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Economic Crises and the Elderly

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Economic crises in the last decades have swept elderly workers more than younger workers out of employment. But now the tide is turning. In affluent societies, elderly workers will have more opportunities of being employed in meaningful and well-paid jobs than ever before. On account of demographic changes, fewer (younger) workers will be around and most of the reasons that in the past have induced employers to lay off older rather than younger workers will disappear. Future employment strategies will have to focus more on an optimal age mix and on benefitting from the full potential of the elderly.

The past: Economic crises and employment of the elderly

In the past, employers who needed to lay off workers in an economic crisis have relied heavily on dismissing older rather than younger workers. A number of factors have contributed to that pattern.

First, in many jobs elderly workers tend to be less productive than younger workers. The most obvious example is hard manual labour in manufacturing. In these jobs, elderly workers simply have a disadvantage compared to younger workers because physical strength declines significantly with age [1, 2]. Elderly workers also tend to be less productive in certain non-manual tasks, in tasks that involve learning, problem-solving, and quick information processing. Individual performance in these cognitive skills typically declines from an age of around 50, though with considerable inter-personal variation [2-4]. A disadvantage of older workers in learning skills is particularly problematic during an economic crisis because that is a period of creative destruction. It is then that companies invest in new technology and introduce new processes, all of which need to be combined with new worker skills and knowledge. During the 1990's, for example, computer technologies entered many workplaces in manufacturing and services and revolutionized traditional processes. In such a situation, elderly workers' skills and knowledge may be outdated and they may find it more difficult than younger workers to catch up on the new requirements through learning. Overall, it was probably rational for employers, when faced with the need to reduce their workforces, to retire older workers: both because of the elderly workers' lower physical strength in more traditional sectors and because of their inferior learning skills across a whole range of sectors.

Second, even abstracting from productivity disadvantages of the elderly it was often rational for employers to hold on to younger workers and dismiss elderly workers. This is because from an economic perspective employers perceive the employment relationship from an investment perspective and anticipate the costs and returns of employing workers over their career. Workers need to be trained in skills and knowledge that are often firm-specific. Training in these skills must be acquired inside the company and be financed at least in part by the employer. Since elderly workers are close to retirement, employers may find it diffi-

cult to recover the costs of investment in training. Faced with a crisis, employers prefer to dismiss trained elderly workers and to retain trained younger workers because this also upholds the option for firms to benefit from the future returns to training acquired by the younger workers once the crisis is overcome. This effect is made worse by the seniority-based pay system common in many companies. Pay increases with age, thus rendering elderly workers more costly than younger workers [5].

Finally, reducing headcounts via early retirement instead of dismissing a number of select workers was often considered as involving lower social costs. Older workers entered retirement a few years earlier, and given the hard labour involved in many jobs and the problematic health conditions that older workers were often in, early retirement was welcome by many older workers too [6]. By contrast, dismissing younger and particularly prime age workers often resulted in higher spells of unemployment for these workers and was therefore resisted by the workers and the general public. Governments have therefore often supported employers with various legal reforms or subsidies in order to foster early retirement and concentrate layoffs on older workers. This policy conferred the additional benefit for governments of keeping the official unemployment figures down.

Overall, the economic crises that have hit western societies in the last decades have led to massive waves of early retirement. The actual average retirement age is therefore much lower than the formal retirement age. Germany is a good case in point. Despite a formal retirement age of 65, average retirement was around 60 years during the 1990's [7]. Early retirement and dismissals of elderly workers dramatically changed the workforce composition inside German companies. In a representative study for the year 2002, it was found that around 40 percent of firms did not employer a single worker older than 50 years of age [8]. Though that may be an extreme example, comparative evidence points to similar developments in other industrialized economies [9].

The present situation: Older workers are coming back

The situation is gradually changing. Not only has early retirement become too expensive for the social security system and taxpayers, but as baby boomers are nearing retirement, skilled workers will also become rare and the productivity potential of older generations will be needed in the workforce to stay competitive and ensure economic well-being of future generations. Accordingly, public policies on early retirement have started to reverse in many countries [10]. Denmark is but the latest example discussing an increase in the official retirement age to 70 years.

It is less obvious that early retirement and dismissals of elderly workers may have also incurred hidden costs to companies, costs that have long been overlooked by employers and that will now harm many companies' competitiveness unless policies towards the elderly are reversed quickly. Employers may have ignored the downsides of early retirement and dismissals of elderly workers because scientific knowledge about the links between age and productivity is limited. Many empirical studies in the past have examined individual age-productivity profiles in laboratory settings. Even those studies that have looked at task performance in the field, still usually considered individual rather than group performance as an outcome of aging processes. But in the world of work elderly workers almost always perform their job in groups composed of both younger and elderly workers. Whether a high share of elderly group members is good or bad for performance depends on the division of labour within a group, the degree of interdependencies between individual tasks, and the type of the overall task requirements. These factors have only recently attracted attention in research. Appropriate scientific designs are field studies that focus on performance on the job and look at the demographics or composition of workforces or work groups. The evidence on these questions is still sketchy but nonetheless instructive.

A number of studies have looked at individual age-productivity profiles: the link between age and individual job performance. Although many of the findings in these studies point to a clear disadvantage of older workers, a comprehensive meta-analysis already found age to be unrelated to core task performance across a whole range of studies [11]. Furthermore, if older workers are at a disadvantage, this may be in certain jobs but not in others. In a comprehensive review of the literature, Skirbekk [4] found that “productivity reductions at older ages are particularly strong for work tasks where problem solving, learning and speed are needed, while in jobs where experience and verbal abilities are important, older individuals’ maintain a relatively high productivity level”. Perhaps the widespread stereotype according to which older workers are less productive is largely unwarranted [12]. This impression is supported if we add to the picture studies that have examined how the ageing of teams or work groups affects organizational performance. Here the results on the effects of average age and age heterogeneity on performance are inconclusive so far [13, 14]. Hence, it is not at all evident that elderly workers or teams with a high share of elderly workers need to be less productive.

Despite this hopeful sign, the inconsistency of the available evidence is not satisfactory. Though the age effect seems insignificant on average, some studies show a positive, others a negative effect. One reason for that mix can be found in two key design features of previous studies. They usually compared productivity or performance across a whole range of sectors and handled performance as one-dimensional. A number of more recent studies have overcome that limit and have sought to produce more specific findings by distinguishing different types of sectors or activities, and by breaking down performance into several dimensions.

For example, Backes-Gellner/Veen [15] extended the work by Spitz-Oener [16] and Warr [2] who distinguish occupations with and without a productivity discount of elderly workers. Backes-Gellner/Veen draw on a representative employer-employee sample for Germany and

compare how differences in age heterogeneity affect the productivity of firms and focus on differences in productivity outcomes depending on the firm's overall types of tasks. They find that for firms with more routine types of tasks, age heterogeneity decreases productivity, other things being equal, and that for firms with more innovative and creative types of tasks, age heterogeneity increases company productivity. Thus, more age heterogeneity has a positive effect on company productivity if and only if a company engages in more creative but not in routine tasks. According to their results, an increase in age heterogeneity of 10 percent (which is equal to the range of age heterogeneity in the time period they observe) increases the annual company productivity by approximately 3.5 percent in companies with creative tasks. In comparison to average GDP growth rates of about 1 percent in the same period, this effect is large and economically significant. Age composition and organizational demography in general are therefore an important source for productivity growth, particularly in innovative companies with creative tasks. For innovative industries and societies the age composition of their companies' workforces are an important source of their future competitiveness. As an important by-product of their analysis, Backes-Gellner/Veen also found that organizational productivity—unlike individual productivity—does not necessarily decline with the average age. When age diversity and type of tasks are controlled for, an increase in average age has a positive effect on company productivity. With demographic changes rapidly approaching, these results are also of the utmost importance for organizational performance.

In another study, Schneider [17] and Backes-Gellner/Schneider/Veen [18] departed from the practice of collapsing performance into one dimension. By breaking up performance into several dimensions, they produced new and important insights. Their study focused on professional judges as an example and examined how the average age of courts in Germany affects court performance on two different dimensions of court performance, quantity and quality. The courts are an interesting setting because teamwork does not affect performance.

Data on different dimensions of performance can be constructed from official sources. Furthermore, courts are among the few organizations that actually employ elderly workers. The effect of judges' age on their performance has been studied before (e.g. Posner [1]) but no study has systematically distinguished quantitative and qualitative performance. Quantitative performance was measured as the number of complaints handled by each of 19 Labour Courts of Appeal. Qualitative performance was measured as the share of decisions of these 19 courts that were overturned by a higher authority, the Federal Labour Court in Germany.

The findings are interesting and cast into doubt the widespread stereotype of a performance disadvantage of elderly workers. Average age was found to be related differently to quantitative performance compared to qualitative court performance. In particular, it was found that the share of judges older than 59 has a statistically significant negative effect on quantitative court performance. An increase in the share of judges older than 59 by one standard deviation (18.4) was estimated to lead to a reduction in processed cases – the measure of quantitative performance – by 2.76 percent. Conversely, the share of judges younger than 50 was found to be negatively linked to qualitative court performance. An increase in the share of judges younger than 50 years of age by one standard deviation was estimated to lead to a 9.76 percent reduction in the confirmation rate, the measure of qualitative performance. The findings are plausible. They indicate that younger judges excel in quantitative performance because this involves accurate, speedy information processing, for which younger people are at an advantage. Conversely, older judges excel in qualitative performance because this involves wisdom and experience, both of which increase with age.

This study, then, also indicates that it is important for employers to consciously manage the age composition of their workforce. Younger workers should work alongside elderly workers. This strategy is likely to be more productive than solely employing and training younger talents.

The future: bright prospects for the elderly working alongside the younger

Given these recent research results and changing economic conditions in industrialized affluent societies, we expect the prospects for elderly workers to find meaningful, well-paid employment over and above the age of 65 to be bright – at least much brighter than ever before. Industrialized countries have increasingly specialized within the global division of labour into industries that are based on innovation and creativity. Within these industries, companies usually pursue high-quality strategies for which a price-markup can be achieved. It is this sector of the economy in which cross-functional teams, quality circles, and semi-autonomous teams play an important role. These teams tend to perform better if elderly and younger workers cooperate. Furthermore, elderly workers tend to be competitive vis-à-vis younger worker in terms of individual productivity if wisdom and experience are important to excel in the task. This is often the case for the many activities into which industrialized economies now specialize and which target at superior product or service quality.

The advantages of older workers have been overlooked by both scientists and managers alike, with fatal effects during the last decades. In many firms, the cohort of older workers is missing and soon whole cohorts of baby boomers are going to retire. In order to retain their experience and wisdom and in order to be able to compose teams in a heterogeneous way, many firms are increasingly interested in prolonging the working life of the elderly, for example via job sharing arrangements or part-time retirement.

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