

Among the most striking developments of the last forty years are the trends toward earlier retirement, higher longevity, and consequent growing length and cost of retirement. Over the last four decades, for example, longevity in the French labor force has increased by 6.6 years for men and 7.5 for women, and the effective age of retirement has declined by 5.3 years for men and 7.5 for women.

Economics does not have much to say about longevity. Even though increasing life expectancy is likely to be partly due to economic factors, many other noneconomic factors contribute to longer lifespans. In fact, the relationship between economics and longevity is not clearly understood.

But economics has a lot to say about the trend toward earlier retirement. One of the dominant factors driving this trend is the long-term increase in economic wealth, which permits workers to enjoy rising living standards even as they spend a growing percentage of their lives outside the workforce.

Other important factors that have contributed to earlier retirement are expanded retirement benefits and lowered eligibility ages. Assuming that workers look at future income streams from earnings and pensions when considering retirement, a significant increase in benefits in the last decades has reduced the incentive to postpone retirement. The increasing attractiveness and availability of pathways into retirement at earlier ages is one of the most striking explanations for the lower effective retirement age in most industrialized countries.

Another explanation that is frequently advanced for earlier retirement is that workers' health has declined while physical requirements for work have grown more rigorous. Although this explanation is one of the least persuasive ones, health does play a role in the timing of individual retirement decisions. But there is no convincing evidence

that the health of 55- to 70-year-old workers declined over the period in which their labor-force participation was falling. Recent evidence about the physical disabilities of older people suggests, instead, that their health is improving. Regarding work onerousness, it seems that a much smaller percentage of today's jobs require strenuous physical effort.

For a majority of economists, the trends toward higher longevity, earlier retirement, and increased economic wealth are not only related to but also signs of improved welfare. Recent studies of economic growth incorporate leisure and longevity to correct for standard indicators of development. This evolution is perceived as regrettable only if we cannot afford it. But this is far from being certain. Even with optimistic growth forecast, most countries (particularly those with an early retirement age) will be unable to meet their pension obligations. Early retirement is costly. According to recent estimates, its current cost in countries that belong to the Organization for Economic Cooperation and Development (OECD) amounts to 7.1 percent of gross domestic product.¹

This book examines various explanations for why early retirement has become such a burden for social security systems, tries to identify the most important determinants of this trend, and proposes some pension reforms that might help to reverse this trend. We believe that the strongest factors that are driving early retirement are the financial incentives provided by expanding social security systems. A comprehensive and powerful way to capture those financial incentives in one concept is the implicit tax involved in social security systems. We discuss this implicit tax from several perspectives. From a normative point of view, second-best policies need to minimize the distortions of labor-supply and retirement decisions that are caused by social security taxes on a payroll basis. This optimal-tax approach also includes an analysis of alternative sources for financing benefits, such as consumption and capital income taxation. From a positive point of view, policies are designed in a way that discourages work among older persons, and the political economy of early retirement provides useful insights into how support for such policies arises and why it is difficult to reverse the trend toward early retirement.

In this study, we do not survey the vast research output dealing with retirement but instead focus on analyzing the labor supply. The expansion of social protection and, in some countries, the development of employer-sponsored pension plans induces workers to stop working

early. The voluntary decisions of older workers to leave the labor force are based on the amount of income they can expect to receive when they leave the workforce. This income can come from standard pension programs, but also from other components of social protection such as disability insurance, unemployment insurance, and early retirement schemes that provide relatively generous benefits well before the normal retirement age (which is 65 in many countries). One reason to concentrate on labor supply is that we believe it is particularly relevant to European Union countries. We also think that it is the most interesting subject for economists concerned with issues of choice and responsibility. But labor-demand forces also drive older workers out of the labor force. Employers (and government) have been active in forcing older persons out of work, especially when earnings increase with seniority and exceed productivity. Employers who wish to cancel labor contracts with older workers may be backed by governments that hope to free jobs for young unemployed.

Chapter 2 deals with empirical evidence on early retirement. It shows how the pathways into retirement—such as old-age pension schemes, early retirement schemes, disability insurance, and unemployment insurance—are implemented into the social protection systems in different countries. We present the existing evidence on the decline in the workforce-participation rate of elderly workers and on their increasing longevity. A comparison of retirement patterns over time and between genders reveals that retirement age is sensitive to regulations of the social security system (such as changes in eligibility age). Furthermore, we find that health as a determinant of early retirement plays a minor role compared to financial incentives. Chapter 3 concentrates on how to measure such incentives that are imbedded in social security systems. It presents and evaluates different ways to measure those incentives, including accrual rates of social security wealth, the peak value, and the option value. Among other things, we give a number of estimates of implicit taxes on prolonged activity and show the relationship between these taxes and the retirement decision.

Introducing the theoretical part of the book, chapter 4 presents the model used in the book and some concepts pertaining to actuarial neutrality and fairness. It appears that for the retirement decision, what matters is marginal neutrality. The optimal payroll-tax rates of a pay-as-you-go (PAYG) pension scheme that are derived in this chapter minimize distortions of labor-supply and retirement decisions, and the question of whether distortions are smaller in a fully funded (FF)

pension scheme is also discussed. In chapter 5, we turn to aspects of the political economy of early retirement. Here we address the question of why in some societies effective retirement is early and why reforms that are considered necessary and socially desirable face resistance.

Pensions schemes traditionally are built within the framework of an overlapping-generations model. The age of retirement is fixed, and the issue is to find the optimal scheme from the standpoint of a modified "golden rule." In chapter 6, we extend this model by allowing for an endogenous retirement age. In this framework, the problems of payroll taxes as a source for financing pensions are analyzed, and alternative ways of financing (such as consumption and capital income taxes) are discussed. One new result that we obtained from this growth model is that as people retire later, the level of capital accumulation turns out to be lower. In chapter 7, we turn to the issue of disability insurance, which often seems to be one of the normal routes to early retirement. The issue we are concerned with is that of sorting out those who are truly disabled and those who are mimicking disability because they are leisure prone. The tendency today is to cut disability insurance benefits to avoid having elderly workers use this route to exit the job market. We argue that the victims of such reforms would be those who are truly disabled. The same applies to unemployment insurance.

Chapter 8 is devoted to the demand side of the retirement decision. Some claim that most elderly workers do not have the choice of working longer. According to this view, early retirement results from choices made by employers with the support of government and even unions. We discuss two points. First, many European governments believe that by pushing elderly workers into retirement, they free jobs for the young unemployed. We show that this is not the case. The second point pertains to the gap between the salary and the productivity of elderly workers. When that gap is large, employers have a strong incentive to get rid of their older employees. We show that this must not be the case. In chapter 9, we draw conclusions from the results of the preceding chapters and discuss those issues that are crucial for policy reforms of the social security system.