

Employment Trends of Older Workers in Western Countries

Abstract

While Western societies are ageing, the trend of the early retirement of older workers from work-force continues. Public policy tries to reverse this trend by extending the age limit of old age pension schemes. The trend of early retirement however, is primarily driven by labour market dynamics rather than by pension regulations. An empirical analysis of employment trends by single industries shows that the early retirement of older workers is a general labor market phenomenon in all countries and not restricted to certain industries. Therefore, reversing this trend will be a very difficult task for the future.

The ageing society and the labour market

The increase in longevity and the decline in fertility are the two major forces creating a change in the age distribution of most mature industrial societies. The outcome of these trends has been an ageing society characterised by a growing share of older people in the population. One might expect that this process will be reflected in the labour market with a growing share of older workers in the work-force. Instead a reverse occurred: in almost every Western country in the 1970s and the 1980s there has been a more or less steady decrease in male work-force participation from age 55 to 64. There

are some differences in the slope, the level of exit, and in the time period in which the process began. For example, the work-force decline is not as steep in Sweden and Japan as it is in Germany, the Netherlands, and France. The United States and the United Kingdom fall between these extremes. In France and the United Kingdom the trend began in the 1980s, whereas in the Netherlands and Germany it started in the early 1970s. Moreover, the trends appear more similar across countries for the 60-64 age group than for the 55-59 group¹.

In almost every country the standardised age of retirement at age 65 has de facto been substantially lowered. From the perspective of the labour market, people are seen as "older workers" in the last phase of their working life. If the normal end of working life increasingly occurs in the mid- or late 50s, then those in the late 40s or early 50s have already become "older workers". The labour market has thus accelerated the trend of an ageing society by redefining the meaning of ageing.

Public policy in Germany, Japan and the United States has taken the first step towards reversing this trend by gradually extending the age of retirement. However, the age of entering the public pension system is not necessarily the same as the age of exiting the work-force employment. Policy and practice can thus diverge, because there are also other important actors, such as the firms and unions and the elderly themselves. We believe that the key to unravelling the changing boundary between work and retirement primarily lies in a better understanding of labour market dynamics, rather than focusing on changes in the structure of the pension system.

One way to understand these dynamics is to look at the changing age profiles within different industries over time. If the trend of

¹ see Martin Kohli's detailed summary of our documentation and analysis of these trends in this volume.

to early exit from the work-force is limited to a few industries which are, for example, experiencing economic hardship or rapid technological change, then the expectation of reversing the trend of early exit does not appear completely unrealistic. The continued employment of older workers in other industries shows that, in general, they still have an economic role to perform.

If, on the other hand, the pattern of early exit is more general and extends to almost all industries, then reversing the trend seems much more difficult. Such a scenario might suggest that firms are in general unwilling to employ older workers, from the perspective of an economic rationale, and/or the older people prefer the early exit option because, if the economic penalty of early exit is not too high, they see an opportunity of enjoying retirement when they are still healthy and active.

In this paper we will present some empirical results from our analysis of industry-specific employment trends of older workers in the 1980s in five countries. We want to answer the question whether the trend of early exit of older workers from the work-force is concentrated in certain industries or represents a general phenomenon of the total labour market.

Employment trends of older workers by industry

Previous findings

In a previous study, we analysed the exit patterns in industry over a period of time in the 1970s in the Netherlands, Germany and Sweden; three countries which represent different industrial mixes and different rates of exit of older workers (Jacobs et al. 1987). The most obvious interpretation of the process of early exit from the labour market was that troubled industries, or industries experiencing rapid technological change, were expelling older workers. If this interpretation

was correct, one would expect to find that exit takes place in certain industries and not in others. Secondly, we expected that the different industry mixes in countries might help to explain the overall exit patterns or processes. Economies with a rapidly declining industrial sector and a lower proportion of employment in services would show higher rates of exit than economies with less industrial transformation and a growing service sector.

The main conclusion of our study was that exit takes place almost everywhere in growing and declining industries, although not necessarily to the same extent. The decline in male participation rates was larger in declining industries than in rapidly growing industries. In Sweden, a country where the general level of exit is much lower than in Germany and in the Netherlands, there were some industries that were exceptions to this generalisation.

New evidence for the 1980s: more countries and industries

The main shortcomings of our previous study of the early exit process in industry were the limited number of countries and the relatively low level of disaggregation of the total work-force into only 16 different industries. Our new data base allows a much deeper analysis. The data cover the most recent time period in five countries with a disaggregation of the total work-force in each country into 34 to 38 different industries.

Selection of countries: different processes of work transition

In our first study, the choice of countries was oriented at the level of overall decline of work-force participation of older men and the specific industry-mix. We chose Sweden as a country with a relatively low decline of work-force participation of the elderly and Germany and the Netherlands as two

countries with a sharp decline since the early 1970s, but with clearly different industrial structures: Germany with a great share of the total male employment in the manufacturing sector and the Netherlands with a very large service sector.

In the present study, we want to call attention not only to differences in the scope and level of early exit of older workers between countries and the specific industry-mix within each country, but also to different processes of work transition that exist in different countries in the last phase of working life before leaving the work-force.

Germany is a prototype of those countries where the early exit from employment of older workers is permanent exit from work, because the proportion of workers who re-enter employment is very low. Other countries that belong to this category are France and the Netherlands. In Germany there are not only few employment opportunities for older workers, but also the different exit pathways (unemployment insurance, disability, and firm- or industry-based pre-retirement programs) are generally adequate and produce a high level of income replacement (Jacobs, Schmähl 1989). There is little economic need, therefore, at least for male workers with continuous work careers, to seek further employment. Not only is the economic need low, but workers consider early retirement a moral right that they have earned and would oppose the need to re-enter work in order to receive an adequate income (Kohli 1987). Thus, it is not only the availability of jobs or the adequacy of income, but the legitimacy of early retirement which is also at stake in an effort by the state to alter the retirement process.

Sweden is very different from Germany, because the decline of the work-force participation of older men has been more moderate and limited primarily to the 60-64 age group. Noticeable work-force declines have not yet occurred in the 55-59 age group. This is partially due to the societal evaluation of the role of employment rather than the

existence of a limited repertoire of exit pathways. This societal evaluation is made possible by industry's willingness to make part-time employment available in the same firms or occupations in which they had primary employment. Sweden is the only country where part-time employment for older men exists to any large extent (Kruse, Söderström 1989). However, once workers exit from work their exit is permanent. Japan is quite similar to Sweden in the relatively high employment rates of older workers, but instead of relying on part-time employment, Japanese workers leave their primary jobs ("lifetime employment") between age 55 and 60 and start a second work career (Schulz 1989). The age of entry into the pension system for most men begins at age 60. The interim period of up to five years without income is completed in the continuation of work, not by transitional public and private retirement pathways. Moreover, the pension level at retirement is relatively low, so that, even after age 60, men find it economically necessary to continue to work. The Japanese pattern then is exit from permanent lifetime employment, but the continuation of work largely by re-employment; thus, permanent exit from work is postponed. This process leads to high participation rates. Of course, the participation rates do not capture this process, only the final outcome. As in Sweden, everyone who is able is expected to work, although there appears to be a subtle difference between the Swedish emphasis on the right to work and the Japanese emphasis on the obligation to work.

In the United States, the decline in the participation rates of older male workers is relatively high in comparison to Japan and Sweden, despite anti-age-discrimination legislation and the limited repertoire of public early exit routes. The main early retirement route is largely made possible through the private occupational pension system. These pension arrangements are designed to encourage early exit at a specific age. Postponing the age of exit leads to

economic penalties in the sense that the relative value of the pension declines after an optimum age is passed (Ruhm 1989). In the United States, the relative net disposable income for older workers is much lower than it is in Sweden and Germany. Many workers appear to receive neither a private occupational pension nor a public pension. They are dependent on assets or on the earnings of other family members. In the case of early retirement, the firm's occupational pension occurs long before the earliest statutory possible retirement program at age 62. Some recent studies show that the proportion of workers re-entering the work-force is growing (e.g. Burkhauser; Quinn 1989). In this case, the pattern is similar to Japan, in the sense that exit from the primary job is not equivalent to permanent exit from the work-force as it is in Germany and Sweden.

We can sum up the retirement process in the four countries as follows. Japan and Sweden both have relatively high, but declining, employment activity rates, while the United States and Germany have much lower rates. In Sweden and Germany exit is exit, i.e., it usually leads to permanent exit from work; whereas in Japan and the United States this is not the case. The continuation of work is a normal feature of the working career and firms provide re-employment opportunities in Japan, while the initiative of finding work rests with the individual and typically takes place in different firms and in industries at lower earning levels in the United States.

The situation is unclear in the United Kingdom. First, the repertoire of institutional routes to early exit is more limited and less adequate and, therefore, there is more use of means-tested programs in Britain than in any other country. At the same time there has been a very rapid decline in work-force participation of older workers in the 1980s. While workers have an interest in re-entering work, because their financial situation is not very good, their opportunities for re-entry are much more limited than in the United States.

Given the different meaning of early exit from work and the practice of re-employment and re-entry, these five countries seem to be a good selection for analyzing the early exit process on a disaggregated branch level.

Data sources

The data are based on *National Employment Surveys* of a population sample for the United Kingdom and the United States; census data, which are available every five years, in Sweden and Japan; and data from the Social Insurance Beneficiary Lists for Germany, excluding self-employed, lifetime civil servants ("Beamte"), and workers with less than 15 hours work-week. The data cover a period of at least five years during the 1980s. Our main interest was to secure the most available data for the most recent time period.

The partly different data sources and employment definitions create some problems for comparisons across countries. The focus of this analysis, however, is not a comparison of industry-mixes or industry-specific age profiles across countries at a certain time point, but a comparison of early exit trends and changes in the age composition of the total work-force and particular industries. Therefore, it is not absolutely necessary to have identical employment data for all countries, which do not exist in such a disaggregated form by single age groups and industries, but to have comparable data for both time points in each country.

Two further explanations are necessary: first, agriculture is excluded from the present analysis, partly to increase comparability across countries and also for substantive reasons. In our first study, we found that agriculture accounts for a large part of the employment of older workers. In all countries in the study, agriculture is declining, but the processes and level of decline are different in each of the countries. Agriculture represents a special case of a declining industry. It is still

large in Japan but already very small in Germany and Sweden. The data we present are for non-agricultural, civilian employment.

The second explanation refers to the fact that in this paper we examine male rather than total and/or female employment. The work-force participation of women differs widely across countries. The analysis of the total employment pattern is very much influenced by the work-force participation of women. Women are more likely to be employed part-time than men. Finally, although the trend of early exit for women also exists (see Jacobs et al. 1990), this trend does not show up in cross-sectional data, because two different phenomena are taking place simultaneously: an increased overall female work-force participation and the early exit of older women. In a cross-sectional perspective, one trend offsets the other. The only way to disaggregate these two trends is by examining birth cohorts. Such data, however, are not available for industry and therefore, this analysis is restricted to men.

The measures of employment: shares and rates

For the kind of cross-sectional data we have, we can look at two different types of measures: employment shares and rates. A share is the proportion of the total employment of the work-force for a particular industry by age. Employment shares represent the perspective of the production regime within an industry and are the outcome of the aggregate behavior of firms within that industry. An old industry is characterised by a high proportion of older workers 55-64 years of age. An ageing industry by this measure is one where the share of older workers is increasing over time. The age structure is seen as a parameter of the production function which can be actively shaped by management decisions.

Since all employment shares within an industry must, by definition, add up to 100

percent, a measure of the decrease in the proportional share of older workers can be the result of very different processes. In a declining industry, if the number of older workers decreases more rapidly than total employment, employment shares will decline. One can also see decreasing shares, even when the number of older workers is increasing. This can occur if the increase is less rapid than that of another age group, thus, some of the results can be produced by very different processes.

Employment shares are largely shaped by management decisions. The scope of such decisions is partly restricted by the simple demographic availability of workers and by social policy measures, such as job protection provisions for older workers and the existence or absence of public routes for early retirement before reaching the age limits of the pension system. The demographic factors are mainly influenced by the birth rate, migration processes and special factors, such as the consequences of the two World Wars. These demographic factors are especially important in Germany and Japan.

Employment activity rates represent the proportion of the total population of a specific age group that is employed. The measure of employment activity rates is interesting from a societal perspective, because it tells us what proportion of an age group is actively working. There is a societal obligation to provide income alternatives for older men who are not at work.

Findings

The most important empirical results of our analysis are shown in tables 1-3. In each country, the single industries are grouped by their average annual employment growth. Total male employment in Japan and the United States increased by an annual average of 0.8 percent (table 1).

In both countries, the total male population is also increasing, in the United

Table 1:
Male employment trends in the 1980s

Employment growth		Employment by industry				Growth rate (%)	Annual rate (%)
		(100)	(%)	(100)	(%)		
GERMANY		1980		1987			
a)	decline over - 2 %	29780	23.6	24438	19.8	-17.9	-2.6
b)	decline - 0.6 to - 1.7 %	26872	21.3	25174	20.4	-6.3	-0.9
c)	stable - 0.2 to + 0.5 %	34110	27.1	34117	28.0	0.9	0.1
d)	increase + 0.8 to + 2.1 %	27956	22.2	30077	24.4	7.6	1.1
e)	increase over + 3.0 %	7276	5.8	9025	7.3	24.0	3.4
Total non-agricult. male employment		125994	100.0	123131	100.0	-2.3	-0.3
Total male population		294171		293984		-0.1	0.0
JAPAN		1980		1985			
a)	decline over - 2.4 %	8388	2.7	7033	2.2	-16.2	-3.2
b)	decline - 0.6 to - 1.9 %	61276	19.5	58550	17.9	-4.4	-0.9
c)	stable - 0.4 to + 0.5 %	105398	33.6	104389	32.0	-1.0	-0.2
d)	increase + 0.8 to + 2.2 %	113412	36.2	123199	37.7	8.6	1.7
e)	increase over + 4.1 %	25126	8.0	33271	10.2	32.4	6.5
Total non-agricult. male employment		313601	100.0	326442	100.0	4.1	0.8
Total male population		574904		594973		3.5	0.7
SWEDEN		1980		1985			
a)	decline over - 2.7 %	2287	11.2	1827	8.9	-20.1	-4.0
b)	decline - 1.2 to - 1.7 %	5343	26.2	4934	24.1	-7.6	-1.5
c)	stable - 0.6 to + 0.6 %	7814	38.3	7818	38.2	0.1	0.0
d)	increase + 0.9 to + 1.9 %	3079	15.1	3324	16.3	7.9	1.6
e)	increase over + 4.2 %	1880	9.2	2545	12.4	35.4	7.1
Total non-agricult. male employment		20403	100.0	20448	100.0	0.2	0.0
Total male population		41198		41271		0.2	0.0
UNITED KINGDOM		1981		1988			
a)	decline over - 2.5 %	38163	28.7	29451	21.6	-22.8	-3.3
b)	decline - 1.5 to - 2.1 %	12621	9.5	11127	8.2	-11.8	-1.7
c)	stable - 0.5 to + 0.1 %	21187	15.9	21103	15.5	-0.4	-0.1
d)	increase + 0.6 to + 2.1 %	30391	22.8	33432	24.5	10.0	1.4
e)	increase over + 3.1 %	30686	23.1	41382	30.3	34.9	5.0
Total non-agricult. male employment		133049	100.0	136495	100.0	2.6	0.4
Total male population (1981, 1987)		274090		277370		1.2	0.2
UNITED STATES		1978		1985			
a)	decline over - 3.0 %	53741	8.9	32232	5.1	-40.0	-5.7
b)	decline - 1.4 to - 1.6 %	31536	5.2	28365	4.5	-10.1	-1.4
c)	stable - 0.4 to + 0.5 %	171504	28.5	173422	27.3	1.1	0.2
d)	increase + 0.7 to + 1.6 %	215731	35.8	233067	36.8	8.0	1.1
e)	increase over + 2.8 %	129786	21.5	167000	26.3	28.7	4.1
Total non-agricult. male employment		602299	100.0	634086	100.0	5.3	0.8
Total male population		1074570		1161610		8.1	1.2

States even more rapidly than male employment. In the United Kingdom there is also male employment growth, but at a much lower level - about half the annual rate of that of Japan and the United States. By contrast, total male employment is stable in

Sweden and slightly declining in Germany.

These numbers are interesting because increasing total employment indicates that there is more scope for the employment of older men. The reason for this overall growth in Japan and the United States is that

declining industries account for only 10-20 percent of employment in the mid 1980s; whereas in other countries where the male employment rates are not increasing, the share of declining industries is almost twice as large.

When we consider the impact of growing

and declining industries on the share of employment of older workers, we see a clear decline in the employment shares of older men 55-64 years of age in Sweden, the United Kingdom, and the United States (table 2).

The relative decline in the employment

Table 2:
Relative Change in Employment Shares by Age (in %)

Employment growth		Age							
		15-24	25-49	50-54	55-59	60-64	65+	55-64	55+
GERMANY		1980-1987							
a)	decline over - 2 %	3.9	-8.7	29.8	27.3	-8.3	-53.5	19.8	16.4
b)	decline - 0.6 to - 1.7 %	-4.4	-0.1	10.3	11.6	1.5	-56.1	9.0	2.5
c)	stable - 0.2 to + 0.5 %	-5.8	-1.6	14.1	13.2	3.6	-50.1	11.1	8.8
d)	increase + 0.8 to + 2.1 %	5.4	-2.3	3.2	6.3	2.2	-49.6	5.3	2.5
e)	increase over + 3.0 %	-8.8	2.4	4.2	1.4	-2.6	-48.5	0.3	-7.4
Total non-agricult. male employment		-2.8	-2.3	13.0	13.6	2.1	-50.3	10.8	7.0
Total male population		-6.4	-0.2	7.3	14.0	44.4	-11.6	25.7	3.8
JAPAN		1980-1985							
a)	decline over - 2.4 %	-0.2	-11.4	23.7	46.1	1.4	-2.4	29.2	19.6
b)	decline - 0.6 to - 1.9 %	3.4	-5.5	16.4	27.9	0.5	-1.2	16.7	10.2
c)	stable - 0.4 to + 0.5 %	-11.1	-3.1	8.1	43.0	12.5	-10.9	32.9	22.3
d)	increase + 0.8 to + 2.2 %	1.9	-3.9	11.2	25.4	5.8	-5.7	18.0	10.5
e)	increase over + 4.1 %	25.3	-6.8	-1.7	19.7	8.8	-9.0	15.3	7.8
Total non-agricult. male employment		1.5	-4.3	9.3	31.1	6.8	-5.9	22.1	13.5
Total male population		1.1	-7.0	5.1	27.3	14.6	7.9	21.7	14.8
SWEDEN		1980-1985							
a)	decline over - 2.7 %	-3.1	4.9	0.1	-7.4	-18.0	-1.6	-12.1	-11.3
b)	decline - 1.2 to - 1.7 %	10.1	0.9	-3.8	-10.6	-11.9	-6.6	-11.2	-10.7
c)	stable - 0.6 to + 0.6 %	9.1	2.0	-7.6	-12.8	-5.8	-1.6	-10.0	-9.4
d)	increase + 0.9 to + 1.9 %	3.9	2.5	-6.5	-12.1	-6.0	-16.0	-9.6	-10.3
e)	increase over + 4.2 %	44.3	-4.6	-14.3	-20.5	-4.2	97.7	-13.9	-3.1
Total non-agricult. male employment		9.1	1.7	-6.9	-12.9	-9.2	7.7	-11.3	-9.6
Total male population		1.3	2.0	-7.5	-13.4	-3.1	3.6	-8.4	-1.8
UNITED KINGDOM		1981-1988							
a)	decline over - 2.5 %	-15.7	15.4	-16.2	-22.8	-22.1	-29.6	-22.5	-23.0
b)	decline - 1.5 to - 2.1 %	4.1	9.3	-18.3	-21.4	-23.6	-33.3	-22.3	-22.9
c)	stable - 0.5 to + 0.1 %	10.2	7.3	-9.7	-23.7	-29.9	-26.3	-26.0	-26.0
d)	increase + 0.6 to + 2.1 %	-2.6	3.6	7.9	-10.1	-11.8	-38.1	-10.8	-14.8
e)	increase over + 3.1 %	10.6	2.7	-7.2	-15.7	-16.8	-26.5	-16.2	-18.6
Total non-agricult. male employment		3.3	6.7	-8.9	-20.2	-19.9	-22.7	-20.1	-20.4
Total male population		-1.7	3.4	-7.5	-9.8	0.1	1.4	-5.2	-1.7
UNITED STATES		1978-1985							
a)	decline over - 3.0 %	-48.4	12.2	-1.3	0.7	14.9	42.6	6.2	10.5
b)	decline - 1.4 to - 1.6 %	-26.6	14.6	-15.4	-12.5	-23.4	23.4	-17.0	-12.5
c)	stable - 0.4 to + 0.5 %	-29.7	12.9	-6.7	-3.2	-11.9	-6.9	-6.8	-6.8
d)	increase + 0.7 to + 1.6 %	-22.2	15.0	-12.5	-6.3	-2.2	-10.1	-4.6	-5.8
e)	increase over + 2.8 %	-9.3	12.6	-14.9	-15.4	0.6	-22.9	-8.4	-13.8
Total non-agricult. male employment		-18.9	12.6	-12.3	-9.0	-5.3	-7.9	-7.5	-7.6
Total male population		-13.4	9.9	-14.9	-9.5	4.2	5.1	-3.3	1.0

shares is over 20 percent in the United Kingdom, 11 percent in Sweden, and almost 8 percent in the United States.

For these three countries, there is a clear pattern of the relative declining share of older workers in both growing and declining industries. In Sweden, the decline appears to be more or less uniform; in the United Kingdom, the relative decline in the employment shares of the elderly is higher in the rapidly declining industries and somewhat lower in the growing industries; in the United States, the data show a small relative increase in employment shares in rapidly declining industries. In the rapidly declining industries in the United States, the increased share of older workers occurred because of a very rapid decrease in the share of very young workers 15-24 years of age. In no other country did such a pattern occur.

At first sight, the situation in Germany and Japan seems strikingly different. Both these countries show a uniform increase in the relative share of older workers in growing and declining industries. This trend appears to be due largely to special demographic factors. There were fewer men born during World War I, and the size of this birth cohort was further reduced because many men died in World War II. The size of the cohort of men aged 55-64 in 1987 in Germany is substantially larger than the small cohort that preceded them. If it weren't for these demographic forces, we believe that there would have been a decrease in the relative share of employment of older workers in Germany and Japan as has occurred in the other three countries. That this is indeed the case becomes clear when the age specific size of the male population is also taken into account.

We can see the demographic effect when we shift our measure from relative changes in employment shares to relative changes in employment rates. In table 3 we find that in Japan and Germany, as well as in the other countries, there is an overall decline in the employment activity rate of men 55-64 years of age. The relative decline is smallest in

Japan at about 2 percent, and largest in the United Kingdom and Germany at about 17 percent. Sweden and the United States with 5 and 8 percent relative declines fall between these extremes. This pattern of declining relative rates is not only found in overall declining industries. In Germany, employment activity rates of men 55-64 are declining everywhere, while in the other countries these rates are increasing in rapidly growing industries but declining elsewhere. Only in Sweden, is there already an increase in modestly growing industries.

In general, these results do not contradict the empirical findings of our first study of employment trends, but they do somewhat challenge our previous generalisation. In our first analysis of Germany, the Netherlands and Sweden, we found that early exit of older men was taking place in almost every industry. Sweden was an exception with an increase in the employment rates of older workers in very rapidly growing industries. The more recent time period does not change our findings for Germany and Sweden. However, the addition of other countries where practices of re-entry and re-employment occur, now makes Germany an exception. In all the other countries, as in Sweden, we still find declining overall employment rates of older men, but increasing rates in rapidly growing industries. Furthermore, this picture is much more pronounced for men 60-64 than for men 55-59.

If we examine specific industries for each growth pattern, do we still find the same pattern of relative decline in employment shares and employment rates for older workers? The answer appears to be "yes" with some exceptions. Table 4 for Sweden is included to illustrate the general trend. Here we identify only two branches with a significant increase (larger than 5 percent) in employment shares of older workers 55-64 years of age: education and research, and repair services. There are some other exceptions in the other countries, such as the small group of declining traditional

Table 3:
Relative Change in Employment Activity Rates by Age (in %)

Employment growth		Age					
		15-24	25-49	50-54	55-59	60-64	15-64
GERMANY		1980-1987					
a)	decline over - 2 %	-12.7	-28.1	-5.0	-12.2	-50.1	-22.8
b)	decline - 0.6 to - 1.7 %	-8.3	-10.2	-7.8	-12.1	-36.9	-11.6
c)	stable - 0.2 to + 0.5 %	-2.7	-4.7	2.7	-4.0	-30.7	-5.1
d)	increase + 0.8 to + 2.1 %	16.0	0.9	-1.0	-3.9	-27.1	1.3
e)	increase over + 3.0 %	15.8	21.8	15.2	5.6	-19.9	17.4
Total non-agricult. male employment		-2.8	-8.3	-1.5	-6.8	-33.9	-8.0
JAPAN		1980-1985					
a)	decline over - 2.4 %	-22.2	-25.0	-7.3	-9.6	-30.3	-20.4
b)	decline - 0.6 to - 1.9 %	-8.1	-8.8	-0.6	-9.8	-21.2	-9.3
c)	stable - 0.4 to + 0.5 %	-18.2	-3.1	-4.3	4.5	-8.6	-5.8
d)	increase + 0.8 to + 2.2 %	2.9	5.4	7.9	0.5	-5.7	3.3
e)	increase over + 4.1 %	54.2	24.7	16.3	16.9	18.2	26.1
Total non-agricult. male employment		-1.7	0.6	1.6	0.7	-8.8	-1.1
SWEDEN		1980-1985					
a)	decline over - 2.7 %	-24.9	-19.3	-15.0	-16.1	-33.6	-20.9
b)	decline - 1.2 to - 1.7 %	-1.4	-10.2	-5.6	-6.4	-17.5	-8.5
c)	stable - 0.6 to + 0.6 %	5.8	-1.8	-1.8	-1.1	-4.4	-0.9
d)	increase + 0.9 to + 1.9 %	8.8	6.5	7.2	7.6	2.8	7.2
e)	increase over + 4.2 %	89.4	24.3	23.2	22.0	31.4	31.8
Total non-agricult. male employment		6.1	-1.9	-0.9	-1.0	-7.7	-0.9
UNITED KINGDOM		1981-1988					
a)	decline over - 2.5 %	-36.1	-16.8	-32.6	-36.3	-42.0	-25.0
b)	decline - 1.5 to - 2.1 %	-9.8	-10.0	-24.9	-25.8	-35.1	-14.4
c)	stable - 0.5 to + 0.1 %	7.9	-0.2	-6.2	-18.6	-32.7	-3.2
d)	increase + 0.6 to + 2.1 %	5.3	6.4	23.8	5.8	-6.5	7.4
e)	increase over + 3.1 %	46.5	29.4	30.5	21.6	8.2	32.0
Total non-agricult. male employment		4.1	2.2	-2.5	-12.4	-20.8	-0.2
UNITED STATES		1978-1985					
a)	decline over - 3.0 %	-67.3	-44.1	-36.5	-39.1	-39.6	-45.3
b)	decline - 1.4 to - 1.6 %	-30.3	-14.3	-18.3	-20.6	-39.6	-17.6
c)	stable - 0.4 to + 0.5 %	-25.0	-5.1	1.2	-1.3	-21.9	-6.7
d)	increase + 0.7 to + 1.6 %	-11.2	3.3	1.5	2.1	-7.4	-0.3
e)	increase over + 2.8 %	23.2	20.5	17.5	9.8	13.4	20.2
Total non-agricult. male employment		-9.8	-1.5	-0.9	-3.3	-12.6	-2.8

manufacturing industries in the United States like leather and mining, that show an increasing share of older workers due to the very rapid decline in the share of the young. The general picture, however, is not substantially affected by these exceptions.

Conclusion

In at least three countries: Japan, the United

States and Germany, new national legislation has been passed to extend the retirement age because of anxiety over financing old age pensions, early exit routes and changing demography. Can international comparisons shed some light on how these new legislative initiatives will affect the employment trend of older workers?

Our most general empirical finding is that decreasing employment shares and employment rates of older workers, do not

Table 4:
Relative Change in Employment Shares by Age in Sweden (in %)

Industry	Age							
	15-24	25-49	50-54	55-59	60-64	65+	55-64	55+
Textile,Apparel,Leather	6.5	7.4	-10.9	-13.9	-10.3	-10.4	-12.2	-12.0
Stone, Clay, Ceramic, Glass	-5.5	2.5	12.2	-7.5	-11.5	2.7	-9.3	-8.7
Repair Serv.	-5.4	0.1	-0.5	7.5	3.0	16.8	5.6	7.3
Basic Metall Ind.	-4.8	6.6	7.2	-1.2	-41.6	-35.0	-19.4	-19.8
Other Manufacturing	-0.2	6.7	-12.0	-15.1	-2.5	-5.7	-9.8	-9.2
Mining	-24.5	2.2	9.4	5.8	-5.6	56.8	2.4	4.3
Lumber,Wood Prod./Furniture	-3.1	6.7	-4.9	-12.0	-12.7	0.8	-12.3	-11.2
Personal Serv.	28.7	5.4	-14.5	-28.6	-18.6	-12.6	-24.2	-21.4
a) decrease over - 2.7 %	-3.1	4.9	0.1	-7.4	-18.0	-1.6	-12.1	-11.3
Retail Trade	13.8	-1.7	-8.6	-5.9	-7.3	-5.7	-6.5	-6.4
Construction	12.4	-0.6	1.0	-10.5	-14.8	18.9	-12.3	-10.4
General Machinery	2.8	5.9	-10.2	-19.3	-14.2	1.9	-17.1	-16.5
Non-Profit-Organisations	2.3	3.0	-0.5	0.2	-6.8	-20.1	-3.1	-6.6
Recreational, Cultural Serv.	4.9	3.6	-4.4	-6.3	-3.9	-45.2	-5.3	-13.8
b) decrease - 1.2 to - 1.7 %	10.1	0.9	-3.8	-10.6	-11.9	-6.6	-11.2	-10.7
Transportation Equipment	23.1	0.9	-12.6	-20.6	-19.2	8.3	-20.0	-19.3
Transportation, Storage	1.3	4.8	-9.8	-17.0	-5.0	12.1	-12.8	-11.4
Paper, Paper Products	-0.6	3.1	-3.4	-6.6	-7.4	-7.0	-7.0	-7.0
Real Estate	24.6	4.8	-8.3	-12.5	-11.1	-24.4	-11.8	-14.2
Metal Products	4.1	3.4	0.4	-16.7	-15.2	0.3	-16.1	-15.1
Food, Tobacco	6.8	2.7	-10.4	-11.9	-7.3	-18.1	-9.9	-10.4
Rubber Products	25.3	-0.3	-8.0	-23.9	-14.5	-17.9	-19.9	-19.8
Education, Research	-21.8	-2.9	2.6	18.7	24.8	25.0	21.2	21.5
Precisions Instruments	12.8	6.5	-19.4	-33.0	-10.2	-15.5	-23.6	-23.1
Wholesale Trade	12.9	1.9	-11.1	-15.4	-3.6	-6.3	-10.4	-10.0
Electrical Machinery	28.2	-0.3	-14.5	-21.0	-11.4	4.7	-17.1	-16.3
c) stable - 0.6 to + 0.6 %	9.1	2.0	-7.6	-12.8	-5.8	-1.6	-10.0	-9.4
Printing, Publishing	12.0	-1.9	-1.6	-5.3	-0.6	16.1	-3.2	-0.8
Utilities, Sanitary Serv.	5.8	3.5	-10.3	-13.3	-7.5	8.2	-10.8	-9.9
Business Serv., Computer Serv	15.5	1.0	-4.7	-12.1	-4.3	-21.0	-8.9	-11.0
Chem., petrol., coal prod.	0.8	2.7	-5.7	-7.2	-4.7	-19.5	-6.1	-6.7
Communication	-2.1	5.2	-8.5	-18.1	-14.9	-53.9	-17.1	-18.3
Health	-2.7	4.1	-7.4	-13.5	-5.5	-28.6	-10.2	-13.5
d) increase + 0.9 to + 1.9 %	3.9	2.5	-6.5	-12.1	-6.0	-16.0	-9.6	-10.3
Finance, Insurance	15.9	-1.5	-3.5	-11.5	3.8	19.2	-4.8	-1.3
Social Serv.	28.1	0.9	-18.7	-23.2	-22.3	-43.7	-22.8	-24.8
Restaurants, Hotels	50.8	-7.2	-38.0	-32.1	-34.5	-35.6	-33.0	-33.4
Public Administration	58.9	-5.9	-13.6	-21.9	-1.2	183.2	-13.6	1.8
e) increase over 4.2 %	44.3	-4.6	-14.3	-20.5	-4.2	97.7	-13.9	-3.1
Non-agricult. male employment	9.1	1.7	-6.9	-12.9	-9.2	7.7	-11.3	-9.6
Total male population	1.3	2.0	-7.5	-13.4	-3.1	3.6	-8.4	-1.8

only occur in declining industries in those countries where the demographic factors do not offset the general pattern. Thus, early exit of older workers is a general phenomenon of the labour market rather than a strategic measure of coping with specific problems of certain industries. Therefore the expectation of reversing this trend does not appear to be very realistic

since the trend of early exit is primarily driven by labour market dynamics rather than by old age pension arrangements of the state's. The more or less uniform trend of early exit in all western countries with different industrial structures and different transition processes from work to retirement indicates a general and still growing unwillingness of firms to employ workers

below the formerly "normal" retirement age. While society as a whole is ageing, "older workers", by definition of the labour market, are getting ever younger.

Employment" Ends. Older Worker Programs in Japan (1-11). Policy Center on Aging, Brandeis University, Waltham, Massachusetts.

References

- Burkhauser, R.V. and Quinn, J.F. 1989; "American Patterns of Work and Retirement." In: W. Schmähl (ed.) *Redefining the Process of Retirement. An International Perspective* (91-113), Springer, Berlin/New York.
- Jacobs, K.; Kohli, M. and Rein, M. 1987; *Testing the Industry-Mix Hypothesis of Early Exit*, Science Center Berlin for Social Research (WZB), discussion paper IIVG/dp87-229, Berlin.
- Jacobs, K.; Kohli, M. and Rein, M. 1990; "The Evolution of Early Exit: A Comparative Analysis of the Work-force Participation of the Elderly." In: M. Kohli et al. (eds.) *Time for Retirement: Comparative Studies of Early Exit from the Work-force*, Cambridge University Press, Cambridge/New York (forthcoming).
- Jacobs, K. and Schmähl, W. 1989; "The Process of Retirement in Germany: Trends, Public Opinion and Options for its Redefinition." In: W. Schmähl (ed.) *Redefining the Process of Retirement, An International Perspective* (13-38) Springer, Berlin/New York.
- Kohli, M. 1987; "Retirement and the Moral Economy: An Historical Interpretation of the German Case." In: *Journal of Aging Studies*, 1: 125-144.
- Kruse, A. and Söderström, L. 1989; "Early Retirement in Sweden." In: W. Schmähl (ed.) *Redefining the Process of Retirement. An International Perspective* (39-61) Springer, Berlin/New York.
- Ruhm, C.J. 1989; "Why Older Americans Stop Working". In: *The Gerontologist* 29/3: 294-299.
- Schulz, J.H. 1989; "Retirement Practices and Policy in Japan." In: J.H. Schulz, K. Takada, S. Hoshino *When "Lifetime*