

NOT WORKING: THE WEST GERMAN LABOR
MARKET 1964-2001
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1. INTRODUCTION

Aggregate Data from the German Labor Market paints a worrisome picture of falling wage growth and rising non-employment. Real wage growth (Figure 1 and Table 1) has been declining in every decade since the nineteen-sixties. Between 1995-2001 growth was slower than during any 5 year period in the sample with the exception of the recession at the beginning of the nineteen-eighties. Figure 2 shows how overall unemployment and non-employment rates among males aged 25-65 have followed an upward trend over the 1964-2001 time-period. Substantial attention has been brought to the fact that each increase in these series seems to permanently lift Germany to a new level of un- or non-employment. During no cycle since 1964 have employment rates been able to regain more than a small fraction of a preceding decrease during the subsequent recovery. This feature of the data adds to the alarm with which recent unemployment rates have been greeted in Germany.

TABLE 1
REAL WAGE GROWTH IN WEST GERMANY 1964-2001

	1964-1969	1970-1979	1980-1989	1990-2001
Average Real Wage Growth	4.60%	3.92%	1.23%	0.83%

Source: German Microcensus

The data in figure 2 aggregates the data for both the former Federal Republic of Germany (West Germany) and the former German Democratic Republic (East Germany) for the decade from 1991 to 2001. This way of organizing the data obscures the structural problems of the West German labor market. The economy of East Germany has faced tremendous upheavals following unification in 1990 with large non-employment rates throughout the post-unification period. In this paper I will focus on the West German experience drawing on the aggregate time-series data provided by the German Mikrozensus for West Germany for the time-period from 1964 to 1991 and the panel data available through the German Socio-

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Economic Panel (GSOEP) for 1984-2001.¹ Figure 3 shows the non-employment and unemployment rates for West Germany between 1964 and 2001 using these 2 data sources. The basic patterns of the non-employment rate observed for the whole of Germany hold even when we focus on West Germany alone. The increase in non-employment by 5 percentage points from a 16.8% in 1991 to 21.8% in 2001 is dramatic, albeit not as dramatic as the one documented in Figure 2. The unemployment rates do not display quite as large an increase, but an upwards trend is still clearly discernible. Table 2 documents this upwards trend by comparing the peaks and troughs in the unemployment rate over the 1964-2001 period. Between each of the peaks or troughs an increase in the unemployment rate of over 1.5 percentage points had to be registered. Thus even when looking at West Germany alone one receives the impression that the German labor market is increasingly unable to provide employment and wage growth for all job seekers.

FIGURE 1
REAL WAGE GROWTH (WEST GERMANY)

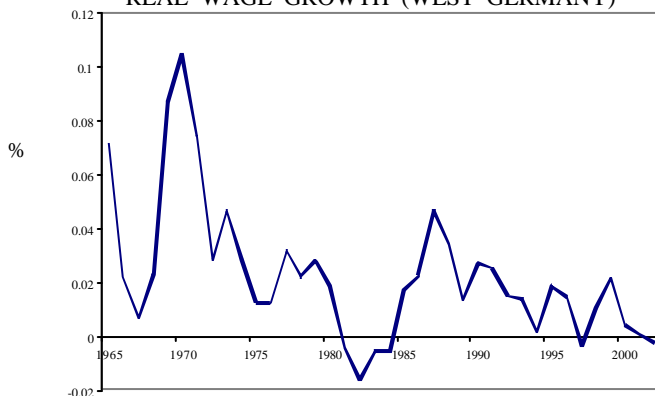
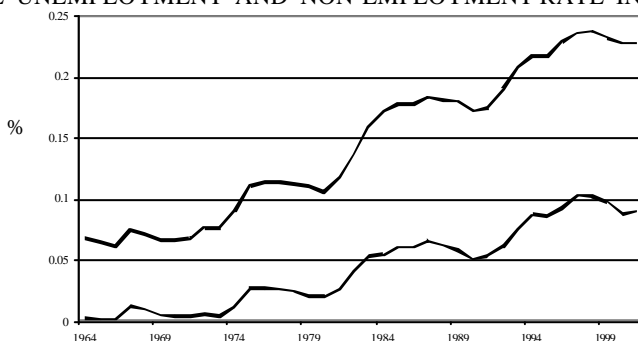


FIGURE 2
MALE UNEMPLOYMENT AND NON-EMPLOYMENT RATE IN GERMANY



¹ The data from the German Microcensus is based on the time-series service of the German Microcensus, an annual 1% sample of the German population. This service does not report the employment data is aggregated by East and West Germany after 1991. The design of the GSOEP is modeled on the PSID. The sample used here is the West German sample with 4,659 individuals and 41,937 observations.

FIGURE 3
NON-EMPLOYMENT IN WEST GERMANY (MALE, 25-65)

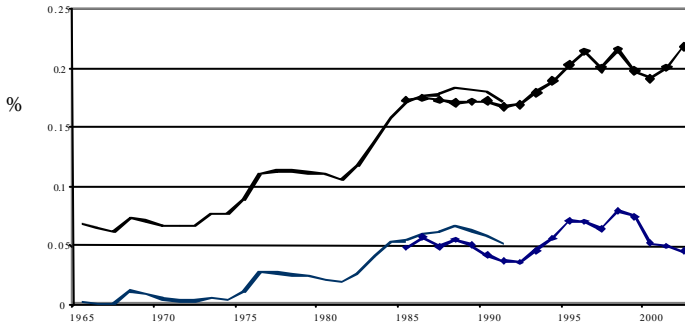


TABLE 2
SECULAR INCREASES IN UNEMPLOYMENT/NON-EMPLOYMENT
FROM 1964-2001

Panel 1. Comparison of unemployment and non-employment rates between peaks

Years	Unemployment		Years	Non-Employment		Sample
	Levels	Difference		Levels	Difference	
1968/1976	1.19%/2.78%	+1.59%	1968/1977	7.47%/11.40%	+3.93%	MZ
1976/1988	2.78%/6.65%	+3.87%	1977/1988	11.40%/18.35%	+6.95%	MZ
1986/1998	5.77%/7.95%	+2.18%	1986/1998	17.49%/21.58%	+4.09%	GSOEP

Panel 2. Comparison of unemployment and non-employment rates between troughs

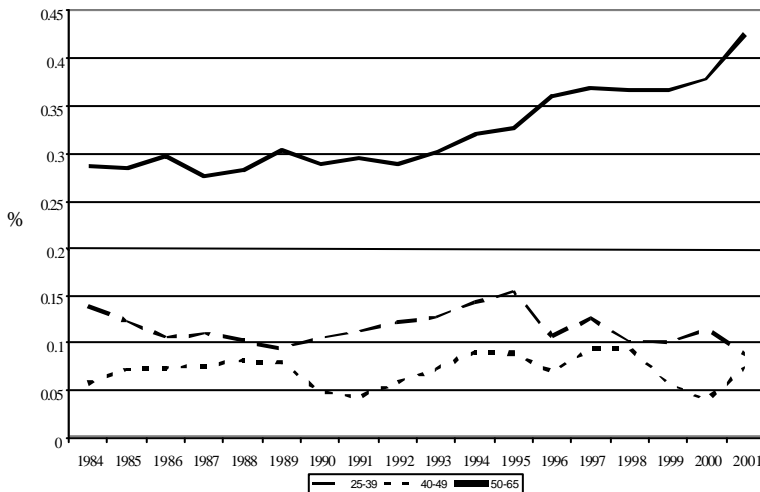
Years	Unemployment		Years	Non-Employment		Sample
	Levels	Difference		Levels	Difference	
1972/1981	0.40%/2.01%	+1.61%	1970/1981	6.68%/10.62%	+3.94%	MZ
1981/1992	2.01%/3.62%	+1.61%	1981/1991	10.62%/16.78%	+6.16%	MZ/GSOEP
1992/2001	3.62%/4.53%	+1.89%	1991/200	16.78%/19.20%	+2.42%	GSOEP

These features of the data have initiated a debate regarding the necessary reforms to reduce unemployment in Germany. In 2002 a governmental commission, the “Hartz-Kommission”, published its recommendations. These aim to facilitate the matching process between job-seekers and firms by improving various aspects of the employment offices run by the government. These proposals reflect the view that unemployment in Germany is largely the result of inefficiencies in the process through which workers and firms meet. Other proposals that have been advanced in the policy debate are reductions in firing costs, general deregulation of labor and goods markets, and a scaling back of the generosity of unemployment benefits.

Knowledge of what segment of the population experienced the increase in non-employment helps one in evaluating these different policy proposals from the view-point of their ability to reduce non-employment.² Inefficiencies in the matching process, excessive labor market regulations and firing costs are all likely to apply to across all ages. Other forces, such as those related to the impact of the welfare state on work incentives might affect different age-groups very differently. This paper attempts to shed light on the sources of the non-employment increase over the last quarter of a century by examining the age-patterns of labor market participation among West German males.

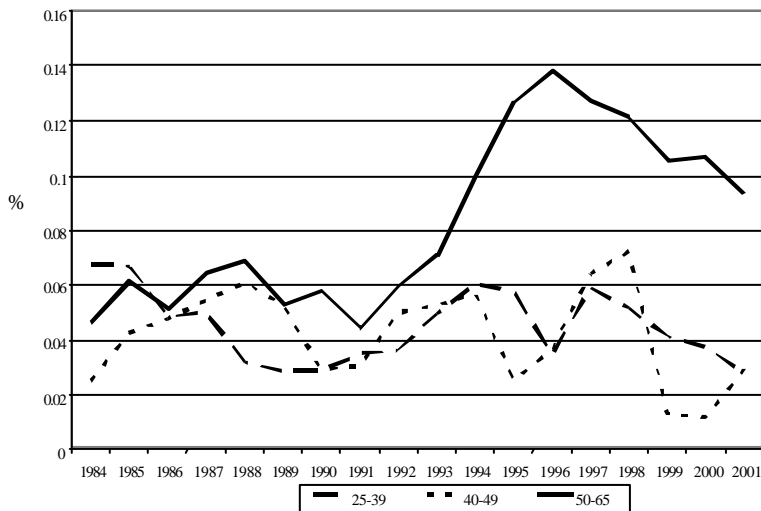
Such an analysis yields striking results. The trend towards higher non-employment among West German males is not uniform across age-groups (see fig. 4). For the age-groups 25-39 and 40-49 there is no discernible upwards trend in the non-employment rates over the time-period covered by the GSOEP (see fig. 4). Indeed for these two groups the lowest values of non-employment are observed in 2000 (age 40-49) and 2001 (age 25-40). The trend towards higher non-employment is entirely due to the increased non-participation among those workers aged 50-65. Since 1991 the non-employment rate in this age-group increased from less than 30% to 42.5% in 2001. For unemployment the conclusion is the same. Younger age-groups do not have higher unemployment rates towards the end of the sample period than at the beginning. Older workers however experienced a large increase of unemployment during the early and mid-nineties. The decline in unemployment rates since the mid-nineties has not yet sufficed to eliminate half of the increase experienced between 1992 and 1996 for this age-group.

FIGURE 4.1
NON-EMPLOYMENT BY AGE-GROUP



² I take the view that many of the suggested reforms might be beneficial for other reasons than reducing non-employment. Nevertheless in this article I focus specifically on non-employment as an outcome measure.

FIGURE 4.2
UNEMPLOYMENT BY AGE-GROUP



These statistics clearly show that the increase in non-employment and unemployment in West Germany is concentrated among older workers. Understanding the dynamics of unemployment and non-employment in Germany therefore requires an understanding of the incentives that older Germans face. The most important social programs influencing the retirement decision of older workers are the public pension system and the unemployment insurance program. I will show in the next section that these programs give extremely strong incentives to Germans to retire before the official retirement age of 65. These incentives have strengthened further during the 1980s as the period over which unemployment benefits are paid to older workers was lengthened from 12 to 32 months in 1987.

2. WORK AND RETIREMENT IN GERMANY

The regulations of the German public pension system that affect the sample period considered here stem from the pension reform of 1972. The new regulations of 1972 allow for the possibility of retiring early for a number of different reasons. In 1992 and 1999 two reform acts were passed by parliament with the aim of reducing the number of individuals taking advantage of the exceptions to the official retirement age. However both of these acts provided for lengthy transition periods, so that the pension regulations in 2001 are still largely identical to the regulations of the 1972 act.³ I will therefore present the regulatory framework as of 1972 and only in passing refer to the reforms of the nineteen-nineties.

³ The first measures of the 1992 act started to be phased in during 1997, but the regulations of the 1992 and 1999 act will not be fully phased in before well after the year 2010.

The German public pension system is a pay-as-you-go system with extremely generous provisions for its pensioners. The net replacement rate is approximately 70% of average wages during the period that workers contribute to the pension system⁴. This compares with a replacement rate of 53% in the United States. The coverage of the system is near universal. Only recipients of low incomes and the self-employed are exempt⁵, so that approximately 85% of the population belongs to the public pension system. In consequence private and employer pension plans are rare and serve at most to supplement the main income received through the public system.

The official retirement age for males in Germany is 65 and for females 60 years. There are however many possibilities for early retirement, so that only very few individuals actually work until age 65. In the GSOEP sample the fraction of males working at age 64 is 16.3%. The most important exceptions to the official retirement ages are disability, unemployment and long contribution to the retirement system. Those who have contributed more than 35 years can retire at 63, whereas the handicapped and the unemployed are allowed to retire at age 60. In addition partial or full inability to exercise one's profession and earn income can qualify individuals to receive a pension at ages even younger than 60. The courts are instructed by law to take account of labor market conditions when assessing the ability of individuals to exercise their profession. Consequently the legal system has been very generous in the evaluation of such claims.

Pension entitlements are calculated proportional to the length of contribution. Therefore the average pension falls by about 2.5% for every year that an individual retires early. This reduction in pension payments is however far below the required reduction in pension payments that would keep the net present value of total pension payments constant with respect to the retirement age. The system of 1972 therefore implies that an individual seeking to maximize the net present value of total pension payments would chose to retire as early as possible. Of course individuals will also take into account their current earnings and this might induce them to work longer, but nevertheless the above system clearly penalizes individuals who retire late. Boersch-Supan and Schnabel (1999) calculate the adjustments to pensions that are necessary to keep the present discount value of pension payments constant. Table 3 compares the 1972 regulations with these incentive neutral adjustments and also those legislated in 1992. These new adjustments have only in 1997 begun to be phased in and will not fully apply until 2010.

The generosity of the German unemployment insurance system makes it even more attractive to effectively retire early. The net replacement rate is 67% of the last net wage for individual with children and 60% for individuals without. The last net wage of older workers is often substantially higher than the average wage

⁴ In recent years the net replacement rate has been falling slightly.

⁵ Public employees belong to a different system than other employees, but this system is also publicly administered.

over the life-cycle of employees on which pensions are assessed. Therefore unemployment benefits will often be substantially higher than the pension payments. This has made it popular for individuals to retire before age 60 and then draw unemployment benefits until retiring at age 60 under the exception to the official retirement age granted to the unemployed.

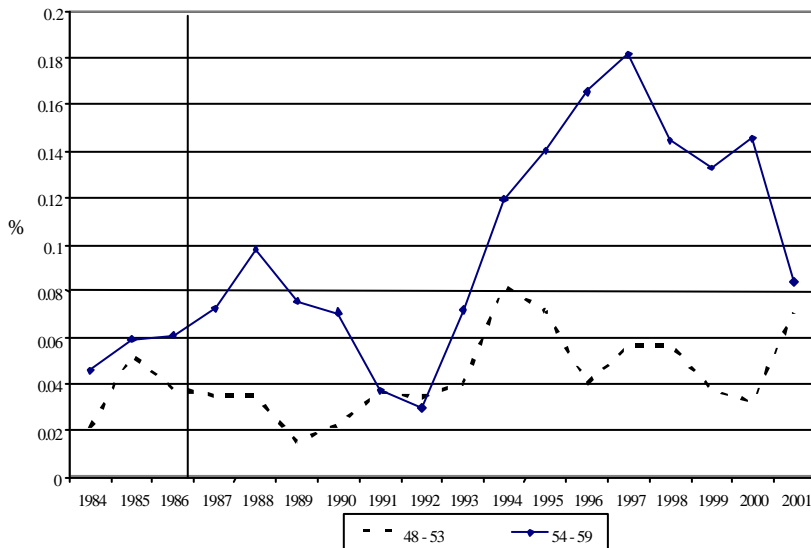
TABLE 3
PENSION ADJUSTMENTS FOR RETIREMENT AGE IN GERMANY
Percentage of rent compared to entering at age 25

Age	According to 1972 regulations	Incentive-neutral adjustments	After 1992 rules are fully phased in
62	100.0	80.5	89.2
63	100.0	86.3	92.8
64	100.0	92.8	96.4
65	100.0	100.0	100.0
66	107.2	108.1	106.0
67	114.4	117.2	112.0
68	114.4	127.4	118.0
69	114.4	139.1	124.0

Source: Boersch-Supan and Schnabel (1999). Reported are the adjustments to pension payments for different ages of retirement. The first column refers to the 1972 regulations. Column 2 presents the adjustments required to keep the net present value of pension payments constant, given a discount rate of 3% and 1992 life-tables. Column 3 presents the adjustments under the 1992 regulations once these have fully been phased in. This process has begun in 1997 and will not be completed before 2010.

In 1987 the unemployment system was revised so as to increase the time-period during which workers aged 54 and older are entitled to draw unemployment benefits from 12 to 32 months. Figure 5 shows the impact of the 1987 unemployment regulations on unemployment figures of workers aged 54-59 and compares this with the unemployment rates in the age-group 48-53. For the older age-group the 1987 reform implied a substantial increase in the length for which they were entitled to draw unemployment benefits. Following the reform the unemployment rate increased substantially more for the treatment group than for the control group. We can therefore rule out common business cycle effects as an explanation of the increase in unemployment in 1987 for individuals aged 54-59. The increase in the unemployment rate among older workers following the 1987 period is comparatively modest relative to the increase experienced over the 1992-1997 period. During this period the increase in the unemployment rate among older workers again substantially exceeded that among younger age-groups. It is plausible that this excess increase in unemployment rates among older workers both immediately following the changes in unemployment regulations in 1987, but also during the recession of 1992 – 1997 is caused by the changed incentives due to the reform of 1987.

FIGURE 5
UNEMPLOYMENT BY AGE-GROUP: 48-53 vs 54-59



Further evidence that unemployment is used as a pathway into retirement is provided by the number of individuals of older ages who retire once they experience a period of unemployment. The fraction of individuals aged 55-64 in the GSOEP⁶ who permanently retire from the work force after a period of unemployment is 89.28%. Considering the fraction of individuals who are formally unemployed in the year before they retire underlines the importance of unemployment as a pathway into retirement. To estimate this statistic I consider the cohorts 1929-1936. Table 4 shows that almost 30% of Germans are formally unemployed at their effective retirement date. The variation of this fraction by age of retirement represents further evidence that formal unemployment has become an effective pathway into retirement. The fraction entering retirement through unemployment shows peaks at ages 57 and 59 and a general increase in the years preceding age 60. In addition overall retirement peaks around age 58. These facts indicate that many individuals make use of at least part of the 32 month period of full unemployment benefits for elderly workers that applies for the sample considered here before entering retirement at age 60.

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Only individuals are included who are followed up to age 65.

TABLE 4
FRACTION OF INDIVIDUALS WHO EFFECTIVELY RETIRE THROUGH
UNEMPLOYMENT

Age of retirement	All	All ≤ 62	≤ 54	55	56	57
Observations	287	193	14	14	11	18
Fraction with previous Unemployment	27.87%	38.34%	50%	42.86%	36.36%	55.56%
Age of Retirement	58	59	60	61	62	≥ 63
Observations	39	37	38	22	27	67
Fraction with previous Unemployment	33.33%	48.65%	23.68%	31.82%	22.22%	0%

The table reports the number of individuals of cohorts 1929-1936 who retire at different ages and the fraction that experiences a period of unemployment preceding to retirement. The calculations are based on the West German in the GSOEP. Retirement is defined as the period after the one in which the individual is last observed working. 57 individuals are excluded because their last valid labor market observation is observed in 1984 and 15 because they have not effectively retired in 2001 yet.

3. CONCLUSION

The viability of any welfare state relies on preserving a sufficiently large ratio of contributors to beneficiaries. In Germany this viability is undermined not only by the demographic trends of an ageing population, but also by increases in the non-employment and unemployment rates in the population. The increase in these rates is however not uniform across different age-groups in (West-) Germany, but is entirely due to the age-group older than 50. The structure of the German pension system and the increasing incentives for early retirement explain why unemployment as well as non-employment rates have been rising for this age-group during the last 2 decades.

This finding suggests that policies to reverse both the increase in unemployment and non-employment over the last decades need to address the incentives for early retirement. Especially important is how unemployment insurance and social security interact in providing incentives for early withdrawal from the workforce. Attempts to reduce unemployment by improving the matching process between firms and workers are not likely to address the issues at the heart of the increase in unemployment in Germany. Such measures were recently proposed by a governmental commission charged with proposing reforms of the German labor market. The reform process of the German pension system started during the nineteen-nineties is more likely to at least partially redress the perverse incentives built into the German retirement system. The elimination of unemployment as a justification for early retirement and the financial penalties on early retirement that will be phased in until 2010 are likely to reduce unemployment and non-employment among the elderly. Whether these reforms are sufficient to redress the financial imbalances of the German Welfare State is highly questionable.

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