most importantly, many cash out when they change jobs. And very few annuitize at retirement, which means that they risk outliving their accumulations.

Massachusetts faces a unique retirement-income challenge since its public employees, who constitute about 14 percent of the workforce, are not covered by Social Security.⁸ Their relatively generous defined benefit plan replaces about 60 percent of pre-retirement earnings. But since the onset of the bear market in 2000, the Commonwealth's plan has become seriously underfunded. Moreover, public employees lack the inflation protection and benefits for spouses that are central to Social Security. The Governor has put forth a plan for Social Security coverage and the introduction of 401(k)-type accounts, but, for now, the future is uncertain here as well.

With the inevitable decline in Social Security and the increased uncertainty surrounding employer-sponsored pensions, one would think that people would save more on their own. But the national saving rate, while rebounding slightly since the roaring stock market of the 1990s, still hovers below 4 percent and most of that saving reflects pension accumulation. Rising house prices and homeowner equity have increased personal wealth—especially in Massachusetts. But the elderly are often unable or unwilling to access the equity in their home. So personal saving seems unlikely to come to

the rescue. If people continue to retire in their early 60s, they will lack the income needed to support a comfortable retirement.

The central question is whether people will continue to withdraw from the labor force at the same ages they do today or whether they will work longer, allowing them to build up more wealth and reduce the time spent in retirement. There are some hopeful signs that people will indeed work longer, as the historic trend toward earlier and earlier retirement may have come to a halt in the mid-1980s. Some attribute the break in the long-term trend to the response of older workers to seemingly permanent economic shifts—to the end of early retirement incentives that accompanied the transition from defined benefit to 401(k) plans, to the elimination of mandatory retirement, and to the initial retrenchment of Social Security. Others emphasize the extended economic boom of the late 1980s and 1990s, which was accompanied by rising demand for workers. After all, a similar pattern occurred during the booms of the 1940s and 1960s.

If the recent pattern has been due primarily to incentive shifts and the reduction in Social Security wealth, workers should be expected to retire later in the future. But if, instead, cyclical forces have been dominant, the long-term trend could resume and workers will retire at earlier and earlier ages. On balance, we believe that, with pension incentives moving sharply towards neutrality with respect to retirement age, the diminution of Social Security wealth, the improved health and education of older workers, the shift to less physically demanding employment, and the dramatic increases in longevity, the retirement age has at least stabilized and people may be open to the notion of working longer.

The likelihood that employers will want to

hire older workers is less clear. On the one hand, employers could face a serious labor shortage, especially in Massachusetts. Over the next three decades, the size of the nation's younger workforce will remain virtually static, and in Massachusetts it is expected to actually decline, leaving an insufficient pool of younger workers. Employers are unlikely to fully close this gap by using more capital, recruiting younger women and immigrants, or sending jobs abroad. Therefore, older workers seem like a logical alternative. On the other hand, companies generally resist employing part-time workers, and most older people want to work part-time. Older workers are also expensive in terms of health care coverage and defined benefit plan pension costs. And while employers value the reliability and experience of older workers, they generally view them as inflexible and not worth training. Increasing the employment of older workers, therefore, will require increased flexibility on the part of both employers and employees.

In short, ensuring an aging population a decent retirement income is not an easily

EMPLOYERS COULD FACE A SERIOUS LABOR SHORTAGE, ESPECIALLY IN MASSACHUSETTS.

achievable goal, amenable to some simple legislative or regulatory fix. The real solution involves a sweeping cultural change on the part of individuals, employers, and government. Individuals will need to take a hard look at their financial situation and, in most cases, revise their expectations about when to retire. Employers will need to understand that younger workers will soon become scarce, and most will need to learn how to retain and

attract older workers. While the most important steps will involve individuals and employers, government policymakers can help by stabilizing the Social Security system and taking steps to facilitate the transition to an aging labor force through updating pension regulations, improving worker training opportunities, and developing programs to match up older workers with employers experiencing labor shortages.

The complexity of the problem places a premium on educating workers, employers, and government officials about the scope of the social and economic changes that a rapidly aging population will bring. This educational effort is in many ways most effectively pursued at the state level, and needs to start immediately to have the most beneficial effect. The sooner individuals, employers, and policymakers comprehend the scope of the challenge that lies ahead, the more effectively they will be able to revise their expectations and plans.

Without proper planning, the transition to an older population will be more difficult, painful, and less satisfying for everyone. It is not that residents of the Commonwealth will fall off a cliff. That is not how the world works. Instead, people will muddle through. For example, to avoid outliving their resources, many retirees could be forced to lower their living standards significantly below what they had anticipated. Or, to supplement their dwindling assets, many could reenter the workforce in their 70s, only to find that low-wage service jobs are all that are open.

Nor will the challenge of an aging population be limited to older Americans themselves.

Employers could face a serious labor shortage and be forced to move jobs out of the Commonwealth or even overseas. Younger generations could find themselves burdened by rising payroll taxes or the need to support their parents while struggling to raise their children. In short, muddling through is an option, but not the best way to approach the most important socioeconomic transition of the 21st century.

This report aims to start the educational process. Chapter 2 looks more closely at the underlying trends that are causing the population to age and at the health and wealth characteristics of tomorrow's older population. Chapter 3 explores the various sources of income that older people will have to support themselves in retirement, and concludes that they will be inadequate if people continue to retire in their early 60s. Chapter 4 takes a close look at the most vulnerable population—namely, non-married women—exploring the causes of their economic distress and their prospects in the future. Chapter 5 describes past trends in labor force activity among older Americans and lays the groundwork for Chapters 6 and 7, which investigate the potential to keep people in the labor force longer. Chapter 8 presents recommended actions that individuals, employees, and governments can take to prepare for the demographic transition, emphasizing that there is no silver bullet. Instead, a rapidly aging population, in the face of retrenching public programs, requires a cultural shift in the way that workers and employers think about retirement.

ENDNOTES

1. U.S. Bureau of the Census. 2000. "Projections of the Total Resident Population by 5-Year Age Groups, and Sex with Special Age Categories: Middle Series, 2001-2005, 2006-2010; 2016-2020; and 2025-2045." *National Population Projections, Summary Files*. [Available at: <http://www.census.gov/population/www/projections/natsum-T3.html>].
2. If benefits are claimed at age 62 and the NRA is 65, benefits are reduced by 20 percent ($5/9$ percent/month * 36 months = 20 percent).
3. The NRA is scheduled to increase from age 65 to age 67 by 2022. The increase began with individuals turning age 62 in 2000, for whom the NRA is 65 plus 2 months, and increases 2 months per year until it reaches age 66. Then, after a 12-year hiatus, the NRA begins to increase again by 2 months per year until it reaches age 67 for individuals born in 1960 or later. If benefits are claimed at age 62 and the NRA is 67, benefits are reduced by 30 percent ($(5/9$ percent/month * 36 months) + $(5/12$ percent/month * 24 months) = 30 percent). This is because benefits are reduced by 5/12 of one percent per month for each month benefits are received beyond 36 months.
4. U.S. Social Security Administration. 2003a. *The 2003 Annual Report of the Board of Trustees of the Federal Hospital Insurance and Survivors Insurance and the Disability Insurance Trust Funds*. Washington, D.C.: U.S. Government Printing Office. [Available at: <http://cms.hhs.gov/publications/trusteesreport/2003/tr.pdf>].
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8. U.S. Bureau of the Census. 2003. *Massachusetts: 2000—Summary Social, Economic, and Housing Characteristics*. PHC-2-23 (March). Washington, D.C.: U.S. Government Printing Office. [Available at: <http://www.census.gov/prod/cen2000/phc-2-23.pdf>].

CHAPTER 2 | The Population is Graying Rapidly

The U.S. population will age rapidly over the next three decades. By 2030, one out of every five people will be age 65 or older, compared to only about one in eight today.¹ Massachusetts is currently somewhat older than the nation at large, and, going forward, is expected to age with the rest of the nation.² This chapter begins with an explanation of the factors underlying the aging of the population. Next it looks more specifically at the size of the older population today and projected growth in the coming decades, both for the nation as a whole and for Massachusetts. Finally, it provides details on the social and economic characteristics of Massachusetts residents and the implications for their ability to maintain a decent standard of living throughout old age.

Why the Population is Aging: Fewer Children and Longer Lifespans

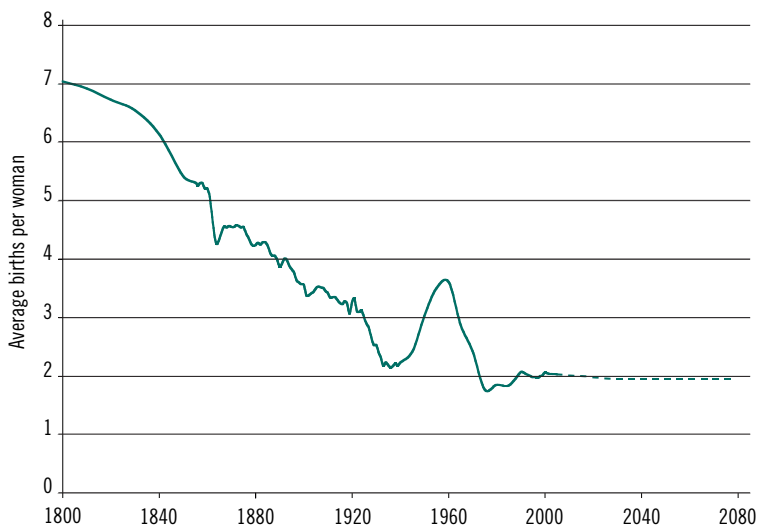
The aging of the population is not a new phenomenon. Indeed, the U.S. population has been

growing older since the dawn of the republic. This long-term trend is the inevitable result of two factors: (1) women have generally been having fewer children than in previous generations; and (2) individuals have been living longer.³

The declining fertility rate of women is often perceived as a recent phenomenon—the baby bust that followed the post-war baby boom.⁴ In reality, as shown in Figure 2-1, the fertility rate in the United States has been falling for much of the past two centuries. In 1800, the average woman had 7.0 children. By the end of World War II, a century and a half later, the fertility rate was down to 2.4 children. The postwar baby boom—lasting from 1946 to 1964—pushed the rate back up to about 3.5 children. But it was a temporary phenomenon. By the mid-1960s, fertility began to head down sharply, dropping to a historic low of 1.7 children by the mid-1970s before bouncing back slightly and stabilizing at about two children today. Viewed in this long-term context, the baby boom was a demographic blip that temporarily interrupted the decline in fertility. And the baby bust brought fertility back to around its historic trend.

The other demographic factor driving the aging of the population is increased life expectancy. The gains here have been as dramatic as the drop in fertility and have shown less fluctuation, as displayed in Figure 2-2.⁵ In 1935, when Social Security was enacted and the retirement age set at 65, life expectancy at age 65 was about 12 years for men and 13 years for women. Today it is 16 years and 19 years, respectively. By 2080, life expectancy at 65 is projected to be 20 years for men and 23 years for women. Moreover, the probability of a young worker surviving to retirement has also risen dramatically. In the 1930s, the probability of a

FIGURE 2-1. Fertility Rates in the United States, 1800-2080



Source: Council of Economic Advisers. 1997. *Economic Report of the President*. Washington, D.C.: U.S. Government Printing Office.

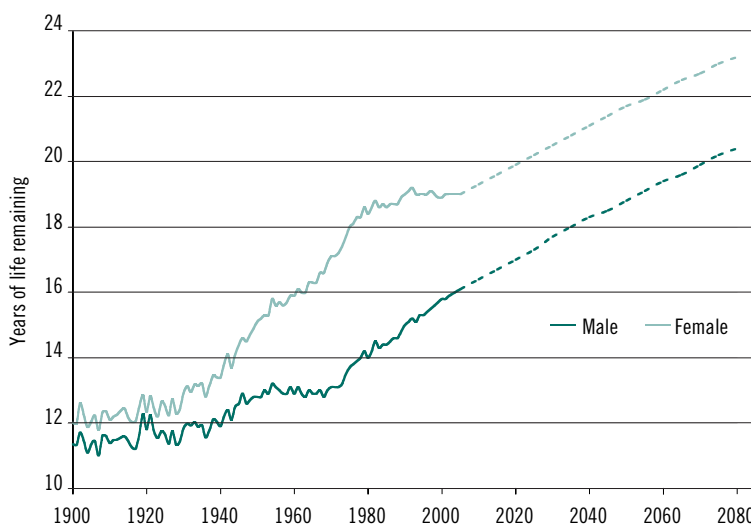
20-year old man surviving to age 65 was only about 60 percent, while for women it was about 67 percent. By the mid-1990s, these fractions had increased to 77 and 87 percent respectively, and they are expected to continue rising in the future.⁶

The Extent of Population Aging: “A Nation of Floridas”

In 2000, according to the decennial census, 12.4 percent of the U.S. population was age 65 or older. This share was slightly lower than in 1990, the first time that the elderly share of the population had dropped in the history of the Census.⁷ Figure 2-3 shows the trend in the share of the population aged 65 and over for each decade beginning in 1900 and continuing with the projected increases to 2030. In the last 100 years, the percentage of the population aged 65 or older increased 8 percentage points. Now, it will take only 30 years to increase another 8 percentage points.

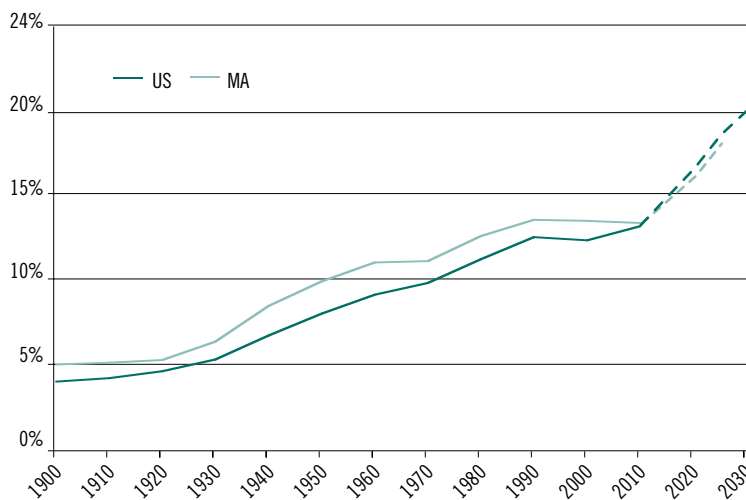
The halt in the growth of the older population between 1990 and 2000 was the result of two factors: 1) a sharp drop in fertility rates between the early 1920s and early 1930s, followed by a relatively flat trend until the end of World War II; and 2) the post-war baby boom that swelled the non-aged population. As those born in the 1920s and 1930s have reached 65 in recent years, the nation has enjoyed a “demographic holiday” in which the retired population is relatively small compared to the working-age population. This “holiday” may be one reason why all the discussion of an aging population and its social and economic implications has not sunk in yet with the general public and with decision-makers in the public and private sectors.

FIGURE 2-2. Life Expectancy at Age 65, 1900-2080



Source: Bell, Felicitie C. and Michael L. Miller. 2002. “Life Tables for the United States Social Security Area 1900-2100.” Actuarial Study No. 116 (August). Washington, D.C.: Social Security Administration. [Available at: <http://www.ssa.gov/OACT/NOTES/as116/as116TOC.html>].

FIGURE 2-3. Percentage of the U.S. and MA Populations Aged 65 and Over, 1900-2030



Source: U.S. Bureau of the Census. 2000. “Projections of the Total Resident Population by 5-Year Age Groups, and Sex with Special Age Categories: Middle Series, 2001-2005, 2006-2010; 2016-2020; and 2025-2045.” National Population Projections, Summary Files. [Available at: <http://www.census.gov/population/www/projections/natsum-T3.html>]; and State Population Projections, Summary Files [Available at: <http://www.census.gov/population/www/projections/stproj.html>]; and Hobbs, Frank and Nicole Stoops. 2002. “Demographic Trends in the 20th Century.” Census 2000 Special Reports Series CENSR-4 (November). Washington, D.C.: U.S. Bureau of the Census. [Available at: <http://www.census.gov/prod/2002pubs/censr-4.pdf>].

Preparation for population change is important because we know that the “demographic holiday” will be over relatively soon. The oldest baby boomers will qualify for early Social Security benefits in 2008. By 2010, the share of the population aged 65 and over is expected to rise to 13.2 percent; it then begins a very rapid climb to 16.5 percent in 2020 and

20.0 percent in 2030.⁸ To put the 2030 figure in perspective, it is larger than the share of older residents in Florida today, which has led one commentator to describe the future United States as “a nation of Floridas” (Figure 2-4).⁹ So while the U.S. population was aging long before the baby boomers came along and will probably continue well after they are gone, the boomers are the primary cause of the rapid pace of aging in the coming decades. If the baby boom had never occurred, the U.S. population would still be aging due to long-term fertility and life expectancy trends, but the process would be occurring much more gradually.

FIGURE 2-4. States with 18 Percent of the Population 65 and Over, 2000 and 2025



Source: Committee for Economic Development. 1999. *New Opportunities for Older Workers*. New York: Research and Policy Committee of the Committee for Economic Development. Updated with the 2000 Census, U.S. Bureau of the Census. 2001b. “States and Puerto Rico Ranked by Percent 65 Years and Over: 1990 and 2000.” PHC-T-13, Population and Ranking Tables of the Older Population for the United States, States, Puerto Rico, Places of 100,000 or More Population, and Counties, Table 3. [Available at: <http://www.census.gov/population/cen2000/phc-t13/tab03.pdf>].

Profile of the Older Population in Massachusetts

Massachusetts has experienced the same population aging as the rest of the nation (Figure 2-3). The long-term decline in fertility was temporarily interrupted by the large post-war baby boom generation, while the rise in life expectancy has proceeded steadily. Massachusetts is currently somewhat older than the U.S. average, with about 1 in 7 residents age 65 or over compared to 1 in 8 for the country as a whole, but future projections closely mirror the national projections described above. Since other states are growing older more quickly than Massachusetts, the shares of the population age 65 and over in the Commonwealth and the nation are identical by 2015 at 14.7 percent. In later years they remain quite close.¹⁰

This section provides more details on the characteristics of the older population in Massachusetts, including geographic location, gender, education, health, type of employment, and income. All of these characteristics have implications for the ability of the state’s older residents to maintain a decent standard of liv-

ing throughout retirement, which is the main concern of this report.

Where They Live

In 2000, 13.5 percent of Massachusetts residents were age 65 or over, making it the 12th oldest state (Table 2-1). While older than the national average, Massachusetts is actually slightly younger than the Northeast as a whole, which is the oldest region in the country. Within New England, Connecticut, Maine and Rhode Island are all older than Massachusetts.

Within the Commonwealth, the counties with the oldest residents are at opposite ends of the state: Barnstable and Berkshire. Both counties have populations that are older than the state of Florida. In Barnstable, 23.1 percent of residents was aged 65 and over in 2000, compared to 17.6 percent of Floridians. The immediate Boston area (i.e. Suffolk County) has one of the lowest shares of older residents—only 11.0 percent are 65 or over. Table 2-2 shows a breakdown of the age 65 and over population by county.

This geographic dispersion suggests that different regions of the Commonwealth may have different needs as the population ages. It is also important to keep in mind that the largest number of older people, as opposed to the highest percentage, will still be in the Boston metropolitan area.

More Older Women than Men

One persistent demographic trend is that women tend to live longer than men.¹¹ In Massachusetts, Table 2-3a shows that women accounted for 54 percent of residents aged 65-69 in 2000. The difference becomes striking at older ages, with women making up 68 percent of Massachusetts residents 80 and over.

TABLE 2-1. Share of Population Aged 65 and Over, New England, 2000

STATE	PERCENT OF POPULATION AGED 65 AND OVER	NATIONAL RANK	RANK IN NEW ENGLAND
Rhode Island	14.5%	6	1
Maine	14.4	7	2
Connecticut	13.8	10	3
Massachusetts	13.5	12	4
Vermont	12.7	26	5
New Hampshire	12.0	36	6

Source: U.S. Bureau of the Census. 2001. The 65 Years and Over Population: 2000. <http://www.census.gov/prod/2001pubs/c2kbr01-10.pdf>

TABLE 2-2. Share of Massachusetts Population Aged 65 and Over by County, 2000

COUNTY	PERCENT OF COUNTY POPULATION AGED 65 AND OVER	NUMBER OF COUNTY RESIDENTS AGED 65 AND OLDER
Barnstable	23.1%	51,265
Berkshire	17.9	24,223
Hampden	14.5	66,251
Dukes	14.4	2,153
Norfolk	14.4	93,734
Franklin	14.2	10,180
Bristol	14.1	75,512
Essex	13.9	100,306
Worcester	13.0	97,969
Middlesex	12.8	187,307
Hampshire	12.0	18,327
Plymouth	11.8	55,772
Suffolk	11.0	76,163
Nantucket	10.5	1,000
Statewide	13.5	860,162

Source: U.S. Bureau of the Census. 2002. Massachusetts: 2000—Summary Population and Housing Characteristics. PHC-1-23 (September). Washington, D.C.: U.S. Government Printing Office. [Available at: <http://www.census.gov/prod/cen2000/phc-1-23.pdf>].

While women are projected to continue to live longer than men in the future, the gap is expected to narrow. As shown in Table 2-3b, the share of women in the 80 and over age group is projected to drop by several percentage points by 2025, though it still exceeds 60 percent of the total. The longer lifespan of women is of great significance in any discus-

TABLE 2-3A. Older Massachusetts Residents by Gender, 2000

AGE GROUP	MEN (% OF TOTAL)	WOMEN (% OF TOTAL)
65-69	45.7	54.3
70-74	43.7	56.3
75-79	40.6	59.4
80 and over	31.8	68.2

Source: Authors' calculations from U.S. Bureau of the Census. 1996. "State Population Projections—Detailed State Projections by Single Year of Age, Sex, Race, and Hispanic Origin: 1995 to 2025, Massachusetts." Report PPL-47 (October). [Available at: <http://www.census.gov/population/www/projections/stproj.html>].

TABLE 2-3B. Older Massachusetts Residents by Gender, 2025

AGE GROUP	MEN (% OF TOTAL)	WOMEN (% OF TOTAL)
65-69	47.7	52.3
70-74	47.0	53.0
75-79	46.4	53.6
80 and over	39.1	60.9

Source: Authors' calculations from Source: Authors' calculations from U.S. Bureau of the Census. 1996. "State Population Projections—Detailed State Projections by Single Year of Age, Sex, Race, and Hispanic Origin: 1995 to 2025, Massachusetts." Report PPL-47 (October). [Available at: <http://www.census.gov/population/www/projections/stproj.html>].

sion of retirement income security, as older women are at high risk of poverty for reasons detailed in Chapter 4.

Wealth and Health

Two key sources of retirement income, Social Security and employer-sponsored pensions, are expected to erode or become less certain in coming years, a topic discussed in Chapter 3. This will likely lead to greater reliance on other income sources, namely individual saving and/or wages from continued full- or part-time employment. While saving more and working longer both involve tradeoffs and challenges, Massachusetts residents, on average, may be in a better position than other workers across the country.

First, Massachusetts residents have higher salaries, on average, than other U.S. workers. In 1999, the median full-time male worker in Massachusetts earned about \$43,000, com-

pared to \$37,000 for all U.S. workers. For women, the numbers were about \$32,000 and \$27,000, respectively.¹² Not surprisingly given their higher wages, Massachusetts households also have higher incomes—20 percent above the national average in 2000.¹³ While the cost of living in Massachusetts is higher than in other parts of the country, greater earnings and income suggest that residents, on average, are better equipped to save for retirement on their own than individuals in other states.

Second, Massachusetts residents approaching retirement (those aged 51-61 in 1992) appear to be healthier than older Americans generally. According to survey results from the Health and Retirement Study, men and women in Massachusetts were both about half as likely to report their health status as "poor" compared to older workers nationally.¹⁴ And older Massachusetts women were much more likely to rate their health status as "excellent" or "very good" (65 percent versus 53 percent).

Third, Massachusetts workers have higher levels of formal education, often an attractive attribute for employers. In 2000, one-third of all state residents had a bachelor's degree or higher compared to about one-fourth of all U.S. residents.¹⁵

Finally, as shown in Figure 2-5, Massachusetts workers are more likely than workers in other states to have jobs that generally require less physical activity. These jobs tend to be a better fit for older workers.

The portrait painted thus far sounds fairly optimistic relative to the rest of the nation. Nevertheless, a number of difficult challenges exist in ensuring that Massachusetts residents enjoy a decent standard of living throughout their retirement. First, the statistics described above have focused on statewide averages. These averages fail to capture the

many vulnerable members of the population who have low incomes, poor health, little or no higher education, and/or physically demanding jobs.

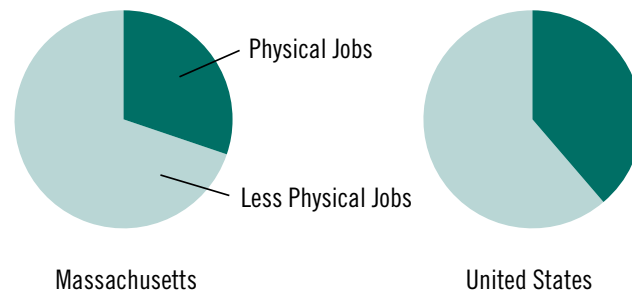
Another reason for concern, as detailed in Chapter 3, is that most people in Massachusetts, and the nation, save little on their own for retirement. For most people, their home represents their main asset in retirement. And while individuals have the option of tapping into their housing equity by either selling their home and moving to a less expensive property or by borrowing against their home, most people do not choose this route.¹⁶ As Figure 2-6 shows, however, home ownership rates among older households is fully 10 percentage points lower in Massachusetts than the national average. So, even the option to tap into home equity is less available in Massachusetts than elsewhere.

Finally, the majority of workers still leave the labor force in their early 60s.¹⁷ While working longer holds out the prospect of significantly bolstering old-age living standards, extending careers will take time and involve a cultural and psychological shift not only among older workers, but among employers as well. These issues will be explored in Chapters 5 and 6.

Conclusion

Population aging in the United States and in Massachusetts is the result of very long-term trends in fertility and life expectancy. The post-war baby boom was a short-term departure from the trend of lower fertility, and it was quickly followed by a baby bust that brought fertility back down to historically low levels. As the baby boom generation begins to reach traditional retirement ages, the pace of population aging will rapidly accelerate. By 2030, 1 in 5 Americans will be age 65 or over. Massachu-

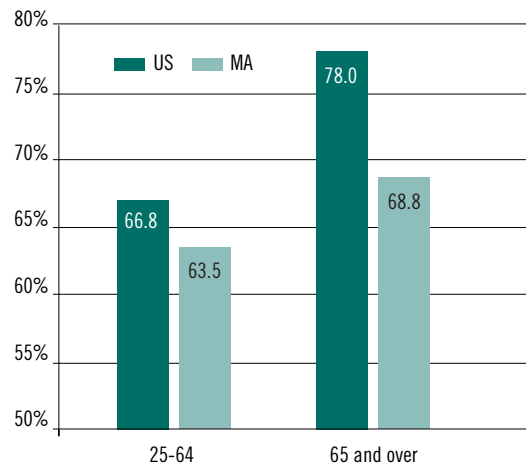
FIGURE 2-5. Job Status of Workers, 2000



Source: U.S. Bureau of the Census. 2003a. Massachusetts: 2000—Summary Social, Economic, and Housing Characteristics. PHC-2-23 (March). Washington, D.C.: U.S. Government Printing Office. [Available at: <http://www.census.gov/prod/cen2000/phc-2-23.pdf>]; U.S. Bureau of the Census. 2003c. United States: 2000 - Summary Social, Economic, and Housing Characteristics. PHC-2-1 (July). Washington, D.C.: U.S. Government Printing Office. [Available at: <http://www.census.gov/prod/cen2000/phc-2-1-pt1.pdf>].

Note: “Physical” jobs include the following occupations: Farming, Fishing, and Forestry; Construction and Maintenance; Production and Transportation. “Less physical” jobs include Service, Sales and Office, and Management and Professional.

FIGURE 2-6. Home Ownership Rates, US and MA, by Age Group, 1999



Source: Authors’ calculations from U.S. Bureau of the Census 1% File.

sets is already somewhat older than the nation, and is expected to closely follow national aging trends. In some ways, Massachusetts residents appear better equipped to handle the financial demands of old age. But ensuring retirement security for an aging population will still pose a major challenge in the decades ahead.

ENDNOTES

1. U.S. Bureau of the Census. 2000. "Projections of the Total Resident Population by 5-Year Age Groups, and Sex with Special Age Categories: Middle Series, 2001-2005, 2006-2010; 2016-2020; and 2025-2045." *National Population Projections, Summary Files*. [Available at: <http://www.census.gov/population/www/projections/natsum-T3.html>].
2. U.S. Bureau of the Census. 1996. "State Population Projections—Detailed State Projections by Single Year of Age, Sex, Race, and Hispanic Origin: 1995 to 2025, Massachusetts." *Report PPL-47* (October). [Available at: <http://www.census.gov/population/www/projections/stproj.html>]; U.S. Bureau of the Census (2000).
3. These trends are also similar in many other countries, particularly advanced industrial nations.
4. The fertility rate, as used here, as defined as "the average number of children that would be born to a woman in her lifetime if she were to experience the birth rates by age observed in, or assumed for, the selected year, and if she were to survive the entire childbearing period" (U.S. Social Security Administration. 2003. *The 2003 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds*, p. 75. Washington, D.C.: U.S. Government Printing Office. [Available at: <http://www.socialsecurity.gov/OACT/TR/TR03/tr03.pdf>]).
5. The Social Security Administration prepares two types of tables for measuring life expectancy. The first is a *period life* table that shows how many people in each age group are expected to die in a given year. The second type is a cohort life table that incorporates mortality improvements. All the numbers used in this chapter are from the period life table.
6. Council of Economic Advisers. 1997. *Economic Report of the President*. Washington, D.C.: U.S. Government Printing Office.
7. U.S. Bureau of the Census. 2001a. "The 65 Years and Over Population: 2000." *Census 2000 Brief C2KBR/01-10* (October). Washington, D.C.: U.S. Department of Commerce. [Available at: <http://www.census.gov/prod/2001pubs/c2kbr01-10.pdf>].
8. U.S. Bureau of the Census (2000).
9. Peterson, Peter G. 1996. *Will America Grow Up Before It Grows Old?: How the Coming Social Security Crisis Threatens You, Your Family, and Your Country*. Random House.
10. U.S. Bureau of the Census. 1996. "State Population Projections—Detailed State Projections by Single Year of Age, Sex, Race, and Hispanic Origin: 1995 to 2025, Massachusetts." *Report PPL-47* (October). [Available at: <http://www.census.gov/opulation/www/projections/stproj.html>]; U.S. Bureau of the Census (2000).
11. While women *on average* live longer than men, it is worth noting that life expectancy for most men and *most* women is very similar. The higher average life expectancy of women is due mainly to a small group of long-lived women and a small group of short-lived men. See Campbell, Sheila and Alicia H. Munnell. 2002. "Sex and 401(k) Plans." *Just the Facts on Retirement Issues* No. 4 (May). Chestnut Hill, MA: Center for Retirement Research at Boston College.
12. U.S. Bureau of the Census. 2003a. *Massachusetts: 2000—Summary Social, Economic, and Housing Characteristics*. PHC-2-23 (March). Washington, D.C.: U.S. Government Printing Office. [Available at: <http://www.census.gov/prod/cen2000/phc-2-23.pdf>]; U.S. Bureau of the Census. 2003c. *United States: 2000—Summary Social, Economic, and Housing Characteristics*. PHC-2-1 (July). Washington, D.C.: U.S. Government Printing Office. [Available at: <http://www.census.gov/prod/cen2000/phc-2-1-pt1.pdf>].
13. Authors' calculation from U.S. Bureau of the Census. 2003b. "State and County Quick Facts: Massachusetts." [Available at: <http://quickfacts.census.gov/qfd/states/25000.html>].
14. The HRS—an in-depth survey conducted by the University of Michigan—provides information on the income and wealth holdings for a nationally representative sample of individuals born between 1931 and 1941 and their spouses.
15. U.S. Bureau of the Census (2003b).
16. For evidence on reverse mortgages, see Eschtruth, Andrew D. and Long Tran. 2001. "A Primer on Reverse Mortgages." *Just the Facts on Retirement Issues* No. 3 (October). Chestnut Hill, MA: Center for Retirement Research at Boston College.
17. Burtless, Gary and Joseph Quinn. 2002. "Is Working Longer the Answer for an Aging Workforce?" *Issue in Brief* No. 11 (December). Chestnut Hill, MA: Center for Retirement Research at Boston College.

CHAPTER 3 | Traditional Income Sources Will Fall Short

Massachusetts residents, like their counterparts nationwide, will depend on a retirement income system that has often been described as a three-legged stool. The first leg is the public Social Security system, which covers virtually all workers and provides benefits based on lifetime earnings at 65 (gradually increasing to 67 for those turning 62 in 2022 or after) and reduced benefits at 62. The second leg consists of employer-provided pensions, which cover roughly half the workforce at any point in time. These tax-subsidized plans are sponsored by private employers, by state and local governments for their workers, and by the federal government for its employees. The third leg consists of individual saving.¹

In considering these sources of income for Massachusetts residents, keep several facts in mind. First, Massachusetts residents have higher incomes than the rest of the population. For example, median household income in the Commonwealth averaged \$50,502 in 1999, compared to \$41,994 for the nation as a whole. Similarly, the poverty rate for individuals in Massachusetts was 9.3 percent compared to the national average of 12.4 percent in 1999. On the other hand, life is expensive in Massachusetts; the 2000 Census reports that the typical house costs over 50 percent more in the Commonwealth. Second, more workers in Massachusetts are covered by an employer-sponsored pension than in the nation in general. On the other hand, unlike in most other states, Massachusetts public employees are not covered by Social Security. Third, a greater proportion of older Massachusetts men and women are in the labor force than is true for the nation as a whole.

This chapter summarizes the major devel-

opments in the nation's retirement system and their implications for Massachusetts residents. The main message is that current sources of retirement income will likely be inadequate for low- and middle-income individuals. The Social Security program will be significantly less generous in the future than it is today, and employer-sponsored pensions, where coverage has moved from traditional plans to 401(k)s, will provide less reliable retirement income.

Needs and Sources of Retirement Income

Ideally, retirement benefits should enable workers to maintain the same standard of living in retirement as they enjoyed while they were employed. Most analysts assume that retirees need to replace less than 100 percent of pre-retirement earnings. Retirees have lower clothing and transportation expenses as a result of not working; they pay less in taxes (particularly the payroll tax); they have lower housing costs because they have generally paid off their mortgages; and they have less need to save. They can

SOCIAL SECURITY IS THE MOST IMPORTANT RESOURCE FOR THE TYPICAL FAMILY APPROACHING RETIREMENT.

also consume some of their accumulated assets. Taking these factors into account, along with the ordinary expected health costs in retirement, financial advisors often recommend that households replace between 65 and 85 percent of their pre-retirement income.

To meet these needs, Social Security is the most important resource for the typical family approaching retirement. As shown in Table 3-1,

Social Security wealth—the present value of future Social Security benefits—is by far the most significant asset for the typical household headed by a person aged 55-64. Middle-income households also generally have some equity in their home, but less than \$50,000 in financial assets. They may also have pension

WHAT WILL RETIREMENT INCOME SOURCES LOOK LIKE GOING FORWARD?

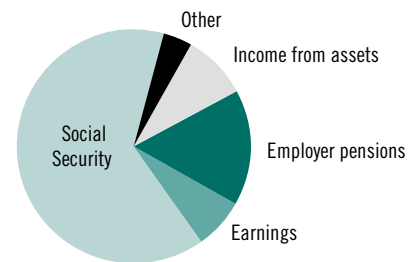
wealth in the form of either a defined contribution—401(k)-type plan—or a traditional defined benefit plan, or both. Middle-income families, both nationwide and in Massachusetts, will draw upon these assets to support themselves in retirement.

We can convert the non-housing assets reported in Table 3-1 into a benefit stream, to get a sense of whether the typical household approaching retirement will have sufficient retirement income. Doing this yields benefits of about \$40,000 per year. Since the “typical household” in this sample has an income of

about \$50,000, this translates into a replacement rate of around 80 percent—a rate within the range recommended by financial planners. This number may be misleading, however. It is important to remember that, of the wealth holdings listed in Table 3-1, only Social Security benefits are indexed to inflation. Thus, the snapshot for the person aged 65 is likely the best-case scenario; the replacement rate is likely to decline throughout the household’s retirement.

Data on income flows (as opposed to wealth measures) confirm that Social Security is the dominant source of retirement income for the household in the middle of the income distribution (Figure 3-1). Pensions are second, followed by individual savings and earnings. The important question for this study is what these retirement income sources will look like going forward with the graying of the population.

FIGURE 3-1. Retirement Income by Source, Households Age 65 and Older, Middle Income Quintile



Source: U.S. Social Security Administration. 2002a. Income of the Population Aged 55 and Older, 2000. Washington, D.C., (February). http://www.ssa.gov/policy/docs/statcomps/inc_pop55/2000/incpop00.pdf

TABLE 3-1. Wealth Holdings of a Typical Household Approaching Retirement, 2001^a

SOURCE	AMOUNT	PERCENT OF TOTAL
Primary house	\$81,900	16.9%
Business assets	9,653	2.0
Financial assets	36,806	7.6
Defined contribution plan	28,516	5.9
Defined benefit plan	86,792	17.9
Social Security	220,791	45.4
Other non-financial assets	21,335	4.4
Total	485,793	100.0

Source: Authors’ calculations using the 2001 Survey of Consumer Finances, U.S. Board of Governors of the Federal Reserve System. 2003. Survey of Consumer Finances: 2001.

a. The “typical household approaching retirement” refers to the mean of the middle 20 percent of the sample of households headed by an individual aged 55 to 64.

The Role of Social Security

The economic status of the elderly has improved dramatically over the past four decades. In 1960, about one in three older individuals were living in poverty; today the poverty rate for the elderly is similar to that of the rest of the population (Figure 3-2). Poverty rates have

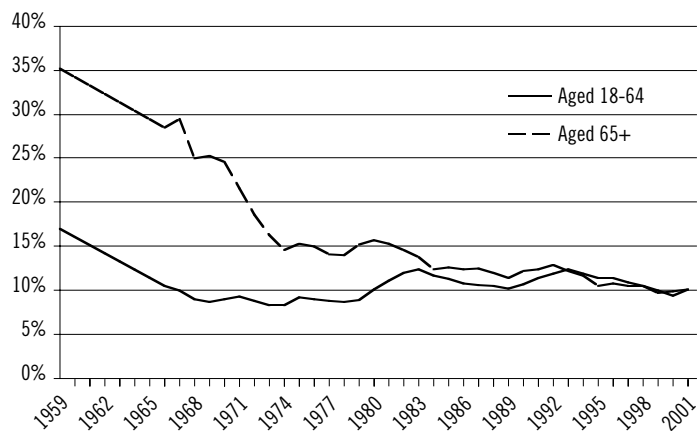
also converged in Massachusetts, with an 8.9 percent rate in 2000 for those age 65 and over compared to 8.4 percent for those age 18 to 64.

The major reason for this improvement is the Social Security program. Social Security provides benefits based on lifetime wages adjusted for productivity growth and indexed after retirement for inflation. In addition, Social Security provides a non-working spouse 50 percent of the worker's benefit. Benefits are financed primarily by a payroll tax on earnings up to a taxable maximum (\$87,000 in 2003). Table 3-2 presents 2003 Social Security benefits—both dollar amounts and as a percent of earnings before retirement—for low, average, and maximum earners at age 62 and age 65.

The average retirement age for men today is 63, and it is about 61 for women. As a result, most workers claim benefits before age 65 (Table 3-3). Thus, when considering Social Security as a source of retirement income, the "Age 62" column in Table 3-2 presents the most relevant numbers. Two important facts emerge from the benefit levels and replacement rates. First, the benefits are quite modest. At age 62, a worker with a history of average earnings who retires in 2003 receives \$11,051 annually from Social Security. (The 2003 poverty threshold for an individual 65 and over is about \$8,800.) Second, Social Security provides far less than full replacement even for low-wage workers.

Despite the modest level of benefits, people rely heavily on Social Security for their retirement income. As shown in Figure 3-3, Social Security benefits account for 100 percent of the retirement income of 20 percent of U.S. households, and for more than half the retirement income of 65 percent of households headed by someone age 65 or older. Massa-

FIGURE 3-2. U.S. Poverty Rates, by Age, 1959-2001



Source: U.S. Bureau of the Census. 2002. "Table 3. Poverty Status of People, by Age, Race, and Hispanic Origin: 1959 to 2001." Historical Poverty Tables. <http://www.census.gov/hhes/poverty/hist-pov/hstpv3.html> Imputed values used for 1960-1965.

TABLE 3-2. Hypothetical Annual Social Security Benefits and Replacement Rates, 2003

WORKER	AGE 62 ^a		AGE 65	
	ANNUAL BENEFIT	REPLACEMENT RATE	ANNUAL BENEFIT	REPLACEMENT RATE
Low earner ^b	\$6,704	44.5%	\$8,380	55.6%
Average earner ^c	11,051	33.0	13,814	41.3
Maximum earner ^d	16,554	23.7	20,692	29.6

Source: U.S. Social Security Administration. 2003a. The 2003 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds. Table VI.F11. Washington, D.C.: U.S. Government Printing Office, (March 17). <http://www.socialsecurity.gov/OACT/TR/TR03/tr03.pdf>

- a. Benefits available at age 62 are 80 percent of those at available at age 65.
- b. Career-average earnings at about 45 percent of the SSA average wage index (AWI).
- c. Career-average earnings at about 100 percent of the AWI.
- d. Career-average earnings at about 160 percent of the AWI.

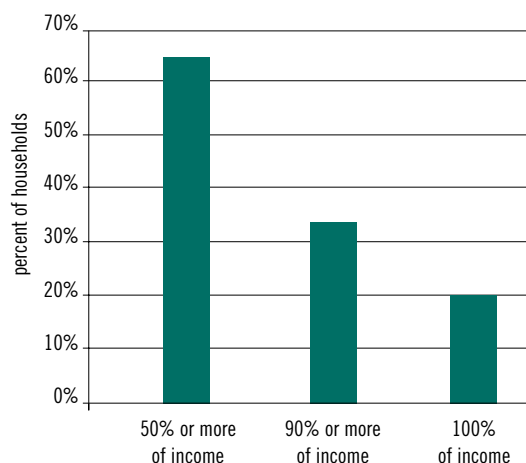
TABLE 3-3. Percent of Men and Women Claiming Social Security Benefits, by Age, 2001

	AGE 62	AGE 63-64	AGE 65	AGE 66+	TOTAL
Men	53.6	21.5	20.7	4.1	100.0
Women	57.6	20.9	14.4	7.2	100.0

Source: U.S. Social Security Administration. 2002b. Social Security Bulletin, Annual Statistical Supplement. Table 6.B5. Washington, D.C.: U.S. Government Printing Office, (December). <http://www.ssa.gov/policy/docs/statcomps/supplement/2002/supp02.pdf>.

Figures adjusted to exclude workers converting from disability benefits to retirement benefits at the normal retirement age as reported in Peter A. Diamond and Peter R. Orszag. 2003. Saving Social Security: A Balanced Approach. Brookings Institution Press.

FIGURE 3-3. Social Security as a Major Source of Income for Households 65 and over, 2002

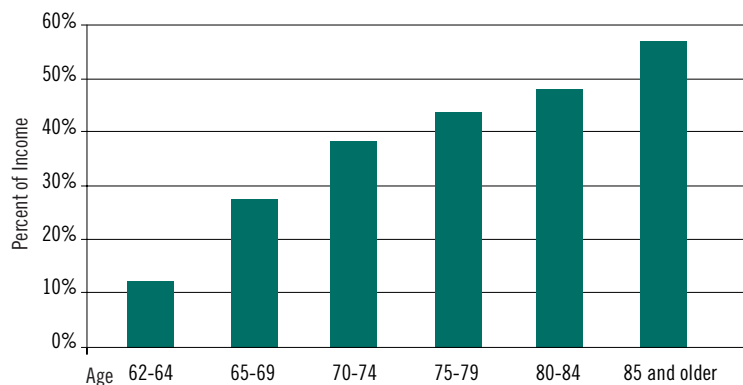


Source: U.S. Social Security Administration. 2003b. Fast Facts and Figures about Social Security. Washington, D.C., (June). http://www.ssa.gov/policy/docs/chartbooks/fast_facts/2003/ff2003.pdf

chusetts workers, who are somewhat better off, would be less dependent on Social Security than the national average.

Moreover, Social Security, with its inflation-adjusted benefits, becomes increasingly important as households age (Figure 3-4). For individuals in their eighties, Social Security accounts for almost 60 percent of total income received. This is true both in Massachusetts

FIGURE 3-4. Social Security Benefits as Percent of Income by Age of Household, 2000



Source: U.S. Social Security Administration. 2002a. Income of the Population Aged 55 and Older, 2000. Washington, D.C., (February). http://www.ssa.gov/policy/docs/statcomps/inc_pop55/2000/incpop00.pdf

and across the nation.

With such a high dependence on Social Security, even given the minimal level of income it provides, it is crucial to understand the outlook for the program. Although Social Security could pay full benefits through 2042, the system faces a serious long-term deficit. Restoring balance will require tax increases, benefit cuts, or some combination of the two. But as discussed below, the financing shortfall is only one factor that will reduce Social Security’s ability to replace pre-retirement income going forward.

The Outlook for Social Security

Policymakers have focused considerable attention on alternative ways of eliminating Social Security’s 75-year financing gap. But lost in the debate is the fact that even under current law Social Security will provide less retirement income relative to previous earnings than it does today. Combine the already legislated reductions with potential cuts to close the financing gap, and Social Security might no longer be the mainstay of the retirement system for many people.²

The Increase in the Normal Retirement Age

First, under current law, the Normal Retirement Age (NRA) is scheduled to increase from 65, for those who reached 62 before 2000, to 67 for people reaching age 62 in or after 2022. The increase in the normal retirement age is equivalent to an across-the-board benefit cut. For those who continue to retire at age 65, this cut takes the form of lower monthly benefits; for those who continue to work to the “normal retirement age,” it takes the form of fewer years of benefits. The replacement rate for the average earner who retires at age 65, for example, will drop from 41.3 percent in 2003 to 36.3 percent in 2030 (Table 3-4).

Medicare Part B Premiums

The second development that will affect future replacement rates is the rising cost of Medicare. Premiums for Medicare Part B, which go to cover doctor visits, and which are automatically deducted from Social Security benefits, are scheduled to increase from 6.8 percent of benefits for someone who retired in 2002 to 10.2 percent for someone retiring in 2030 (Table 3-5). Since premiums tend to rise rapidly after retirement, they will account for an even larger share of Social Security benefits as recipients age, potentially consuming all cost-of-living adjustments provided along the way.

Taxing Social Security Benefits

The third factor that will reduce Social Security benefits is the extent to which they are taxed under the personal income tax. Under current law, individuals with less than \$25,000 and married couples with less than \$32,000 of “combined income” do not have to pay taxes on their Social Security benefits. (Combined income is adjusted gross income as reported on tax forms plus nontaxable interest income plus one half of Social Security benefits.) Above those thresholds, recipients must pay taxes on either 50 or 85 percent of their benefits.³

Today, only about 20 percent of people who get Social Security have to pay taxes on their benefits. So beneficiaries with a history of average earnings—and thus about \$14,000 in Social Security benefits—probably pay no tax. But the thresholds are not indexed for growth in average wages or even for inflation. So a significantly higher percentage of recipients will be subject to tax in the future. By 2030, the nominal Social Security benefit for the worker with a history of average earnings is projected to nearly triple, to about \$38,000. If other nominal income increases similarly, many average

TABLE 3-4. Social Security Replacement Rates at Age 65 under Current Law

YEAR	PERCENT OF EARNINGS		
	LOW EARNER	AVERAGE EARNER	MAXIMUM EARNER
2003	55.6	41.3	29.6
2030	48.9	36.3	24.0

Source: U.S. Social Security Administration. 2003a. The 2003 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds. Table VI.F11. Washington, D.C.: U.S. Government Printing Office, (March 17). <http://www.socialsecurity.gov/OACT/TR/TR03/tr03.pdf>

TABLE 3-5. Medicare Premiums as a Percent of Social Security Benefits at Age 65

YEAR	AT AGE 65	YEAR	SAME PERSON AT AGE 85
2002	6.8	2022	12.4
2030	10.2	2050	15.4

Source: U.S. Social Security Administration. 2003c. The 2003 Annual Report of the Board of Trustees of the Federal Hospital Insurance and Survivors Insurance and the Disability Insurance Trust Funds. Washington, D.C.: U.S. Government Printing Office, (March 17). <http://cms.hhs.gov/publications/trusteesreport/2003/tr.pdf>

earners will pay tax on half of their benefits. (Note that the full Social Security benefit is considered for tax purposes, even though the Medicare Part B premium is deducted before payment.) A 15-percent personal income tax on half of the benefits will reduce replacement rates by another 7.5 percent as compared to today.⁴

Closing the Financing Gap

The final development, unlike those discussed above, is by necessity speculative. Eliminating the entire 75-year deficit by reducing benefits alone would require a 13-percent cut in benefits right now. But that figure makes no allowance for protecting the benefits of those 55 and over and the benefits for the disabled. Holding these groups harmless, which seems politically likely, requires a benefit cut of about 20 percent to restore balance. If Congress closes the funding gap by splitting the difference—so that benefits are cut 10 percent and the rest of the shortfall is eliminated through additional revenue—the

replacement rate for the average earner would be cut by an additional three percentage points.

Combined Impact

Table 3-6 summarizes the combined impact on the replacement rate for the average worker. The increase in the Normal Retirement Age from 65 to 67, the rapidly rising Medicare premiums, the eventual taxation of a portion of Social Security benefits, and the possible benefit reductions associated with restoring balance to the program would reduce the replacement rate, for the average worker retiring at age 65, from an unadjusted 41.0 percent to 26.3

percent by 2030. If the worker retires at 62—as soon as benefits become available—the replacement rate would fall to 20.0 percent. In short, forces already in place are likely to lead to a markedly reduced role for Social Security. This reduced role will have a profound effect on future Massachusetts retirees, as people will need other sources of income or risk facing a reduced standard of living.

The Outlook for Private Sector Employer-Provided Pensions

Most middle- and upper-income individuals have an employer-provided pension to supplement their Social Security benefits. In 2001, employer-sponsored pensions accounted for about 20 percent of the wealth of middle-income households aged 51-61, second only to Social Security (Table 3-1). However, many workers still lack pension coverage.⁵ As shown in Figure 3-5, the percentage of private sector workers aged 25 to 64 who participate in an employer-sponsored pension plan has remained around 50 percent nationwide since the 1970s.⁶

The pattern is nearly identical for Massachusetts, with the Commonwealth having slightly higher levels of pension coverage. For example, 51.6 percent of the Massachusetts private sector workforce aged 25-64 participated in a pension in 2002 compared to 48.7 percent nationwide (Table 3-7). It is possible to report higher or lower percentages for both Massachusetts and the nation as a whole depending on age group and labor force attachment. But regardless of the group definition, pension participation in the private sector has not increased in the last 20 years.

Although the overall participation rate in private pensions remained virtually unchanged between 1979 and 2001, that stability was the result of offsetting changes for men and

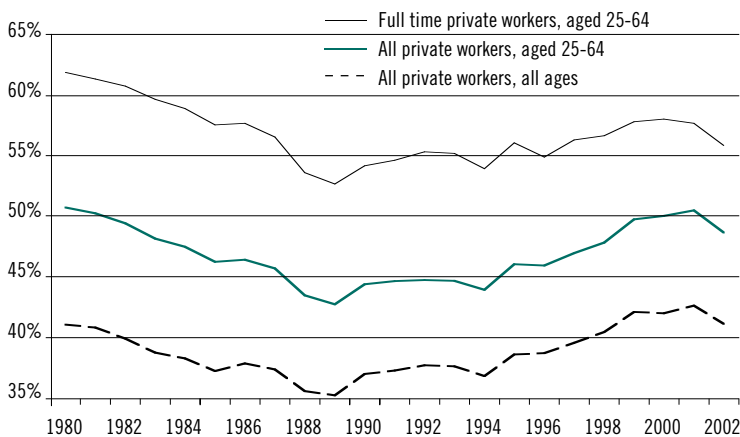
TABLE 3-6. Social Security Replacement Rate in 2030 for Worker with a History of Average Earnings

DEVELOPMENT	PERCENT OF EARNINGS IN 2030	
	AGE 62	AGE 65
Current Provisions	32.8	41.3
REDUCTION FACTOR:		
	IN 2030	
Extension of Normal Retirement Age	28.7	36.3
Medicare Part B Premium	25.0 ^a	32.6
Personal Income Tax	22.8	29.9
10% benefit cut to eliminate financing gap	20.0	26.2

Source: Tables 3.3-3.5 and authors' estimate.

a. For the individual retiring at age 62, the Medicare Part B premium will not begin until age 65.

FIGURE 3-5. Percent of the Private Workforce Participating in a Pension, 1980-2002



Source: Authors' calculations using the March CPS, 1980-2002.

TABLE 3-7. Percent of the Private Workforce Participating in a Pension, 1980 and 2002

	MA		US	
	1980	2002	1980	2002
Aged 25-64, full-time only	63.9	58.5	61.8	55.8
Aged 25-64, all workers	49.0	51.6	50.7	48.7
All ages, all workers	42.7 ^a	44.8	40.7	41.1

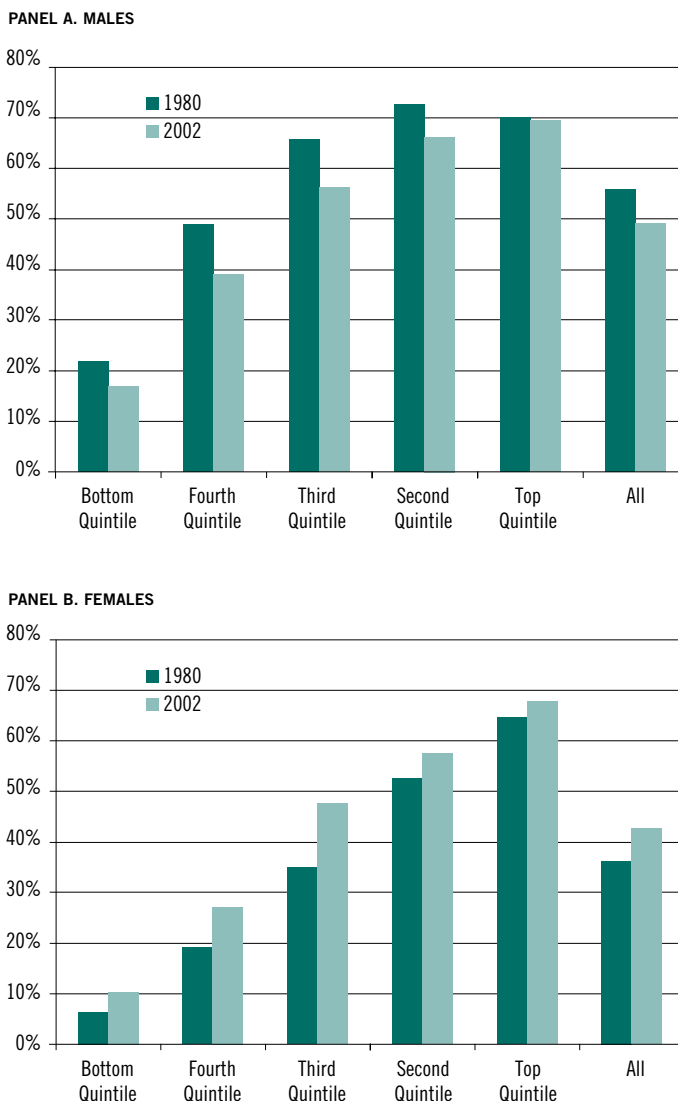
Source: Authors' calculations using the March CPS, 1980 and 2002.
 a. The Massachusetts coverage figure comes from the 1981 survey, rather than the 1980 survey. The Massachusetts data show large variations from year to year due to the small sample size. The 1980 coverage number was 37.9 percent, which was not consistent with either earlier or later years, and was therefore replaced.

women. Figure 3.6 Panel A shows that pension coverage declined for all male workers except those in the highest-earning quintile (i.e., the top 20 percent of the population). In contrast, participation for women increased at all earnings levels (Figure 3-6 Panel B). The drop in male participation rates was caused by declines in union membership and employment at large firms, and by the rapid growth in 401(k) plans that made employee participation in pensions voluntary.⁷ Among women, the growth in pension participation was largely the result of improved earnings and an increase in full-time work and—to a lesser extent—increased union membership and employment at large firms.⁸ The remaining differential can largely be explained by labor force attachment, since pension participation rates for men and women who work full-time, full-year are virtually identical.⁹

Figure 3-6 shows that participation is closely correlated with earnings. In the top quintile, about 70 percent of workers—both male and female—participate in pensions; in the bottom quintile, that figure drops to about 20 percent for men and 10 percent for women.¹⁰

A second major change has occurred in the nature of pension coverage. Twenty years ago, most people with pension coverage had a tra-

FIGURE 3-6. Pension Participation for Male and Female Workers, Ages 25-64, by Earnings Quintile, 1980 and 2002



Source: Authors' calculations using the CPS, 1980 and 2002

ditional defined benefit plan that pays a lifetime annuity at retirement. The annuity might be a dollar amount per month for each year of service, say \$50; so workers with 20 years of service would receive \$1,000 per month at age 65. The benefit could also be a percentage of final salary for each year of service, say 1.5 percent; so workers with 20 years would receive 30 percent (20 years at 1.5 percent) of final salary for as long as they live. The employer finances these benefits by making pre-tax contributions

into a pension fund; holds the assets in trust; directs the investments; and bears the risk. The Pension Benefit Guaranty Corporation (PBGC) insures benefits up to specified limits.¹¹

Today the world looks very different. Most people with pensions have a defined contribution plan—most often a 401(k). In contrast to defined benefit plans, defined contribution plans are like savings accounts. Generally the employee, and often the employer, contributes a specified percentage of earnings into the account. These contributions are invested, usually at the direction of the employee, mostly in mutual funds consisting of stocks and bonds. Upon retirement, the worker generally receives the balance in the account as a lump sum, albeit with the option to roll it over to an IRA.

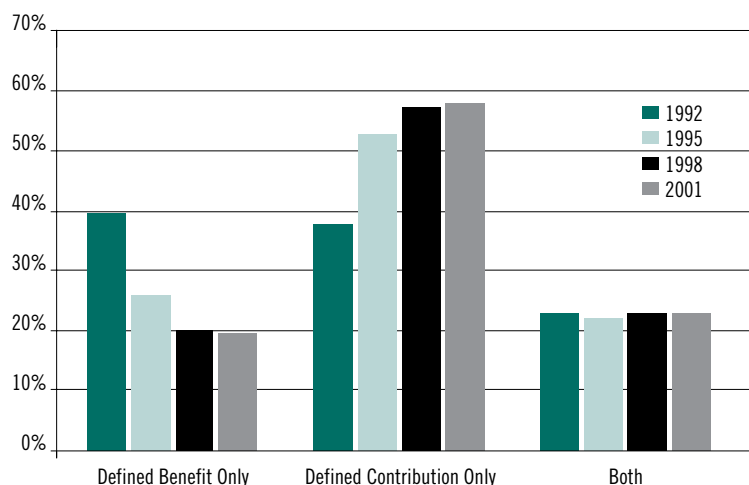
The defining characteristics of 401(k) plans are that participation is voluntary and that the employee as well as the employer can make pre-tax contributions. These characteristics shift a substantial portion of the burden for providing for retirement to the employee; the employee decides whether or not to participate, how much to contribute, how to invest the assets, and how

to use the assets at retirement. In addition, workers have some access to 401(k) plan funds before retirement, adding another element of individual responsibility.

Figure 3-7 shows the growing prevalence of defined contribution plans and the declining importance of defined benefit plans over the period 1992-2001. While the percent of households with both a defined contribution (DC) and a defined benefit (DB) plan remained unchanged, a vast shift occurred from DB to DC over the nine year period. From 1992, the percent of households with a DB plan dropped from just under 40 percent to less than 20 percent. Defined contribution plans, meanwhile, gained some 20 percentage points during the same stretch. As mentioned, 401(k) plans represent the lion's share of defined contribution plans.¹²

Although 401(k) plans give individuals control of their investments and are much better than defined benefit plans for the mobile employee, they come up short in a number of ways. *In theory* workers could accumulate substantial pension wealth under 401(k) plans. But *in practice* they do not. Balances in 401(k) plans—even for long-service employees—are surprisingly low. For example, the average household approaching retirement has accumulated only \$55,000—not much to support a couple for two decades.¹³ The reason for these relatively low balances appears to be that the entire burden is on employees, and many make mistakes at every step along the way. A quarter of those eligible to participate in a plan fail to do so. Less than 10 percent of those that do participate contribute the maximum. Over half fail to diversify their investments, many over-invest in company stock, and almost none re-balance their portfolios in response to age or market returns. Most importantly, many cash out when they change jobs. And very few

FIGURE 3-7. Of Households with Pension Coverage, Type of Coverage, 1992-2001.



Source: Authors' calculations from the Survey of Consumer Finances.

annuitize at retirement. Changes are clearly needed if 401(k) plans are to be a reliable retirement income vehicle. Part of the solution may lie in increased financial education for employees. Some studies suggest that greater “financial literacy” can change people’s retirement objectives and expectations, as well as possibly their investment decisions.¹⁴ But financial education alone will not solve the problem. One proposal involves setting up a system of “defaults,” which would, for example, enroll employees in the plan, have them contribute the maximum, and rollover their accounts automatically. Such default settings would require the employee to opt out of these recommended decisions, instead of opting in.¹⁵

In addition to the shift in pension coverage from defined benefit to 401(k) plans, many employers are converting their traditional defined benefit plans to “hybrid” plans. The key characteristic of these hybrids is that they define the benefit in terms of a lump sum rather than an annuity payment. “Cash balance” plans are the most popular hybrid. As in traditional defined benefit plans, the employer makes the contributions, owns the assets, selects the investments, and bears the risk. The PBGC also insures the benefits. To the employee, however, cash balance plans look very much like defined contribution plans. The employer typically contributes 4 or 5 percent of the worker’s pay to a “notional” account and provides an interest credit (generally at some specific rate such as that on Treasury securities) on the balances. Employees receive regular statements and generally withdraw the balance as a lump sum when they retire or terminate employment.¹⁶ Cash balance plans relieve employees of the participation, contribution, and investment decisions they face in 401(k) plans. All else equal,

they also provide more generous benefits to mobile employees than traditional defined benefit plans.

The downside of cash balance plans is two-fold. First, they generally pay lump-sum benefits both at termination and at retirement. Thus, many workers in these plans are cashing out accumulations. At retirement, all workers face the daunting task of allocating fixed sums over their expected remaining lifetimes. Second, both contributions and investment earnings

BALANCES IN 401(K) PLANS ARE SURPRISINGLY LOW.

in cash balance plans, as currently constituted, are low. A plan with such low contribution levels cannot on its own provide an adequate level of retirement benefits.

In short, workers with employer-sponsored pension coverage face an array of challenges. First, the majority now rely on 401(k) and similar type plans, and 401(k)s are coming up short. The problems go beyond the investment losses from the collapse of the stock market. These plans shift all of the responsibility for participation, contributions, investment, and withdrawal to the individual. These are difficult financial decisions, and people do not always have the resources to make wise choices. Increased financial literacy may help in this regard but it is unlikely to be a cure. Second, within the defined benefit world, many employers have transformed their traditional plan to a hybrid that generally provides lump-sum benefits rather than a stream of payments. Still, people with 401(k) plans and hybrids are the lucky ones. At any point in time, about half the workforce aged 25-64 has no pension coverage at all.

The System for Massachusetts Public Employees

The retirement income system for Massachusetts public employees is somewhat unique. Unlike most other states, public employees in Massachusetts are not covered by Social Security. State and local workers were excluded from the Social Security Act in 1935 due to constitutional concerns over the federal government's authority to tax the states. However, as Social Security expanded over the next thirty years to encompass nearly all private workers, coverage was extended to public employees on a voluntary basis. Many states worked with the Social Security Administration to implement coverage for some or all of their public employees. Massachusetts was one of the few states in the Union that chose to

PUBLIC EMPLOYEES IN MASSACHUSETTS ARE NOT COVERED BY SOCIAL SECURITY.

stay out of Social Security and instead provided state and local employees with a defined benefit pension plan.¹⁷

For several years, the Massachusetts state government, along with the Public Employee Retirement Administration Commission (PERAC), has administered the pension plan for nearly 290,000 state and local public employees. The two largest plans in Massachusetts are the State Employee's Contributory Retirement System and the Teacher's Retirement System with 82,152 and 89,427 active members respectively. Local county and town plans account for the remaining 110,000 public workers.¹⁸

Benefits provided under the Massachusetts system are considerably more generous than

those offered under the typical employer-sponsored plan. But it is important to remember that these benefits constitute both Social Security as well as private pensions for these workers. Benefits under the state plans are calculated using a 2.5 percent benefit rate for those who retire at or after age 65. Workers who choose to retire early have .1 percent deducted from the base benefit rate for each year before 65 that they retire. For example, if a man works 30 years and retires at age 62, he earns a benefit of 66 percent (30×2.2 percent) of the average of his highest three consecutive years' salary. Pension benefits are exempt from state taxation, and a cost-of-living adjustment based on the Consumer Price Index is administered ad hoc and capped at 3 percent on the first \$12,000. In addition, the state provides health and life insurance for nearly all public employees.¹⁹

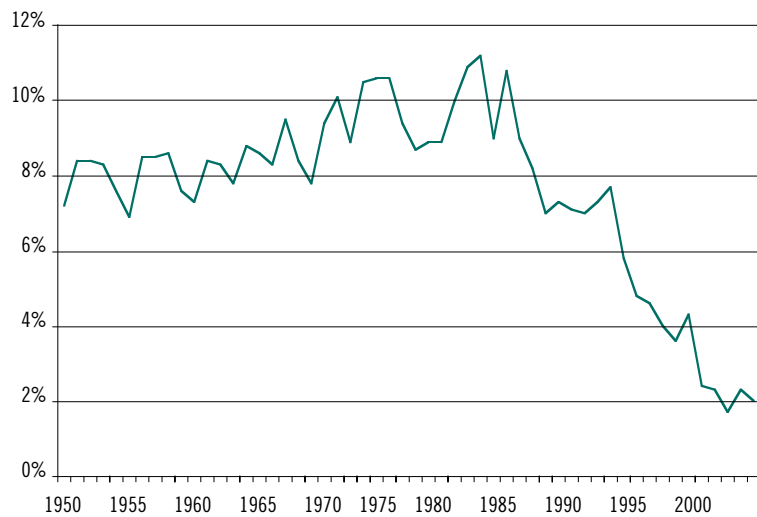
While Massachusetts pensions are high relative to private sector pensions and Social Security combined, the state plan does not have a number of attractive features offered by Social Security. The most important is inflation protection. While the state system makes some ad hoc adjustments on the first \$12,000, Social Security adjusts the entire benefit annually for increases in the cost of living. Second, Social Security offers a spousal benefit, equal to 50 percent of the employee's benefit, for spouses without sufficient earnings to claim a higher benefit on their own. Social Security also provides a 100 percent survivor's benefit, and even provides partial benefits to young widows and widowers. Massachusetts provides only limited survivor benefits if the worker dies before retirement and no benefits after retirement unless the worker chooses a joint-and-survivor annuity option.²⁰ Finally, Social Security offers better disability insurance than the state system.

Much like other employer-sponsored plans, the future of Massachusetts' public employee pension system is uncertain. The onset of the bear market in 2000 and the recession that began in 2001 have created serious funding problems. Massachusetts' unfunded pension liabilities—the current value of future retirement payments less pension-fund assets—jumped from \$4.8 billion in 2000 to more than \$12 billion in early 2003, due to heavy losses in the stock market and the decline in interest rates (which makes future payments more expensive). This wide gap caused alarm in the Massachusetts State Legislature. In response, Governor Romney laid out a plan to completely overhaul the state's pension plan in early 2003.

The Governor's proposal would make two key changes to the system. First, the current defined benefit plan would be changed to a defined contribution plan. Although very common in the private sector, only four states have implemented this 401(k)-style plan for their public employees.²¹ The new pension plan, which would allow employees to invest their own benefits through individual investment accounts, would only apply to newly-hired state workers. Second, all state public employees would be brought under Social Security. This would provide state and local public workers with greater benefits, but would be costly to the Commonwealth. One study estimated the five-year cost of converting to Social Security for Massachusetts at over \$2 billion.²²

The purpose here is not to assess the merits of alternative plans, but simply to point out that the system for public employees faces the same pressures as Social Security and other employer-sponsored plans. It appears that the existing retirement income system simply will not provide enough money for people to enjoy a comfortable retirement.

FIGURE 3-8. Personal Saving in the United States as a Percentage of Disposable Personal Income, 1950-2003



Source: Bureau of Economic Analysis. 2003. National Income and Product Accounts (NIPA) data. U.S. Department of Commerce. <http://www.bea.gov/bea/dn/nipaweb/SelectTable.asp?Selected=Y>

The Outlook for Individual Saving

Politicians and economists alike have been alarmed over the past two decades at the incredibly low personal saving rate of the U.S. population. The personal saving rate, as a percentage of disposable personal income, fell from 10 percent in 1980 to just over 2 percent in 2001, with a slight interruption during the previous recession in 1991 (Figure 3-8). In fact, the personal saving rate of 2001 was at its lowest point since the Great Depression. Moreover, since the saving rate includes contributions to pension plans, Americans may have even less saving outside of the amounts earmarked for retirement.

The precipitous drop in the U.S. saving rate during the 1990's can be attributed in part to the "wealth effect" and the way savings are measured. The stock market boom and hot economy convinced many Americans that their retirement would be secure as they saw their investments, such as 401(k)s and IRAs, grow in value. Capital gains, however, are not

included in the measurement of national income since they do not reflect increases in output. The increase in wealth nevertheless spurred a mass increase in consumption—spending on goods and services that otherwise would not have occurred.²³ As consumption rose, savings fell. This pattern was mirrored in contributions to traditional defined benefit plans: As stock prices rose, defined benefit contributions declined, which also reduced personal and national saving.²⁴

Because of the “wealth effect” and pension accounting conventions, one would expect the personal saving rate to rise significantly after the market crash. Yet it actually fell during the market rout of 2001, and rose just slightly to 3.9 percent in 2002. These numbers are a far cry from the average 8 to 10 percent savings rate the United States has experienced since the Second World War.

This development does not bode well for the baby boomers about to retire. These soon-to-be retirees need some other form of income

to compensate for the decline in Social Security and increased uncertainty of pension income.

The EBRI Retirement Income Assessment for Massachusetts

The prospect of inadequate retirement income for Massachusetts residents is supported by a recent study by the Employee Benefit Research Institute’s Education and Research Fund (EBRI-ERF). In 2002, EBRI-ERF estimated the adequacy of future retirement income for Massachusetts residents using EBRI’s Retirement Income Projection Model. The study projected the income of future Massachusetts retirees from Social Security, defined-benefit pension plans, and assets in 401(k)-type plans and Individual Retirement Accounts (IRAs). This income was then compared to projected expenses for food, housing, and health care during the first year of retirement at Social Security’s normal retirement age.

Two comments are needed before reporting the results. First, EBRI assumes that people will retire at the Normal Retirement Age, which is gradually rising from 65 to 67. As the average retirement age for men is currently 63, and it is unlikely to jump to 67 over the next 30 years, this assumption tends to overstate future benefits. Second, the EBRI study offers two options for closing Social Security’s long-term deficit: One option closes the gap by cutting benefits, while the second raises taxes and increases the Normal Retirement Age beyond age 67. The following discussion reports results based on the first option, that benefits will be cut. While this assumption probably understates future benefits, it offsets the effect of EBRI’s assumption that individuals retire at Social Security’s Normal Retirement Age.

With these caveats in mind, Table 3-8 reports the percent of households that will have enough

THE PERSONAL SAVING RATE OF 2001 WAS AT ITS LOWEST POINT SINCE THE GREAT DEPRESSION.

to ensure a good retirement—an assurance that Social Security and employer-sponsored pensions no longer provide. The future of personal savings remains uncertain, as Americans seem intent on continuing their high level of current consumption. Lawmakers have enacted an array of tax incentives designed to spur saving, but these efforts have produced only limited results.²⁵ Indeed, outside of employer-sponsored pensions, people seem to have almost no additional saving whatsoever. In short, personal saving seems unlikely to com-

income to cover normal food, housing, and health care expenses at retirement. The results are shown for three different birth cohorts. Regardless of the year of birth, nearly all couples appear to have adequate income. But this is true for only three quarters of single men and for only 40 percent (or less) of single women.

This baseline case also assumes that individuals are in good health. Their health-care expenditures thus include only Medicare part B premiums, Medicare supplement or Medigap insurance premiums, and an average amount of prescription and over-the-counter drugs and other medical supplies. If the retiree becomes ill, however, medical expenses can increase dramatically. Using data on the non-reimbursed cost of illnesses requiring home health care or nursing home care, the EBRI researchers then estimated the percent with sufficient funds to cover two rather common health scenarios: the need for 1) some home health care assistance; and 2) over 120 days of home health care assistance. Including these expenses sharply reduced the share of Massachusetts households with adequate retirement incomes. Table 3-9 presents the results for the cohort born between 1951 and 1955; the results for the other cohorts are similar.

Finally, the EBRI researchers estimated the present value of the income shortfall, over the entire retirement period, for these three different types of households. Using current health-status data, they conducted simulations in which individual retirees in each succeeding year could 1) incur no excess health-care costs; 2) require home-based health care services; 3) enter a nursing home; or 4) die. They subtracted Massachusetts Medicaid reimbursements, where appropriate, to determine the net cost to the household. (These estimates assume that the Medicaid program and its

TABLE 3-8. Percent of Households with Sufficient Resources at Retirement

YEAR OF BIRTH	1941-45	1951-55	1961-65
Single men	75	76	76
Single women	28	38	40
Couples	99	99	96

Source: Jack L. VanDerhei and Craig Copeland. "2002 Massachusetts Future Retirement Income Assessment Project: Third Draft." Mimeo. EBRI Education and Research Fund.

TABLE 3-9. Percent of Households (1951-55 Birth Cohort) with Sufficient Resources at Retirement by Health Experience

	HEALTH EXPERIENCE		
	BASELINE	SOME HOME HEALTH CARE	121+ DAYS HOME HEALTH CARE
Single men	76	64	49
Single women	38	28	24
Couples	99	89	68

Source: Jack L. VanDerhei and Craig Copeland. "2002 Massachusetts Future Retirement Income Assessment Project: Third Draft." Mimeo. EBRI Education and Research Fund.

income thresholds are adjusted for inflation.) If the household's total medical and non-medical expenses exceed its pension income, that household is assumed to draw down its retirement account balances until they are exhausted. Any remaining deficits are then accumulated over the retirement span and put in present value terms for each birth cohort and gender/family combination.

The results are presented in Table 3-10. They show that, on average, all three Massachusetts household types are projected to have insufficient income to meet their retirement needs, and that single women are projected to have substantially larger deficits than either their single male or married counterparts. In the 1951-55 cohort, for example, single Massachusetts women are projected to have, at age 65, an income deficit with an average present value of about \$42,500. This compares to \$32,500 for single men and \$31,000 for a couple. The discrepancy is even greater in per-

TABLE 3-10. Present Value of Accumulated Retirement Income Deficits in 2002 Dollars

	YEAR OF BIRTH		
	1941-45	1951-55	1961-65
Single men	\$29,900	\$32,000	\$35,500
Single women	41,500	42,500	49,000
Couples	32,500	31,000	24,500

Source: Jack L. VanDerhei and Craig Copeland. "2002 Massachusetts Future Retirement Income Assessment Project: Third Draft." Mimeo. EBRI Education and Research Fund.

centage terms, since retirement income of single women is only about 55 percent of that for couples and 75 percent of that for single men.

The EBRI report also developed estimates on how the disposition of the household's home affects the size of the deficit. Annuitizing the value of the house at age 65 reduced the deficit, though not nearly as much as selling the house the first time expenses exceeded income. In neither case, however, did disposing of the house have an enormous impact, because those who faced shortfalls had relatively little housing equity.

In short, the EBRI study supports the notion that the existing retirement system will not provide an adequate retirement income for the baby boom generation.

Conclusion

This chapter has explored whether the baby boomers will have adequate incomes to support themselves in retirement. The numbers tell a worrisome story. Data on wealth (Table 3-1) show that the median household—those in the middle of the income distribution—have roughly adequate resources to maintain their standard of living, at least initially. This is consistent with other studies that show that those in the middle will have sufficient replacement rates to begin retirement.²⁶ But going forward, the picture will not be so good.

This is in part due to the fact that each leg of the three-legged stool is wobbly.

Social Security, the backbone of the retirement system, will not provide as much replacement of pre-retirement income in the future as it does today even under current law. Moreover, to restore solvency to the program, additional cuts are likely. Employer-sponsored pensions also involve considerably more uncertainty given the shift from defined benefit to defined contribution plans. Under these plans, employees now bear most of the responsibility for providing their pension income. These responsibilities involve difficult financial decisions, and the evidence suggests that many people make mistakes at each step along the way. The low level of holdings in 401(k)-type plans confirms that they are not the successful retirement savings vehicle they were once thought to be. With institutional savings arrangements on the decline, one might have thought that people would be saving more on their own. But the personal saving rate, while rebounding slightly since the roaring stock market of the 1990s, still hovers around 2 percent. Thus, personal saving seems unlikely to come to the rescue.

When these developments are combined with the expected rise in health care costs and the eroding effects of inflation, many middle-income people will no longer enjoy a secure retirement in the future. Lower-paid workers who have no pension other than Social Security will be considerably worse off. The outlook for retirement is not good nationwide and the story for Massachusetts is very much the same. The state's lower homeownership rates, however, may mean yet another retirement income shortfall for many people. In short, if people continue to retire in their early 60s, they will not have enough money to com-

fortably support themselves in retirement.

While having sufficient retirement income is of general concern, unmarried women are particularly vulnerable. They tend to have less income than other households from all sources

listed above. And women tend to live longer than men, meaning that many must stretch a smaller amount of income over a longer period of time. Chapter 4 will provide an in-depth look at this group.

ENDNOTES

1. In addition, the Supplemental Security Income program provides benefits to those with very low income and virtually no assets (less than \$2,000 for an individual, \$3,000 for a couple).
2. This section is adapted from Munnell, Alicia H. 2003. "The Declining Role of Social Security" *Just the Facts* No. 6 (February). Chestnut Hill, MA: Center for Retirement Research at Boston College.
3. Prior to 1983, no amount of Social Security benefits were subject to taxation. Legislation in 1983 allowed up to 50 percent of benefits to be taxed (using the \$25,000 and \$32,000 thresholds mentioned above), with the revenue going into the Social Security Trust Funds. In 1993, legislation extended this taxation, increasing the taxable base limit to 85 percent of Social Security benefits for single taxpayers with incomes over \$34,000 and \$44,000 for taxpayers filing jointly. The additional revenue that this legislation generated is deposited in Medicare's Hospital Insurance Trust Fund. See www.ssa.gov/retire/2/tax.htm for further discussion.
4. Replacement rates are typically expressed on a pre-tax basis, i.e. pre-tax benefits as a percent of pre-tax earnings. Subtracting taxes from benefits in the current exercise means that the resulting ratio will consist of post-tax benefits relative to pre-tax earnings. While it would be technically possible to produce this ratio on a consistent post-tax basis, this discussion relies on the commonly-reported pre-tax replacement rate as the benchmark. Also, using a full post-tax measure would not affect the main point—that taxation of Social Security benefits will significantly reduce replacement rates in the future.
5. This section was adapted from Munnell, Alicia H., Annika Sundén, and Elizabeth Lidstone. 2002. "How Important Are Private Pensions?" *Issue in Brief* No. 8 (February). Chestnut Hill, MA: Center for Retirement Research at Boston College.
6. The pension coverage data discussed above apply only to individual workers at any given point in time. Over a lifetime and on a household—rather than an individual—basis, coverage rates are somewhat higher. For households aged 55-64, the 2001 Survey of Consumer Finances shows that approximately 65 percent of households had some sort of pension coverage in 2001. Again, pension coverage is much more extensive for high-income households.
7. The growth of 401(k) plans caused participation rates to drop most for young and less educated workers, as shown in Even, William E. and David A. Macpherson. 1994. "Why Did Male Pension Coverage Decline in the 1980s?" *Industrial and Labor Relations Review* 47 (3).
8. Even, William E. and David A. Macpherson. 2000. "The Changing Distribution of Pension Coverage." *Industrial Relations* 39, no. 2 (April): 199-227.
9. Copeland, Craig. 2001. "Retirement Plan Participation: Full-Time, Full-Year Workers Ages 18-64." *EBRI Notes* 22, no. 1 (January).
10. Earnings also appear to be more important than race in explaining pension participation. When examining participation by earnings groups, the picture for whites and blacks looks very similar.
11. The PBGC monthly guarantee limit in 2004 is \$3,699 at age 65, and declines to \$1,664 at age 55. Employers pay for this insurance with premiums largely determined by the plan's funding status.
12. Data from the U.S. Department of Labor's Form 5500 reports show that between 70 and 80 percent of DC participants are in 401(k) plans, and that over 80 percent of contributions to DC plans go to 401(k)s. For more information, see U.S. Department of Labor. 2001. *Private Pension Plan Bulletin: Abstract of 1998 Form 5500 Annual Reports* 11 (Winter 2001-2002). Washington, D.C.: Employee Benefits Security Administration. [Available at: <http://www.dol.gov/ebsa/PDF/1998pensionplanbulletin.PDF>].
13. Aizcorbe, Ana, Arthur Kennickell, and Kevin Moore. 2003. "Recent Changes in U.S. Family Finances: Evidence from the 1998 and 2001 Survey of Consumer Finances." *Federal Reserve Bulletin*, vol. 89 (January): 1-32.
14. Clark, Robert L., Madeleine B. d'Ambrosio, Ann A. McDermed, and Kshama Sawant. 2003. "Sex Differences, Financial Education, and Retirement Goals." Pension Research Council Working Paper 2003-15. Pension Research Council. The Wharton School, University of Pennsylvania.

15. For further discussion, see Munnell, Alicia H. and Annika Sunden. 2004. *Coming Up Short: The Challenge of 401(k) Plans*. Washington, D.C. Brookings Institution Press.
16. Since hybrid plans are defined benefit plans, by law they must offer an annuity option. But it appears that the majority of workers opt for the lump-sum benefit.
17. Only Nevada and Ohio join Massachusetts in staying completely out of Social Security for its public employees. Varying degrees of partial coverage exist in other states (in Louisiana, 2% of public employees are covered by Social Security; in New York, all are covered). This is so because, unless prevented by state mandate, local municipalities can individually negotiate with the Social Security Administration for coverage of public employees. For an in-depth discussion, see Munnell, Alicia. 2000. "The Impact of Mandatory Social Security Coverage of State and Local Workers: A Multi-State Review." Washington, D.C.: AARP Public Policy Institute.
18. Public Employee Retirement Administration Commission (PERAC). 2003. *PERAC Annual Report 2002*. [Available at: <http://www.state.ma.us/perac/02annuareport/AR02.pdf>].
19. Public Employee Retirement Administration Commission (PERAC). 2001. *Retirement for Public Employees in the Commonwealth* (October).
20. Munnell (2000).
21. Blanton, Kimberly. 2003. "Pension Overhaul Battle Looms." *Boston Globe* (April 9).
22. Segal Company. 1999. "The Cost of Impact of Mandating Social Security for State and Local Workers." For the AFSCME, AFL-CIO, and Coalition to Preserve Retirement Security (May).
23. Perozek, Maria and Marshall Reinsdorf. 2002. "Alternative Measures of Personal Saving." *Survey of Current Business* (April). Washington, D.C.: Bureau of Economic Analysis.
24. The net affect of these accounting conventions was that pension plans contributed nothing to the national saving measure between about 1996 and 2000—a period when plan assets were growing rapidly in response to the stock market boom. For details, see Lusardi, Annamaria, Jonathan Skinner and Steven Venti. 2003. "Pension Accounting & Personal Saving." *Just the Facts on Retirement Issues* No. 8 (April). Chestnut Hill, MA: Center for Retirement Research at Boston College.
25. Perozek and Reinsdorf (2002); Saxton, Jim. 1999. "Negative Personal Savings Rate Shows Need For Saving Incentives." Press Release from the Congress of the United States Joint Economic Committee (May 3).
26. Munnell and Sunden (2004).

CHAPTER 4 | Older Non-Married Women Are Most At Risk

As discussed in Chapter 3, the economic status of older Americans has improved dramatically since 1960 both nationwide and in Massachusetts. Today, the poverty rate for those 65 and over is about the same as for those aged 18-64. But substantial pockets of poverty remain, especially among older non-married women. This chapter will focus on why older women are particularly vulnerable and discuss the outlook for the future in the U.S. and Massachusetts.

Poverty among Older Households

According to the 2000 Census, 10.6 percent of older households in Massachusetts fell below the poverty line, about the same as the national average. It should be noted, however, that the poverty line is the same nationwide. This means that in a higher-cost state like Massachusetts, the "real" poverty line is likely to be higher. It would thus be safe to assume that, in Massachusetts, even a larger share of the population than reported in this study experiences the hardships associated with being poor.

Old-age poverty in the Commonwealth, as in the nation, is concentrated among single women. Census data for 1999 show that non-married women "households" accounted for 71 percent of all older Massachusetts "households" in poverty (Table 4-1). The remainder consisted of roughly equal proportions of couples and single men.

Before looking more closely at the women's story, it is useful to briefly consider what other factors contribute to households falling into poverty. Not surprisingly, a greater percentage of the poor are non-white, have no college education, are foreign born, or have some physical limitation (Table 4-2). While the table shows each characteristic individually, people with two

TABLE 4-1. Percentage Distribution of Households 65 and Over with Income in 1999 Below Poverty Level, Massachusetts and U.S.

HOUSEHOLD TYPE	MASSACHUSETTS	UNITED STATES
Couples	12.6%	15.6%
Non-married men	16.6	16.7
Non-married women	70.9	67.7

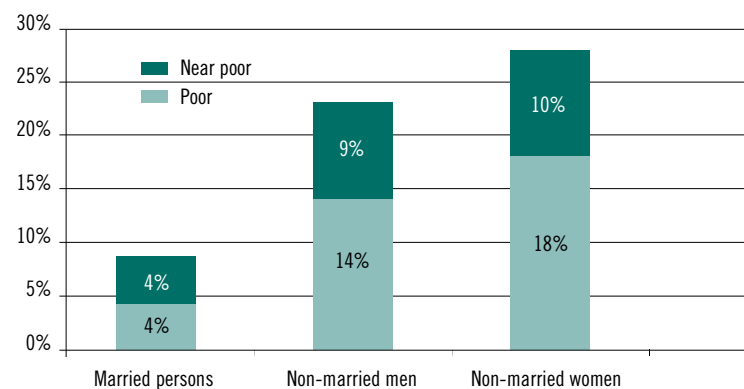
Source: Authors' calculations using the Census 2000 Summary File 3, P92 (U.S. Bureau of the Census (2000)). The poverty threshold in 1999 for households over age 65 was \$7,990 for an individual and \$10,075 for a couple (U.S. Bureau of the Census (2002b)).

TABLE 4-2. Percent of Poor and Non-Poor Massachusetts Households 65 and Over with Characteristic, 1999

GROUP	CHARACTERISTIC			
	ARE NON-WHITE	HAVE NO COLLEGE EDUCATION	ARE FOREIGN BORN	HAVE A PHYSICAL LIMITATION
COUPLES				
% of poor couples who...	23.6%	76.4%	21.8%	25.8%
% of non-poor couples who...	4.0	56.0	12.1	20.1
NON-MARRIED MEN				
% of poor men who...	13.0	79.7	14.4	30.5
% of non-poor men who...	4.3	61.0	8.0	26.3
NON-MARRIED WOMEN				
% of poor women who...	8.9	79.7	19.8	35.1
% of non-poor women who...	3.9	68.4	10.1	29.0

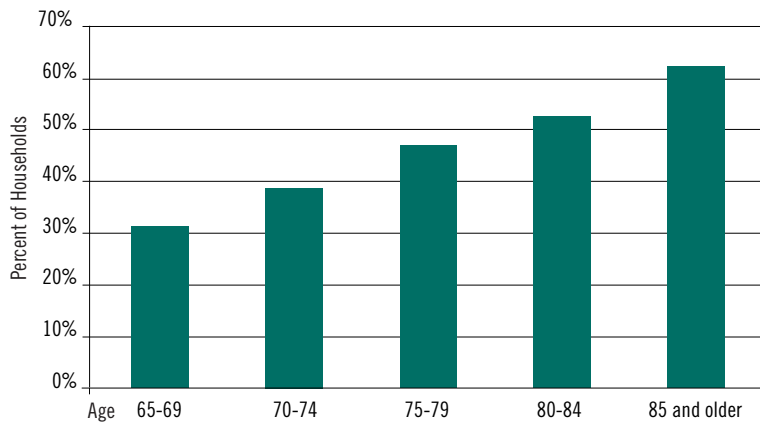
Source: Authors' calculations using the Census 2000 Summary File 3, P92.

FIGURE 4-1. Percent Poor and Near Poor by Marital Status of Population: Aged 65 and Over, 2001



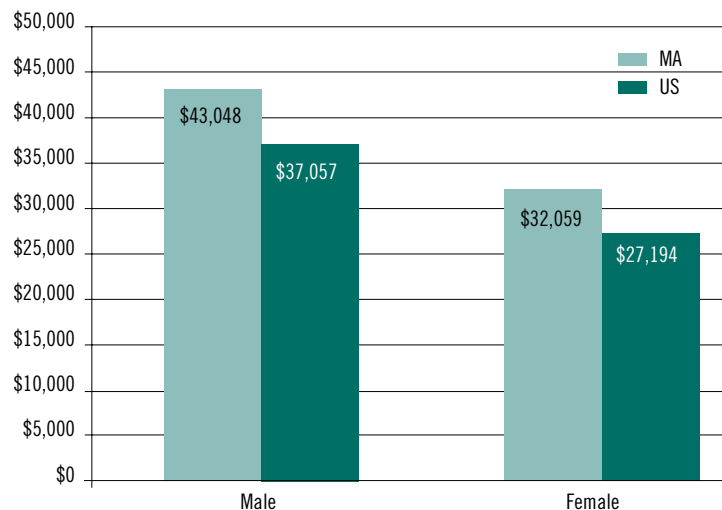
Source: U.S. Social Security Administration. 2003a. Income of the Aged Chartbook, 2001. (April). http://www.ssa.gov/policy/docs/chartbooks/inc_aged/2001/iac01.pdf

FIGURE 4-2. Non-Married Women as a Percent of Total Households, Aged 65 and Over



Source: U.S. Social Security Administration. 2002a. *Income of the Aged Chartbook, 2000*. (April). http://www.ssa.gov/policy/docs/chartbooks/inc_aged/2000/iac00.pdf

FIGURE 4-3. Median Earnings of Full-Time Workers, U.S. and Massachusetts, 1999



Source: U.S. Bureau of the Census. 2003a. *Massachusetts: 2000—Summary Social, Economic, and Housing Characteristics. PHC-2-23* (March). Washington, D.C.: U.S. Government Printing Office. [Available at: <http://www.census.gov/prod/cen2000/phc-2-23.pdf>]; U.S. Bureau of the Census. 2003b. *United States: 2000—Summary Social, Economic, and Housing Characteristics. PHC-2-1* (July). Washington, D.C.: U.S. Government Printing Office. [Available at: <http://www.census.gov/prod/cen2000/phc-2-1-pt1.pdf>].

or more of these characteristics are even more likely to be poor. Of these characteristics, the lack of a college education is the single most important difference between the poor and

non-poor for all types of households. On this score, there is some cause for optimism in the future as education levels among baby boomers are significantly higher than earlier generations.

Non-Married Women Are the Most Vulnerable Group

Of all the factors associated with poverty in old age, the most critical is to be a woman without a husband. As shown in Figure 4-1, in 2000 18 percent of non-married women fell below the poverty line. Another 10 percent of older single women were classified as “near poor,” which means that they had an income of less than 125 percent of the poverty threshold. Thus, 28 percent of single older women (about 10,312 statewide) are either poor or near poor—clearly a vulnerable group as Massachusetts grays.

Not only do older single women have high levels of poverty, but they are a significant portion of the elderly population. And the share of non-married women in the elderly population increases with age. As shown in Figure 4-2, non-married women in 2000 accounted for about 30 percent of all households aged 65-69 and more than 60 percent of households aged 85 and over.

Why do so many women end up poor? The answer is twofold. First, the retirement income systems in the nation and in Massachusetts are based on earnings, and women have low earnings for a variety of reasons discussed below. Second, women live longer than men, and the retirement income of married women drops significantly when their husbands die.

Women Have Low Lifetime Earnings

Women have low lifetime earnings compared to men for three reasons: 1) they have lower

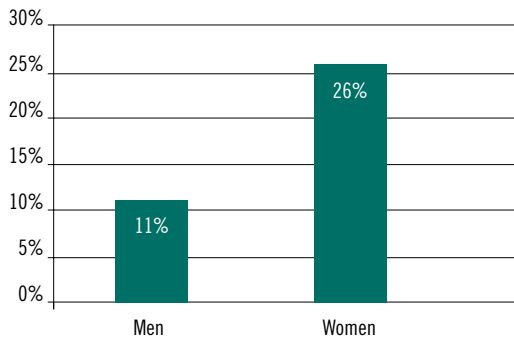
wages; 2) they are more likely to work part time; and 3) they spend fewer years in the labor force. First, women employed full time earn less than what men earn. Figure 4-3 presents the latest national and Massachusetts data showing that, although Massachusetts wages are higher than the national average, the earnings of female full-time workers equal only 74 percent of their male counterparts.¹

The second factor that shapes women’s earnings profiles is that many work part-time. Figure 4-4 reports that 25 percent of women work part-time compared to only 11 percent of men. Women are especially likely to work part time when they have young children at home. Working part time, however, further reduces their annual earnings.

The third important factor affecting women’s earnings is that they spend fewer years in the labor force. The Social Security Administration reported that, of women retiring in 1999, the typical woman had worked 32 years compared to 44 years for a typical man (Figure 4-5).

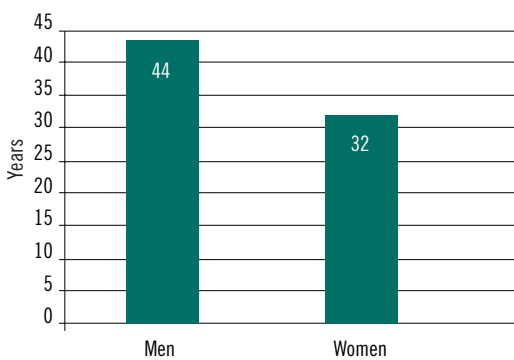
Women’s employment patterns are shaped by their role as caregiver. For example, Metropolitan Life interviewed a sample of women to see how caregiving affected their work schedule. The responses show that, in order to meet caregiving responsibilities, a large number of women have taken actions that have reduced their earnings. For example, one-third said that they had decreased their hours to take care of a child or parent (Figure 4-6). Twenty-nine percent had either quit their job or retired early. And twenty percent responded that they had moved from full-time to part-time work in order to provide care. Clearly, care giving has a profound effect on the work schedule of many women.

FIGURE 4-4. Percent of U.S. Workers Employed Part-Time, 2001



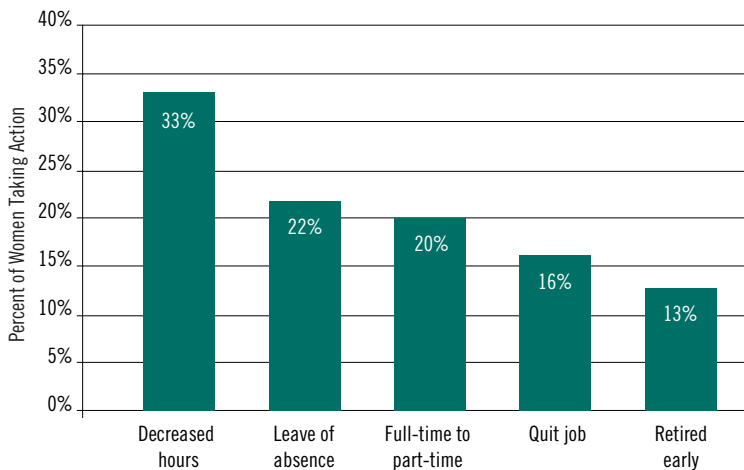
Source: U.S. Bureau of the Census. 2002c. “Employment and Earnings.” Current Population Survey. [Available at: <http://www.bls.gov/cps/cpsaat/8.pdf>].

FIGURE 4-5. Of Workers Retiring in 1999, Median Years Worked



U.S. Social Security Administration. 2003b. “Social Security Is Important to Women.” Social Security Fact Sheet (July). [Available at: <http://www.ssa.gov/pressoffice/factsheets/women-alt.htm>].

FIGURE 4-6. Effects of Caregiving on Work Schedule



Source: Metropolitan Life Insurance Company. 1999. The MetLife Juggling Act Study: Balancing Caregiving with Work and the Costs Involved, (November). <http://www.caregiving.org/JugglingStudy.pdf>

Low Lifetime Earnings Produce Low Benefits

The combination of earning less than men when working full time, working part time, and participating in the labor force for fewer years over their lifetimes means that women end up at retirement with quite low lifetime earnings. As a result, most women continue to depend at least in part on their husbands' earnings for their Social Security benefit.² This pattern is evident in Figure 4-7, which reports the basis on which women are entitled to Social Security benefits from 1960 to the

SINGLE OLDER WOMEN ARE THE MOST VULNERABLE.

present. The top area shows the percent of women who receive only a spousal benefit and are not entitled to any benefit based on their own earnings. This group has clearly declined over time. The middle portion of the figure represents the share of women who

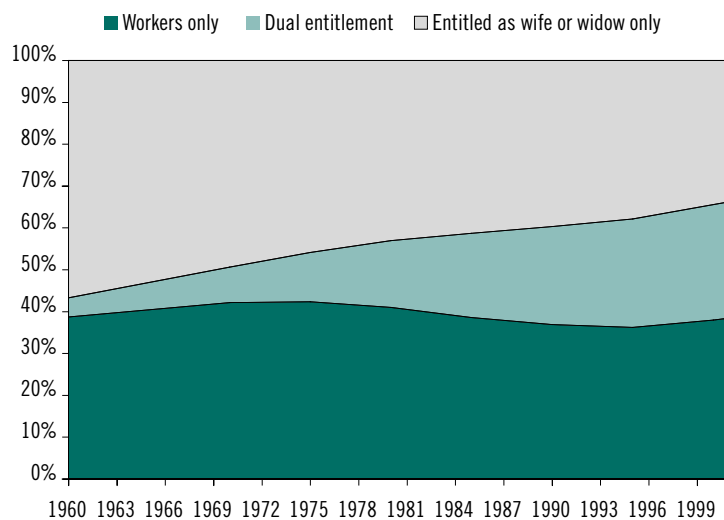
receive both a spousal benefit and some benefit based on their own earnings, that is, they have "dual entitlement." The increased labor force participation of women over the last 30 years has raised the proportion of women dually entitled. The bottom layer consists of women who receive benefits based solely on their own earnings record. In 2001, only 38 percent of women fell into this category; the remaining 62 percent were entitled, in whole or in part, based on their husband's earnings.

The other major source of retirement income is employer-sponsored pension plans. Because women have less attachment to the labor force and earn less, they are less likely to end up with a pension and, when they do, that pension benefit is likely to be smaller than a man's. As shown in Figure 4-8, only 32 percent of working women have a pension compared to 55 percent of men, and the average benefit is less than half that for men.

The fact that many women have little else than Social Security to support themselves means that those without a husband are poor from an early age, while married women who share in their husband's benefits fare better. As shown in Figure 4-9, 27 percent of non-married women aged 65-69 are either poor or near poor, compared to only 7 percent of married women.

If women could stay married throughout retirement, they might do all right. But, women live longer than men—a life expectancy at 65 of 19.6 years compared to 16.6 for men (Figure 4-10). Thus, most women end up widowed. When their husbands die, two things happen to their retirement income. First, the couple's Social Security benefit is cut by between one third and one half. Second, the couple's private pension benefit either disappears completely or is reduced. One study

FIGURE 4-7. Women Age 62 and Older, by Basis of Entitlement, 1960-2002



Source: U.S. Social Security Administration. 2002b. Social Security Bulletin, Annual Statistical Supplement. Table 5.A14. Washington, D.C.: U.S. Government Printing Office, (December). <http://www.ssa.gov/policy/docs/statcomps/supplement/2002/supp02.pdf>

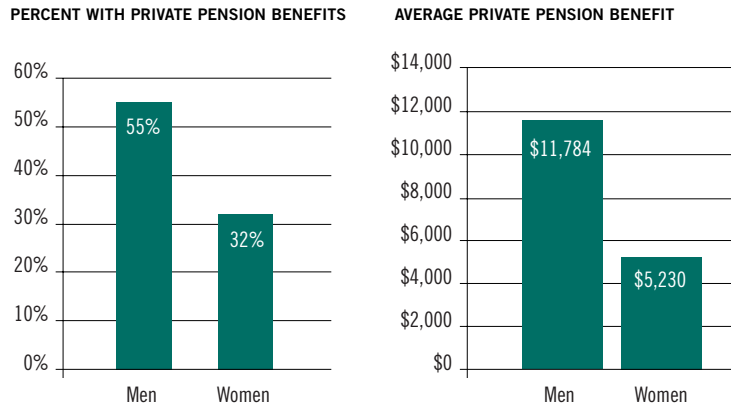
reported that in 41 percent of the cases, the payments ended when the husband died because the couple had not selected a joint-and-survivor annuity, which would have continued payment to the survivor for life. In the other 59 percent of cases, the payment was reduced by an average of one third.³

With the reduction in Social Security benefits and the reduction or cessation of employer-sponsored pension benefits, women suffer a severe decline in their income when their husbands die. Figure 4-11 compares the income situation of two groups of couples — one where the couple remains intact, the other where the husband dies. Income is measured in terms of the family’s income relative to the poverty line. The couples in which the husband survives maintain an income-to-poverty ratio in excess of three. In contrast, in the couples where the husband dies, the income-to-poverty ratio falls to two and then recovers slightly.

The other factor that hurts women is inflation. Because of women’s longevity, even moderate levels of inflation can seriously erode the purchasing power of \$100 over time. For example, with an inflation rate of 3 percent, the value of \$100 drops to \$76 after 10 years, and \$56 dollars after 20 years—the average life expectancy for women at age 65 (Figure 4-12). While Social Security benefits are indexed for inflation, employer-sponsored pension benefits generally are not. As a result, even if some of their husband’s pension benefit continues after his death, the value of that benefit declines sharply over time.

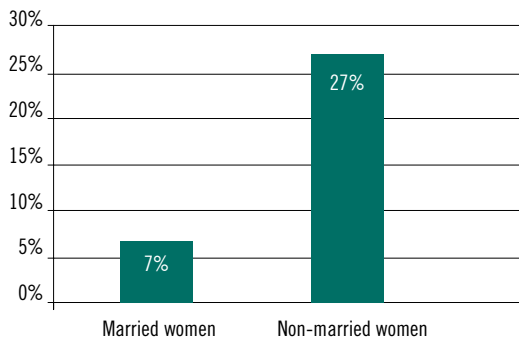
The erosion of the purchasing value of pension benefits as well as health and other problems contribute to the increase in poverty rates at older ages. For example, fully one-third of non-married women aged 85 and over are

FIGURE 4-8. Pension Benefits for Men and Women



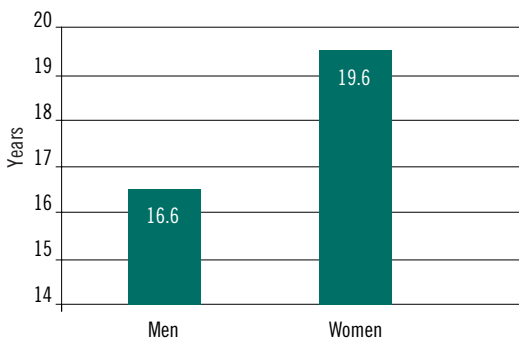
Source: U.S. Department of Labor. 1996. Retirement Benefits of American Workers, New Findings from the September 1994 Current Population Survey.

FIGURE 4-9. Percent of Women Poor or Near Poor: Aged 65-69



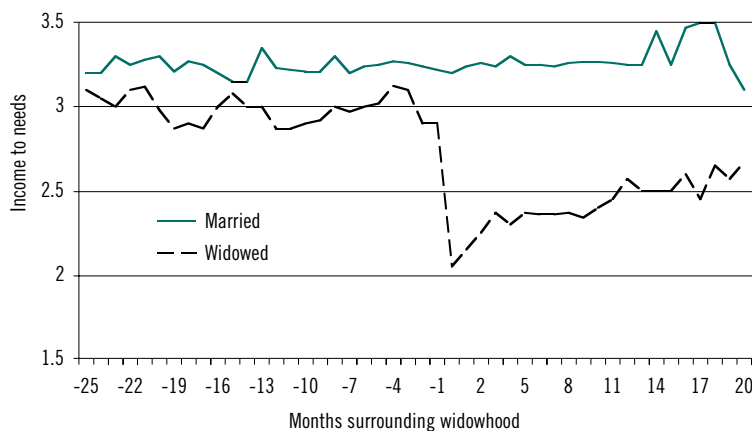
Source: U.S. Social Security Administration. 2002a. Income of the Aged Chartbook, 2000. (April). http://www.ssa.gov/policy/docs/chartbooks/inc_aged/2000/iac00.pdf

FIGURE 4-10. Life Expectancy at Age 65



Source: U.S. Social Security Administration. 2003c. The 2003 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds. Washington, D.C.: U.S. Government Printing Office, (March 17). <http://www.ssa.gov/OACT/TR/TR03/tr03.pdf>

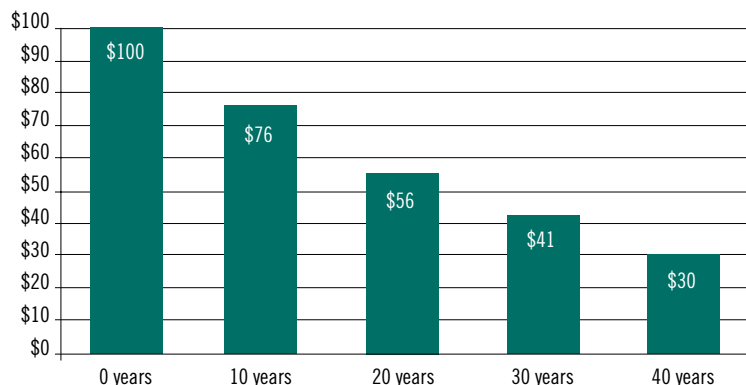
FIGURE 4-11. Income to Needs Ratio for Months Surrounding Widowhood*



Source: Karen C. Holden and Cathleen Zick. 1998. "Insuring against the Consequences of Widowhood in a Reformed Social Security System." In *Framing the Social Security Debate*, edited by R. Douglas Arnold, Michael J. Graetz, and Alicia H. Munnell, pp. 157-170.

*Note: The income to needs ratio is the ratio of total family income relative to the poverty line. For married couples, the time period shown is the entire period of the study rather than the months surrounding widowhood.

FIGURE 4-12. Value of \$100 with 3 Percent Inflation after Specified Number of Years



Source: Authors' calculations.

TABLE 4-4. Percent of Non-Married Women Poor or Near Poor by Age, 2000

AGE	PERCENT POOR OR NEAR POOR
65-69	27%
70-74	29
75-79	30
80-84	27
85 and over	33

Source: U.S. Social Security Administration. 2002a. *Income of the Aged Chartbook, 2000*. (April). http://www.ssa.gov/policy/docs/chartbooks/inc_aged/2000/iac00.pdf

poor or near poor (Table 4-4). And, as noted earlier, 62 percent of households aged 85 and over consist of non-married women.

The Outlook for the Future

What about the future? Will women still be at such risk in retirement with the graying of the population in the 21st century? Changes are occurring both in women's lives and in the programs that support them.

In terms of women's lives, more women are working. Figure 4-13 shows the labor force participation rates for 1970, 1980, 1990, and 2000 as well as a projection for 2008. Although the rate of change has slowed, the country has moved from a situation where about half of women aged 25-54 were in the labor market to one where 80 percent participate. More employment means that women will have higher future earnings, and perhaps more saving and pension benefits.

While increased earnings will help women's retirement security in the future, an increase in divorced and never-married women will hurt. As shown in Figure 4-14, the divorce rate for the baby boom generation—those born from 1946-64—is about double that of the previous generation. Never-married women are also twice as prevalent among baby boomers as in the earlier generation. Both these groups have very high poverty rates, so their increase as a proportion of the population worsens the outlook for future retirees.

On the program side, neither of the major developments described in this study augurs well for women. The decline in Social Security discussed in Chapter 3 will hurt women. Women currently do well under Social Security because the program provides higher levels of replacement income for low earners than high earners through the progressive benefit for-

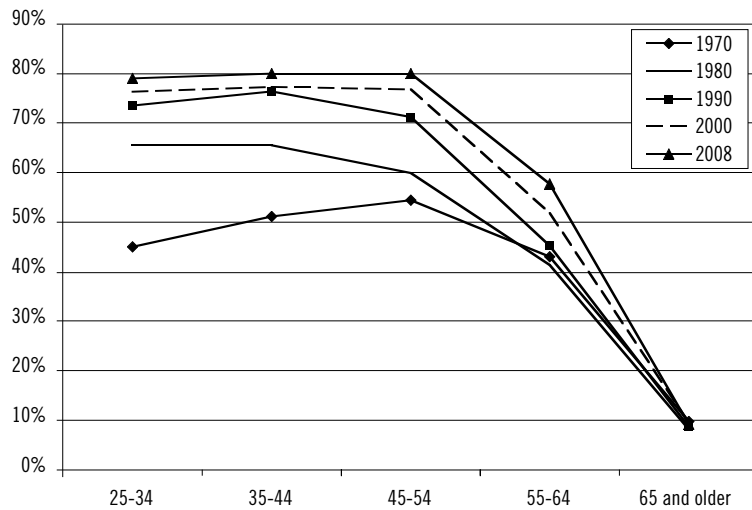
mula, and women on average are low earners. To the extent that Social Security is reduced, they will lose this advantage. Similarly, for women who spend considerable time out of the labor force, the cutback in Social Security will reduce spousal benefits. And, as discussed above, only Social Security provides full inflation indexing, which is particularly valuable for people who spend a long time in retirement, and women live longer than men. Thus, the decline in Social Security and the loss of these valuable features will lead to more poverty among future women retirees.

The other major development on the program side is the shift from defined benefit pensions to 401(k)-type plans and, within defined benefit plans, from traditional to cash balance plans. Although these individual account arrangements are clearly beneficial for the mobile employee, they both suffer from the fact that they pay benefits at retirement as a lump sum rather than an annuity. Thus, married women will not have the joint-and-survivor provision as the default option on their husband's pensions. Lump-sum payments raise the prospect of the couple consuming the assets while the husband is alive, leaving nothing to support the wife after he dies. Of course, those receiving lump-sum payments could choose to purchase annuities on their own.⁴ However, in practice, few do. In short, the new plans simply do not provide the same kind of protection for widows as the traditional defined benefit plans.

Conclusion

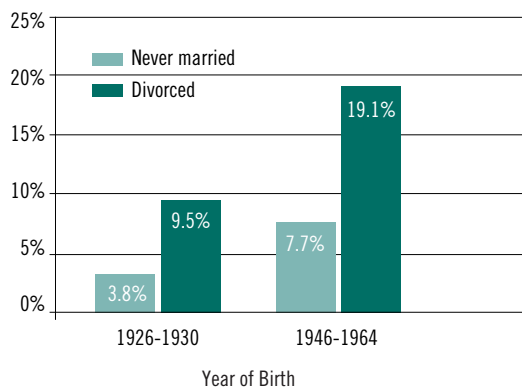
In summary, many women are poor in old age because the retirement system is based on earnings and women have low earnings. Married women can depend on their husbands' benefits, but these benefits are cut

FIGURE 4-13. Labor Force Participation of Women, 1970-2008



Source: U.S. Bureau of the Census. 2002a. Statistical Abstract of the United States: 2001. "Section 12: Labor Force, Employment, and Earnings." Table No. 568. <http://www.census.gov/prod/2002pubs/01statab/labor.pdf>; U.S. Bureau of the Census. 1996. Statistical Abstract of the United States: 1995. "Section 13: Labor Force, Employment, and Earnings." Table No. 627. <http://www.census.gov/prod/1/gen/95statab/labor.pdf>

FIGURE 4-14. Percent of Age 62 Population of Never-Married or Divorced Women^a



Source: Barbara Butrica, Lee Cohen, and Howard Iams. 1999. Introduction and Findings from the MINT Project. Presented at the First Annual Joint Conference for the Retirement Research Consortium, May 20-21.
a. "Divorced" does not include those that have remarried.

when the husband dies. One factor that will help women in the future is that more of them are working than in the past, which will tend to improve their retirement income prospects somewhat. However, an increase in divorced and never-married women will tend

to undermine women's retirement security. At the same time, Social Security cuts and reliance on 401(k) plans will make maintaining an adequate retirement income more difficult. Given these developments, women could

WOMEN HAVE LOW LIFETIME EARNINGS.

enhance their situation by saving more during their working years. But, as discussed in Chapter 3, most people do not save much on their own. And given that women have low earnings, it may be particularly difficult for them to boost their saving.

In response to the discouraging trends

described above and in Chapter 3, the obvious question is whether people can postpone retirement by continuing to work for a few more years. Continued employment provides additional earnings and postpones the date when people start drawing down their 401(k) plans and other assets. But for continued employment to be an option, people have to want to work and employers have to be willing to hire them. Chapters 6 and 7 explore each side of this equation, by looking first at individuals' willingness to remain in the labor force and then at employers' demand for older workers. Chapter 5 provides an introduction for these issues by describing past and current trends in labor force activity by older workers.

ENDNOTES

1. Male-female wage differentials do not necessarily indicate gender discrimination. Part of the discrepancy in wages can be explained by the fact that women choose to work in occupations that pay lower wages. Women, on average, also have different work histories and different levels of education, which are likely to impact wages. Other factors may be important as well, such as gender differences in bargaining power and mobility. Still, studies have shown that women have lower wages than men even after controlling for many of these factors. See, for example, Graddy, Kathryn and Luigi Pistaferri. 2000. "Wage Differences by Gender: Evidence from Recently Graduated MBAs." *Oxford Bulletin of Economics and Statistics* 62 (Special Issue) and Wood, Robert G., Mary Corcoran, and Paul Courant. 1993. "Pay Differences among the Highly Paid: The Male-Female Earnings Gap in Lawyers' Salaries." *Journal of Labor Economics* 11: 417-441.
2. Regardless of work history, the wife (or husband) of a worker covered by Social Security is eligible for a spousal benefit of 50 percent of the worker's benefit. If the spouse is entitled to a benefit based on her own work history and this benefit exceeds the spousal benefit, she will receive the larger amount. If her own benefit is less than the spousal benefit, she is considered dually entitled and will receive a "supplement" up to the spousal benefit level. See Steuerle, C. Eugene and Jon M. Bakija. 1994. *Retooling Social Security for the 21st Century*. Urban Institute Press.
3. Holden, Karen C. and Cathleen Zick. 1998. "Insuring against the Consequences of Widowhood in a Reformed Social Security System." In *Framing the Social Security Debate*, edited by R. Douglas Arnold, Michael J. Graetz, and Alicia H. Munnell. Brookings Institution Press and the National Academy of Social Insurance: 165-167.
4. One factor worth noting is that annuity prices for individuals differ by gender; women pay more than men for an equivalent monthly benefit because of their longer average life expectancy. In contrast to private annuity markets, traditional defined benefit pension plans are required by law to pay men and women equal monthly benefits, assuming equal work and earnings' histories. See Campbell, Sheila and Alicia H. Munnell. 2002. "Sex and 401(k) Plans." *Just the Facts on Retirement Issues* No. 4 (May). Chestnut Hill, MA: Center for Retirement Research at Boston College.

CHAPTER 5 | The Work-Retirement Divide

In light of the aging of the population and expected reductions in traditional retirement income sources, continued employment in later life is the most promising option for ensuring the financial security of older Americans. Each additional year in the workforce increases income directly, reduces the number of years over which retirement savings need to be spread, and actuarially increases Social Security benefits by 5 to 10 percent.

American men have left the work force at steadily younger ages over much of the post-war period. The average retirement age for men declined by about two years per decade from 1950 to 1985.¹ Since then, it has stabilized at about 63; the average age for women, whose labor-market behavior is increasingly similar to that of men, is about 61. For additional earnings from work to become an effective response to the old-age income challenge, the trend toward ever-earlier retirement must not just be halted, but reversed.

The next three chapters explore the potential for extending the careers of older workers. This chapter reviews how labor force participation among older workers evolved in the United States over the last century, and how it has changed in recent years both nationally and in the Commonwealth. The retirement patterns discussed in this chapter reflect the intersection of labor supply decisions made by workers and labor demand decisions made by employers. Chapter 6 examines the labor supply decisions of older workers and how those decisions might change in the future. Chapter 7 examines the labor demand decisions made by employers. Only by examining both sides of the labor market for older workers can we address the question of whether—and how—

continued employment could alleviate the retirement income challenge.

The Trend Towards Early Retirement

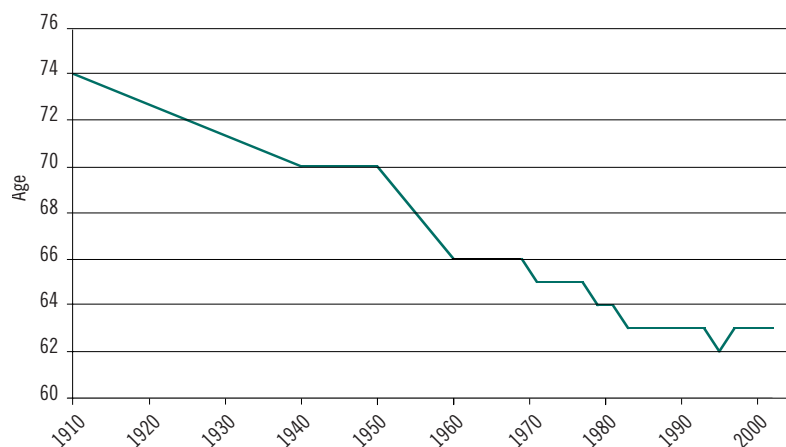
“Retirement” can mean very different things to different people. For some, retirement begins once they stop working. Others consider themselves retired once they begin to receive benefits from Social Security or private pensions, regardless of their work status. Still others consider themselves retired even though they do not draw a pension and continue to work, albeit

THE AVERAGE RETIREMENT AGE HAS DECLINED DRAMATICALLY.

at a job other than their full-time career position. This report defines “retirement” as complete labor force withdrawal.

The “average retirement age,” or the youngest age at which half of the population is out of the labor force, declined dramatically among men for much of the last century. In 1910, the aver-

FIGURE 5-1. Average Retirement Age of Men, 1910-2002



Source: Gary Burtless and Joseph F. Quinn. 2002. “Is Working Longer the Answer for an Aging Workforce?” Issue Brief No. 11. Chestnut Hill, MA: Center for Retirement Research at Boston College, (December). Authors’ calculations using BLS data.

age retirement age for men was 74. Over the next seven decades, it dropped sharply to age 63 (Figure 5-1).²

The main reason for this decline is increasing prosperity, with a portion of the additional per capita income channeled through the retirement income system in ways that allowed—indeed encouraged—workers to leave the labor force. Per capita GDP increased at an average annual rate of about 2.2 percent between 1930 and 2000 (Figure 5-2). In 1930, GDP per capita was about \$7,600 and by 2000 it was almost \$35,000—a more than four-fold increase in constant 2000 dollars. People received this additional income in part through the expansion of Social Security and employer pension programs. In both public and private retirement income programs, coverage expanded during the 1950s and 1960s, and then benefits rose substantially in the 1970s.³

Figure 5-3 shows Social Security replacement rates from 1940 to 2000.⁴ The rates for

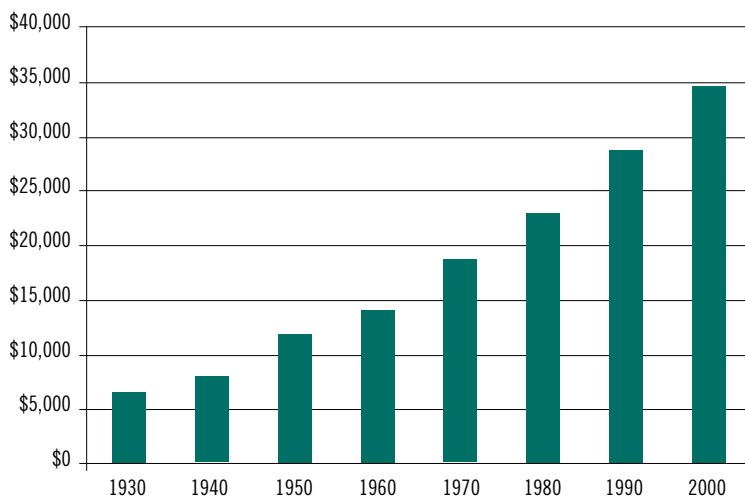
1950 and 1980 were somewhat abnormal. Benefit levels in 1950 were the subject of a serious political dispute and not increased in line with the sharp post-war inflation; in 1980, benefit levels were excessively high due to the “notch” error in calculating payments. Nevertheless, the replacement rate for average earners more than doubled between 1950 and 1980, from less than 20 percent to about 50 percent of wages prior to retirement.⁵ Since 1980, replacement rates have declined to about 40 percent for the average earner.

Coverage in private pension plans also increased in the post-World War II era. In 1940, less than 20 percent of the private sector workforce was covered by a pension. Pension coverage grew to about one half of the workforce by 1970, where it has remained ever since.⁶ Coverage is higher when considering all jobs in a person’s work history, and looking at households rather than individuals. Using this method, about 65 percent of all older households had some form of pension coverage in 1998.⁷

Social Security and employer plans today provide about 60 percent of the income of Americans aged 65 and over, and about three-quarters of the income excluding earnings from work.⁸ These retirement programs are thus the economic foundation of modern retirement and have allowed workers to leave the labor force at ever-earlier ages.

Since 1985, however, there has been a break in the trend towards earlier and earlier labor force withdrawal. The change can be seen in the labor force participation rates of males aged 60-64 (Figure 5-4).⁹ The line in the figure shows predicted labor force participation based on data from 1964-1985.¹⁰ Prior to 1985, the predicted line fits the actual data points closely. After 1985, the predicted line diverges from actual outcomes.¹¹

FIGURE 5-2. GDP per Capita in the United States (2000 dollars), 1930-2000



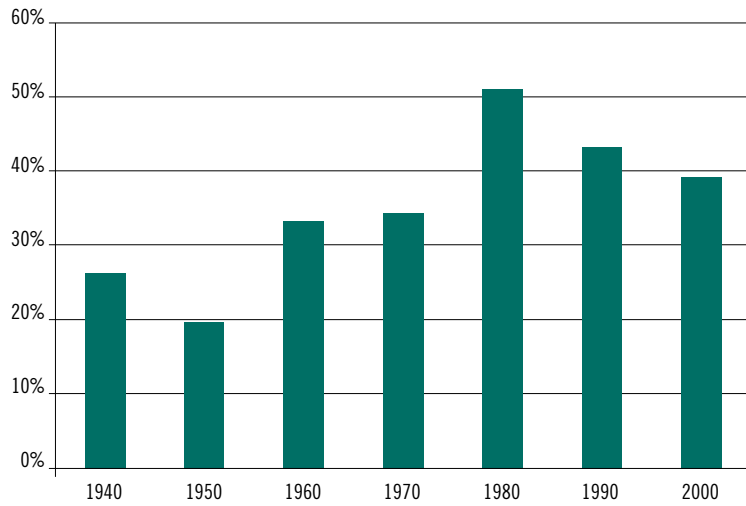
Source: U.S. Bureau of the Census. 1993. “Population, Housing Units, Area Measurements and Density, 1790 to 1990.” <http://www.census.gov/population/censusdata/table-2.pdf>; Bureau of Economic Analysis. 2003. National Income and Product Accounts (NIPA) data. U.S. Department of Commerce. <http://www.bea.gov/bea/dn/home/gdp.htm>

Older women experienced a different break in the trend in the mid-1980s. Labor force participation rates for older women were basically flat from the mid-1960s to the mid-1980s, the product of two distinct factors that offset each other. The first was the movement towards earlier retirement among all older workers, which pushed participation downward. The second was the increased number of married women entering the labor force, which pushed participation upward. The net result was little or no change. At about the same time that the trend towards earlier retirement for men came to a halt, participation rates for older women began to increase steadily. It is hard to discern whether this primarily reflects the halt in the trend towards earlier retirement as seen among men or the aging of post-war women who began entering the labor force in large numbers in the 1940s. Nonetheless, women also experienced a break in trend, with a shift toward increased labor force participation, in the mid-1980s.

Is the Break in Trend Cyclic or Permanent?

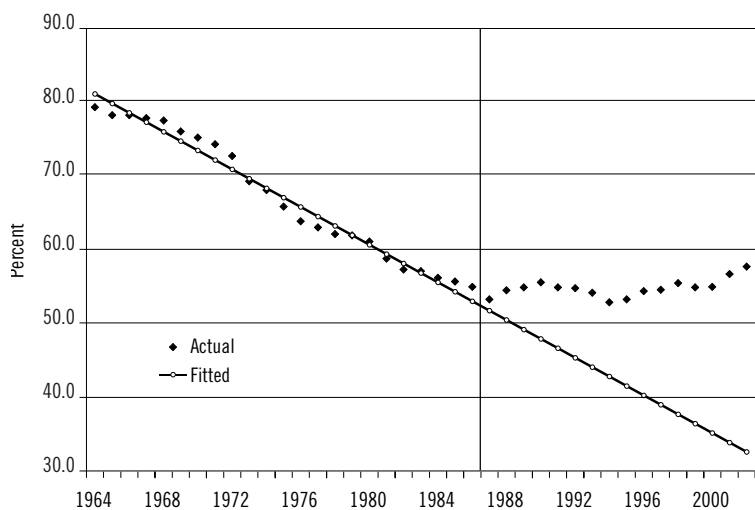
Some researchers have argued that the break in the trend toward earlier retirement is a passing cyclical phenomenon.¹² They claim that it reflects a temporary increase in labor demand during an economic boom that lasted nearly two decades, and that the long-term trend toward earlier retirement will resume over time. The tight labor markets of the late 1980s and 1990s increased labor force participation among all workers. It is therefore not surprising, these researchers argue, to see a flattening of the early retirement trend as the economy soared. After all, they observe, the labor markets behaved this way in the 1940s and the 1960s. In each of these decades, robust economic gains were matched with temporary halts in the trend towards early retirement (Figure 5-1).

FIGURE 5-3. Social Security Replacement Rates, Average Earnings, 1940-2000



Source: Committee on Ways and Means, U.S. House of Representatives. 2000. 2000 Green Book. Table 1-17. Washington, D.C.: U.S. Government Printing Office, (October 6). <http://aspe.hhs.gov/2000gb/sec1.txt>

FIGURE 5-4. Labor Force Participation Rates in the United States, Males Aged 60-64, Actual and Fitted Values, 1964-2002



Source: Joseph F. Quinn. 1999. "Retirement Patterns and Bridge Jobs in the 1990s." EBRI Issue Brief, No. 206, (February); updated with data from the Current Population Survey.

And each of these periods was subsequently followed by a resumption of the trend towards earlier retirement. So why should this period be any different?

Others contend that fundamental changes have occurred in retirement incentives and that these changes can explain why the trend

towards earlier retirement has stopped—permanently. They claim that the world of retirement is substantially different today than it was prior to the mid-1980s. Mandatory retirement was eliminated in 1986.¹³ Workers are living longer, healthier lives and can remain productive beyond traditional retirement ages. Older workers today have higher levels of education

percent of women nationally. Third, the recent trend among older workers to postpone retirement and/or re-enter the labor force seems much more pronounced among older workers in Massachusetts.¹⁶ This might reflect differences in education, occupational status, housing, taxes, or health status, all of which are likely determinants of the retirement decision.

MORE WORKERS REMAIN IN THE LABOR FORCE AT OLDER AGES.

as well, and jobs have shifted from manufacturing to less physically-demanding service occupations.¹⁴ Perhaps the most important factor has been the end of key financial incentives that led older workers to retire early. These include changes in Social Security benefit calculation rules, such as an expanded Delayed Retirement Credit (DRC) and a significantly weaker earnings test, and a shift from defined benefit to defined contribution employer pension plans.¹⁵

Labor Force Participation at Older Ages in Massachusetts

Generally speaking, the trends in labor force participation since 1980 in Massachusetts appear to resemble those of older workers nationally. In several ways, however, the story in Massachusetts is different. First, more Massachusetts workers remain in the labor force at older ages compared to workers nationally. Between 1980 and 2002, labor force participation rates for men aged 55-64 were consistently several percentage points higher in Massachusetts than in the nation as a whole (Table 5-1). Second, the state-country differences are much more pronounced among older women than men. In 2002, two thirds of Massachusetts women aged 55-64 were participating in the labor force, compared to 55 per-

TABLE 5-1. Labor Force Participation Rates of Older Workers Aged 55-64, US and MA, 1980-2002

YEAR:	MEN		WOMEN	
	MA	US	MA	US
1980	77.6%	71.2%	48.9%	41.6%
1990	72.7	67.0	53.1	45.4
2000	71.1	67.3	57.5	51.8
2002	78.5	69.2	66.7	55.2

Source: Author's calculations using the Census one-percent file, 1980 and 1990; U.S. Bureau of Labor Statistics. 2000 and 2002. Employment Status of the Civilian Noninstitutional Population. [Available at: <http://www.bls.gov/lau/table12full00.pdf>, <http://www.bls.gov/lau/table12full02.pdf>, and <http://www.bls.gov/cps/cpsaat3.pdf>].

Conclusion

This chapter explored the patterns of retirement in the United States and Massachusetts. Findings show the work-retirement divide to be neither fixed nor permanent. As the country grew richer over the last century, the government and employers directed a portion of this increased wealth to older workers in the form of retirement income. In response, “retirement” emerged as a fairly well-defined and extended period of life. The long-term trend toward ever-earlier retirement came to a halt in the mid-1980s. This could be a permanent reversal, an early response to the declining sources of retirement income and the financial incentives to exit the labor force. The retirement pattern over recent years could also be a cyclic phenomenon, reflecting an increased demand

for labor during the prosperity running from the mid-1980s through 2000. If so, the work-retirement divide could resume its long-term shift to earlier ages if employer demand cyclically declines.

Whether or not continued employment can contribute to the financial security of future retirees thus depends on the labor-supply deci-

sions of older workers and the labor-demand decisions of employers. Will older workers respond to a shrinking retirement income system and chose to extend their careers? Will employers respond to the expanded supply of older workers by creating sufficient employment opportunities? These two issues will be explored in the next two chapters.

ENDNOTES

1. Burtless, Gary and Joseph F. Quinn. 2002. "Is Working Longer the Answer for an Aging Workforce?" *Issue in Brief* No. 11 (December). Chestnut Hill, MA: Center for Retirement Research at Boston College.
2. The average retirement age concept is not directly applicable to women because many women among older cohorts did not participate in the labor force over their lifetimes. The numbers exist, nonetheless, and the youngest age at which half of women were in the labor force in 1970 was 56; today it is 62 (Authors' calculations based on CPS data).
3. A detailed history of the Social Security program, including amendments, can be found at: <http://www.ssa.gov/history/brief-history3.html>.
4. The replacement rate is equal to total monthly benefits for the year in which a worker is entitled to full benefits as a percentage of earnings in the year prior to entitlement. The replacement rates shown are for an average wage earner.
5. Replacement rates declined substantially between 1940 and 1950 because benefits declined sharply relative to earnings. The rise in replacement rates between 1950 and 1980 reflects both increases in Social Security benefit levels and increases in average indexed monthly earnings (AIME).
6. The stabilized rate of coverage in private pensions since 1970 masks two significant changes. First, coverage among men has declined while it has increased among women. Second, during much of the past decade, there has been a dramatic shift away from traditional defined benefit plans towards defined contribution plans, such as 401(k)s. For further information, see Munnell, Alicia H., Annika Sundén, and Elizabeth Lidstone. 2002. "How Important Are Private Pensions?" *Issue in Brief* No. 8 (February). Chestnut Hill, MA: Center for Retirement Research at Boston College.
7. Munnell, Sundén, and Lidstone (2002).
8. U.S. Social Security Administration. *Income of the Population 55 or Older*, 2000. Table 7.1.
9. A person is considered to be in the labor force if he or she is working or looking for work. All individuals not employed and not actively seeking employment (e.g., homemakers, "discouraged workers") are not considered to be in the labor force. The labor force participation rate is the ratio of those in the labor force to the total population. See Pearce, David M. 1994. *The MIT Dictionary of Modern Economics*. Cambridge, MA: The MIT Press.
10. Labor force participation rates are used to examine the break in trend because projections about the percentage of individuals working for any given age group are intuitive. In contrast, extrapolations based on the average retirement age can be misleading since there are institutional reasons (e.g., the earliest eligibility age for Social Security) why the average retirement age would not be expected to drop below 62.
11. A similar break in trend occurred among older men in other age categories.
12. See Costa, Dora. 1999. "Has the Early Retirement Trend Reversed?" First Annual Joint Conference for the Retirement Research Consortium: New Developments in Retirement Research. May 20-21.
13. The Age Discrimination in Employment Act of 1967 set the youngest age at which employers could implement mandatory retirement to 65. It was later raised to 70 for private employers through an amendment to the law in 1978. In 1986, mandatory retirement was outlawed altogether for employers of 20 or more employees. For a detailed discussion of the topic, see Neumark, David. 2001. "Age Discrimination Legislation in the United States." Working Paper 8152. Cambridge, MA: National Bureau of Economic Research.
14. See Chapter 2 for details.
15. The impact of Social Security benefit calculation rules and the impact of private pensions are important determinants of the labor supply decision and are discussed in the next chapter.
16. Alternatively, the state-level labor force participation rates shown in Table 5-1 could be higher than the national estimates due to migration. If large fractions of older individuals leave the state once they retire, then labor force participation rates at older ages would increase, all else equal, since fewer non-working individuals would be living in the state. We do not believe that migration is driving the higher percentages, since labor force participation rates are higher in Massachusetts at most ages.

CHAPTER 6 | Will Older People Want to Work Longer?

If increased employment later in life is to enhance retirement income security, older workers in Massachusetts must respond to the coming decline in traditional retirement income sources by choosing to remain in the labor force longer. But will older people want to work longer?

Until the 1970s, researchers believed that the retirement decision was largely involuntary, determined by mandatory retirement policies, layoffs, or changes in health status. But since the 1970s, researchers have increasingly found that a worker's financial wealth has had a powerful effect on the decision to retire. While health status and age-related barriers to employment are still important factors leading to involuntary retirement, the key finding is that retirement is often a voluntary decision. Furthermore, the retirement decision is often not set at a fixed point in time, nor is it permanent.

A WORKER'S FINANCIAL WEALTH AFFECTS THE DECISION TO RETIRE.

This chapter explores the financial and non-monetary factors that drive the retirement decision, and the way older workers respond to these incentives. The goal of the discussion is to determine if older workers will want to extend their worklives in response to the changes in traditional retirement income sources.

Older Workers Have Faced Strong Financial Incentives to Retire

As discussed in the previous chapter, the growth of Social Security and private pension benefits allowed workers to quit employment and spend an ever-increasing amount of time

in retirement. Without this substantial financial support, most older workers simply could not afford to retire. In addition to the size of benefits, the way benefits are calculated has created strong financial incentives to retire at particular ages.

Researchers have found subsidies for early retirement, embedded in many traditional employer defined benefit pension plans, of particular importance in worker retirement decisions. These plans offer workers who retire early—as early as age 55—benefits that are greater than the “actuarially fair” amount—that is, they do not reflect the additional years the retirees will receive benefits and the fewer years for the pension fund to accumulate investment earnings.¹

For an example, take a worker who is entitled to a pension of \$15,000 at age 65 and is expected to live for 20 years. Lifetime benefits would equal \$300,000 (20 x \$15,000). If that worker retired at 55, his annual benefit should be only \$10,000 per year (30 x \$10,000 = \$300,000) to keep the lifetime benefit constant (ignoring, for simplicity, reduced investment returns and worker contributions to the firm and the pension plan). But many defined benefit plans provide significantly higher early-retirement pensions than the actuarially reduced amount—say \$12,000 at age 55 in our simple example. The worker who retires early thus receives substantially more in lifetime pension benefits than if he were to retire at 65.² The subsidy implicit in the less-than-actuarially fair reduction then gradually declines and disappears entirely at the normal retirement age.³

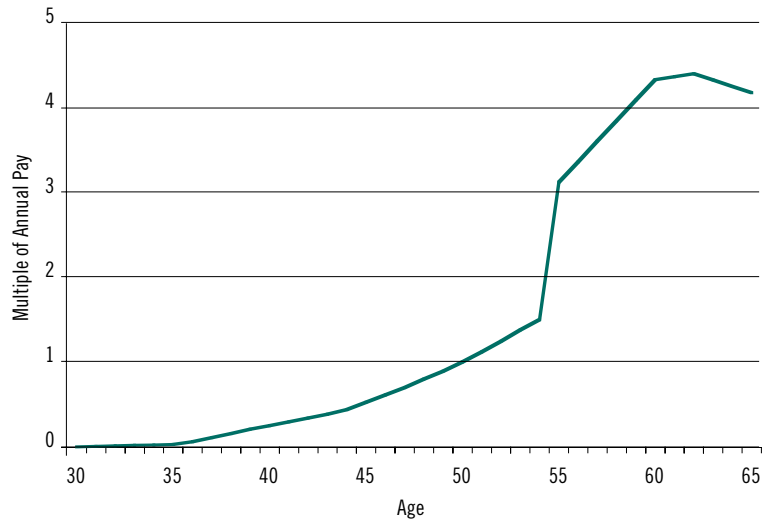
This pattern is illustrated in Figure 6-1, which shows accrued pension benefits as a

multiple of pay at different ages. Benefits relative to pay jump dramatically at the early retirement age (age 55 in the figure) because of the lack of an actuarially fair adjustment. Then increments to the worker's pension wealth slow dramatically, and turn negative as the worker approaches the plan's "normal retirement age." Researchers find that this pattern of pension benefit accruals has created an effective incentive that leads most workers in these plans to retire early.⁴

The government's Medicare program provides another, somewhat less dramatic incentive to retire before age 65. Medicare benefits are an entitlement that 65-year-olds have earned through a lifetime of payroll tax contributions. Designating Medicare as a secondary payer deprives workers employed at firms offering health insurance of a benefit to which they are otherwise entitled and serves as a significant tax on work. Employees can get around this tax by working for a firm that does not offer health insurance or by converting to the role of a consultant. But requiring such efforts reduces the likelihood that older workers will stay in the labor force.

In recent years, the retirement income system has changed in ways that have eliminated many of the financial incentives that encouraged workers to retire early—or indeed to retire at any particular age. The most important such change has been the shift from defined benefit to defined contribution employer pension plans.⁵ The two types of pension plans have different financial incentives, different ways of paying benefits, and different types of risks, and these differences, taken together, set up dramatically different retirement incentives.⁶ As discussed above, workers with defined ben-

FIGURE 6-1. Accrued Pension Benefits in a Traditional Defined Benefit Plan as a Multiple of Annual Pay



Source: Robert Clark and Sylvester Schieber. 2002. "The Emergence of Hybrid Pensions and Their Implications for Retirement Security in the 21st Century." In *Cash Balance Pension Plan Symposium*, Society of Actuaries Spring Meeting in Dallas, (May 31). And authors' calculations.

efit plans are offered a significant financial incentive to retire early. In contrast, defined contribution plans, such as 401(k)s, are neutral with respect to retirement age. Assets and income provided by defined contribution plans are also less certain, which creates an incentive to remain working longer in order to insure against this risk. As traditional defined benefit plans become less common, workers will be more inclined to stay working later in life.

The Social Security system has also moved much closer to retirement-age neutrality. Social Security originally set up a strong incentive for workers to retire at age 65, the system's "normal retirement age." It did that through a "take it or leave it" policy that offered no increase in benefits to workers who retired at a later age. This policy changed in 1972, when Congress introduced the Delayed Retirement Credit (DRC) that increased benefits for workers who delayed retirement, up to age 70.

Initially, the DRC raised benefits just 1 percent for each year of delayed receipt—hardly a significant adjustment. But the DRC has been increasing since 1987 and will be an “actuarially fair” 8 percent per year of delay by 2008.

A second feature influencing the retirement age is the Social Security earnings test, which reduces benefits if earnings exceed a certain threshold. With the introduction of early retirement at age 62 (for women in 1956 and for men in 1961), earnings test reductions of early-retirement benefits were repaid through an actuarially-fair increase in subsequent benefits. As most workers seemed to view the reduction as a permanent loss, the earnings test created a disincentive to work. In 1983, Congress reduced the age for which the earnings test applied from 72 to 70 and in 2000 eliminated the test for workers over Social Security’s normal retirement age. Currently, the test applies only to recipients below the (gradually rising) normal retirement age who

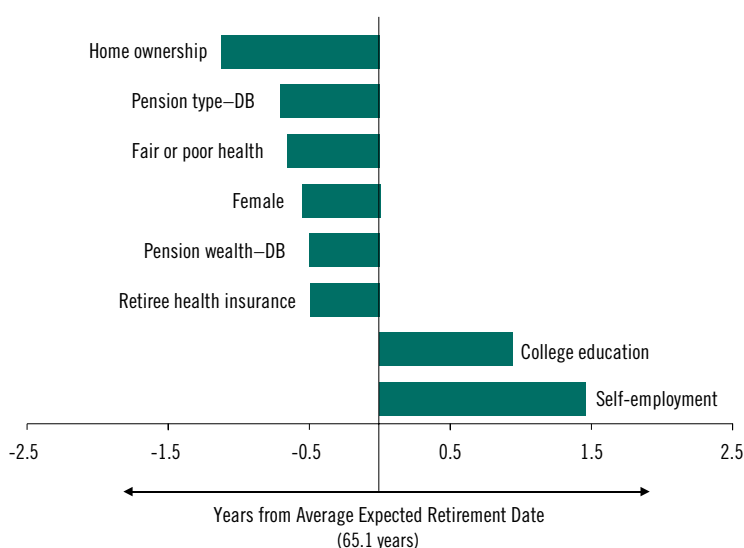
earn more than \$11,520, and it reduces their (current) benefits by one dollar for every two dollars earned above the threshold.⁷ Workers above the normal retirement age can now earn income without affecting their Social Security benefits and, indeed, can increase their benefits in an actuarially fair manner if they postpone receipt.

Financial Incentives Matter

The importance of financial factors is illustrated in Figure 6-2, which reports the findings of a recent study on the impact of different factors on the retirement decision.⁸ The center line in the figure represents the average expected age of retirement for a sample of older workers aged 51-61 in 1992—65.1 years.⁹ Bars to the left indicate that the factor reduced the expected retirement age; bars to the right indicate an increase.

The study found that poor or failing health is clearly important in a worker’s decision to retire. But home ownership is the most important factor leading workers to lower their expected retirement age. Other financial factors—having a defined benefit pension plan, having an average level of defined benefit pension wealth, and having retiree health insurance—each reduce the expected retirement age by more than one-half year.¹⁰ The importance of a worker’s financial wealth is confirmed in the Employee Benefit Research Institute’s (EBRI) 2002 Retirement Confidence Survey. The EBRI Retirement Confidence Survey found that nearly half of those who plan to work after “retirement” state that they want to maintain health insurance coverage and one-third state that they “want money to make ends meet.” So as the traditional sources of retirement income recede, workers are likely to choose to remain in the labor force longer.

FIGURE 6-2. Expected Retirement Dates, by Selected Individual Characteristics



Source: Alicia H. Munnell, Kevin E. Cahill, and Natalia Jivan. 2003. “How Has the Shift to 401(k) Plans Affected the Retirement Age?” Issue in Brief. Chestnut Hill, MA: Center for Retirement Research at Boston College.

In addition to financial motives, many older workers chose to stay in the labor force for “quality of life” reasons. Figure 6-2 shows that being college educated or self-employed—factors indicating greater control and a higher quality work experience—extend the expected retirement date by one year and one and a half years, respectively.¹¹

And, among the EBRI survey respondents who plan to work for pay after they retire, 65 percent say “they enjoy working and want to stay involved.”

For many older workers, the non-monetary aspects of work may actually trump traditional economic motives. Studies have shown that re-entering the labor force later in life is positively associated with better health, happiness, and life satisfaction. Employment also increases the individual’s sense of accomplishment and responsibility and expands the worker’s social network. Such non-monetary benefits are even important for low-income workers.¹²

Retirement Is Not an All-or-Nothing Event

Up until this point, retirement has been described as an all-or-nothing event. In fact, the labor force withdrawal patterns of many older workers are quite diverse. Most people do exit the labor force in the stereotypical fashion, by moving from a full-time career job to complete labor force withdrawal. But a significant minority “shift gears” later in life—after leaving full-time career employment they take a short-duration, part-time job, or self-employment job before exiting the labor force completely. For these individuals, retirement can be viewed as a process.

For some, transitional jobs offer an opportunity to try something new following a lifetime in one type of employment. Others are attracted to part-time work or self-employment

because they offer flexible work schedules. Still others take transitional jobs out of financial necessity or because a change in health status prevents them from working at their full-time career job. Workers might also be responding to the conflicting incentives currently offered through public and private pension plans.

RE-ENTERING THE LABOR FORCE LATER IN LIFE CAN BE POSITIVE.

Traditional defined benefit pension plans often have strong early retirement incentives, as discussed above, while Social Security benefits are becoming more age-neutral. The combination might be inducing workers to leave a full-time career job but remain in the labor force.

One way to explore this process is to examine the labor force transitions of individuals out of their full-time career jobs.¹³ This method shows that men and women are quite similar in their movement into transitional jobs (Table 6-1). The table examines the current work status of individuals aged 55-65 in 1996 who had a full-time career job in their work history. Among men, 44 percent were still on their career job; 25 percent had moved to a transition job, and 28 percent had dropped out of the labor force entirely. Similar percentages are seen for women.

Has transitional retirement increased in

TABLE 6-1. Job Transitions of Older Workers (55-65) with a Full-time Career Job, by Gender

STATUS IN 1996:	MEN	WOMEN
Still on a career job	44%	51%
Moved to a transitional job	25	23
Moved to no job	28	24
Don't know	4	2

Source: Joseph F. Quinn. 1999. “Retirement Patterns and Bridge Jobs in the 1990s.” EBRI Issue Brief No. 206, (February).

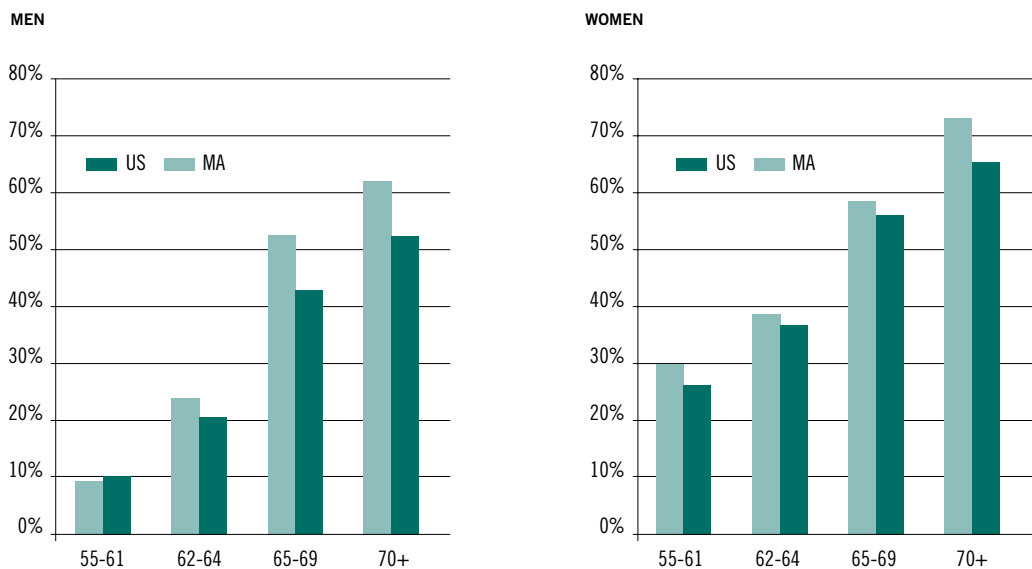
recent years? The question is difficult to answer because large-scale longitudinal datasets of the work histories of older Americans are needed, and only a few exist. The Retirement History Study (RHS), a nationally-representative dataset from the 1970s that followed a cohort of men and unmarried women aged 58-63 in 1969, is one such survey. A study based on the RHS found that the majority of household heads did not retire directly from career jobs, but rather chose some form of bridge job, partial retirement, or re-entry.¹⁴ While it is difficult to compare these results to Health and Retirement study results because of differences in the sample, it is safe to say that gradual transitions out of the labor force were also important components of the retirement process in the 1970s.¹⁵

A key aspect of transitional retirement is the type of jobs older individuals select. Older workers need to decide how many hours to work (e.g., part-time versus full-time), the regularity of their work schedule (e.g., year-round

versus seasonal), and the form of employment (e.g., wage and salary versus self-employed). What types of jobs do older individuals take on later in life? Both part-time work and self-employment become much more common among working individuals as they age (Figures 6-3 and 6-4).¹⁶ Nationally, only about 10 percent of working males aged 55-61 were employed part-time in 1999. But about 20 percent of working men aged 62-64; more than 40 percent of those aged 65-69; and more than half of those aged 70 and over worked part-time. The pattern is similar for women, although many more women work part-time for all ages. About one quarter of working women aged 55-61; 36 percent of those aged 62-64; and well over half of those aged 65 and older worked part-time in 1999.

Self-employment also becomes more prevalent at older ages. This occurs for two reasons: the self-employed retire later and individuals tend to move into self-employment as they age.¹⁷ About 15 percent of employed men aged

FIGURE 6-3. Percent Employed Part-Time in Massachusetts and the US, by Age and Gender, 1999



Source: Authors' calculations using the Census one-percent file, 2000.

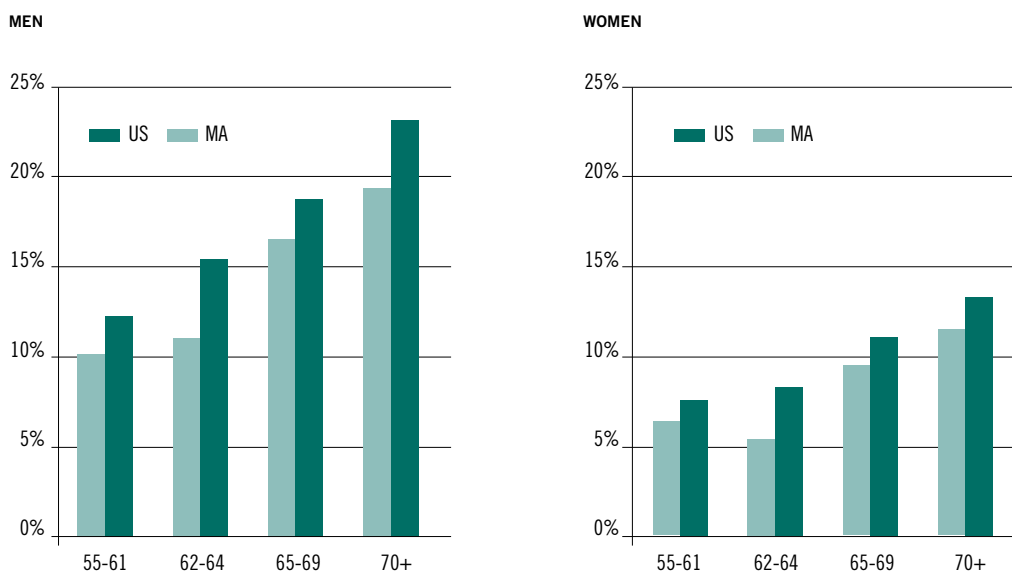
62-64 and 19 percent of those aged 65-69 were self-employed, compared to about 12 percent of employed men aged 55-61. A noticeable jump in self-employment is also seen for women at traditional retirement ages, although the change is not nearly as dramatic and the prevalence of self-employment at each age is much lower compared to men. About 7 percent of working women aged 55-61 were self-employed, compared to about 8 percent of employed women aged 62-64 and 11 percent of women aged 65-69. Older workers in Massachusetts were more likely to be working part-time and less likely to be self-employed in 1999 compared to all older workers nationally. Differences between the Commonwealth and the nation, moreover, increase at older ages. Massachusetts men aged 65-69 who remained in the work force were much more likely to be working part time than their national counterparts (53 versus 43 percent—a 10 percentage point gap). And the difference persisted among men aged 70 and older. For women, the state-

country difference in part-time employment reached eight percentage points among those aged 70 and older (73 versus 65 percent). A similar gap exists for self-employment, but in the opposite direction. Among workers aged 70 and older, Massachusetts men and women were about two to three percentage points less likely to be self employed.

A Preview of Things to Come?

Between 2000 and 2002, labor force participation rates of older workers aged 55-64 increased by about 2-3 percentage points, from about 59 to almost 62 percent. Any increase at all, let alone an increase of this magnitude over such a short period of time, is quite surprising given the long-term trend toward earlier retirement and the more recent stabilization of the average retirement age. The recent increase in labor force participation is even more dramatic given the slowdown in the economy, as fewer job opportunities typically lead individuals to drop out of the labor force.

FIGURE 6-4. Percent Self Employed in Massachusetts and the US, by Age and Gender, 1999



Source: Authors' calculations using the Census one-percent file, 2000.

This increase in labor force participation appears to be specific to men and women of retirement age. While the labor force participation of men in their 60s increased over the last three years, rates for men in their 50s or 70s saw little or no change. So in terms of labor force participation, men on the cusp of retirement were the ones most sensitive to recent economic changes. Participation rates for older women also increased beyond what one would expect given the trend since the mid-1980s, and the increase has been specific to women of retirement age.

Why have older workers postponed retirement or re-entered the labor force in recent years? A recent study indicates that one reason might be the increased prevalence of 401(k) plans combined with large declines in stock market wealth.¹⁸ In the late 1990s, as the stock market rose rapidly, investors were enthusiastic about having more control over the retirement wealth in their 401(k) accounts. But as the S&P 500 Index dropped from about 1500

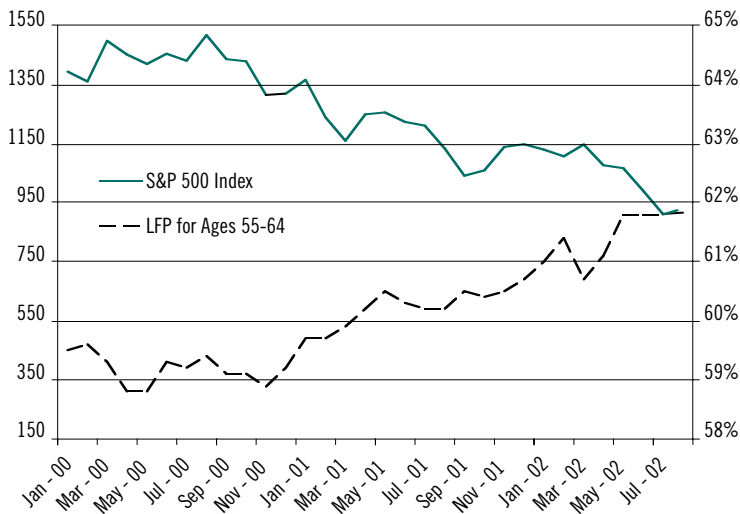
to below 950 between 2000 and 2002, a large fraction of many workers' retirement savings simply vanished. As shown in Figure 6-5, the decline is closely correlated with the rise in labor force participation among individuals aged 55 to 64.

Recent surveys have confirmed a close connection between the decline in the financial markets and the rise in labor force participation. An AARP study found that one in five older workers who lost money in the stock market, and who had not yet retired, planned to postpone their retirement. Among those who were already retired, one in ten who lost money in the stock market had re-entered the labor force.¹⁹ The 2003 Employee Benefit Research Institute's (EBRI) Retirement Confidence Study found that about 25 percent of workers aged 45 and older decided to postpone retirement in the past year, mainly for financial reasons.²⁰

Preliminary data indicate that older workers in Massachusetts were much more likely to postpone retirement and/or reenter the labor force in recent years. Labor force participation among Massachusetts men aged 55-64 increased more than seven percentage points between 2000 and 2002, from 71.1 to 78.5 percent, whereas nationally it only rose by two percentage points, from 67.3 to 69.2 percent. Massachusetts women experienced a similar increase. While labor force participation rates among women nationally increased from 51.8 to 55.2 percent between 2000 and 2002, they jumped more than nine percentage points among Massachusetts women—from 57.5 percent to 66.7 percent.

The experience over the last few years clearly shows labor force participation among older workers to be quite responsive to financial downturns. Participation rates typically decline during economic downturns as employ-

FIGURE 6-5. Labor Force Participation (LFP) for Older Workers and S&P 500 Performance, 2000-2002



Source: Andrew D. Eschtruth and Jonathan Gemus. 2002. "Are Older Workers Responding to the Bear Market?" Just the Facts on Retirement Issues No. 5. Chestnut Hill, MA: Center for Retirement Research at Boston College, (September).

er demand recedes. But the recent rise among older workers came in response to a decline in their retirement wealth. And the response seems especially pronounced among Massachusetts workers. So as Social Security replacement rates decline and the income provided by employer pension plans becomes more uncertain, one can expect a significant labor supply response on the part of older workers.

Conclusion

This chapter explored the labor supply and retirement decisions made by older workers in the United States and Massachusetts. The findings are a cause for optimism. While some people retire involuntarily, the retirement decision for most older workers is neither fixed nor even permanent. Many factors play a role, and workers often change their retirement plans in response to changes in the retirement landscape.

Unanticipated shocks, such as health status changes, layoffs, and age-related barriers to employment, are still important factors leading to involuntary retirement. But the key find-

ing is that retirement is often a voluntary decision. Non-pecuniary benefits to work often play an important role in the labor supply decision. And so does a worker's financial position.

Indeed, older workers retired at ever-earlier ages in response to increases in wealth over the previous century. As the financial markets turned downward over the past few years, workers responded by reassessing their retirement plans. Many older workers delayed their retirement plans or reentered the labor force. Furthermore, as traditional sources of retirement income recede, many who would currently choose complete retirement will look to exit the labor force gradually. Continued employment later in life thus looks like a realistic option.

The decision to remain in the labor force, however, assumes that older workers who want jobs can find them. Even if older individuals want to work, will jobs be available? And will they be available on the terms that older workers prefer? The question of whether employers will want older workers is the focus of the next chapter.

ENDNOTES

1. Orszag, Peter. 2001 "Should a Lump-Sum Payment Replace Social Security's Delayed Retirement Credit?" Issue in Brief No. 6 (April). Chestnut Hill, MA: Center for Retirement Research at Boston College; Sass, Steven. 2003. "Reforming the U.S. Retirement Income System: The Growing Role of Work." Global Issue in Brief No. 1 (September). Chestnut Hill, MA: Center for Retirement Research at Boston College. The term "actuarially fair" means that the total amount of income an individual receives over his or her lifetime will be the same regardless of when a person initially claims benefits.
2. The exercise is actually somewhat more complicated because the employee adds to his pension if he continues to work. Assume that the firm imposes no reduction in monthly benefits for retiring before age 65. Then, while working past the early retirement age, say 55, allows the person to earn additional benefits for additional years of service, it also reduces the total value of benefits earned up to age 55. (The monthly dollar amount of these benefits remains unchanged but they will be received for fewer years.) This decline in the value of retirement benefits from continued employment was even more severe before legislation prohibited the practice of ceasing benefit accruals after the normal retirement age. For more details, see Halperin, Daniel and Marla Schnall. 2000. "Regulating Tax-Qualified Pension Plans in a Hybrid World." In New York University-Proceedings of the Fifty-Eighth Institute on Federal Taxation: Employee Benefits and Executive Compensation. Matthew Bender and Company.
3. Often working beyond the normal retirement age results in negative pension accruals. The law requires that the wage increases of those who work beyond the normal retirement age be reflected in higher retirement benefits. But it does not prevent firms from capping the years of service used to calculate benefits; nor does it require firms to provide actuarial adjustments for the fact that participants will receive benefits for fewer years (McGill, Dan M., Kyle N. Brown, John J. Haley, and Sylvester J. Schieber. 1996. *Fundamentals of Private Pensions*, Seventh Edition. University of Pennsylvania Press.).

4. Considerable research exists on retirement incentives in defined benefit plans. An early study documented the incentives in a single plan for a Fortune 500 company and in a nationally representative cross section of plans (see Kotlikoff, Laurence J. and David Wise. 1989. "Employee Retirement and a Firm's Pension Plan." Working Paper 2323. Cambridge, MA: National Bureau of Economic Research.). Similar studies include: Stock, James H. and David A. Wise. 1990. "Pensions, the Option Value of Work, and Retirement." *Econometrica* 58, No. 5 (September): 1151-1180; Lumsdaine, Robin, James Stock, and David Wise. 1992. "Pension Plan Provisions and Retirement: Men & Women, Medicare and Models." Working Paper 4201. Cambridge, MA: National Bureau of Economic Research; and Samwick, Andrew. 1998. "New Evidence on Pensions, Social Security, and the Timing of Retirement." *Journal of Public Economics* 70: 207-236. Researchers have taken different approaches to characterizing the incentives in the plans. Stock and Wise developed an "option value" measure to reflect the utility gains or losses from postponing retirement, while a somewhat simpler concept of "peak difference" of pension wealth accruals was introduced in Coile, Courtney and Jonathan Gruber. 2000. "Social Security Incentives for Retirement." Working Paper 7651. Cambridge, MA: National Bureau of Economic Research.
5. Munnell, Alicia H., Kevin E. Cahill, and Natalia Jivan. 2003. "How Has the Shift to 401(k) Plans Affected the Retirement Age?" Issue in Brief No. 13. Chestnut Hill, MA: Center for Retirement Research at Boston College.
6. Benefits in traditional defined benefit plans are based on average final salary and years of service, and are typically paid in the form of an annuity. Benefits in defined contribution plans are based on employee contributions, and may include an employer match. Benefits are typically received in the form of a lump sum. See Chapter 3 for details.
7. Quinn, Joseph F. 1999. "Retirement Patterns and Bridge Jobs in the 1990s." EBRI Issue Brief No. 206 (February). Washington, D.C.: Employment Benefit Research Institute; Burtless, Gary and Joseph F. Quinn. 2002. "Is Working Longer the Answer for an Aging Workforce?" Issue in Brief No. 11 (December). Chestnut Hill, MA: Center for Retirement Research at Boston College.
8. The values shown in the figure are based on a retirement equation estimated using a sample of working individuals from the Health and Retirement Study. See Munnell, Cahill, and Jivan (2003) for details.
9. The result is consistent with the expected retirement age for working individuals aged 50 and over. Not surprisingly, the value is higher than the expected retirement age for the population generally, as younger workers tend to underestimate how long they will be working. Across all age groups, the expected retirement age for those who have not yet retired is 62.8 years for men and 63.2 years for women. See Moore, David W. 2003. "Retirement Income Biggest Financial Worry for Americans." The Gallup Organization (April 22).
10. The average level of defined benefit pension wealth for HRS respondents with coverage was about \$159,000 in 1992 (Munnell, Cahill, and Jivan (2003).
11. The impact of having a defined contribution plan and lower wages are also a significant determinant of delaying retirement, but the impact for each is less than one half of a year.
12. Committee for Economic Development. 1999. *New Opportunities for Older Workers*. New York: Research and Policy Committee of the Committee for Economic Development.
13. This method selects out workers who may have had a series of short-duration jobs or for whom job changes later in life do not necessarily represent a transition towards retirement. Another way to measure transitional retirement is to examine the job status of older individuals at a set point in time, and classify who is working on a full-time career job and who is not. Using this method, at least one-third of men and one-half of women with work experience since age 50 will change jobs prior to complete labor force withdrawal. Job transitions may turn out to be even more prevalent since these estimates assume that all individuals on full-time career jobs exit the labor force directly. See Quinn (1999).
14. Ruhm, Christopher J. 1990. "Bridge Jobs and Partial Retirement." *Journal of Labor Economics* 8, Issue 4 (October): 482-501.
15. In his analysis, Ruhm used only household heads, only individuals with work experience between 1949 and 1969, and only individuals who responded in all six waves.
16. The following discussion focuses on the prevalence of part time work and self employment among working older individuals. Another issue is whether there is an absolute increase in the number of older individuals who take on these types of jobs among all older people. For simplicity, we focus on working individuals, taking the employment decision as given. The latter option, in contrast, is the combination of two inter-related outcomes: the decision to work and the decision to work at a certain type of job.
17. Evidence suggests that crossovers between wage and salary and self employment are quite common later in life. Quinn (1999) finds that among wage and salary workers who had full-time jobs and transitioned to a bridge job, nearly one-quarter became self employed. Among their self-employed counterparts, about one third moved to wage and salary employment. Even though the percentage of self-employed individuals that moved to wage and salary employment is higher, the number of self-employed individuals increased since there are more wage and salary workers.
18. Eschtruth, Andrew D. and Jonathan Gemus. 2002. "Are Older Workers Responding to the Bear Market?" *Just the Facts on Retirement Issues* No. 5 (September). Chestnut Hill, MA: Center for Retirement Research at Boston College.
19. AARP. 2002. *Impact of Stock Market Decline on 50-70 Year Old Investors*. [Available at: http://research.aarp.org/econ/market_decline.pdf].
20. Employee Benefit Research Institute (EBRI). 2003. "EBRI 2003 Retirement Confidence Survey."

CHAPTER 7 | Will Employers Want Older Workers?

Can older workers ensure themselves a secure retirement by staying in the labor force longer? The answer depends on two factors. The first is their ability and desire to work. As shown in Chapter 6, this reflects their health, their need for income, the nature of the job, the incentives in their pension plans, and their desire for personal fulfillment. The other side of the equation, to be addressed in this chapter, is employers' willingness to retain and hire older workers.

Up to the 1990s, most employment policies were designed to encourage early retirement—policies reflected in the design of employer-sponsored defined benefit pension plans. Large bureaucratic and seniority-driven employers dominated the U.S. economy, and these employers sought to retire older workers whose compensation was thought to exceed their productivity. In the 1970s and 1980s, this tendency was reinforced as young, inexpensive baby boomers came flooding into the labor market.

By the 1990s, and especially in the late 1990s, the employment landscape changed; employers became more concerned about finding enough trained workers than retiring older employees. Large U.S. corporations were far less bureaucratic and seniority-driven, so wages more effectively matched worker productivity. This flexibility was especially prevalent in the knowledge-based businesses that came to distinguish the Massachusetts economy. Moreover, as the baby boomers matured, the reservoir of inexpensive young workers disappeared.

Although the onset of the recession in March 2001 lessened labor market pressures, the economy appears to be recovering and labor shortages will re-emerge. This should be especially true in Massachusetts, where the labor force is

older and historically has grown more slowly than the labor force nationwide. The real problems will start to appear in 2008, when the leading edge of the baby boom—the cohort

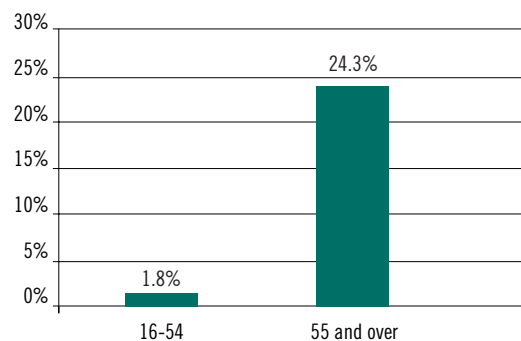
THE POPULATION UNDER 55 WILL DECLINE IN OUR STATE.

born between 1946 and 1964—turns 62 and begins to retire, and employers will no longer have an influx of young workers to meet their needs. This chapter explores the extent to which employers, especially in Massachusetts, will retain or hire older workers to fill the void.

Employers and the Coming Labor Shortage

The baby boom generation is about to move from ages when most people work to ages when most people retire. The early baby boomers will turn 62 in 2008 and the late boomers in 2026. That means that older workers will be a growing portion of the labor force over the next two decades. Figure 7-1 shows the projected percentage change in the labor force between 2010 and 2025 for those aged 16-54 and those aged

FIGURE 7-1. U.S. Labor Force, Percentage Change 2010-2025



Source: Bureau of Labor Statistics. 2003a. "Labor Force Data." <ftp://ftp.bls.gov/pub/special.requests/ep/labor.force> See Appendix for underlying labor force data.

55 and over. The number of younger workers will remain virtually constant over the 15-year period, while the number of older workers will grow by 24 percent. As older workers will still account for less than 20 percent of the labor force, total labor force growth will be determined by those under 55. The result is that total growth will average only 0.4 percent per year between 2010 and 2025—far below the 1.3 percent experienced between 1980 and 2000.

Long-term labor force projections are not available for Massachusetts. But a quick glance at the projected population numbers suggests the labor shortage in the Commonwealth will be even more serious (Table 7-1). Like the nation, Massachusetts will see a significant increase in its older population. But, unlike the case nationwide (where the population under 55 will stay basically constant), Massachusetts is projected to experience a significant decline in its under 55 population. Since the labor force will mirror these trends, this should drive home the fact that, in Massachusetts, all of the growth in the labor force will come from older workers.

The labor force growth in Massachusetts has already slowed compared to that of the nation (Figure 7-2). This slowing of the labor force is one factor that has contributed to the

relatively low unemployment rate in Massachusetts compared to the U.S. average (Figure 7-3). In short, Massachusetts labor markets are already tight and will become significantly tighter over the next 20 years.

The projections for the labor market have profound implications for the economy. The amount of output that the economy can produce depends on the supply of capital, the supply of labor, and the level of technology. All else equal, a slowing of the growth of the labor force means a slowing of the rate of growth of output and income of future residents of the Commonwealth. The question for employers is whether they can avoid this slowdown by finding a substitute for prime-age workers.

Possible Responses to Shortage of Prime-Age Workers

In theory, both the nation and Massachusetts could respond to the upcoming shortage of prime-age workers (defined as workers between the ages of 25 and 54) by supplying the existing workers with more capital, by tapping unconventional sources of labor, such as immigrants and women, by relocating, or by employing more older workers.

Capital

Increasing the amount of capital per worker to raise the productivity of the labor force seems an unlikely response. The same demographic trends that lead to the aging of the population and slowing of labor force growth are likely to reduce both personal and government saving. Lower saving means lower investment and relatively less capital than would have occurred without the demographic shift.

According to the conventional economic model of life-cycle saving, people save when they are young and then draw down their accu-

TABLE 7-1. Massachusetts Population, 1980-2025^a

YEAR	15-24	25-54	55-64	TOTAL (15-64)
1980	1,110,141	2,147,705	588,349	3,846,195
1990	923,573	2,619,912	515,055	4,058,540
2000	820,016	2,863,136	546,407	4,229,559
2010	962,439	2,681,435	742,765	4,386,639
2015	947,870	2,644,240	819,690	4,411,800
2020	921,232	2,602,950	870,711	4,344,893
2025	919,815	2,599,192	834,412	4,353,419

Source: U.S. Bureau of the Census. 2002a. "State Population Projections." <http://www.census.gov/population/www/projections/stproj.html>; U.S. Bureau of the Census. 2003a. "Census 2000 Gateway." <http://www.census.gov/main/www/cen2000.html>; U.S. Bureau of the Census.
a. Projections use the Census Bureau's middle assumption about immigrants.

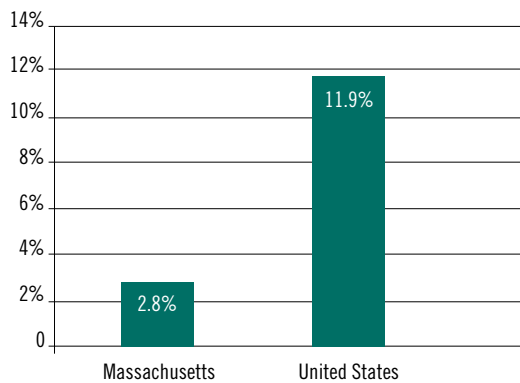
mulated assets when they reach retirement. The implication of this theory is that as the large cohort of baby boomers leaves the labor force, they will draw down their 401(k) plans and other assets to replace their foregone income from earnings. This dissaving will swamp the saving undertaken by incoming younger cohorts. Although economists have not been able to document a strong relationship between demographics and personal saving, less personal saving would be the expected outcome.

Government saving—the difference between revenues and expenditures—will also be under pressure in the face of an aging population. The large programs that support older Americans—Social Security and Medicare—are financed primarily on a pay-as-you-go basis. Currently, both programs have commitments far in excess of scheduled revenues. As retiring workers claim their Social Security and Medicare benefits, these programs will put increased strain on the rest of the budget. This strain is likely to reduce government saving.

With lower levels of personal and government saving, investment levels should also decline. The only way to avoid such a decline is to borrow from abroad. In the 1980s, also a period of large government deficits, such borrowing allowed the U.S. to avoid a major decline in investment spending. But the U.S. current account deficit is now so large relative to GDP that further borrowing seems unlikely to offset the projected decline in national saving. As a result, lower national saving should produce less investment and limit the extent to which employers can substitute capital for the decline in the prime-age labor force.

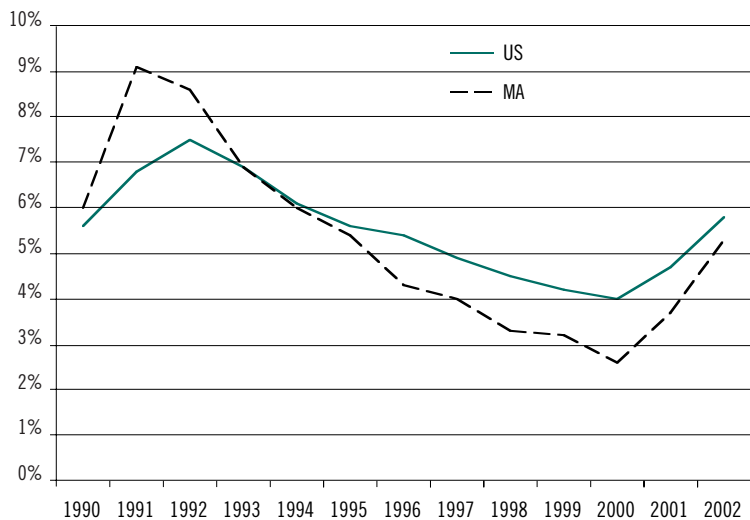
The employers' alternative to adding more capital is to increase the labor force by turning to untapped sources. The two most often mentioned are immigrants and women.

FIGURE 7-2. Percentage Increase in Labor Force, Massachusetts and U.S., 1990-2000



Source: Massachusetts Division of Employment and Training. 2003a. "Labor Force and Unemployment Rates." <http://www.detma.org/LMI/mi.htm#labor>; Howard N. Fullerton, Jr. and Mitra Toossi. 2001. "Labor force projections to 2010: steady growth and changing composition." *Monthly Labor Review* 124(11), 21-38, (November).

FIGURE 7-3. U.S. and Massachusetts Unemployment Rates, 1990-2002



Source: U.S. Bureau of the Census. 2003b. Current Population Survey; Massachusetts Division of Employment and Training. 2003a. "Labor Force and Unemployment Rates." <http://www.detma.org/LMI/mi.htm#labor>

Immigrants

In considering the role that immigrants might play in alleviating the future labor shortage, it is important to keep the numbers in mind. First, current levels of immigration have been relatively high from a historical perspective.

As shown in Figure 7-4, the United States went from very high immigration rates in the early part of the century to extremely low rates during the Depression and World War II. Immigration then gradually picked up, and the rate in the 1990s returned to that of the 1920s.

Second, current labor force projections already assume that substantial numbers of new workers will continue to enter the country. The Census Bureau's middle assumption, which underlies the labor force projections reported in Figure 7-1, is net immigration of about 900,000 per year including both legal and those classified as "other-than legal." This level would be in keeping with the pattern of the 1990s. Higher levels of immigration seem unlikely for the foreseeable future in the wake of September 11, 2001. Given today's much more restrictive environment, immigration is unlikely to solve the problems created by the projected national shortage of prime-age workers.

This conclusion is even more valid for Massachusetts, which has relied heavily on

TABLE 7-2. Demographic Components of Population Change, Massachusetts, 1990-1999

SOURCE OF CHANGE	POPULATION CHANGE
Total	156,505
Natural change	260,762
Births	754,676
Deaths	-493,914
Net international migration	143,499
Net domestic migration	-232,157

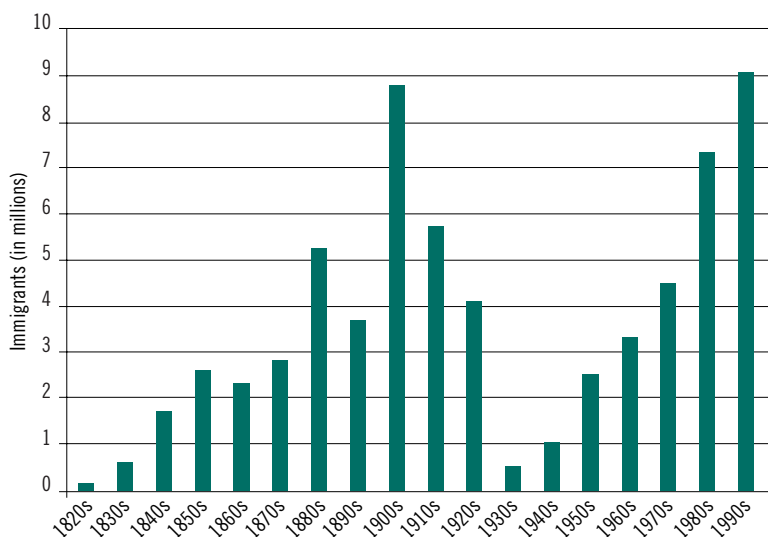
Source: U.S. Bureau of the Census. 1999. "State Population Estimates and Demographic Components of Population Change." <http://eire.census.gov/popest/archives/state/st-99-7.txt> All figures based on mid-year estimates.

Note: Total includes an additional -15,599 for "Net Federal Movement" of government employees into and out of the United States and a residual that arises from constraining the state estimates to sum the separately estimated national population.

immigrants to meet its labor force needs during the 1990s. Were it not for immigrants, the population of Massachusetts would have remained virtually unchanged during this period (Table 7-2). Natural growth in the population due to the excess of births over deaths was roughly offset by net domestic migration out of the state. But 143,499 more persons entered Massachusetts than left to live abroad, and this nearly equaled the Commonwealth's entire population gain in the decade. Similarly, almost all the net growth in the Massachusetts labor supply during the 1990s came from outside the country. The state was the fifth highest in the nation in terms of the contribution of immigrants to labor force growth.¹ So while immigrants should continue to augment the Massachusetts labor supply, the current high immigration rates make it unlikely that further increases will remedy the projected labor shortage.

When considering a state rather than a nation, another source of labor force growth could be workers from elsewhere in the country. This seems unlikely given the historic pattern of net domestic migration out of Massachusetts. To reverse that trend, employers in

FIGURE 7-4. Immigration to the United States, 1821-2000



Source: Kyle N. Brown and Sylvester Schieber. 2003. "Structural Impediments to Phased Retirement." Watson Wyatt Worldwide. Mimeo, (March 27).

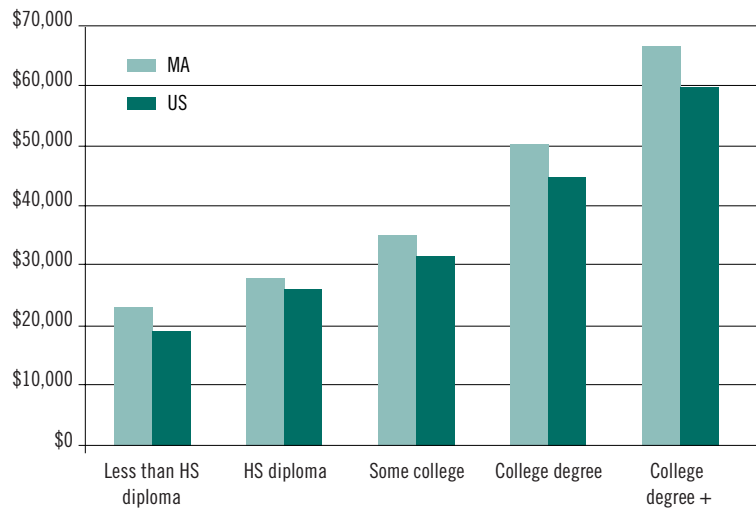
the Commonwealth would have to offer significantly higher wages. As shown in Figure 7-5, Massachusetts employers pay roughly the same wages for workers with the same level of education. But while earnings levels are roughly comparable, expenses are much higher in Massachusetts than elsewhere in the country. As of 2000, the median house price in Massachusetts was \$185,700 compared to a national average of \$119,600. And in Boston, home prices have been rising much faster than earnings (Figure 7-6). That trend may be good news for existing homeowners, but it makes it very expensive for people moving into the area. Thus, domestic immigration, like foreign immigration, is unlikely to solve the labor force shortage.

Women

Women have contributed enormously to the growth in the labor force over the last 40 years. Nationally, their labor force participation has increased from 37.7 percent in 1960 to 60.2 percent today (Figure 7-7). The question is whether further labor force participation by women can close the gap.

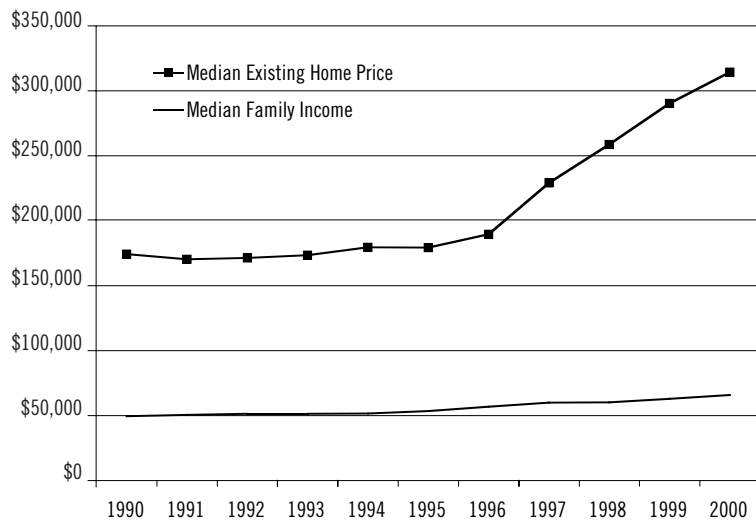
Women born in 1940 and thereafter came into the labor force at ever increasing rates, and they stayed in the labor force at higher levels than those born before them. This pattern came to a halt, however, with those born around 1965, when labor force participation reached a plateau.² By the 1990s, the continued increase in female labor force participation reflected the retirement of older women, who had relatively low lifetime participation, and their replacement by younger women with higher labor force activity. The current gap in participation between men and women aged 35-44 has narrowed to 15 percentage points (92.6 percent versus 77.2 percent), and that

FIGURE 7-5. Earnings by Educational Attainment, 2001



Source: Authors' calculations from the Current Population Survey, March 2002

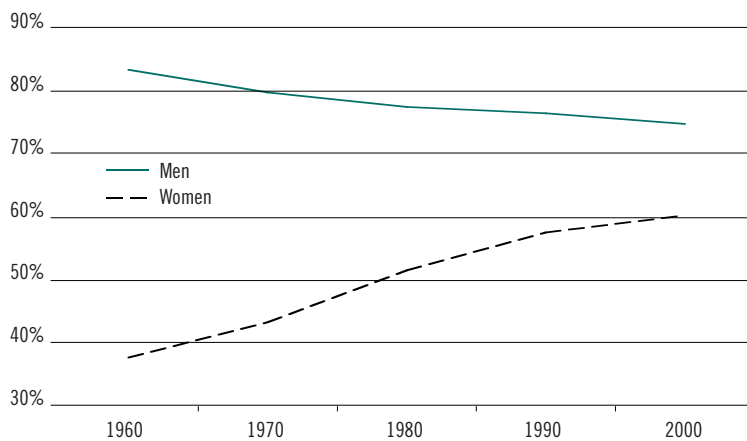
FIGURE 7-6. Median Existing Home Price and Median Family Income, Boston, 1990-2000



Source: Metropolitan Area Planning Council, unpublished data.

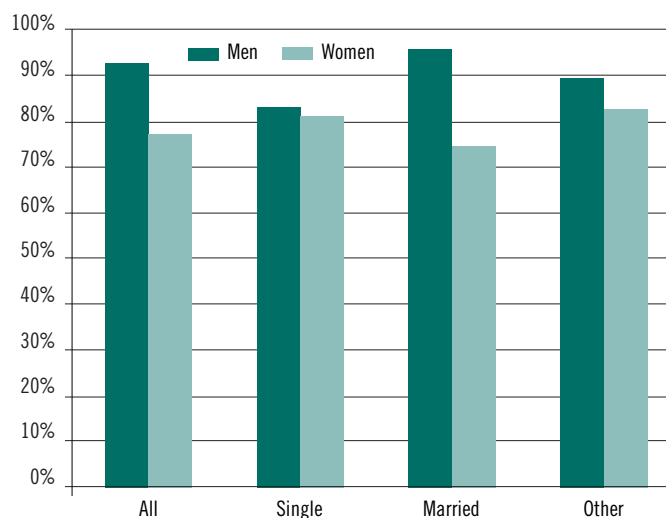
discrepancy comes from the significant difference in participation between married men and married women (Figure 7-8). Given that women remain primarily responsible for the care of home and children, they are likely to need higher pay and/or substantial improvement in child care facilities to enter the labor force in greater numbers.

FIGURE 7-7. Labor Force Participation Rates for Men and Women, 1960-2000



Source: U.S. Bureau of the Census. 2002b. "Section 12: Labor Force, Employment, and Earnings." Statistical Abstract of the United States: 2001, Table 561. [Available at: <http://www.census.gov/prod/2003pubs/02statab/labor.pdf>]; U.S. Bureau of the Census. 1996. "Section 13: Labor Force, Employment, and Earnings." Statistical Abstract of the United States: 1995, Table 628. [Available at: <http://www.census.gov/prod/1/gen/95statab/labor.pdf>].

FIGURE 7-8. Labor Force Participation of Workers Aged 35-44 by Marital Status, 2001



Source: U.S. Bureau of the Census. 2002b. Statistical Abstract of the United States: 2001. "Section 12: Labor Force, Employment, and Earnings." Table 568. <http://www.census.gov/prod/2003pubs/02statab/labor.pdf> Note: "Other" includes widowed, divorced, and married (spouse absent).

Massachusetts is ahead of the nation in terms of labor force participation of women. As shown in Table 7-3, more Massachusetts women are in the work force than for the

nation as a whole. This is particularly true for older women, which suggests that Massachusetts has a long tradition of women entering the labor force. But even at prime work ages (35-44), Massachusetts has more women working than the rest of the nation. Thus, Massachusetts employers appear to have fully tapped the supply and are even less likely to be able to make up for the slow growth in the labor force by hiring more women. In short, as with immigrants, a surge of female workers is unlikely to solve the problem.

Relocating

Firms might find the answer to the shortage of prime-age workers by relocating overseas or to another state, where younger workers are abundant or where labor is less expensive. In theory, a firm would relocate only if the expected benefits exceeded the costs of remaining in Massachusetts. The costs of remaining will rise as the shortage of prime-age workers becomes apparent. Firms will need to pay higher salaries and other benefits to attract the limited set of available workers. For example, employers may need to provide immigrants with English for Speakers of Other Language (ESOL) training or low-skill workers with Adult Basic Education (ABE). Employers may also need to pay women higher salaries and offer child care benefits.

While moving overseas has its benefits, one must also consider the potentially substantial costs it brings as well. Such a move would almost certainly require new training that would perhaps be more costly than the training of domestic employees. Further, beginning an overseas operation may require the transportation of goods over great distances. For these reasons, it is hard to envision international relocation as the solution to the shortage of prime-age labor at home.

The Potential Demand for Older Workers

If increased capital, more immigrants, a surge of female workers, or relocation are unlikely to fill the gap left by the lack of growth of the under-55 work force, will employers turn to older workers? In some ways, that seems like the logical option. The population over age 55 will soon increase sharply and permanently. As indicated in the previous chapter, a much larger portion of this population will likely be seeking to remain employed as the traditional sources of retirement income recede. Moreover, tomorrow's older workers will be well educated, they will have a lifetime of experience, they will be healthier than workers in the past, and the jobs employers need filled have become much less physically demanding.

Older workers are well educated

The U.S. population has become more educated over time. As shown in Figure 7-9, the share of the national adult population with at least a bachelor's degree has increased from 11 percent in 1970 to 24 percent in 2000. The improvement in Massachusetts has been even more dramatic—rising from 12 to 33 percent. This overall gain in education should make older workers more desirable.

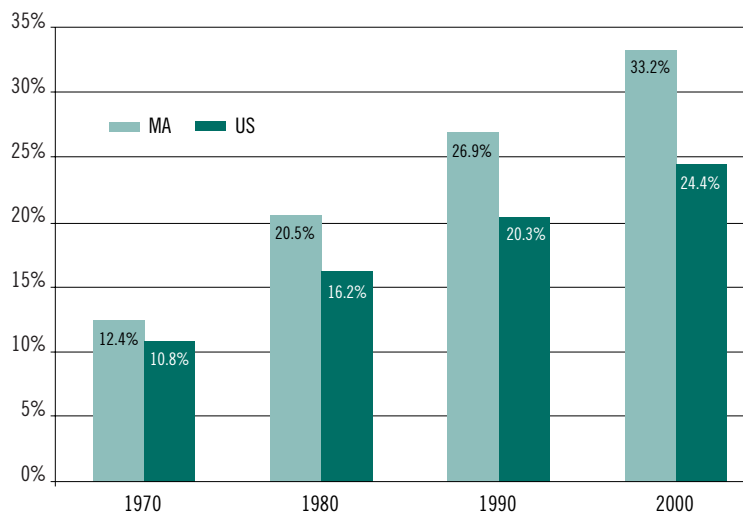
Moreover, the educational discrepancy between older and younger workers is now a thing of the past. In both Massachusetts and the nation, individuals 65 and over have substantially less education than their younger counterparts (Table 7-4). But educational levels for men aged 45 to 64, which includes the bulk of the baby boomers, are either better (U.S.) or about the same (Massachusetts) as levels for younger men. The picture for women is more complicated, given the enormous social change that has occurred in post-WWII America. The educational attainment of each succeeding

TABLE 7-3. Labor Force Participation of Women, U.S. and Massachusetts, 2002

AGE	LABOR FORCE PARTICIPATION RATE	
	MASSACHUSETTS	UNITED STATES
All	62.3%	59.6%
16-19	50.6	47.3
20-24	72.2	72.1
25-34	79.6	75.1
35-44	77.7	76.4
45-54	77.3	76.0
55-64	66.7	55.2
65 and over	12.2	9.8

Source: Bureau of Labor Statistics. 2002a. "Employment status of the civilian non-institutional population by age, sex, and race." <ftp://ftp.bls.gov/pub/special.requests/lfaaat3.txt>; Bureau of Labor Statistics. 2002b. "Employment status of the civilian non-institutional population by age, sex, and race—Massachusetts." <http://www.bls.gov/lau/table12full02.pdf>

FIGURE 7-9. Percent of Persons 25 and Over with a Bachelor's Degree or More, U.S. and Massachusetts, 1970-2000



Source: Authors' calculations using the Census one-percent file, 1970, 1980, 1990; U.S. Bureau of the Census. 2003c. United States: 2000 - Summary Social, Economic, and Housing Characteristics. PHC-2-1. Washington, D.C. (July). <http://www.census.gov/prod/cen2000>

cohort surpasses that of earlier cohorts. But even here, the gap between women aged 45 to 64 and younger groups is much less than with women 65 and over. In short, older workers will look much like younger workers in terms of their educational attainment.³

TABLE 7-4. Percent of Population with a Bachelor’s Degree or More, 2000

AGE	MEN		WOMEN	
	MASSACHUSETTS	UNITED STATES	MASSACHUSETTS	UNITED STATES
25-34	39.3	25.8	43.4	29.3
35-44	36.0	25.8	37.0	26.0
45-64	37.6	29.3	32.2	23.7
65 and over	24.1	20.4	13.5	11.8

Source: Authors’ calculations using Census 2000 data. U.S. Bureau of the Census. 2000. “Sex by Age by Educational Attainment for the Population 18 Years and Over.” Summary File 3 PCT 25. [Available at: <http://factfinder.census.gov/>].

Older workers have a lifetime of experience

Older workers have logged a great many years in the labor force and have generally acquired valuable skills in the process. These skills are not just useful to their current employer. Most older workers have a diverse work history and experience with many different employers, as the U.S. workforce is extremely mobile.⁴ The median job tenure is currently 4.7 years for all wage and salary workers and about 10 years

**TOMORROW’S OLDER WORKERS
WILL BE WELL EDUCATED.**

for workers aged 55 to 64; fewer than one in five wage and salary workers aged 60 to 64 has more than 25 years of tenure.⁵ Today’s older workers are generally efficient, versatile, able to display good judgment, and capable of adjusting to workplace changes.

Older people are healthier than in the past

The conclusion that the health of older workers is improving is a relatively new finding.⁶ Demographers who examined the issue in the 1970s concluded that the elderly were increasingly less healthy.⁷ But these early conclusions may have been based on less than ideal data that allowed multiple interpretations. A new survey of those 65 and older designed in part

to solve these data problems—the National Long-Term Care Survey—was first conducted in 1982 and now challenges this view. It asks detailed questions about disability in a consistent manner over time and now provides almost twenty years of information.⁸

Between 1982 and 1999, the share of the elderly with severe disabilities, measured roughly in terms of lack of ability to function independently with ease, declined from 26.2 percent to 19.7 percent. This is a 25 percent cumulative reduction in the disability rate, or 1.7 percent per year. Moreover, the study reported that the rate of reduction is increasing over time. Between 1982 and 1989, disability rates fell by 1.0 percent per year; between 1989 and 1994 by 1.6 percent per year; and between 1994 and 1999 by 2.6 percent per year. The elderly are increasingly healthy, and getting healthier at a faster rate. The dramatic improvement in the health status of those 65 and over suggests that those in their late 50s and early 60s must also be healthier.

The outlook for the future depends on the cause of these health improvements.⁹ If largely due to public health changes at the beginning of the twentieth century, they will fade over time as people born well after these improvements were instituted enter old age. If primarily due to new medical treatments, such as drugs for arthritis or cataract surgery for eye problems, they are likely to persist over time. Similarly, if people are healthier mainly because of behavioral changes, such as a reduction in smoking or fat consumption, or improved education and thus better access to medical care and greater understanding about appropriate behavior, the trend towards continued improvement is likely to persist.

For the purpose of assessing employers’ willingness to hire older workers, the improved

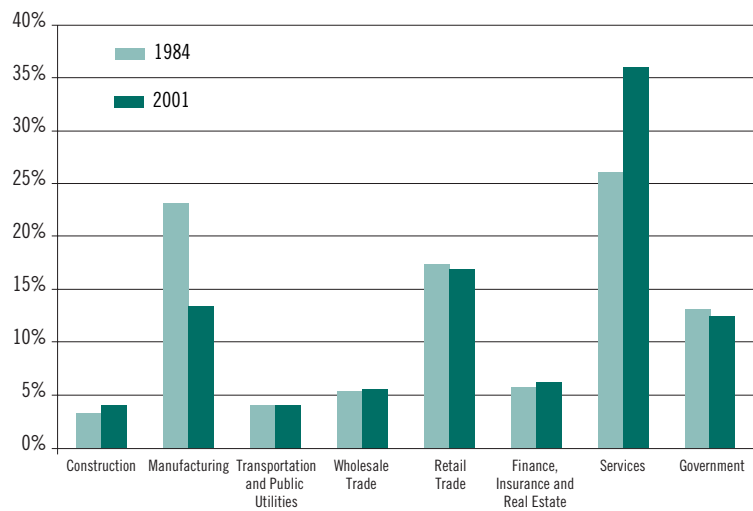
health of older people is definitely positive. Healthy older workers are more productive than those with infirmities and will appear more similar to younger workers in terms of physical and mental capabilities than in the past. Moreover, as discussed in Chapter 2, older people in Massachusetts are even healthier than the national average.

Jobs are no longer physically demanding

The nature of Massachusetts employment has changed dramatically in the last 20 years. For almost two hundred years, Massachusetts workers earned their money by producing manufactured goods for the rest of the country. As recently as 1984, almost a quarter of Massachusetts workers were employed in manufacturing (Figure 7-11).

As manufacturing declined, the service sector exploded and rose from 26 percent to 37 percent of state employment. This expansion reflects the growth of jobs in universities, hospitals, software developers, and management consulting firms. Finance, insurance, and real estate, which includes money managers, mutual fund distributors, and venture capitalists, was the other sector that added jobs, rising from 6.3 to 6.8 percent of total employment. Even within manufacturing the nature of jobs has changed, as firms have automated or outsourced production and now employ more managers, engineers, and technicians.¹⁰ The Massachusetts industrial structure now looks very much like that of the nation, except for slightly more jobs in the service sector. The key difference is our concentration in knowledge-based activities within those sectors. Employers looking to fill less physically demanding knowledge-based jobs should be more willing to hire older workers who offer a wealth of skills and experience.

FIGURE 7-11. Employment by Industry in Massachusetts, 1984 and 2001



Source: Massachusetts Division of Employment and Training. 2003b. "Current Employment Statistics." <http://www.detma.org/lmices790.htm>; Bureau of Labor Statistics. 2001. "New England Nonfarm Employment up 148,800 in 2000." Boston, (May 31). <http://www.bls.gov/ro1/empneaa.pdf>

Impediments to Hiring Older Workers

Although the stage appears set for hiring older workers—alleviating the problems of workers and employers alike—a number of impediments stand in the way. First, older workers are expensive. Second, most existing employment policies have been geared to encouraging early retirement. Third, employers resist part-time employment, which older workers disproportionately favor. Fourth, legal impediments preclude employers from offering phased retirement. Finally, age discrimination, while illegal, probably continues to exist at least to some extent. It should be noted at the outset of this discussion that, while these impediments certainly exist, little work has been done to quantify their impact on older workers.

Older workers are expensive

Older workers are expensive for a number of reasons. First, their earnings tend to be higher than those of comparable younger workers.

One would expect rising salaries as workers become more productive with increased experience. But the issue here is increases in salary that exceed what can be attributed to productivity gains. Economists explain this phenomenon in terms of implicit contracts between employers and workers whereby younger

on a quality-adjusted basis.

In addition to cash earnings, the cost of fringe benefits—health insurance and pensions—also rises with age. Health insurance costs increase for two reasons. First, the percentage of workers covered rises with age, suggesting that older workers demand such coverage as part of their compensation package. Thus 82 percent of full-time workers aged 55 to 64 have employer provided health insurance compared to 55 percent of 16 to 24 year olds and 76 percent of 25 to 44 year olds.¹² Second, the cost of fringe benefits increases with age. Private health insurance costs for full-time year-round workers are between \$500 and \$1,000 for those aged 20 to 40 compared to over \$1,500 for workers 50 to 54, and to \$2,000 for workers 55 to 64 (Figure 7-12). If the employer self-insures, hiring an older worker—all else equal—will drive up health care costs. If the employer purchases insurance from a carrier, hiring older workers will raise the cost of the policy.

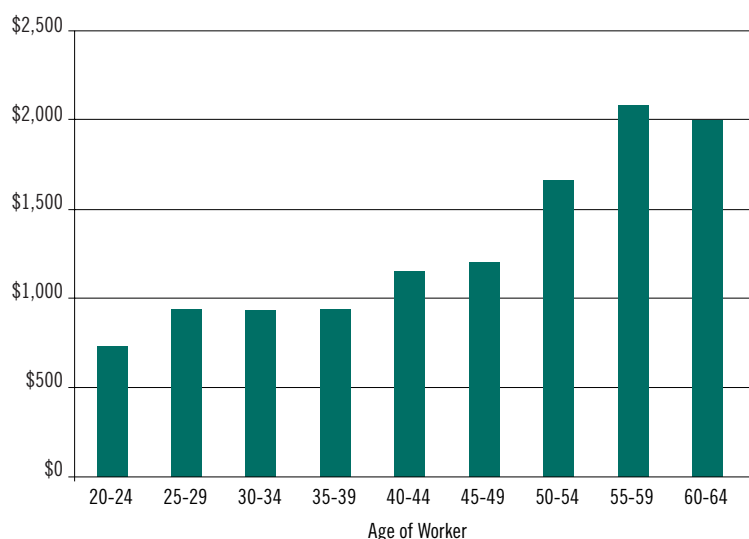
OLDER WORKERS ARE EXPENSIVE.

workers are underpaid and older workers are overpaid.¹¹ The idea is that the promise of future high salaries encourages the worker with firm-specific skills to remain with the company, and that compensation reflects the value of the workers' contributions over their lifetimes. This pattern may be less prevalent than in the past with the onset of tight labor markets, the pressure of global competition, and the flattening of corporate personnel systems. Nevertheless, older workers tend to be paid somewhat more than younger workers

In the case of pension costs, the impact of hiring older workers depends on the type of plan provided. With 401(k)s, the employer's contribution is generally a fixed percentage of salary and therefore rises in line with pay increases. If the older worker's salary simply reflects greater productivity, then 401(k) contributions raise no cost issue. To the extent that older workers' salaries are higher because of implicit contracts, the 401(k) contribution adds to the extra expense. On the whole, however, 401(k) plans are not a major factor in the hiring of older workers. Neither are the new cash balance plans that some employers have adopted to replace their traditional defined benefit plans.

The real pension issue with regard to older workers arises in traditional defined benefit

FIGURE 7-12. Per Worker Health Care Expenditures Paid by Private Insurance

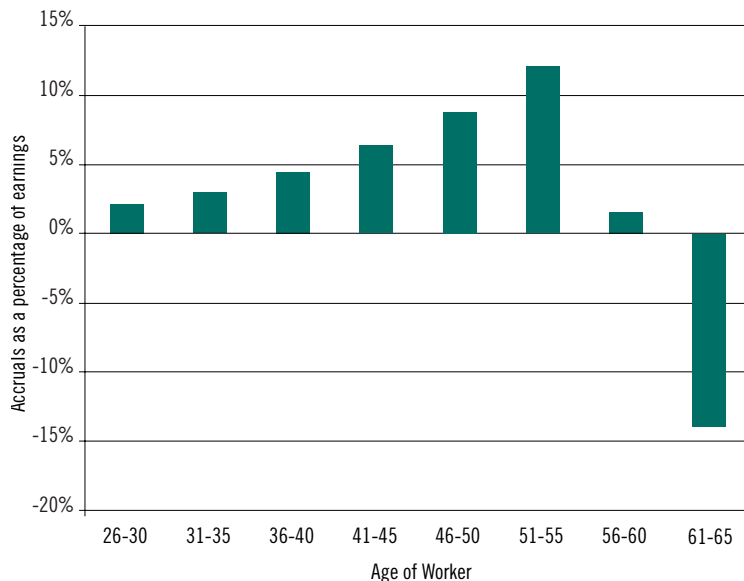


Source: Rudolph G. Penner, Pamela Perun, and Eugene Steuerle. 2002. "Legal and Institutional Impediments to Partial Retirement and Part-Time Work by Older Workers." The Urban Institute, (November 20). http://www.urban.org/UploadedPDF/410587_SloanFinal.pdf

plans. Figure 7-13 shows the average accrual rate in a sample of traditional private sector defined benefit plans by age—that is, the increase in the present discounted value of pension benefits as a percent of earnings for each age group. The accrual rate rises sharply from 2.1 percent for those aged 26-30 to 12 percent for those aged 51-55. The reason for this increase is the multiplier effect inherent in the traditional defined benefit formula. Assume that the formula provides 1.5 percent of final salary for each year of service and a 54-year-old with 20 years of service works for another year. That worker's replacement rate will increase from 30 to 31.5 percent. In addition, the entire 31.5 percent will apply to salary earned in that 21st year of service, increasing the value of all the previously earned pension credits. For this reason, defined benefit pension accruals rise much faster than salary, making the retention of older workers very expensive.

Defined benefit plans also make hiring older workers costly. Figure 7-14 shows the present discounted value of pensions earned during the first five years for workers starting at different ages. A person who starts with a plan at age 25 accrues very little—2.1 percent of pay; whereas someone who starts at age 55 accrues benefits equal to 9.6 percent of pay. Again, suppose the plan provides 1.5 percent of final salary and that the employee earns \$35,000 during the first year of employment. Both the older and younger worker will be entitled to benefits of \$525 per year (1.5 percent of \$35,000) when they retire. The older worker, however, can retire in five years at age 60 and claim the benefit, while the younger worker has to wait 35 years. That means in terms of calculating the present value of the accrued pension benefit at age 60, the \$525 for the older worker is discounted by 5 years while the

FIGURE 7-13. Average Accruals in Private Defined Benefit Plans



Source: Rudolph G. Penner, Pamela Perun, and Eugene Steuerle. 2002. "Legal and Institutional Impediments to Partial Retirement and Part-Time Work by Older Workers." The Urban Institute, (November 20). http://www.urban.org/UploadedPDF/410587_SloanFinal.pdf

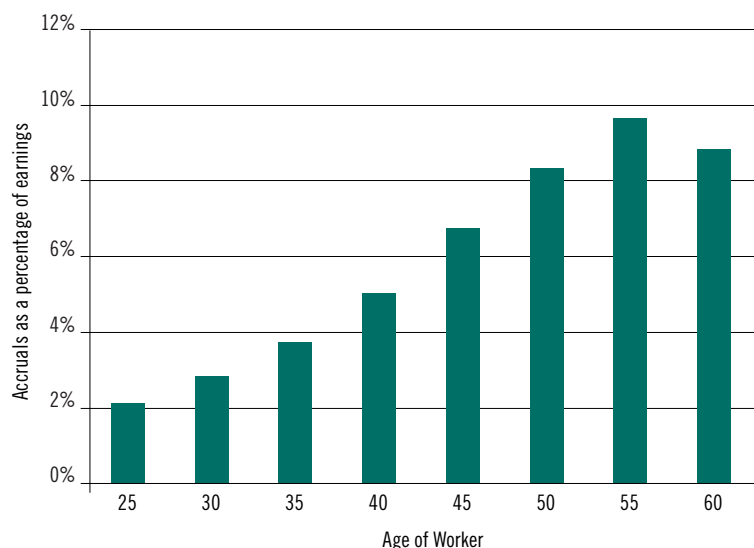
Note: The analysis is based on a sample of 340 salary-based defined benefit plans in the private sector. Accrual estimates assume that workers join the firm at age 25 and leave at the age that maximizes the present discounted value of pension benefits (or age 70). The analysis assumes that wages grow at the average age-specific rate for college-educated male workers with defined benefit plans. The real interest rate is set at 3 percent and the inflation rate at 3.3 percent. Estimates are weighted by firm size.

\$525 for the younger worker is discounted by 35 years. The fewer years of discounting means a much larger required contribution to the pension plan for the older worker, making the hiring of older workers in firms with traditional defined benefit plans very expensive.

Several other items make older workers more expensive to retain or hire.¹³ One is paid leave. Both vacation days and sick leave tend to increase with tenure, so older workers are generally entitled to more days off than younger ones. The second is life insurance costs. Many employers provide term life insurance for their employees, and the cost of these policies is directly related to the age of the workforce. Finally, the cost associated with work injury and disability tends to be higher for older workers.

In short, the current compensation struc-

FIGURE 7-14. Average Pension Accruals in Private Sector Defined Benefit Plans during the First Five Years of Service, by Start Age



Source: Rudolph G. Penner, Pamela Perun, and Eugene Steuerle. 2002. "Legal and Institutional Impediments to Partial Retirement and Part-Time Work by Older Workers." The Urban Institute, (November 20). http://www.urban.org/UploadedPDF/410587_SloanFinal.pdf

Note: The analysis is based on a sample of 340 salary-based defined benefit plans in the private sector. Accrual estimates assume that workers leave the firm at the age that maximizes the present discounted value of pension benefits, or age 70, whichever comes first. The analysis also assumes that all workers receive a starting annual salary of \$35,000 that grows at 5 percent per year. The real interest rate is set at 3 percent and the inflation rate at 3.3 percent. Estimates are weighted by firm size.

ture tends to make older workers expensive. To the extent that they are more productive because they have spent years on the job, some of the disadvantage to retaining older workers disappears. But for workers in jobs that require little training, the cost disadvantage of older workers is a serious problem. Similarly, the compensation structure discourages the hiring of older workers since their health care and benefit costs are higher and they cost firms with traditional defined benefit plans significantly more, yet they do not have the past experience on the job to mitigate these costs.

More flexible compensation structures would benefit older workers. The movement to 401(k) and cash balance plans in the pension area would make older workers more attractive to employers (though these plans, as

discussed in Chapter 3, raise a number of other issues). In terms of health insurance, eliminating the requirement that Medicare serve as the secondary payer would reduce costs for workers over 65. In the short run, this change would only cost 1.5 percent of Medicare spending since so few people work past 65. But, to the extent the change was successful, costs would rise and further burden a program already facing enormous long-term deficits.¹⁴ In short, the cost of older workers remains a major hurdle to their retention and hiring.

Employment policies encourage early retirement

As discussed in the previous chapter, the existing compensation structure not only makes older workers expensive to retain or hire, but also creates a strong incentive for workers to retire. The shift from traditional defined benefit plans to cash balance plans and 401(k)s in the private sector has reduced these incentives considerably. But traditional defined benefit plans still cover 30 percent of private sector workers and dominate the state and local sector, which accounts for 14.6 percent of total employment nationally, and 13.5 percent in Massachusetts. In terms of Medicare, making Medicare the primary payer would reduce the cost of older workers and the tax on continued employment, but such a change is unlikely in the current fiscal environment.

Older workers may not have the required skills

The previous discussion has focused on the compensation structure, assuming that older workers will have the requisite skills to fill the open job slots in the future. This assumption may not be correct.

The Massachusetts Division of Employment and Training (DET) in 2000 provided employ-

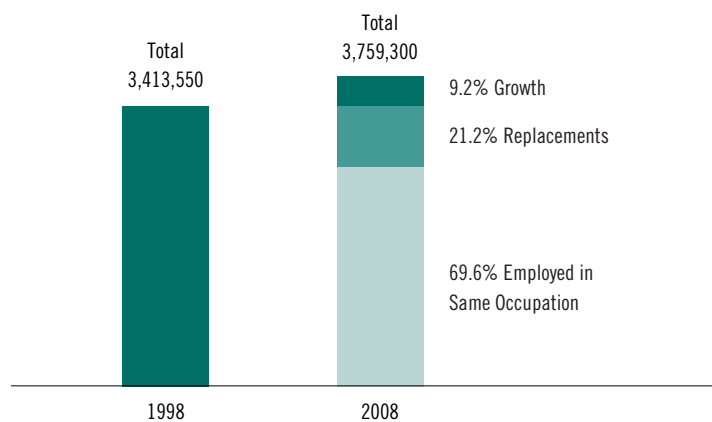
ment projections for 2008, the year the lead edge of the baby boomers turns 62 (Figure 7-16). The subsequent economic downturn made the projected employment levels and shift to knowledge-based skills unrealistic for 2008. But the study does capture the longer-term trends that are reshaping the Massachusetts economy.

Between 1998 and 2008, the DET study projected the Massachusetts economy to produce 345,000 new jobs, with an additional 797,000 jobs arising from the need to replace workers who retire, change jobs, or advance up the career ladder. The replacements were projected to be concentrated in occupations where a large number of people are approaching retirement, such as teaching, or where a concentration of young and part-time workers results in high turnover, such as waiting tables. New jobs, by contrast, were projected primarily in high tech industries and are probably more reflective than replacement jobs of the pattern of employment for the next 20 to 25 years.

The DET projected that the bulk of the new jobs would arise in the services industries (Table 7-5), primarily in four main categories: 1) business services, which includes computer software and related information technology jobs; 2) health services, primarily to support an aging population; 3) engineering and management, which includes management consultants and public relations personnel for the high tech industries; and 4) social services to support the demand for child care, elder care, and a myriad of other activities.

The growth of these service sector jobs was projected to sharply increase the demand for professional and technical workers, with these workers accounting for 56 percent of the total new jobs (Figure 7-17). This group includes computer analysts, engineers and scientists,

FIGURE 7-16. Projected Job Growth and Replacement in Massachusetts, 1998 and 2008



Source: Massachusetts Division of Employment and Training. 2000. "Massachusetts Employment Projections through 2008: A Focus on the Jobs, the Industries, and the Workforce." http://www.det.ma.org/pdf/1030_0203.pdf http://massstats.detma.org/websaras/frame_it.asp?theProductName=MassStats

TABLE 7-5. Projected New Nonfarm Wage and Salary Jobs in Massachusetts, 1998-2008

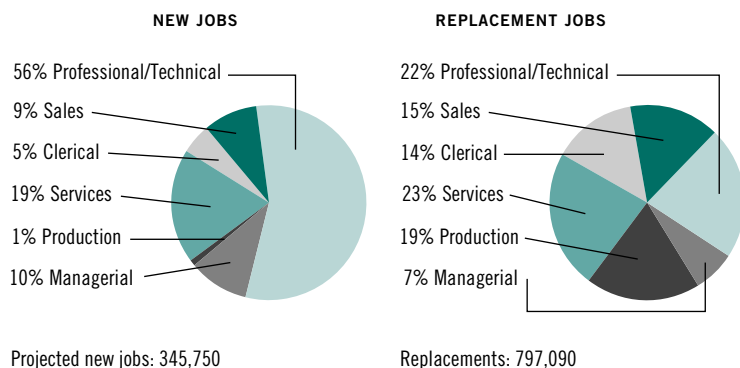
SECTOR	NUMBER	PERCENT OF TOTAL
Business services	107,300	33.6
Health services	65,800	20.6
Engineering and management services	33,400	10.5
Social Services	22,100	6.9
Other services	38,600	12.1
Wholesale and retail trade	45,300	14.2
Transportation, communications, and utilities	6,900	2.2
Finance, insurance, and real estate	18,400	5.8
Construction/mining	3,100	1.0
Government	27,900	8.7
Manufacturing	-49,600	-15.5
Total	319,200 ^a	100.0

Source: Massachusetts Division of Employment and Training. 2000. "Massachusetts Employment Projections through 2008: A Focus on the Jobs, the Industries, and the Workforce." http://www.detma.org/pdf/1030_0203.pdf

a. The total excludes the self-employed, non-paid family workers and those employed in agricultural services, which explains the difference between the 345,000 discussed above and the 319,200 shown in the table.

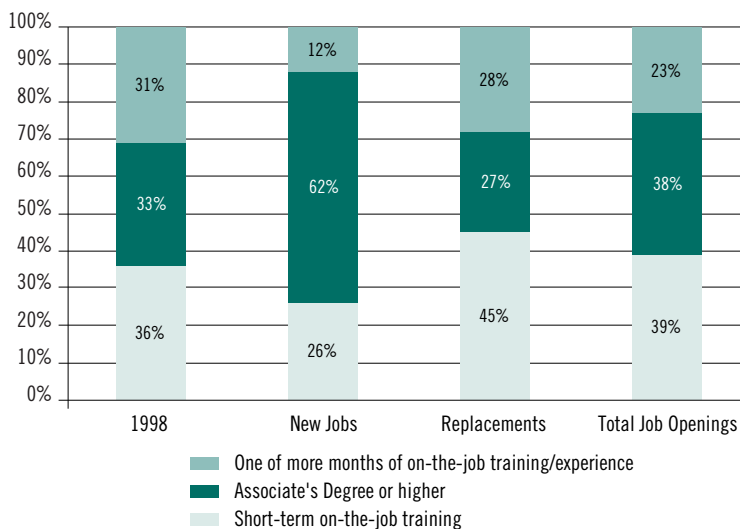
teachers, and health practitioners among others. Service workers, such as nursing and home health aides, cooks, security guards, janitors, etc., were projected as the next largest component of job growth. Managerial positions, par-

FIGURE 7-17. Professional Composition of Projected New and Replacement Jobs in Massachusetts, 1998-2008



Source: Massachusetts Division of Employment and Training. 2000. "Massachusetts Employment Projections through 2008: A Focus on the Jobs, the Industries, and the Workforce." http://www.detma.org/pdf/1030_0203.pdf

FIGURE 7-18. Projected New and Replacements Jobs by Education and Training Requirements, 1998-2008



Source: Massachusetts Division of Employment and Training. 2000. "Massachusetts Employment Projections through 2008: A Focus on the Jobs, the Industries, and the Workforce." http://www.detma.org/pdf/1030_0203.pdf

ticularly in the engineering and computer information systems area, constitute the third major group of projected new jobs.

The nature of the job growth has important implications for the educational requirements of tomorrow's workers. Of the 345,000 new jobs projected over the period 1998-2008,

over half require a bachelor's degree or more, and 62 percent will require an associate's degree or higher (Figure 7-18). Figure 7-18 also shows that the educational demands for the projected replacement jobs are significantly less stringent; only 27 percent require at least an associate's degree. Even though the current economic downturn has resulted in significant job losses overall and in the Commonwealth's knowledge-based industries in particular, the clear implication is that educational requirements will increase sharply over time. Given that about 35 percent of Massachusetts workers aged 45 to 64 have at least a bachelor's degree and 49 percent have at least an associate's degree, the population seems adequately prepared for the near term but may lack the education and skills required for the longer run. Many older workers—including those with substantial educational backgrounds, but in fields of study that have fallen out of favor—will require additional training. The problem is that many employers are reluctant to train older workers and the federal government is cutting back on its training programs.

Employers resist part-time employment

In addition to matching workers to the skill requirements of future jobs, many employers who want to retain or tap into the growing pool of older workers will likely have to structure the job to suit employee tastes. To the extent that current employment patterns reflect the preferences of older workers, they indicate that many want to work part time (Table 7-6). Indeed, this preference is borne out in a number of surveys. A study based on the Health and Retirement Study (HRS), for example, reports that 56 percent of respondents aged 55 to 65 in 1996 said they would prefer to gradually reduce their hours as they age.¹⁵ And

older self-employed people tend to reduce hours worked as they approach retirement.

The question is whether employers will increase part-time job opportunities.¹⁶ Economic theory suggests that employers will hire more part-time workers only when their cost relative to other inputs (including full-time workers) declines. Currently, part-time employment is concentrated in small establishments and in establishments in the service sector.¹⁷ This is true even after controlling for other factors that would affect demand, such as wages, fringe benefits, seasonal fluctuations in demand, and hiring costs. It is not exactly clear why this is the case. Large firms might avoid part-time workers because they tend to have higher turnover rates than full-time employees.¹⁸ Part-time work might be more common in the service sector because it is labor intensive and faces fluctuations in demand, and because employers find it is easier to meet these fluctuations with part-time workers. Employers in general might resist part-time employment because a number of costs, such as supervising and record keeping, hiring and training new workers, and fringe benefits like health insurance, are unrelated to hours worked and make two part-time people more expensive than one full timer. While all these theories are plausible, they have not been supported by rigorous empirical studies.¹⁹

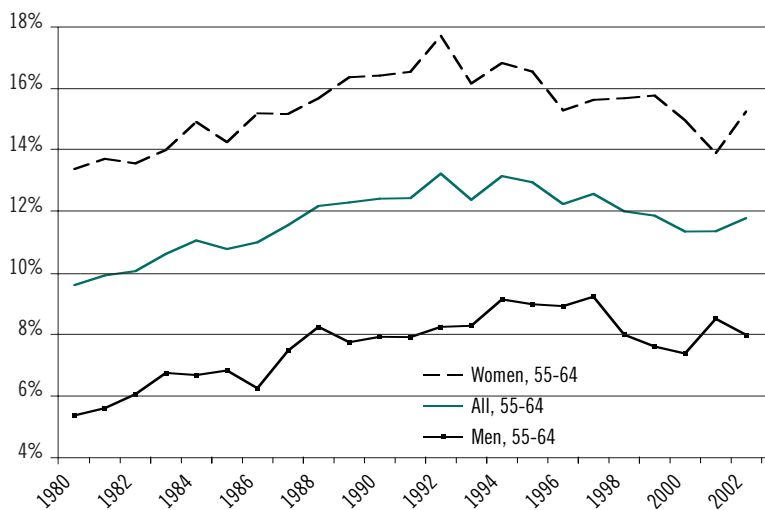
Not only do large firms tend to shun part-time employment, but the percent of workers employed part-time appears to have been on the decline since the early 1990s (Figure 7-19). Some of that decline may have been due to the strong economy of the 1990s, which pulled some part-time workers into full-time employment. It could also be attributable to the fact that the large cohort of baby boomers was in its prime earning years, during which both

TABLE 7-6. Percent of Employees Working Part-Time, 2000

AGE	MEN		WOMEN	
	PERCENT EMPLOYED	OF THOSE EMPLOYED, PART TIME (%)	PERCENT EMPLOYED	OF THOSE EMPLOYED, PART TIME (%)
55-61	71.3	7.7	58.0	22.8
62-64	47.1	22.1	34.6	38.7
65-69	30.4	39.5	19.8	55.8
70 and over	12.3	51.5	5.9	63.6

Source: Analysis of the annual income supplement to the Current Population Survey as presented in Patrick J. Purcell. 2000. "Older Workers: Employment and Retirement Trends." *Monthly Labor Review*, 19-30, (October).

FIGURE 7-19. Percent of Workers Employed Part Time, 1980-2002



Source: Authors' calculations of the Current Population Survey, 1980-2002

men and women tend to work full time. In any event, part-time employment appears to be less, rather than more, prevalent.

The demand for part-time work could increase in the future for one of two reasons. First, the price of part-time workers could decline. This should happen if large numbers of older workers wanted to work on a part-time basis and were willing to accept lower wages in order to attain a part-time slot. Economists do not have a good idea, however, how much compensation would have to decrease relative to full-time workers to spur demand. That is,

it is unclear whether part-time compensation would have to fall by 5 percent or 20 percent relative to full-time to persuade employers to hire more part-time workers.

The other way that the demand for part-time work could increase is if some of the impediments declined over time. For example, if the quasi-fixed costs discussed above could be reduced, part-time employees would look more attractive. It is difficult to conceive, however, how hiring and training costs will decrease; they simply do not vary with hours worked. Similarly, health insurance tends to be an all-

WILL EMPLOYERS INCREASE PART-TIME JOB OPPORTUNITIES?

or-nothing proposition that does not depend on whether the employee is full- or part-time. Some advocate that health insurance costs for older workers could be reduced if Medicare became the primary payer. But as discussed above, such a change seems unlikely given the extraordinary shortfalls facing the Medicare program.

In short, older workers consistently report that they would like to reduce their hours as they age, and this preference is clearly evident in the behavior of the self-employed, who cut back gradually as they approach retirement. But employers outside of the service sector and small firms appear reluctant to hire part-time workers. Unless structural changes make the hiring of part-time workers more attractive, employer demand for older workers will fall short of the supply, except at very low wages.

Legal impediments to flexible retirement provisions

One way to reduce the cost to employers of part-time work at older ages is phased retire-

ment, with employees supplementing their reduced earnings by drawing on their pension. Phased retirement offers employers a way to keep employees who have specialized skills and institutional knowledge and to avoid the costs of hiring and training new employees.

Despite the apparent appeal of phased retirement, few private sector firms offer such an option. Watson Wyatt Worldwide undertook a survey of nearly 600 employers in 1999: although more than 60 percent responded that they were currently having problems attracting workers, only 16 percent offered any form of phased retirement.²⁰ Most of these firms said that they rehired workers after they retired on either a part-time or temporary basis. Slightly less than half said that they contracted with retired workers as consultants.

The question is why so few firms offer phased retirement. One answer may be personnel considerations. For instance, it is difficult to think how a manager could function effectively coming in three days a week. Similarly, activities requiring team work would not lend themselves to one person working part-time. That the two most popular phased retirement arrangements require the employee to separate from the firm (rehiring retired employees on a part-time or temporary basis and hiring retirees as contractors) also suggests that personnel policies play a role. The rehiring approach allows employers to pick and choose those older workers with whom they want a continuing relationship—something otherwise difficult to accomplish. The difficulty, however, is that the rehiring approach introduces considerable uncertainty because once the employee retires the employer is not legally required to renew the relationship.

The alternative is to allow employees to remain with their employer and reduce their

work effort as they approach retirement. However, this approach faces a number of legal impediments. First, benefits in defined benefit plans are generally based on final earnings, so cutting back on hours could reduce the base for benefit computation. Although current law explicitly precludes pension reduction due to increased age or service, no law specifically prohibits a reduction due to a decline in final average pay. The Internal Revenue Service has asserted that pensions cannot be reduced because final pay goes down, but others report that benefits have been reduced and that the courts have upheld these reductions.²¹ The uncertainty surrounding the treatment of retirement benefits thus is one factor that inhibits phased retirement.

A second factor is that employees covered by a defined benefit plan cannot receive any pension benefits as they move to part-time employment until they have reached the plan's normal retirement age. A plan that pays benefits to an active employee before the normal retirement age could lose its tax-qualified status, since it is permitted to pay benefits only in the event of death, disability, termination of employment, or at the normal retirement age. To the extent that workers who reduce their hours need to supplement their earnings with pension benefits, existing regulations regarding defined benefit plans make continued employment with the same firm difficult.

The rules for in-service distributions from 401(k) plans are different. Participants who reach age 59½ can continue to work for their employer and receive distributions from their account. Before age 59½, any distribution—in service or not—is subject to a 10-percent excise tax in addition to ordinary income taxes. The law provides two exceptions. First, distributions may begin as early as 55 if the employ-

ee separates from his employer under an early retirement plan. Second, if benefits are paid as a lifelong annuity, they can begin at any age. Thus, these plans do not preclude part-time work and pension receipt. To the extent that coverage has shifted in the private sector, the pension issue will become less important.

The Age Discrimination in Employment Act (ADEA), which forbids employers from discriminating against employees aged 40 and older, creates further complications. The Courts are just beginning to define its implications for benefit plans, and this gray area makes employers reluctant to adopt phased retirement programs for risk of legal exposure.²²

Public sector employers are actively developing programs to encourage the continued employment of older workers—initiatives that reinforce the notion that legal impediments in the private sector are important barriers to innovative retirement arrangements. A growing number of states and localities—not including Massachusetts—have re-designed their defined benefit programs to include a Deferred Retirement Option Plan (DROP). A DROP is not really a phased retirement program in that it does not generally contemplate employees reducing their hours; instead, it aims at retaining workers who become eligible for unreduced benefits.²³

For example, consider a plan that provides a benefit equal to 2 percent of final pay for each year of service up to a maximum of 25 years. A worker covered by such a plan, who started at age 25, would be entitled to an annual benefit equal to 50 percent of final pay at age 60. Without a DROP, he would gain little from continued employment since the replacement percentage could not increase (although final salary might rise somewhat). Under a DROP, however, the employer would pay the annual

benefit into a separate account where the money would accumulate with interest, so that after a number of years (typically five) the worker would retire with a significantly higher replacement rate (Table 7-7).²⁴ Despite the popularity of DROPs in the public sector, they do not exist at private firms. One important reason is that public plans are not covered by all the ERISA rules and related laws and regulations applicable to private plans.

AT LEAST SOME AGE DISCRIMINATION STILL EXISTS.

Unfortunately, the recent decline in the stock market has revealed the shortcomings of DROP plans.²⁵ When returns were high, many public sector plans promised high rates of return on the money paid into the separate DROP account. Today's low interest rate environment, however, has caused many cities and public plans to be stuck with unreasonably high pension liabilities and they are experiencing major shortfalls. These recent experiences will certainly lead both the public and private sector to be less sanguine about the benefits of a DROP.

The above discussion highlights only a few of the legal impediments to phased retirement

and innovative retirement provisions. In 2000, the ERISA Advisory Council identified a host of other ERISA and Internal Revenue Code restrictions that constrain employers in implementing flexible employment arrangements. The Council, for example, recommended relaxing rules on in-service distributions and the rules governing non-discrimination. These are complicated issues, and none of the Council's recommendations have been adopted to date. If these regulatory issues are not addressed, however, they will remain an impediment to workers staying in the workforce longer.

Age Discrimination

Age discrimination is one barrier that should have been removed with the passage of the ADEA. But evidence suggests that age discrimination still exists, at least to some extent. What's more, it will become an increasingly important barrier as the population ages by impacting hiring practices and shaping workplace culture. Secondary effects are also likely, since workers' perceptions of employers' practices are likely to influence their workforce decisions.

One problem in gauging the importance of age discrimination is the lack of definitive measures. Unlike other types of discrimination, age discrimination is very difficult to detect. Studies on race and gender discrimination proceed on the assumption that, all else equal, minorities and women are as productive as white and male workers, respectively. Any remaining differences in earnings can therefore be attributed to discrimination. This approach is not suitable to age discrimination since the very process of aging affects productivity, both positively and negatively.

Furthermore, as noted earlier, firms may have legitimate concerns about the cost of em-

TABLE 7-7. Effect of a DROP Program on Accrued Pension Benefits

RETIREMENT AGE	PERCENT OF PAY		TOTAL
	BASIC PENSION	DROP ACCOUNT	
60	50.0%	0.0%	50.0%
61	50.0	5.0	55.0
62	50.0	10.3	60.3
63	50.0	15.8	65.8
64	50.0	21.6	71.6
65	50.0	27.6	77.6

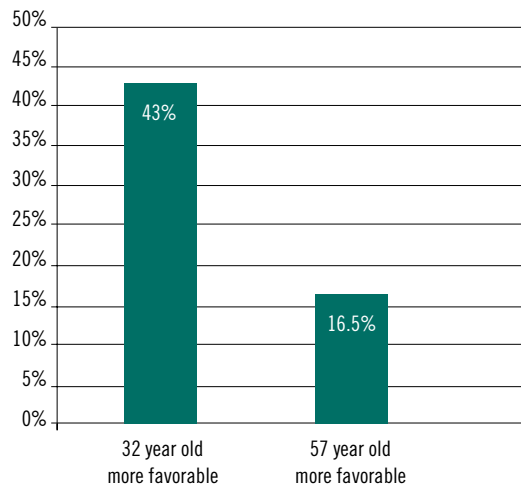
Source: Kyle N. Brown and Sylvester Schieber. 2003. "Structural Impediments to Phased Retirement." Watson Wyatt Worldwide. Mimeo (March 27).

ploying older workers. As earnings increase over a worker's lifetime, they can reach a point where they exceed productivity. Health and life insurance coverage, often provided by the employer, are more costly for older than younger workers. Other benefits whose cost is related to tenure, such as paid leave, may also be higher for older workers. In addition, older workers are more likely than younger workers to experience an extended injury or disability. Each of these factors provides employers with a legitimate reason to view older and younger workers differently.²⁶

Because of the difficulty of testing for discrimination with conventional techniques, researchers have relied primarily on self-reported information. The findings suggest that managers value older workers. Managers indicate that older workers often work harder and are more reliable and motivated than their younger counterparts. They also state that older workers display good judgment, quality control, and attendance, and have lower turnover.²⁷ On the other hand, employers express concern that older workers are less willing to adapt to changing technologies or workplace practices and are more likely to have difficulty learning new skills.

These negative perceptions of older workers appear to be reflected in hiring and training decisions. In one study, resumes for an older and younger worker with equal qualifications were mailed to nearly 800 firms in the United States. When a position appeared vacant, the older worker received a less favorable response about 25 percent of the time (Figure 7-20). Another study based on a nationally-representative sample of nearly 1,500 employers with 50 or more employees found that about 70 percent of employees received formal training in the previous year, compared to only about

FIGURE 7-20. Percent with Favorable Employer Responses, by Age, to Paired Resumes



Source: Marc Bendick, Jr., et al. 1996. "Employment Discrimination Against Older Workers: An Experimental Study of Hiring Practices." *Journal of Aging & Social Policy* 8 (4): 25-46.

50 percent of employees aged 55 years and older. Of those who were trained, older employees also had many fewer hours of training compared to employees aged 25 to 54.²⁸

Beyond the direct effects of age discrimination by employers on recruitment and training, age discrimination creates an additional, more subtle, barrier to work through the perceptions of older workers. According to data from the HRS, between 10 and 20 percent of older workers indicate that younger workers are given preference over older workers and that their employers exert pressure on them to retire. This perception of discrimination on the part of workers significantly increases the likelihood that the older worker will leave his job and the workforce.

Conclusion

Employers will no longer be able to tap into a rapidly growing pool of younger workers. This is especially true in Massachusetts. So how will employers respond to a stagnating supply of

labor? They will expand their use of women, immigrants, and capital, and some firms may relocate. But these responses will not be enough to make up for the labor shortfall.

The number of older workers in the labor force will increase dramatically both in absolute numbers and as a share of the total labor force. Older workers will be well educated, they will have a lifetime of experience, they will be healthier than in the past, and jobs have become much less physically demanding. Given the characteristics of older workers in the Commonwealth, and the mix of skills needed, older workers appear especially attractive to Massachusetts employers.

Although the stage appears set for hiring older workers, a number of impediments exist. First, older workers are expensive. They are paid more, sometimes in excess of their greater productivity. They involve expensive health care costs and rapidly rising pension costs under traditional defined benefit plans. Second, most existing employment policies have been geared toward encouraging early retirement. Incentives to retire early rather

than later are the hallmark of traditional defined benefit plans. Although these plans are less important in the private sector than they were 20 years ago, they are still the dominant plan for states and localities. Third, employers resist part-time employment, which is the preferred mode for older workers, and it is unclear that employer preferences will change in the future. Fourth, legal impediments preclude employers from offering flexible retirement arrangements. Finally, age discrimination, while technically illegal, probably exists.

In sum, increased employment of older workers is clearly in the interest of both workers and employers. But mutual interest is not enough. It will require massive social change, legal and regulatory reform, and increased flexibility on the part of both employers and employees for these employment options to materialize. The speed at which we make these social, legal, personal, and personnel policy changes could well be the most important factor in assuring the future retirement income of the elderly.

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CHAPTER 8 | Meeting the Challenge of an Aging Population

Ensuring income security for the Commonwealth's aging population will be hard. It would be hard even under favorable circumstances. But the trends discussed in this report are far from favorable. First, Social Security, long the key income source for most retirees, is scheduled to replace a smaller share of earnings under current law. And more reductions are likely since the system still retains a serious structural deficit. Second, private pensions, the next leg of the retirement income stool, cover only half the workforce at a given point in time. And for those who do have coverage, the shift to a "do-it-yourself" pension model has significant flaws in practice. Third, individual saving, aside from housing equity, is generally low. And finally, most people now retire in their early 60s, meaning they must have sufficient resources to support two decades or more of retirement. Taken together, these trends mean that the Commonwealth and its aging population face a formidable challenge.

Meeting this challenge will require both difficult and painful decisions and long-term cultural change on the part of individuals, employers, and policymakers. For each group, the bottom line can be summed up with a simple question:

- **Individuals**—how can I find enough money?
- **Employers**—how can I find enough workers?
- **Government**—how can we help ensure retirement income security for our citizens and maintain a healthy business climate for employers?

For individuals, the answer begins with taking more responsibility for their retirement finances. Fading fast are the days when workers could retire in their early 60s knowing that two reliable monthly checks—one from Social

Security and one from an employer pension plan—would, by themselves, provide most of the income they needed. Today, baby boomers and younger generations will need to save more on their own in advance, make smart decisions about building up and drawing down their 401(k)s, and consider working to an older age than their parents did. An increase in "financial literacy" could be a good start to helping people make the right choices. But individuals will need the help of employers in making retirement saving easier.

For employers, the key issue will be adapting their workplace to prevent persistent labor shortages. The supply of younger workers will be limited, especially in the Commonwealth, and other alternate sources of labor—such as women, immigrants, and overseas workers—will at best provide only partial solutions. The most attractive option appears to be the large group of well-educated, experienced, and relatively healthy baby boomers. To date, most employers have understandably focused on their short-term business needs, including surviving the recent recession, and have not thought much about labor shortages that are still a few years away. This lack of attention raises the likelihood that employers will be unprepared as the boomers start to retire and will then have to scramble to adjust their workplace policies and culture to suit older workers.

For government policymakers, managing the transition to an older society means focusing on "big picture" issues, such as shoring up Social Security's finances and boosting pension saving, as well as making progress on less visible items such as expanding training opportunities for older workers. For policymakers at the state and local level, perhaps

most important are initiatives that effectively educate individuals, employers, and others about the social and economic challenges of an aging population. Responding to these challenges will require major adjustments throughout the Commonwealth. In time, these adjustments will be made. But the more knowledgeable we become, the quicker our behavior and expectations will change, and the smoother our passage across the rough terrain that lies ahead.

This chapter examines specific actions that individuals, employers, and governments can take to ease the transition to an older society. Many of these actions require some degree of coordination or cooperation among these different groups, underscoring the complex nature of the challenges ahead.

How Individuals Can Prepare For Population Aging

Given that the amount of retirement income from Social Security and employer pensions will be less reliable in the future, individuals must become much more active in retirement planning. This means calculating the amount of income one will likely need in retirement, adjusting savings behavior to help reach one's goals, and regularly updating these calculations. Retirement planning also means developing a realistic career path, which could include phased withdrawal from one's career job or part-time work in one's 60s and 70s.

Financial planning is quite complicated and our ability to forecast the future quite limited. Nevertheless, there are various retirement planning calculators available so that individuals do not have to crunch their own numbers. "Doing the math" with such calculators will

likely indicate a need for more saving.

Individuals seeking to increase saving should first look at tax-favored plans such as IRAs and voluntary employer plans, like 401(k)s. In employer plans, smart decisions are to participate, to contribute enough to get a full employer match (if offered), to diversify investments, to avoid investing too much in company stock, and to consider using one's accumulated balance at retirement to purchase an annuity.

INDIVIDUALS MUST TAKE MORE RESPONSIBILITY FOR THEIR RETIREMENT FINANCES.

Perhaps the most common way individuals can save outside of IRAs and employer plans is through home ownership. The recent dramatic run-up in Massachusetts house prices, especially in the Boston metropolitan area, means that home equity now accounts for the bulk of the financial wealth of many older workers. Devising realistic ways for individuals to protect and access this wealth is a critical financial planning challenge in the Commonwealth.

Individuals must also include career planning as part of their preparation for retirement. This involves developing a realistic idea of how long to remain in their current job and what types of employment, if any, come next. They need to actively seek out opportunities to enhance existing job skills and to develop new skills that will enhance their ability to realize their plan. Clearly, they should not jump at the first opportunity to retire, either in response to "early-out" incentives or to the availability of reduced Social Security benefits at age 62.

How Employers Can Prepare For Population Aging

Employers can help their employees prepare for retirement by offering a well-designed defined benefit or defined contribution pension plan. The primary impact of population aging on employers, however, is the potentially serious labor shortages likely to emerge in coming years.

Employers can help employees meet their financial needs in retirement by offering pension plans that promote retirement saving and encourage investment decisions that appropriately balance risk and return. There are various ways to accomplish these goals. For 401(k)

TO ATTRACT OLDER WORKERS, EMPLOYERS WILL LIKELY NEED TO MAKE SIGNIFICANT CHANGES IN THEIR WORKPLACE.

plans, it could mean instituting an automatic enrollment policy, offering matching contributions, and including age-sensitive “lifestyle” mutual funds among a manageable number of investment options. It could also mean developing “hybrid” pension plans that blend the advantages of the traditional defined benefit approach with the “do-it-yourself” 401(k).

In terms of their own business needs, employers should develop a plan based on their future labor force needs and the availability of qualified workers. The results of such an exercise will likely indicate a growing shortage of prime-age workers. The most attractive response could well be to retain and hire more older workers. Obviously, not all types of jobs are well-suited to an older workforce, particularly those that demand significant physical labor. However, as noted earlier, Massachusetts

has fewer of these jobs than other states. And with continual improvements in technology, the number of jobs that require backbreaking work are steadily shrinking.

To effectively attract older workers, employers will likely need to make significant changes in their workplace culture and practices. Among these are changes in pension policies (such as reducing or eliminating early retirement incentives), embracing more part-time work opportunities, and offering and effectively marketing training options for older workers.

How Government Can Prepare For Population Aging

Given the enormous scope of the retirement income challenge, government must play a leading role in preparing for population aging. Social Security and federally regulated and subsidized retirement plans provide most older Americans with the bulk of their retirement income. Government also has the unique ability to redefine the environment in which individuals and employers operate and to direct the educational efforts needed to help our society prepare for the coming demographic transition.

The Biggest Picture: National Policy Changes

Any discussion of retirement income policy must start at the federal level. The federal government is the most important provider of income and services to older citizens, directly through Social Security and Medicare,¹ and indirectly through tax benefits and regulations governing private retirement plans. Given this important role, how can decisionmakers in Washington, D.C. bolster the nation’s retirement system? We suggest three things: 1) place the finances of Social Security and Medicare

on a sound long-term footing; 2) consider establishing a new universal retirement savings account system; and 3) revise pension regulations to facilitate continued employment.

First, both Social Security and Medicare face long-term funding shortfalls. The details of these deficits and the options for closing them are complex and have been discussed in detail in many other reports. So we are not advocating any specific solutions here. But we want to emphasize that putting these programs on a solid long-term footing would remove substantial uncertainty that currently makes it difficult for individuals to plan. Knowing how much income Social Security will replace and the extent of coverage Medicare will provide are critical for sound retirement planning.

Second, regardless of what happens with Social Security, individuals will still need a substantial amount of income from other sources. Given the low household saving rates and the large gaps in employer pension coverage, policymakers may want to consider a new universal retirement account system—a type of national 401(k) plan. The most reliable way to boost saving under such a system would be to mandate that all workers set aside a modest share of their wages. Of course, these individual accounts would be an addition to Social Security, not a replacement. For low-income individuals who may find it difficult to save, the government could contribute for them or match contributions up to a certain level, as many employers do now through their 401(k) plans. While no consensus exists on the best design for such a system, and it would cost money to set up and operate, its potential for increasing retirement saving makes such a policy worthy of serious consideration.

Finally, the federal government could revise pension regulations for defined benefit plans

that discourage continued work. For example, permitting workers to receive pension benefits while still working would increase their options as they prepare for old age. The impact of such changes, however, will necessarily be limited given the shift away from defined benefit pensions to 401(k)-style plans.

Closer to Home:

Actions by State Government

While the federal government has the most influence over retirement income policy, Massachusetts can take significant actions on its own to ease the transition to an older society. For, even if the changes at the federal level discussed above are implemented, many state residents will still come up short in financing their retirement. As presented in the previous chapters, continued employment appears as the most promising practical initiative for ensuring retirement income security. And state government could well be the most effective agent for making this initiative succeed.

As Massachusetts employers will soon be struggling with widespread labor shortages, working longer seems like a “win-win” solution to the problems faced by both older individuals and employers. Achieving a successful match between the needs of older workers and employers, however, is far from a foregone

THE ABILITY TO LEARN NEW SKILLS OR UPDATE EXISTING SKILLS IS KEY.

conclusion. The Blue Ribbon Commission on Older Workers, set up in 2000 by the Commonwealth’s Job Council, offered many excellent suggestions for state policy actions.² We generally endorse that group’s recommendations and highlight some of them below.

A key factor in determining older worker’s

job prospects, aside from health, is the ability to learn new skills or update existing skills. Indeed, the perception that older workers are resistant to improving their skills and adapting to change is cited by employers as a reason for preferring younger workers. In response, we suggest three actions that the state can take, the first two of which were advocated by the Blue Ribbon Commission:

- increase funding and outreach programs for training of older workers by community colleges and other post-secondary institutions;
- establish a training fund and outreach program for older public-sector employees; and
- sensitize local “One-Stop” Career Centers to the needs and opportunities facing older job-seekers.

THE STATE SHOULD INCREASE FUNDING & OUTREACH PROGRAMS FOR TRAINING OLDER WORKERS.

By expanding training opportunities and targeting these efforts toward skills that will be in greatest demand, the state can equip its workers with the tools they need to stay in the labor force longer.

The Commonwealth can also take the lead in educating employers about the coming labor shortage and the advantages offered by older workers. State officials and managers could seek out forums, such as trade association meetings, where they could inform employers about the labor shortages they will soon face; how older workers provide an attractive option; how they might alter their personnel practices to accommodate older workers; and what the state is doing to help. More tan-

nable initiatives could include:

- the creation of a detailed database on older job seekers and employers seeking their skills that is accessible through workforce Career Centers;
- the provision of services through the state university system to help employers restructure their personnel systems and make best use of older workers; and
- funding for special workforce intermediaries that pre-screen, train, and offer support services, such as employee transportation, counseling, and health-care, and employer management consulting, to facilitate the employment of older Massachusetts workers.

Taken together, these initiatives by the Commonwealth would help older workers to see employment as a rewarding way to supplement their income. And they would help businesses to see older workers as a solution to labor shortages and to change their workplace practices in response.

Another way that the state can promote an effective transition to an older labor force is to lead by example. Therefore, we recommend that the state explore ways to establish a model environment for its own aging workforce. Part of this approach would require putting the state’s pension system on a sustainable footing and removing incentives for early retirement. Beyond pension reform, the state could develop specific ways to encourage its older workers to stay longer, such as allowing workers to receive pension income on a deferred basis, offering job retraining opportunities, and establishing a phased retirement policy. In addition to the direct benefits to state workers, creating model employment environments for an aging labor force would prove quite useful in the

state's efforts to educate other employers about best practices.

All such policies will fail to make much of a dent if they are not initiated, implemented, and defended by charismatic and effective leaders. Ideally, some of these leaders would hold key positions in agencies like the state's Department of Workforce and Labor Development, the Department of Business and Technology, and the Department of Elder Affairs. Having visible champions in the legislature and the Governor's Office would also be immensely helpful. The involvement of employer groups, labor unions, and community organizations will also be essential in efforts to educate both workers and employers.

One cannot overstate the importance of

leaders who understand the complex problems posed by an aging population and who are well placed to make a difference. Academics and policy wonks can write an endless series of detailed reports like this one. But they won't mean much if policymakers, business and labor leaders, and community advocates fail to embrace and champion the necessary changes. The Commonwealth is about to undergo a demographic transition that will profoundly challenge our society's ability to support a burgeoning elderly population. Piecemeal, short-term, and episodic attention to the problem cannot accomplish much. An effective response requires a broad and sustained campaign and leaders who can effect permanent change.

ENDNOTES

1. In addition, the federal government is a major funder of the Medicaid program that is operated by the states and serves the low-income elderly population primarily by covering nursing home expenses.
2. Commonwealth of Massachusetts Blue Ribbon Commission on Older Workers. 2000. *Older Workers: An Essential Resource for Massachusetts*.

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The Center for Retirement Research at Boston College was established in 1998. The Center's mission is to produce first-class research and forge a strong link between the academic community and decisionmakers in the public and private sectors around an issue of critical importance to the nation's future. To achieve this mission, the Center sponsors a wide variety of research projects, transmits new findings to a broad audience, trains new scholars, and broadens access to valuable data sources. Since its inception, the Center has established a reputation as an authoritative source of information on all major aspects of the retirement income debate.

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