

## 2

# The New Inequality

## The Distribution of Retirement and Older Working Time in the OECD

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Income and wealth inequality has been on the rise for years in rich nations (OECD 2015; World Bank, 2015a). Chapters in this volume address inequality's economic harms: inequality skews production toward what the rich want and away from public spending on education and health (Sctivosky 1976; World Bank 2015b). It also skews political power to the rich, who use that power to create and preserve economic rents (also known as *monopoly rents*, which encompass any payment to a factor of production that is more than needed to induce that factor to engage in production (Stiglitz 2012).

This chapter addresses another kind of inequality and the potential damage it could inflict on workers' retirement. Retirement is the period after a lifetime of work and before death when people can exercise greater control over the pace and content of their time and construct a personal narrative about the meaning of their lives (Blackburn 2009). As nations grew richer, workers, through the ballot and their representatives in Congress, expanded paid time off,

including pension-funded retirement through their employers, widely across socioeconomic classes. But in the late twentieth century, OECD policy has emphasized austerity and retirement income based on the financial markets, leading some elderly workers to work more hours and longer. More work at older ages is associated with higher elderly poverty rates and retirement time inequalities.

The next section in this chapter defines retirement time and explores the lopsided distribution of American retirement time. The section following that describes changes in retirement time in the rest of the countries belonging to the OECD. The subsequent section discusses how rich nations changed their pension designs toward less social insurance and more financialization. The penultimate section shows how pension financialization is correlated with increases in older people's labor force participation and how nations with higher elderly labor-force participation also have higher rates of old age poverty. The last section concludes.

### **The Equality We Forget to Celebrate: Retirement Time Distribution in the United States**

Rich and poor workers' ability to choose to retire or work in old age is a modern development. Before World War II, most men died in their boots (Costa 1998), and only the well-off could choose whether to work or retire. One of the most underappreciated accomplishments of U.S. social policy was the equalization of the distribution of retirement time across socioeconomic groups after WWII (Bonnen and Ghilarducci 2014). However, since the 1980s, gains in retirement wealth, longevity, and morbidity have gone mostly to the highest income workers, white men, and educated women.

Ghilarducci (2008) was the first scholar to measure the distribution of retirement time, finding the distribution of retirement time was strikingly equal for people who died before age 65. The retirement time for people who retired between the ages of 50 and 65 was approximately equal. (The data set was limited, and only people under 65 could be analyzed.)

Retired men under the age of 65 in the top 20 percent of the retirement asset distribution accounted for 22 percent of the total amount of retirement time, while men in the bottom 20 percent accounted for 18 percent. Although the top quintile had 85 percent of all wealth and the poorest 20 percent were in debt, the distribution of retirement time before age 65 was almost equal. The distribution of pre-65 retirement time for women was similarly equal: the top and bottom fifths of women accounted for virtually the same share of retirement time—22.6 percent for the top and 22.7 percent for the bottom (Ghilarducci 2008, p. 145).

Retirement time equity was the result of public policy decisions about pension design. Between the 1950s and the mid-1980s, Social Security, defined benefit (DB) pension plans, and disability insurance allowed pension income to be paid before age 62. That means people with shorter life spans can start collecting a pension long before their mid-60s. More workers from the middle and lower socioeconomic classes were able to retire when social security old-age benefits and disability programs expanded significantly from the 1950s through to the 1970s. Medicare, established in 1965, provided universal health insurance for those over age 65, which significantly improved the health and longevity of the aged of all classes. Broad-based retirement

health and pensions gave workers in all socioeconomic groups the ability to control some of their own leisure time before they died.

Furthermore, the design of workplace pensions and Social Security made retirement income and wealth more equally distributed than preretirement income in the same time period (Wolff 2015). Unionized workers—many with physically taxing jobs—were more likely to be covered by DB pension plans, which enabled earlier retirement to compensate for lower-than-average longevity. DB-plan participants retire about two years earlier than otherwise similar workers covered by defined contribution (DC) plans or otherwise similar uncovered workers. The earlier retirement of workers in DB plans reflects the design of DB plans, which do not increase pensions after a certain age. This provides an incentive for workers to retire earlier than they would otherwise (Friedberg and Webb 2005). Since the retirement income of DC participants depends partially on returns from financial markets, workers likely adapt to their considerable financial market risk by working longer.<sup>1</sup>

But pension designs changed when the increased costs of population aging coincided with austerity movements. Governments cut social insurance, and employers in the United States and Britain moved away from defined benefit plans in favor of voluntary, self-directed 401(k) plans. Social security benefits for mid-to-late baby boomers (born 1945–1962) were reduced by Congress because the age at which people could collect full benefits was increased from 65 to 67. The increase was phased in over 25 years, starting in 1984. For all workers born after 1960, the normal retirement age is 67. Thus, social security was placed further into a worker's future.

Many OECD nations also reduced benefits from social insurance by raising the normal retirement age.

Over the same time period—since 1984 to the present—that Social Security and defined benefit pension benefits were falling, longevity and health gains disproportionately went to those at the top of the income distribution (Auerbach et al. 2017; Buckles et al. 2016, Case and Deaton 2017). Blacks, independent of socioeconomic status, become sick and die sooner than whites (Geruso 2012). In addition, minorities and lower income individuals are less likely to have adequate retirement resources (Even and Macpherson 2007). So, the two growing inequalities—longevity and secure retirement income—means that people dying sooner cannot retire earlier and retirement time could become more unequal.

Using a new and enlarged sample of HRS and AHEAD respondents, Ghilarducci and Webb (2017) identified a growing gap in retirement time: the people with the lowest incomes and lowest education average 14.5 years of retirement, whereas those with higher levels of education enjoy, on average, 17 years of retirement. The class difference in retirement time is strongest for women, and having a DB pension is the most significant factor explaining the difference in retirement time for American men. Men with DB pensions live longer and retire earlier, especially compared to men without any workplace retirement plan.

Depending on 401(k) plans and individual retirement accounts (IRA) and having no workplace retirement plan leads older people (especially middle- and lower-income older workers) to delay retirement. High earners are more likely to be able to afford retirement regardless of the type of plan they have. The individually directed and voluntary nature of

401(k)s and IRAs is a system that works best for higher-income workers. Higher-income workers buy assets at the right time—when asset prices are low—because they are more likely to be employed in down markets. Higher earners also earn higher returns—because their portfolios are more diversified—pay lower fees, and have more favorable tax deductions.

In sum, social security cuts, the decline of unions and DB plans, and the rise of financial-based retirement plans will cause the share of retirement income coming from insurance-based sources (social security and DB plans) to fall for American middle-class retirees. Those born between 1946 and 1955 received 47 percent of their retirement income from insurance-based sources in 2010; people born between 1966 and 1975 will receive 40 percent of their income from such sources (Butrica, Smith, and Iams 2012). And, the inequality of income among the retired population is expected to grow (Gist and Hatch 2014). The financialization of pension systems means more households are expected to bear more financial risks, which will affect the distribution of wealth income and security in old age (Clark, Strauss, and Knox-Hayes 2012). The lopsided distribution of secure retirement income and longevity gains means that those who die sooner will work longer, making the equity we forgot to celebrate—equity in retirement time—more unequal.

As other nations cut social insurance and adopt American-type financialized retirement systems, some older people will work longer—perhaps those with the least resources and shorter life spans—or they will retire with lower incomes, leading to an increase in poverty and higher rates of labor force participation. Some older people will have to find and keep jobs in old age to make up for their lower incomes, leading to higher rates of labor force participation among certain groups.

## **Retirement Time Trends in the OECD: Retirement Time Increased, But Gains May Slow or Reverse**

Over the last 60 years, people in OECD countries are living longer and retiring for longer periods of time. Simple math computes that if the average age of retirement is stable and average longevity is growing, then average retirement years will increase. On the other hand, if elderly labor force participation outpaces longevity improvements, average retirement time could shrink. It's projected that from 1958 to 2020, 27 out of 29 nations will have experienced an increase in retirement time for men, and in all but one nation, women will have had more retirement time than men. Most of the increase in retirement time has come from increases in life expectancy outpacing the general increase in elderly work years.

In 30 OECD nations, the labor force participation of older men and women has grown significantly since 1993. But the increase in elderly labor force participation is not explained by increased prosperity (measured by the changes in GDP). More people working more when the economy grows is expected as pay and working conditions improve, but preliminary evidence does not support the claim. The Pearson<sup>2</sup> correlation between GDP growth and elderly labor force participation is low, just 10 percent (Ghilarducci and Novello 2017). Falling pension income would, in theory, cause older people to work more, as the drop in nonearned income would lower their reservation wage. (The reservation wage is the lowest wage rate a worker would accept to move from not working and collecting, say, a pension, to looking for work.) Evidence suggests a link between falling pensions and older people working. For all OECD nations, when the retirement income replacement rate decreases by 1 percentage point, from say 30 percent to 29

percent, the elderly labor force increases by 21 percent (author's calculations in Ghilarducci and Novello).

The OECD does not measure retirement time from microdata, as the American study did, but estimates retirement time using the difference between the age a person could retire based on the rules of the state pension plan and the average estimated age of death for a fifty-year-old. The average growth in retirement time for 30 OECD nations (some countries only had data from 1971) between 1958 and 2010 was only slightly different for men and women: women's retirement time increased by 23 percent and men's increased by a little less, 20 percent. The American pattern was quite different: between 1958 and 2010, the difference between women's effective retirement age and life expectancy increased by only 15 percent, while American men's increased by much more, 27 percent (Figure 2.1).<sup>3</sup>

### Retirement Time Improvements

What causes the variation in retirement time between nations? Longevity explains most of the variation in changes in retirement time between nations, but not all of it. The link between changes in male retirement time and male longevity at age 50 is 51 percent; for women, the Pearson correlation is a little less, 32 percent. Some of the variation is explained by women shrinking their retirement time by working more. The increase in the labor force participation rate of elderly men is only correlated by 6 percent with a decrease in retirement time. Elderly women's work effort and changes in retirement time are correlated by -25 percent.

## **Pension Financialization Is Associated with Higher Elderly Labor Force Participation Rates and Old Age Poverty**

The link between shrinking retirement time and elderly people working longer is smaller than the impact of longevity changes on retirement time changes, but as pension income shrinks and becomes more uncertain, I expect more retirement time to be lost because of an increase in elderly labor force participation. There is evidence for this view in the simple correlation between the financialization of pensions—the percentage of income coming from capital—and increases in elderly work effort: 33 percent for men and 40 percent for women. A multivariate analysis would of course control for the demand for older workers, including the wage rate, but nations where older workers are still working are not high-wage nations in general.

Gruber and Wise (1998) argued that across the OECD member countries, the older the age at which workers can collect full pension benefits (called normal retirement age), the greater the increases in their participation in the labor force. This conclusion makes sense given that people who do not have access to income without working are more likely to work.

Gruber and Wise (1998) infer that nations intentionally seek to encourage older people to withdraw from working or looking for work because they see a correlation between nations making social security benefits more generous—as in the 1950s, '60s and '70s—and drops in elderly labor force participation. They call for nations to reverse the decline in elderly labor force participation by decreasing the amount of early retirement benefits and lowering the tax rates for older workers. Gruber and Wise's (1998) paper was published at the same time as austerity programs were being implemented (Huber and Stephens 2001). Old-age programs that are

funded by pay-as-you-go funding mechanisms—current workers’ pay for retired workers’ benefits—become more expensive if a large cohort is followed by a small one. These were projected to rise in cost (expressed as payroll tax rates) and so became an obvious target for austerity policies. However, pay-as-you-go systems never add to the budget deficit because they are closed systems. If the revenue doesn’t match the liabilities, the revenue is increased or the benefits are cut.

Gruber and Wise’s (1998) analysis provides a path to obtain social and economic benefits without obvious costs. Having older people work more serves to grow economies and increase household income with no extra effort from state programs—a classic “win-win.” All that was needed to obtain the gains was for states to change their pension design to induce older workers to work.

The effect of the OECD pension design changes after 1990 is consistent with Gruber and Wise’s recommendations that nations cut pensions to induce more work among the elderly. Between 1990 and 2011, more than half of the OECD nations cut pension benefits by raising the normal retirement age (NRA). Nineteen raised the NRA for women, and 16 raised the NRA for men (OECD 2011). Raising the NRA—the age at which people can collect full benefits—effectively cuts benefits for everyone collecting at any age.

Financializing retirement income shifts various risks to individuals, making retirement income less secure, so older people work more as they face higher risks of old-age poverty stemming from social-insurance cuts. Gruber and Wise (1998) recommend nations cut social insurance to increase the labor force participation of men and women.

When nations get richer, their inhabitants consume more of what are called normal goods,<sup>4</sup> including paid time off. Holidays, paid vacations, and nonworking weekends become norms. Retirement is also a normal good; the demand for retirement time increases as nations get richer. However, Gruber and Wise (1998, 2009) argue that more retirement could cause a reversal in that affluence if pension expenses increase too much.<sup>1</sup>

The OECD's "age of effective retirement" is computed based on the average age at which people withdraw from the labor force in a given period. In most nations, people retire at younger ages than the age at which they can collect full retirement benefits under their nation's state pension rules. For instance, in the United States, covered workers can collect a much-reduced social security pension benefit at age 62 or wait to receive a benefit that is worth more at age 70. Each person decides his or her time preference and makes an estimate of their longevity and morbidity in order to choose the age at which collect reduced or full benefits. On average, people retire much sooner than the age required to collect full benefits. This is notable because it means the state systems are less generous than they would otherwise be.

In the United States, the penalty for collecting at 62, four years before the normal retirement age of 66 (for people born after 1960), is 30 percent, and the delayed retirement credit for collecting at age 70 is 32 percent. That means for every \$1,000 of benefit owed at 66, a worker could collect \$700 per month at 62 for life, or \$1,320 per month at 70 for life. More than 40 percent collect at age 62. Retirees in Japan and Korea are notable exceptions to this regularity, where the effective age of retirement, the age at which half of the people actually retire, is close to 70 for men despite a normal retirement age of 60. The demand for labor could be quite high, so that the wage offered to older workers is high, thus encouraging them to work; or the

retirement benefits could be low, so that in order to meet a target income, these men need to work.

Men, on average, are still in the workforce at age 65 in Denmark, Iceland, Ireland, Portugal, and Switzerland, but have left the labor force by age 60 in Austria, Belgium, France, Hungary, Luxembourg, and the Slovak Republic. Women, in general, retire around one to two years earlier than men do on average in the 30–32 OECD nations examined in this chapter (OECD 2015a).

Overall, the labor force participation rates of elderly men and women increased in most OECD nations between 1995 and 2011. However, in 10 out of the 30 nations, women's age of retirement is decreasing, and in 15 nations, men's age of retirement is decreasing. Women are working less and men more in New Zealand, Australia, and Russia; whereas in Greece, women are working longer, and men are retiring at younger ages. The conclusions we draw from the international experience is that there is a general tendency for national policy that cuts retirement benefits to lead to increases in retirement ages, but there is a great deal of variation in that relationship.

Financialization of pension systems/retirement is defined as having an increasing share of old-age income originating from financial assets, rather than from social insurance programs. The degree of financialization varies by country; the elderly in some nations obtain relatively more income from capital than others: Canadian elders get 40 percent of their average income from stocks and bonds, and Slovakian elders less than 1 percent (Figure 2.2).

The boost in elderly work caused by shrinking and uncertain retirement income is welcomed by governments who are engaged in austerity policies. At one extreme is the United States, where the Social Security system has stagnated and job-related defined benefit pensions have been replaced by voluntary, individually directed, commercially defined contribution 401(k) plans, where fees vary considerably and payouts are almost always made in a lump sum.

At the other extreme is Switzerland, where contributions to occupational plans are mandatory, the contribution rates vary with age of worker, and the government sets the minimum rate of return that the plan must pay and a mandatory annuity rate at which the accumulation is converted into a flow of pension payments.

Austerity and financialization affect people in lower socioeconomic classes differently from those at the top. Those who depend most on Social Security and have little pension wealth will likely be more induced to work or look for work than others.

And the negative and unintended effect of inducing more work from the elderly by eroding pension security, rather than luring more people into the workforce with better wages and working conditions, is that the people with the lowest levels of productivity will be forced to stay in the labor force longer, which causes average productivity to fall (Burtless 2013).<sup>5</sup> This “forced to work” hypothesis is consistent with the evidence that increases in labor force participation rates among the elderly are not correlated directly with GDP growth (see above).

Since some increases in labor force participation of older workers is linked to financialization and austerity policies, it is not unanticipated that nations with high rates of labor force participation also show higher rates of elder poverty.

Pension financialization is linked to higher poverty rates. How? First, policies that lead nations to shift away from defined contribution–type retirement systems are often a part of larger austerity measures, in which nations reduce unemployment benefits, increase the normal pensionable age, and reduce social spending. In addition, income from personal assets is less secure and subject to market fluctuations and income shocks such as job loss, divorce, and health crises. It may be that nations that encourage work to supplement pension and social insurance income are nations that tolerate more hardship among their elderly. There is some evidence for this proposition: Unfortunately, working longer signals poverty; the Pearson correlation between the labor force participation of older people and elder poverty rates is 38 percent (Figure 2.4).

In countries where older people have a relatively high share of their income coming from capital, such as Mexico and the United States, we also see some of the highest rates of elderly poverty. In countries such as Finland, Belgium, and Luxembourg, where income comes mostly from sources other than capital (e.g., social insurance), we also see some of the lowest rates of elderly poverty. Nations that tolerate high levels of elderly poverty are more likely to accept riskier pensions.

## Conclusion

As many nations in the OECD shrink their social insurance programs, more elders will obtain their retirement income from individually saved or invested assets. The shift away from PAYGO (“pay as you go”) financing (which is a direct transfer from current workers to pensioners) toward prefunded pensions that pay for future income is occurring in some OECD countries, but the financialization of pensions has taken place at different rates, intensities, and pacing.

Retirement time will be reduced across income classes, but in particular for those who are unlucky in their finances, have high fees on their financial transactions, and suffer life shocks that prevented sufficient accumulation of assets.

Higher-income workers are most likely to have economic lives that are compatible with a financialized retirement system. The highest earners have better and more stable jobs, have larger and more sophisticated employers, pay lower account fees, have more access to financial information networks, and benefit disproportionately from tax deductions for retirement fund earnings and contributions.

Many nations in the OECD have adopted some aspects of the U.S. retirement system so that more elders will obtain their retirement income from individually saved or invested assets. The privatization of risk—and the provision against risk—has been the most dramatic change in the form of pension provision in the OECD countries.

In sum, there are two potential consequences of pension financialization. First, raising the age of eligibility for full Social Security benefits may increase elders’ labor force participation without

making their retirement times shorter. Second, uncertain incomes and the nonredistributive characteristic of financial assets could leave low-income and less-educated people more at risk of poverty rates in old age. In other words, retirement time may stay the same, but poverty will likely increase.

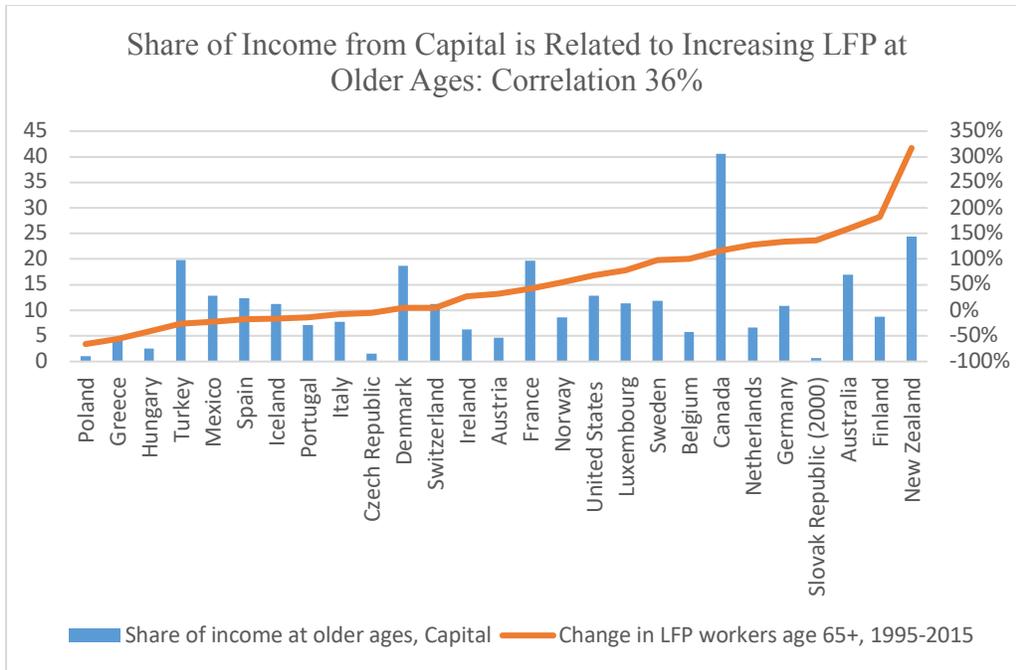
Bottom line: The shift from social insurance to the relative insecurity of financial-based retirement accounts will likely have the intended effect of increasing elderly labor force participation rates and the *unintended* effects of shrinking retirement time or not improving retirement time and increasing old-age poverty in the time of life when time is more precious.

<b>Table 2.1</b>		
<b>Retirement Time Improvements</b>		
NOTE: age 50 life expectancy minus effective pension eligibility age, 1958–2010, for OECD and U.S. by sex (OECD 2015).		
	Women	Men
OECD, 1958–2010	23	20
United States, 1958–2010	15	27

**Table 2.2**  
**Source of Retirement Income from Capital, by Nation**

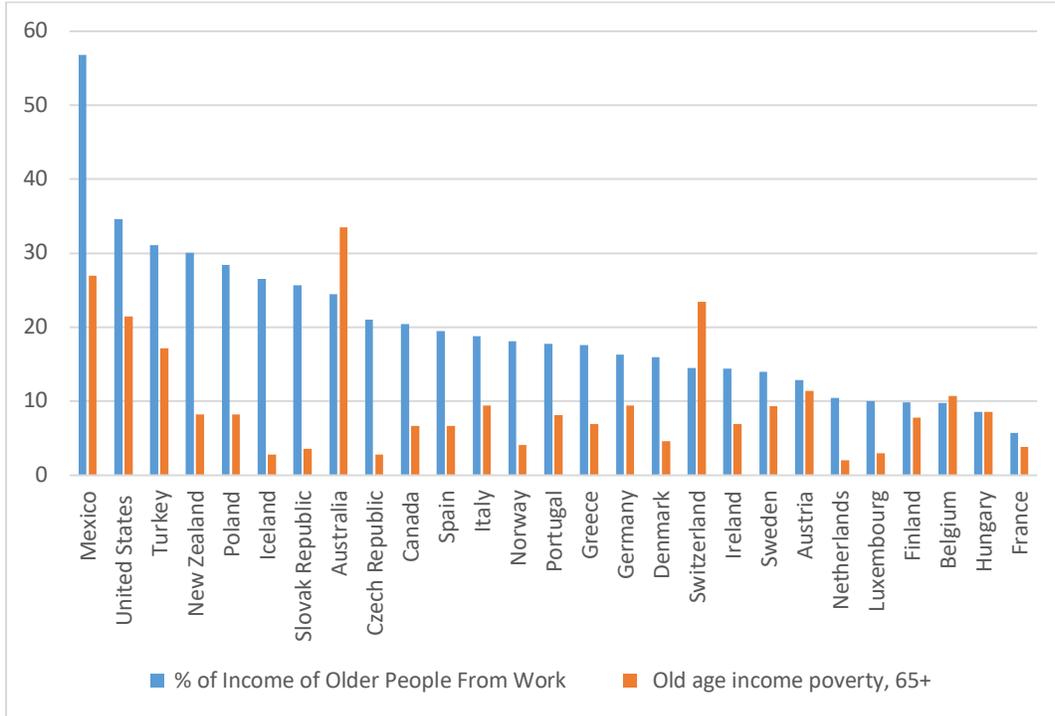
Country	Share of income from capital, for households over age 65
Slovak Republic 2000	0.7
Poland	1.0
Czech Republic	1.5
Hungary	2.5
Greece	4.3
Austria	4.7
Belgium	5.8
Ireland	6.3
Netherlands	6.6
Portugal	7.1
Italy	7.7
Norway	8.6
Finland	8.8
Germany	10.8
Iceland	11.2
Switzerland	11.2
Luxembourg	11.3
Sweden	11.9
Spain	12.4
Mexico	12.8
United States	12.9
Australia	17
Denmark	18.7
France	19.7
Turkey	19.8
New Zealand	24.4
Canada	40.6

**Figure 2.1 Older People Work More Where Pensions Are Financialized ( $r = 0.36$ )**



SOURCE: OECD (2015a,b).

**Figure 2.2 Where Older People Work More, Old-Age Poverty Rates Are Higher ( $r = 0.38$ )**



SOURCE: OECD (2011, 2015a,b).

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## NOTES

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<sup>1</sup> DB plans, which used to pay a stream of income for the rest of a person’s life (an annuity), were switched to policies encouraging payments from an individually owned retirement account.

Employers can sponsor defined benefit (DB) or 401(k) or other DC retirement plans. DB entitlements are computed using a formula that considers salary and length of employment. In contrast, DC plans pay a lump sum equal to employee and employer contributions plus net return of investments. DB plans are associated with greater retirement security than 401(k) or other DC plans, because DB plans pay a lifetime annuity, do not allow people to withdraw money before retirement, earn higher returns, pay lower fees, and do not allow nonparticipation by eligible employees. DB plan participants retire about two years earlier than otherwise similar workers covered by DC plans or uncovered workers, reflecting wealth accrual patterns that incent early retirement (source blinded for review) what do you mean “blinded for review”? Since the retirement income of DC participants depends partially on returns from financial markets, they may respond to the considerable financial market risk they face by working longer.

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<sup>2</sup> I used the Pearson correlation, which is a measure of the linear correlation between two variables. I have no good reason to imagine that the relationship is not linear, though further thought and research should consider other specifications. The measure takes on values between +1 and -1, where 1 is total positive linear correlation, 0 is no linear correlation, and -1 is total negative linear correlation. The size of the correlation indicates the intensity of the relationship.

<sup>3</sup> Retirement time has increased, but the rate of improvement has decreased. On average, we found that the estimated average retirement time for people in the 30 OECD nations since 1958 (some countries only had data from 1971 on) increased more than 20 percent between 1958 and 1992, with a 29 percent improvement for women and a 23 percent improvement for men (Figure 2.2). The rate of improvements slowed down to 8 percent improvement for women and 13 percent for men in the second period, from 1993 to 2010.

<sup>4</sup> As nations get richer, more resources are devoted to increasing longevity through public health campaigns, clean water, antismoking campaigns, clean air and water regulations, access to health care, and technologies for the treatment of heart disease and cancer, etc. Simple two-way correlations between the GDP growth rate in each OECD nation and the growth of life expectancy for people over age 65 is 50 percent for men and women together (Figure 2.1) and 64 percent for women (Ghilarducci and Novello 2017).

<sup>5</sup> Because employer health-care costs increase with the age of the employer's labor force, the relationship of pay to productivity is distorted. Older workers' total compensation increases as their productivity falls. Though older people are healthier than they were in the past, there is evidence that the speed of technology has made for speedier rates of skill obsolescence so that productivity declines after age 60. The argument about productivity is also important to note because it is one of the perennial policy concerns about the total productivity of a labor force and its relationship to overall economic growth. We are not commenting on the strength of this argument (other factors have important impacts on productivity, including, in particular, capital investment).