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Unemployment Benefits and Social
Assistance: The Polish Experience***

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Comments Welcome

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Brief Abstract. This paper provides a comprehensive account of the regulations governing the systems of unemployment support and social assistance in post-transition Poland. To provide a solid foundation for a further discussion of these issues, the paper extensively characterizes the Polish labor force in terms of the incidence and duration of unemployment. A final aspect of our empirical analysis concerned the question of what are the main sources of personal income for labor force participants, unemployed workers and long-term unemployed workers. In conclusion, we argue for a reform of the Polish systems of income support that separates the objectives of employment growth and poverty alleviation, and that improves upon the implementation of support schemes.

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Long-Term Unemployment, Unemployment Benefits and Social Assistance: The Polish Experience

by Marek Góra and Christoph M. Schmidt

Extended Abstract. This paper provides a comprehensive account of the regulations governing the systems of unemployment support and social assistance in post-transition Poland. Various factors contribute to the contamination of the distinction between systems of unemployment support and poverty alleviation, thus compromising the principal objectives of both systems. In effect, measured unemployment rates and long-term unemployment rates are unlikely to reflect labor market problems genuinely.

To provide a solid foundation for a further discussion of these issues, the paper extensively characterizes the Polish labor force in terms of the incidence and duration of unemployment. Young workers, low-skilled workers, and women in general display high unemployment rates, with the most remarkable empirical pattern being the steeply declining age-unemployment profile. Intertemporal fluctuations in unemployment rates are modest. Across individual observation cells, long-term unemployment shares are distributed quite uniformly. Most importantly, long-term shares have declined, not increased throughout the analyzed period. However, very long-term unemployment is a severe phenomenon; the share of very long-term unemployed has been rising substantially over time.

A final aspect of our empirical analysis concerned the question of what are the main sources of personal income for labor force participants, unemployed workers and long-term unemployed workers. We demonstrate that the informal network provided by families and extended families is an important pillar of the Polish society, and also why tightening UI benefit eligibility for the long-term unemployed in the 1991 reform did not lead to a dramatic increase in social assistance expenditures. In conclusion, we argue for a reform of the Polish systems of income support that separates the objectives of employment growth and poverty alleviation, and that improves upon the implementation of support schemes.

1. Background

Most developed economies and most transition economies currently experience high and persistent levels of unemployment among core labor force groups. By contrast to Western countries, for the transition countries these problems are largely the unavoidable consequence of their earlier political history. The legacy of state-wide planning systems manifests itself as large imbalances between the pre-transition regional and industrial concentration of workers and the new structure of the demand for goods and services, and as a general mismatch between human and physical capital. Housing market problems even exacerbate this situation. For the first years under the new economic system these discrepancies were expected to lead to a large restructuring in many dimensions. It was clear to all observers that during this process, adjustment costs would arise in the form of substantial unemployment.

Therefore, not only did transition countries engage in a re-structuring of their entire economies, but they also installed complex webs of measures at the outset to alleviate the anticipated welfare consequences. Their design followed the example of Western welfare state systems of unemployment support and poverty alleviation, and thereby disregarded the problems already emerging for these systems at that time. Transition country governments obviously viewed these interventions emphatically as a potential remedy, not as a source of further difficulties. Correspondingly, neither the design and implementation of unemployment support and welfare systems, nor the incentive effects they might exert on individual workers did become a matter of deeper scrutiny in economic research. In particular, the fact that ill-designed or poorly implemented support measures might exacerbate the situation was not debated intensely.

Instead of questioning the operation of these passive measures, the magnitude of labor market adversities and their incidence even among core labor force groups seemed to call for substantial additional government intervention. Therefore, in addition to passive measures, a variety of measures of Active Labor Market Policy (ALMP) was implemented at various degrees of intensity. Because of their directly visible cost and because they bind resources that might be allocated to competing (active) measures of economic policy, the operation of ALMP measures, their behavioral consequences, and their benefit-cost effectiveness have been addressed by various authors (e.g. for Poland Lehmann 1995, Steiner and Puhani 1996). The interaction of active and passive measures of unemployment support was not the center of attention, though (for an exception see Góra et al. 1996).

Now, severely increasing expenditures on unemployment support and poverty alleviation exert a growing pressure on government budgets in many OECD and Central and Eastern

European countries. The growth in long-term unemployment was a major factor in this development. Some countries have reacted to this pressure with recent reforms entailing a reduced duration of unemployment benefits and reductions in earnings replacement rates. Poland, the country under study here, experienced its last major reform already in late 1991, however, moving from an earnings-related unemployment benefit to a flat rate and to tighter limits on benefit duration. Quite worrisome, throughout the transition economies, many unemployed individuals exhausting eligibility for unemployment benefits have apparently fallen back to means-tested benefits, benefits that were primarily designed to alleviate poverty.

Since such poverty-alleviation schemes might generally be expected to exert a negative effect on the search intensity of the welfare recipients, shifting the burden of supporting the long-term unemployed to social assistance schemes instead of leaving it with the unemployment benefit system might be a grave mistake. Pushing the long-term unemployed to welfare might compromise the principal objective of fostering re-employment not only via the means-tested nature of benefits, but also because the job search activities of welfare recipients are not monitored any longer by the labor office staff. Furthermore, the formal channels for gaining access to new jobs might be closed to welfare recipients.

Therefore, it might well be advisable to accept the higher temporary cost of paying out unemployment benefits to the long-term unemployed to foster employment growth. In addition, one might call for an intensified co-ordination of unemployment support systems and poverty-alleviation schemes to avoid the misallocation of individuals to support measures. Of course, such a conclusion rests on several premises whose validity is an entirely empirical matter. Most importantly, it is presumed that the long-term unemployed are genuinely interested in becoming re-employed, but just happen to be out of luck with respect to job offer arrivals. Moreover, these long-term unemployed must also significantly reduce their search intensity as a reaction to moving to means-tested benefits or to the omission of job search monitoring.

By contrast to this reasoning, this paper will demonstrate in a detailed discussion of institutional arrangements that in the case of Poland, the incentives provided by existing benefit schemes and the implementation of these measures are indeed central ingredients of the long-term unemployment problem. To provide a solid foundation for a further discussion of these issues, the paper also extensively characterizes the Polish labor force in terms of the incidence and duration of unemployment. Finally, we empirically address the question of what are the main sources of personal income for labor force participants, unemployed workers and long-term unemployed workers. In conclusion, instead of the extension of the duration of unemployment support, we

recommend a tighter division of responsibilities between support systems and a serious effort at improving the implementation of unemployment support.

The paper is organized as follows: Section 2 discusses institutional details, section 3 characterizes unemployed workers in the Polish labor force with respect to their demographic as well as their skill composition and their duration of unemployment, section 4 analyzes the individual means of financial support for workers in different labor market states, and section 5 concludes.

2. Institutional Details: Unemployment Benefits and Social Assistance

Ideally, systems of unemployment insurance and social assistance co-exist as complementary systems of income support. Their primary objective is to alleviate (temporary) misfortunes arising to individuals or families in a modern market economy. The ideal unemployment insurance should provide labor force participants being out of a job with the necessary means to search for an appropriate new job without generating any incentive to unnecessarily prolong the period out of employment. The ideal social assistance should lift individuals and families with low income out of poverty, irrespective - at least in principle - of the labor market state of the family members. Most importantly, this support should not create serious adverse incentives on the recipients' labor supply decisions. Yet, in practice, finding work will usually imply a significant reduction of such transfer income, and many such schemes act as *poverty traps* (e.g. Björklund and Freeman 1995).

By contrast, one might even give direct incentives for recipients' economic activity by tying benefits to work requirements or at least to the existence of a previous work record. Such *work fare* programs are at the center of the current scientific and public policy debate. Unfortunately, the institutional arrangements governing the Polish systems of income support as well as the informal evidence on the enforcement of formal rules by the systems' administrations rather suggest to characterize them as *poverty trap* systems, not as *work fare* systems. This will be demonstrated in detail below.

In this section, eligibility for the various types of income support and eligibility duration, the benefit structure, and the financing and administration of these measures are discussed in detail for the time covering the analyzed survey data, 1992 to 1995 (Act on Employment and Counteracting Unemployment Dec. 14, 1994; see also Góra et al. 1996). Previous regulations (particularly those before the reform of 1991) and the most recent reform of December 1996 are contrasted with these regulations where necessary.

Eligibility for and Duration of Unemployment Benefits

Three primary criteria determine a worker's eligibility for **unemployment benefits**, namely (i) unemployment, (ii) a sufficient work record, and (iii) the elapsed duration of benefit payments. Eligibility can also be (iv) terminated for cause by the labor office.

(i) To qualify as unemployed, workers must

- be 18 to 65 years of age (for women 18 to 60)
- be registered as unemployed at the labor office,
- claim to be available for full-time work,
- not receive significant labor earnings (at least half the minimum wage) nor a pension, and
- not be a farm owner (i.e. possess more than 2 ha of agricultural land) nor self-employed.

While age and registration are uncontroversial and easily verifiable criteria, actual availability for work and the magnitude of current earnings are particularly difficult to verify. Generally, job search behavior is therefore supposed to undergo monitoring by the labor offices, and work in the shadow labor market is banned as unlawful.

(ii) To warrant the insurance nature of unemployment benefit systems, it is generally demanded for eligibility that applicants for unemployment benefits hold a considerable work record. In the Polish system, unemployment benefit recipients were required since the reform of 1991 to

- hold a work record of at least 180 days within the last 12 months.

Given that qualification, the waiting period was only one day; if the worker quit the job, the waiting period extended to 90 days. The reform of 1996 extended the work requirement to 365 days within the last 18 months and the waiting period to 7 days. The eligibility criteria acknowledged that youngsters could hardly hold a substantial work record. Therefore,

- school leavers

were also eligible for unemployment benefits after a waiting period of 90 days, irrespective of their insubstantial work record (since 1995). This has changed in the 1996 reform as well. School leavers are now only eligible for a stipend in connection with participation in a training program. There are also substantial exceptions for older workers. More specifically, also eligible for unemployment benefits are

- workers within two years from reaching their retirement age

of typically 65 (60 for women), if they hold a substantial life-time work record, irrespective of their work record in recent months. Requirement on the work record are less stringent, if they

have worked in hard and arduous conditions or they lost their jobs in a group layoff. In contrast to these coverage regulations, coverage was universal in the early days of the new economic and political system (given the qualifications on land ownership). Coverage regulations were already tightened in October 1990.

(iii) After the introduction of modified regulations in 1991 workers were no longer entitled to open-ended benefits (between 1991 and 1992 there was some grandfathering of benefit duration regulations: unemployed workers at reform time received another year of benefits, irrespective of their elapsed duration). After the 1991 reform, the unemployment benefit was paid for a **duration limited to**

- 12 months in regular cases,
- 18 months, if
 - they lived in the declared *crisis regions*, or
 - they possessed a work record of 30 years (25 years for women),
- one year after graduation for school leavers, and
- a maximum of two years for pre-retirement workers (see above), but were
- open ended for lone parents with no income,

irrespective of their search effort and of whether they were ready to take up work. The latter are clearly genuine clients of social assistance, but plans for the introduction of legislation shifting the responsibility for their support to the social assistance budget did not materialize yet. The new regulations link benefit duration directly to regional unemployment rates (6 months, 12 months, and 18 months, respectively). By participating in training courses, workers can extend the duration of their benefit eligibility according to the length of the training course, with a participation of 6 months even for another 12 months.

(iv) Upon fulfillment of the eligibility criteria, the worker is guaranteed unemployment benefits during the entitlement period, as long as he or she is claiming to be genuinely unemployed, i.e. available for work and looking for a job. Formally, eligibility can be suspended or even **terminated if a registered worker**

- earns an income of more than half the minimum wage, or
- receives a loan from the Labour Fund, or
- repeatedly refuses a suitable job offer, or
- refuses to participate in a labor market scheme, or

- fails to report to the labor office.

In addition, a worker would have lost eligibility for unemployment benefits, if

- the spouse had earned twice the average wage or
- the income per household member had been more than one-third of the average wage.

The latter restrictions do not bind any longer, though. In practice, these requirements do not seem to bind very stringently. Apparently, workers can refuse several job offers and their job search activity is hardly monitored. With such low emphasis on job search, unemployment benefits are in danger of mainly becoming a source of income support without means testing, rather than an instrument supporting the reallocation of workers to suitable jobs. A loose enforcement of regulations might also be taken as an invitation to engage in the shadow economy. Finally, cleaning the unemployment registers of workers inactive in job search might even be against the interest of the labor offices, since their own funds and transfers into the region are naturally determined on the basis of the information in the registers.

Eligibility for Social Assistance

The primary purpose of **social assistance** is to support individuals and families with low income. Eligibility for this help is therefore necessarily determined by an assessment of the potential recipients' economic situation, a *means test*. The operative procedures actually implementing this basic idea may vary substantially from country to country. In Poland, the actual means testing of families is done informally by social workers. They visit their clients and directly assess on inspection whether in their opinion a family is in need of social assistance or not; thus, means testing has a strong informal component.

Thus, individuals are eligible for social assistance as long as the responsible social worker acknowledges the family to be poor, irrespective also of the presence of income from other sources than social assistance. In consequence, eligibility for social assistance is also not anywhere near to being guaranteed upon the fulfillment of certain objectively measurable criteria. Furthermore, no eligibility criteria other than low income are required for access to social assistance; in particular, registration at the labor office is not required for unemployed workers. However, in performing their means test, social workers might inquire about the job search activities of unemployed social assistance applicants. Thus, the assessment procedure makes it advisable for unemployed workers applying for social assistance to register at the labor office, irrespective of their true intentions regarding job search. (Recall that false registration apparently entails only minor cost for the individual, since the job search requirements are only enforced very

loosely by the labor offices.) In contrast to unemployment benefits, social assistance can be permanent or of limited duration, with the means test as the overriding criterion.

Although many applicants for social assistance might be unemployed workers without eligibility for unemployment benefits, there is no institutional link between unemployment insurance and social assistance. (Despite some discussion preceding the modifications, this has not been changed by the recent modifications of the law on social assistance in September 1996.) In particular, after the termination of their unemployment benefits, unemployed workers can apply for social assistance, but the necessary means test is identical to that for all other applicants. Social assistance clients can be offered a slot in an ALMP scheme if they are registered, but there is no special preference for them. On the other hand, ALMP schemes are apparently used frequently as a form of income support for workers who exhausted their eligibility to unemployment benefits. Finally note that family members not living in the same household are generally not called upon to support needy individuals.

Benefit Structure in Both Systems

Both unemployment benefits and social assistance payments are not tied to previous earnings, but rather paid according to flat rates. Since 1991 and until the 1996 reform, **unemployment benefits** have been paid according to a flat rate equal to

- 36 % of the national average wage in the previous quarter.

There were several exceptions; unemployed school leavers received a flat rate equal to

- 28 % of the national average wage in the previous quarter;

unemployed workers in declared *crisis regions* received a flat rate equal to

- 52 % of the national average wage in the previous quarter, if
 - they lose their jobs in a group layoff and they have at least a work record of 35 years (30 for women), or
 - they are within two years from retirement (see above);

unemployed workers receive a flat rate equal to

- 75 % of the national average wage in the previous quarter, if
 - they lose their jobs in a group layoff and they have at least a work record of 25 years (20 for women), and they are within two years from their retirement.

Finally, for the duration of the course, workers in a professional training course were entitled to

- 115 % of their hypothetical regular unemployment benefit

that they forego during course participation. The new regulations link benefits to the lifetime record (80%, 100%, 120% of the appropriate benefits, respectively).

By directly tying the benefits to average wages, they are fully indexed on a quarterly basis. Unemployment benefits are also subject to income tax. Until November 1991, unemployment benefits were tied to previous earnings, with a schedule ranging from a replacement rate of 70% of previous earnings (during the first 6 months), over 50% (3 further months) to 40%. The flat rate now in operation necessarily implies that workers with a low market wage have a much higher incentive to register as unemployed and to refuse a suitable job offer than do high wage workers.

Social assistance can be paid in kind (e.g. vouchers for lunch for children) or in cash. There are no stringent adjustments for family size, but in kind-benefits may be targeted at special needs (e.g. coal for heating during the winter or housing allowances). If paid in cash, the social assistance benefit equals 28 percent of a reference wage. This wage is that part of the average wage that is taken as a base for the calculation of old age pensions. It lies slightly below the average wage effectively paid. Social assistance benefits are thus indexed parallel to the indexation of old age pensions. In contrast to unemployment benefits, adjustments are made only once a year, if inflation has exceeded 10 percent starting from the beginning of the year, twice a year.

Finally, being a client of social assistance grants access to social services provided for employed and registered unemployed workers. These non-cash benefits are free health services for the registered worker and his or her family and an injury insurance. In addition, the unemployment spell of registered unemployed also counts towards their contribution period for old-age insurance.

Financing and Administration

Unemployment benefits are administered by a special labor market administration. This administration is organized in three tiers, nationally, regionally at the voivodship level and locally at the community level. Since eligibility for unemployment benefits guarantees receipt, this administration's budget determines the funds left for other uses. Unemployment benefits and other labor market measures are being paid from the Labor Fund. Approximately two thirds of this fund derive from transfers from the state budget, another third comes from compulsory contributions paid by the employers on behalf of their workers. The contribution rate is 3% of gross remuneration, before 1993 it was 2%. Workers themselves don't contribute to the fund.

There are minor revenues from other sources, interest, back payments of loans to the unemployed or to firms, and contributions of Polish workers working abroad. The high share of state funds in the Labor Fund provides direct influence to the Ministry of Finance in the actual allocation of funds. The Ministry of Labor and Social Policy and the Ministry of Finance establish the total levels of expenditure on labor market measures in regular negotiations. The share in GDP of expenditures on unemployment compensation has risen from a mere third of a percent in 1990 to almost two percent, but has been stable since 1992 (see Góra et al. 1996, Table 4a). By contrast, the share of total expenditures on active labor market programs is only a sixth of that on unemployment compensation.

Social assistance is administered in special units at local communities and paid out of community resources. This decentralized structure offers considerable discretion to program administrators. There is no obligation for communities to pay for social assistance. If the resources are lacking, assistance payments are terminated. Expenditures on unemployment benefits have grown much faster than those on social assistance. In 1990, expenditures on social assistance amounted to 92.3% of those on unemployment benefits; by 1994, this share fell to 47.0% (it was as low as 41.1% in 1992). To provide some perspective on these expenditures, note that disability pensions are numerically far more important expenditure items than both unemployment insurance and social assistance. Early retirement on disability pensions seems to be an important exit gate for older workers; the incentive effects of this poverty-trap program therefore deserves at least the attention given to the two support schemes discussed here.

Since two completely separated institutions are simultaneously at work trying to alleviate economic problems of Polish workers, workers presumably will exploit the most beneficial type of support open to them at a time. In particular, workers being ineligible for the more lucrative unemployment benefits or having exhausted benefits may fall on the social assistance budget (of course only, if the necessary resources are available). This would require, however, that upon termination of the UI benefits they pass the informal means test. This pattern will only be a significant phenomenon, however, if the share of long-term unemployed is high and if long-term unemployed workers are disproportionately likely to apply for and - after the appropriate means test - to receive social assistance. In contrast, if the long-term unemployed predominantly fall back to other means of financial support, such as an informal family network, a major additional drain on the social assistance budgets will not be the direct consequence of increasing long-term unemployment.

3. Unemployment, Long-Term Unemployment and Unemployment Benefits

While we can speculate about the incentive effects of both systems of social support, how the systems of unemployment support and social assistance interact in practice in supporting the long-term unemployed, is an empirical matter. It is very difficult to track complete support histories of individual workers from available data. Ideally, we would like to know whether individuals were eligible for unemployment support at the beginning of their spells, how long they received benefits and why benefit termination was initiated, and whether their family situation necessitates some kind of support, if they don't happen to find employment in an adequate period of time, say one year.

Here, we will establish indirect evidence on these matters. In this section, we will document the incidence of unemployment and long-term unemployment in the Polish labor force and the intertemporal developments between 1992 and 1995 characterizing these variables. In the next section, we will then ask what means of support the long-term unemployed usually fall back on.

Data from the Polish Labor Force Survey

Our data derive from the 2nd, the 6th, the 10th, and the 14th wave of the *Polish Labor Force Survey*, all collected in the month of August in the years 1992, 1993, 1994, and 1995, respectively. This survey collects ample evidence on a quarterly basis on individuals' demographic characteristics and education and on labor market outcomes. In particular, the empirical work will utilize three major individual characteristics to generate an accurate portray of the extent and the distribution of unemployment and long-term unemployment in Poland. We distinguish three genders/marital status groups, *married women*, *single women*, and *men*, five age groups, *15 to 24*, *25 to 34*, *35 to 44*, *45 to 54*, and *55 to 64*, and four education groups, (1) *primary education or below*, (2) *technical training*, (3) *general or technical high school or technical college*, and (4) *university*. In each wave, we observe approximately 30,000 labor force participants, half of them are men, approximately 2,000 are single women, and the rest are married women.

Distinguishing the mean incidence of dichotomous labor market outcomes across gender/marital status-age-education cells is in effect like running a linear probability model on a detailed set of gender/marital status-age-education interactions, thus compromising between a non-parametric structure and the number of observations available in each of the cells. In its interpretation, we will implicitly assume that education and marital status are exogenous to the set of labor market outcomes considered. Necessarily, observations on the combination of highest

education group and lowest age bracket are sparse, as are observations of single women in all age groups higher than the first. With that exception, for married women and for men, all cells contain a satisfactory number of respondents in all survey waves.

The Incidence of Unemployment: Gender and Age

Evidence on the incidence of unemployment across population strata and across time is given in Tables 1 to 4. Each of the first three of these tables reports four panels, for men, single women, married women, and all gender/marital status groups taken together. Within each panel, four rows display the results for the four survey waves considered, August 1992 to August 1995. In our empirical work, we count as *unemployed* all individuals who respond to be out of a job and to be actively searching for a new job, and who are also available for taking up work in the current week or in the week following the interview. (We do not require a worker to be registered to count as unemployed, and we do not ask whether the individual is searching for a full-time job or a part-time job.) Unemployment rates are calculated accordingly as the ratio of unemployed to the sum of the employed and unemployed in each observation cell.

The incidence of unemployment across age groups is documented in Table 1. The six columns of this table display unemployment rates for the five age groups taken separately and for workers in all age groups taken together. Substantial differences arise across **gender**. Men and married women both display average unemployment rates fluctuating around 12% and 14%, respectively, whereas single women experienced almost double these unemployment rates, between 22% and 28%. Averaging across all gender/marital status groups, unemployment rates have fluctuated around 14% throughout the sample period.

Unemployment rates display a very distinct age profile across all gender/marital status groups, with high youth unemployment rates, low unemployment rates at high age, and a smooth decline in between. Concentrating first on the age-unemployment profile of **men**, the age group 25-34 displays average unemployment performance, whereas (for 1993 to 1995) the oldest age group experiences unemployment rates clearly less than half the average male unemployment rate. By contrast, the youngest age group experiences more than double the average unemployment rate, that is more than four times that of men in the oldest age group. The slope of the age-unemployment profile thereby moderates towards older ages; the difference is highest between the first and the second age group.

Such high youth unemployment rates might reflect genuine problems for Polish youngsters in finding an adequate job, but they may also be taken as an indication of **measurement**

problems. Youngsters may be in some sort of education program, but still indicate in the survey interview that they are looking for a job. Moreover, they might be school-leavers on their last vacation claiming to be job searchers. In those cases, presumably neither will their search intensity be high nor will they have a low reservation wage. Moreover, many youngsters classified as unemployed by us may instead be working in the shadow labor market. That such survey respondents reveal this fact in the interview would be highly unlikely under any circumstances. It is even less likely for the Polish data, given the totalitarian nature of the previous political regime; individuals on the wrong side of the law would certainly still be very suspicious to reveal too much about themselves.

If the number of shadow market workers in an age group is substantial, the measured unemployment rate in this age group could be overstated dramatically. This conclusion holds in slightly moderated form even if those workers were to be classified as non-participants instead of unemployed. In order to lead to a dramatic upward bias especially for the younger age groups, but not for older workers, shadow market labor would have to be a more important option for younger workers; this is hardly an unreasonable assumption.

Similarly, the very low unemployment rates for the older age groups may be indicative either of genuinely good job opportunities for older workers or also of measurement problems. Early retirement seems to be an important route out of unemployment for older workers. Once retired, it is unlikely that individuals will report themselves as unemployed in the survey interview, even if unemployment was their major motivation for opting for early retirement. To give a genuine reflection of the labor market opportunities of older workers, one would like to count such retirees into the unemployment figures as well. Since this is impossible, in effect, on the basis of survey data the unemployment rate of older workers might be understated dramatically. These problems and their potential numerical effects are also discussed in Schmidt (1996). Measured unemployment rates are demonstrated to be extremely sensitive to such measurement problems.

While the average age-unemployment profile closely resembles that of male workers, the age-unemployment profiles for female workers display several distinct features. Most **single women** are young, and high youth-unemployment rates are reflected in average unemployment rates for single women. This holds in particular, since the measured youth unemployment rate is very high for single females, also leading to a very large difference between the first and the second age group. Naturally, here the discussion of measurement problems arising from education and shadow market labor applies *a fortiori*.

The rest of the age-unemployment profile is not as steeply sloped (with the exception of 1992). In fact, for 1993 to 1995 we find single women in age group 45 to 54 to display relatively high unemployment rates, perhaps an indication of the unconditional UI benefit eligibility for lone mothers. In the median age group (35-44), single females display even lower unemployment rates than men; they perform less satisfactorily in the second age group (25-34) and dramatically worse in the youngest age group (where measurement problems are likely to be most severe), though. In fact, if single women were not to display relatively high unemployment rates in the second-oldest age group (45-54), their unemployment performance in all but the youngest group would have to be characterized quite positively, in contrast to what average figures suggest.

By contrast, for all but the oldest age group, we record a higher unemployment rate for **married women** than for men. This is particularly apparent for the second and the third age group. (The first age group is not represented very well in the sample, albeit still sufficient for inference purposes.) The decline of the profile towards higher ages is more pronounced, however, and the unemployment rates among married women age 45-54 are considerably lower than those of the corresponding age group for men. This pattern is generally consistent with genuinely low re-employment rates for married women, but also with a high incentive for registration (and corresponding interview misrepresentation) for married women without a genuine desire for employment (and, thus, no considerable re-employment rate whatsoever). That the measured unemployment rates for married women might be overstated quite substantially is also suggested by the steep decline of the recorded unemployment rate towards the oldest workers (55-64). For this age group, the generous regulations regarding early retirement (disability retirement) kick in and registration as unemployed loses its appeal.

Average unemployment rates have fluctuated somewhat over time. Between August 1992 and August 1993, the aggregate unemployment rate dropped by one percentage point from almost 14% to almost 13%, then rose two percentage points to almost 15% in August 1994, only to come back to approximately 14% by August 1995. At a slightly lower level, this intertemporal pattern is reflected in the figures for men, and, at a slightly higher level, in those for married women. For single women, measured unemployment rates grew substantially between August 1993 and August 1994, though, and stayed at this level also by August 1995.

Similar intertemporal patterns as for average workers are observed for individual age groups. Fluctuations are most pronounced for the youngest age group. The unemployment rate of youngsters has not receded significantly between August 1994 and August 1995. The worst record is for single females in the youngest age group. Workers in the second age group display

average intertemporal behavior, with the slight exception of married women whose unemployment rates rise even between the first two survey waves, 1992 and 1993. Workers in the median age group display the average intertemporal pattern irrespective of gender and marital status.

For the two oldest age groups, we document atypical intertemporal patterns for single women and for men. Male unemployment rates in the oldest age group experienced a sharp decline between August 1992 and August 1993, over and above that of women. This may be a reflection of the declining attractiveness of unemployment registration for older men who may have opted for early retirement in the aftermath of the UI benefit reform of 1991. For single women age 45 to 64, measured unemployment rates rose dramatically between August 1992 and August 1993, while for all other population strata unemployment rates were falling. This also suggests that the benefit regulations discussed above, not genuinely worsening job opportunities might have been the underlying reason.

The Incidence of Unemployment: Education

The incidence of unemployment rates across the four **education** groups is reported in **Table 2**. Again, the table is organized in four gender/marital status panels; the last column of the table is identical to the last column of Table 1. On the average, there is a distinct profile of unemployment performance across education groups, albeit not in such a dramatic fashion as across age groups. The highest unemployment rate is displayed by workers in the second education bracket (*technical training*), approximately three percentage points over the average. The first education group (*primary education or below*) and the third education group (*high school, technical high school, or technical college*) are both performing close to the average; apart from 1992, the lowest-educated group of workers performs slightly worse, workers in the third education group perform slightly better than average.

University-trained workers, by contrast, perform dramatically better than average; their unemployment rates vary between less than a quarter (3.3%, 1995) and less than half the average (6.3%, 1992) unemployment rate. Across gender/marital status groups, the table documents considerable heterogeneity. Within the lowest education group, measured unemployment rates are very similar for men and married women, but those of single women are substantially higher. A similar pattern arises within the second and the third education groups, where married women perform slightly worse than men, but single women dramatically worse than men. Even university-trained single women display slightly higher unemployment rates than the other population

groups. These patterns may again be taken as indicative of the measurement problems discussed above, particularly for young workers.

Intertemporally, the four education groups experienced distinct unemployment rate fluctuations. Workers in the second education group (at a somewhat higher level) displayed the intertemporal pattern observed for the average worker, those in the third education bracket displayed a very similar pattern (with the exception of the slight rise between August 1994 and August 1995). Performance in the lowest and in the highest education bracket was following quite a different pattern, though. The unemployment situation of unskilled workers worsened between August 1992 and August 1993 by one percentage point, when average unemployment rates fell by one percentage point. By contrast, university-trained workers experienced a sharp drop in unemployment rates between 1992 and 1993, and clearly kept below 1992 rates since. Again, single women deviate substantially from these patterns. Across all education groups, their measured unemployment rates have risen substantially towards the end of the sampling horizon, again indicative of their special role in the average figures.

Table 1 and Table 2 document unemployment performance by age and by education, but not the interaction between these two individual characteristics. Since many young survey respondents might add some education on top of the skills they have already acquired at survey time, for the youngest age group education levels might be understated. Similarly, older workers generally tend to have less formal education than younger workers, and average age-unemployment profiles might be distorted. To control for the heterogeneity of the education composition across age groups, we have performed another set of calculations, documented in **Table 3**.

In particular, for each gender/marital status-age group and each year, we have averaged individual unemployment rates in the underlying gender/marital status-age-education cells *as if* labor force participants in this age group displayed the education distribution of age group 25-34 of the same year and gender. Thus, if workers in an age bracket have in fact a disadvantageous skill distribution, compared to workers of the same gender and of age 25 to 34, their adjusted unemployment rates will be lower than their actual unemployment rate. In contrast, workers in age groups with, say, a high share of university-trained individuals will have a higher education-adjusted than actual unemployment rate.

Overall, remarkably few differences arise from the figures presented in Table 3 to the qualitative conclusions emerging from Table 1. For all gender groups taken together, only for the first survey year we find a noticeable deviation between actual and education-adjusted

unemployment rates, with the adjusted rate being somewhat higher. This pattern is repeated for men and for single women; for single women the table documents additional deviations from the actual rates, though. In particular, while the measured unemployment rates of Table 1 understate education-adjusted rates for survey waves 1992 and 1993, they are overstated in the two later waves, 1994 and 1995. Since educational composition has not changed accordingly across population strata during this short period, this pattern reflects intertemporal variations in the participation and unemployment rates across age-education cells.

Looking more closely at individual age groups, hardly any difference between actual and education-adjusted unemployment rates is calculated for the three median age brackets, 25-34 to 45-54. Almost all the reported deviations in the average rates stem from the substantial effects of implicit education controls in the youngest and the oldest age brackets. Young men and young single women in 1992 and 1993, and young married women in 1992 have measured unemployment rates clearly lying below education-adjusted rates; the most substantial discrepancies arise for young single women. In contrast, young men in 1994, and young single and married women in 1994 and 1995 display lower education-adjusted than actual unemployment rates. In these survey waves, deviations are more substantial for women than for men, too. Since unemployment rates have displayed considerable stability across survey waves, the intertemporal changes in the ranking of actual and education-adjusted unemployment rates reflect the importance of fluctuations in participation rates among women.

For workers in the oldest age bracket, education-adjusted unemployment rates exceed actual rates in the first three survey waves, irrespective of gender and marital status. As for the youngest workers, this pattern is reversed in the last survey wave, August 1995. While the discrepancies between actual and education-adjusted rates for the oldest workers slightly change the conclusions regarding the slope of the age-unemployment profile at high age, the general pattern of a steeply negatively sloped profile is preserved. Thus, the education composition of the work force is not the main driving force behind the very distinct Polish age-unemployment profile.

In a further set of calculations (not reported in the tables), we have investigated whether intertemporal variations in labor force composition might have been a factor in the observed fluctuations. Holding the weights of individual gender/marital status-age-education cells constant at their respective 1992 levels, we have averaged individual unemployment rates across education and across age as in Tables 1 and 2. The resulting unemployment rates thus abstract from changes in the composition of the labor force between August 1992 and August 1995 and reflect changes in participation and unemployment rates in isolation. No substantial deviations could be detected

between these figures and those reported in the tables, though. Therefore, one can follow our approach and confidently interpret all observed fluctuations as variations in labor force outcomes.

Tables 1 to 3 have clearly demonstrated that many of the intertemporal fluctuations observed in the aggregate are caused by substantial shifts in specific age groups outside the **labor force core**, e.g. young single women or university-trained workers. In **Table 4** we report unemployment rates for the labor force core as defined by median-age workers (age 25-54) of median education (education brackets 2 and 3, thus excluding workers with primary education or below and university-trained workers). Very remarkable are both the little intertemporal fluctuation and the moderate level of the resulting unemployment rates across all groups.

In the base year of 1992, males and single females displayed almost identical unemployment rates of approximately 10%, whereas married women had an unemployment rate of almost 15%. These rates combined to an average unemployment rate of 12%. Most remarkably, by concentrating on workers older than 24, the similarity of the unemployment experience of men and of single women is brought out clearly; this fact was more difficult to detect in the aggregate figures. For men, unemployment rates fell by approximately one percentage point throughout the sample period, with a low of 9% in August 1993. For married women, unemployment rates were virtually the same in 1992 and 1995, with a trough in 1993 (slightly more than 14%) and a peak in 1994 (almost 16%). For single women in the labor force core, we observe a steady increase though, overall by two percentage points (and a peak of slightly more than 15% in 1994).

The Incidence of Long-Term Unemployment

In a second set of analyses we ask how **long-term unemployment** is distributed for unemployed Polish workers across the detailed set of gender/marital status-age-education cells. Long-term unemployment is defined here as job search ongoing for longer than 12 months (recall that being unemployed is defined here as a positive interview response on the question whether the worker is searching for a new job off the job at survey time, irrespective of registration at the labor office). Shares of long-term unemployed are reported in Tables 5, 6, and 7 whose organization reflects that of Tables 1, 2, and 4. Labor force fractions of long-term unemployed workers would then be given correspondingly as the product of cell-specific unemployment rates and the respective shares of long-term unemployed reported here.

On average, 34% to 38% of all unemployed workers were long-term unemployed between 1992 and 1995 (**Table 5**). For men, long-term unemployment shares varied between 31% and

35%, whereas long-term shares of unemployment were lower for single women, between 27% and 31%, and those of married women were higher, 37% to 44%. This pattern resembles the pattern of core unemployment rates reported in Table 4. Thus, the less favorable record of unemployment incidence among women makes male-female differences in long-term unemployment even more pronounced in terms of labor force shares.

For men, the figures document a large increase of over ten percentage points in the share of long-term unemployment between the youngest and the subsequent age group; older age groups display no systematic pattern, varying between 33% and 45%. For single women, the long-term shares vary similarly between the two youngest age groups, at a level similar to male long-term shares. For higher age groups, the numbers of observations in the individual cells is too small to warrant much attention, though. Finally, married women also display the same pattern at young age, also at a level comparable to male shares, but then a systematic increase towards higher age (long-term shares of up to 50%), followed by a decline towards the oldest age group. Overall, youngsters have the highest unemployment rates but comparatively low long-term unemployment shares, indicative of a situation where high re-employment rates and high rates of job loss counteract each other.

When unemployment rates declined between the first and the second survey wave, long-term unemployment shares went up; these shares went down subsequently, when unemployment rates increased again. Thus, adjustments of the unemployment rate over time apparently concern mainly the job loss and re-employment success of workers with high re-employment rates; workers with low re-employment rates (for instance those not genuinely searching) remain in the unemployment ranks even throughout periods of improving labor market conditions. This might be taken as indicative of the measurement problems discussed above, it might also reflect substantial heterogeneity in re-employment opportunities among workers genuinely searching for work, though.

The opposite intertemporal pattern of unemployment rates and long-term shares is very pronounced for men, the initial increase in the long-term share is also important for unemployed married women. Similarly, for unemployed single women, we observe a steady decline of long-term unemployment shares throughout the sample period, while we had documented a steady increase in their unemployment rates during the same time. Within individual age groups, we observe the same pattern. For young workers, in particular, whose unemployment rates were comparatively high and rising throughout the sample period, we observe the steepest decline in long-term unemployment shares.

In **Table 6** we document the incidence of long-term unemployment among unemployed workers in different **education** brackets. Overall, long-term unemployment shares are declining in education (with the exception of university-trained men in 1994), with differences between the highest and lowest shares of up to 12 percentage points for men and even higher among women. That is, the education group (education bracket 2, technical training) with the highest unemployment rates has not the highest share of long-term unemployed. This is indicative of comparatively high rates of job loss and re-employment within this group. These patterns are similar for men and for both single (with only low numbers of observations for university-trained workers) and married women.

Intertemporally, these conclusions are quite stable; only for married women the lowest education group displays a substantial increase in long-term shares throughout the sampling period, while single women follow along only in the early survey waves. This intertemporal stability is documented further in **Table 7**, displaying long-term shares of unemployed workers in the **labor force core**. This table emphasizes the similarity of long-term shares across population strata. Men display somewhat lower long-term shares than women, but the figures are numerically very close together, in particular when considering the large discrepancies of unemployment rates across gender/marital status-groups and across age groups.

In summary, long-term unemployment is not a disproportionately large problem for labor force groups with comparatively high unemployment rates, such as the young and workers with technical training. By contrast, across individual observation cells, long-term unemployment shares are distributed quite uniformly. Most importantly, long-term shares have declined, not increased throughout the analyzed period. Moreover, periods with high unemployment rates are usually also periods with a low share of long-term unemployed. These patterns are indicative of substantial heterogeneity of re-employment probabilities even within detailed population strata and are also consistent with the presence of measurement problems in the survey data.

The Incidence of Very Long-Term Unemployment

In **Tables 8 to 10** we address the question of what happens to unemployed workers beyond the usual short-term unemployment/long-term unemployment divide of one year of unsuccessful job search. These tables are identically organized as **Tables 5 to 7**. In particular, in our set of detailed gender/marital status-age-education cells, we report the fraction of unemployed workers who responded to be searching for a job for more than two years, i.e. shares of **very long-term**

unemployment. Again, the labor force fractions would be the corresponding product of unemployment rates and very long-term shares.

Between August 1992 and August 1995, 9% to 16% of all unemployed workers were very long-term unemployed (Table 8). Men displayed very long-term shares of between 9% and 14%, single women clearly lower shares of 5% to 12%. For married women the figures show high shares of between 10% and 20%, evidence that might be taken as indicative of the low job search intensity among this group (or, of course, of genuinely low re-employment opportunities). Across age groups, we clearly observe a rising incidence of very-long term unemployment, apart from the oldest age groups in the early survey waves. This pattern is very similar across gender/marital status groups; for older unemployed workers a share of very long-term unemployed of one quarter is not an exception, particularly in the later survey waves.

While the comparatively low incidence of very long-term unemployment among the youngest workers is similar to the evidence presented in Table 5, a large discrepancy between the analysis of long-term shares and very long-term shares arises in the intertemporal comparison. With a minor exception (single women in 1995) very long-term shares are rising substantially throughout the sampling period and across all gender/marital status groups. Table 9 documents that the incidence of very long-term unemployment across education groups is similarly unaffected by the general increase in these shares over time. Very long-term shares are particularly important among the lowest-skilled workers, those with relatively low unemployment rates and relatively high long-term unemployment shares.

Finally, Table 10 documents the incidence of very long-term unemployment among unemployed workers in the labor force core. These figures are quite substantial in magnitude, and they are highest for female workers in most recent survey waves, exceeding 20%. Thus, the usual criterion for the distinction of short-term unemployment and long-term unemployment, one year of unsuccessful job search, fails to reveal that there is a considerable group of workers, most importantly medium aged (married) women, who stay unemployed for a period incompatible with a standard model of job search. In effect, in these population strata, there seems to be a core of workers who stay (that is, who report staying) unemployed despite their negligible re-employment opportunities or even despite their negligible search effort.

It will be difficult to identify low re-employment opportunities and misrepresentation of unemployment from labor force survey data, since interview information does not necessarily reveal genuine behavior. Nevertheless, the implications for our analysis are clear, as there is a rising share of very long-term unemployed workers among the unemployed who seem to be lost

(for whatever reason) for the labor market, irrespective of improvements the labor market might experience in future years.

Summary and Implications for Social Assistance

In summary, the distinction of detailed gender/marital status-age-education groups in the labor force helps in assessing the incidence of unemployment and long-term unemployment. Unemployment is mainly concentrated among young workers, workers with low education, particularly single women in these groups. The incidence of unemployment has varied over time, but these changes were contained in magnitude and left the relative structure unchanged. Among unemployed workers, long-term unemployment is more severe among medium age workers, workers with low education, and particularly among women. Nevertheless, long-term shares are similar across all detailed population strata.

Here as well, the incidence did not change dramatically over time, and the relative structure prevailed over time. By contrast, the analysis of very long-term unemployment reveals that a substantial fraction of workers remains in unemployment even throughout improving labor market conditions, and that their share among the unemployed (not the labor force) is rising rapidly. Thus, there is a high incidence of labor market problems among workers of low education. Generally, women are faring worst on all three accounts of labor market success considered. The consequences of these stylized facts on unemployment incidence for the social assistance budget depend on the predominant means of support within the problem groups. If upon the termination of unemployment benefits young single women and married women are predominantly supported by their parents or spouses, social assistance budgets will not be burdened by these workers.

4. Income Support for the Long-Term Unemployed

In a separate set of analyses we now ask what are the main sources of personal income for labor force participants, unemployed workers and long-term unemployed workers. The evidence is reported in Tables 11 to 14; these tables are organized according to gender and marital status, Table 11 for men, Table 12 for single women, Table 13 for married women, and Table 14 for all single and married men and women taken together. Within each table, there are separate panels for each of the survey years, 1992 to 1995, and within each of these four panels, entries report the fraction of individuals drawing on one of five separate income sources as their main source of personal income, income from *work*, income from *pensions*, income from *unemployment*

insurance (UI) benefits, other income (comprising, among other sources, welfare payments), and *informal support* (by other household or family members). In each of the tables, the four columns refer to (i) all labor force participants, to (ii) unemployed workers, to (iii) long-term unemployed workers (searching for one year or more), and to (iv) very long-term unemployed workers (searching for two years or more).

Four out of five Polish men (Table 11) report income from work as their main source of personal income. Approximately 5% of the male labor force participants derive their income mainly from a pension, a slightly higher fraction from UI benefits and from informal support, while other income is negligible. Naturally, the fraction deriving the most substantial part of their income from work is much smaller for unemployed workers. Nevertheless, in 1992, according to our figures it is approximately 3% among unemployed workers in general, and almost 1% for long-term unemployed workers. The fraction of pensioners is significantly higher among unemployed workers than among male labor force participants in general, evidencing how (early) retirement functions as an additional exit route from (registered) unemployment for older workers (Schmidt 1996). In 1992, approximately 10% of the unemployed derived their income mainly from a pension, the fraction being somewhat higher for the long-term unemployed.

In this base year, nearly half of the unemployed men reported UI benefits as their main source of personal income, the fraction among the long-term unemployed (45.5%) being almost as high as for all unemployed taken together (46.7%). Moreover, almost a third of the very long-term unemployed had UI benefits as their main income source. That these high shares of UI recipients persisted despite the 1991 reform in the regulations regarding benefit duration, is apparently a consequence of the generous grandfathering rules accompanying this change. Among the unemployed, and particularly among the long-term unemployed, income from other sources (e.g. social assistance) is an important table entry, being the main source of personal income for approximately 4% to 8% of the workers in the various duration groups. Nevertheless, the second most important personal income source for the unemployed besides UI benefits is informal support by other household members. More than one third of all unemployed and almost one half of the very long-term unemployed men report this as their main source of personal income, with the largest difference arising between the long-term and very long-term unemployed men.

These patterns underwent some significant changes within the subsequent year. Most importantly, the grandfathering rules accompanying the reform of 1991 were losing effect, and the UI benefit eligibility among the long-term unemployed apparently dropped accordingly. While eligibility among the unemployed hardly changed between August 1992 and August 1993, less

than 20% of the long-term unemployed and less than 10% of the very long-term unemployed report UI benefits as their main source of income in August 1993 (compared to almost one half and almost one third in 1992). Other income gained somewhat in importance as an income source instead, particularly for the long-term unemployed, but much more so informal support by other household members.

For all unemployed men taken together, informal support was now cited to be the main source of personal income by 44% of the respondents instead of only 36% the year before. Almost two thirds of the long-term unemployed and more than three quarters of the very long-term unemployed report informal support as their main income source (compared to 38% and 48% in 1992). Thus, across all duration groups, informal support became the single most important source of income in the aftermath of the reform of 1991. In the following two years, these patterns changed only very slightly, with the perhaps most remarkable entry being the further decline in the share of unemployed deriving their personal income mainly from UI benefits.

Compared to men, a much smaller share of single women (Table 12) reports income from work as their main source of personal income, slightly less than two thirds as compared to more than four fifths for men. Most single women are young; thus, it is not surprising that only a small fraction of single women derives substantial income from pensions, irrespective of their labor force state. While UI benefits are the main source of personal income only for 37% of all unemployed single women taken together (as compared to 47% for men), in 1992 almost one half of the long-term unemployed among the single women state UI benefits to be their main income source (and only 46% of the men). The importance of UI benefits is very similar for very long-term unemployed men and single women, though.

Finally, while other income is similarly important as an income source for single women and men, across all labor force states considered, a much larger share of single women relies on informal support. Almost one quarter of all single women in the labor force and more than one half of those in unemployment cite informal support as their main source of personal income (compared to 7% and 36% for men in Table 11). The low average age of the typical single woman is apparently a major factor underlying these patterns, since youngsters often rely on informal support by their parents. Moreover, as indicated in section 2, young single mothers may receive UI benefits, explaining part of the relative importance of UI benefits as an income source for single women.

The intertemporal changes observed for single women closely follow the variations for men. The most massive changes were between the 1992 and the 1993 survey wave, when UI

benefits eligibility dropped for the unemployed single women in general (from 37% to 29%), and for the long-term unemployed in particular (from 48% and 32% to 14% and 5%, respectively, for the two duration groups considered). As for men, there were only some changes between the 1993 and the 1994 survey wave, and even less in the subsequent year. Thus, the comparative men-single women patterns are also very stable across time, apart from the more serious decline of UI benefits as the main source of personal income for single women between 1992 and 1993.

By contrast to single women, married women (Table 13) rely very much on the various income sources in the same fashion as do men. Most importantly, approximately four out of five married women derive their income mainly from work. The most important difference between married women and men is the importance of informal support among the unemployed (41% as compared to 36%), and particularly among the very long-term unemployed (61% as compared to 48%). The intertemporal fluctuations in the income pattern for married women follow closely that of the other two gender-marital status strata. The most massive decline arises for UI benefits as the major income source between the August 1992 and the August 1993 survey wave (a drop from 49% to 34% for all unemployed and from 48% to 15% for the long-term unemployed), while informal support becomes dramatically more important (a rise from 41% to 57% for all unemployed and from 45% to 76% for the long-term unemployed). In the subsequent years, the observed changes are not nearly as substantial. As for single women, for married women the reported 1992-1993 drop in the importance of UI benefits is more dramatic than for men (with the exception of the very long-term unemployed).

For all gender-marital status groups taken together, these differences across labor force status and across time are reported in Table 14. Income from work is the single most important main source of personal income for Polish labor force participants, followed by informal support from other persons in the household, and by UI benefits. UI benefits have lost their importance, particularly for the long-term unemployed and the very long-term unemployed, in the aftermath of the 1991 reform of the unemployment insurance system. Most of the workers who lost UI benefits as a consequence of these changes (or who never became eligible the same way their predecessors had) have apparently moved to informal support instead. Other income, comprising among other entries income from social assistance, has also gained in importance, albeit to a much smaller degree than informal support. As a further piece of informal evidence, according to information from the supplement to the PLFS survey wave of August 1994 only a modest fraction of UI benefit recipients who exhausted their UI eligibility subsequently became clients of social assistance (not in the tables).

5. Conclusions

This paper provides a comprehensive account of the regulations governing the systems of unemployment support and social assistance in post-transition Poland. The flat-rate benefit structure, the provision of substantial non-cash benefits to the registered unemployed, the large administrative discretion regarding benefit eligibility, the absence of serious job search monitoring, and the unclear distribution of administrative responsibilities all contribute to the contamination of the distinction between systems of unemployment support and poverty alleviation, thus compromising the principal objectives of both systems. In effect, measured unemployment rates and long-term unemployment rates are unlikely to reflect labor market problems genuinely.

To provide a solid foundation for a further discussion of these issues, we have drawn a detailed albeit incomplete portrayal of the population of Polish workers, both with respect to the incidence of adverse labor market outcomes such as unemployment, long-term unemployment and very long-term unemployment, and with respect to the intertemporal developments of these misfortunes. There are large differences in the unemployment rate across population strata defined by gender, marital status, age, and education. Average unemployment rates among men and among women are considerably lower than among single women, mainly a consequence of age structure. Controlling for age, men perform best, married women worst in terms of unemployment rates, a pattern most clearly visible for the labor force core.

The most remarkable pattern in unemployment rates across all gender and marital status groups is the distinct age profile. Very high youth unemployment rates and the low unemployment rates of old workers are the two ends of a smoothly and steeply declining age-unemployment profile. In the paper, these measured unemployment rates are discussed critically. They could be reflections of genuine discrepancies in employment opportunities, but also the outcome of severe measurement problems. Young workers, in particular, may engage in activities on the shadow labor market, thus overstating measured unemployment rates, whereas older workers may opt for early retirement as an exit route from unemployment, thus understating measured unemployment rates. The high unemployment rates for married women may suffer from similar measurement problems, but it will be difficult to identify genuine labor market problems from measurement issues on the basis of survey data.

Over time, average unemployment rates and the shape of the age-unemployment profiles within the distinct gender and marital status groups have only fluctuated moderately, with the most pronounced variations arising for young workers. Education is a further important determinant of unemployment rates. The worst unemployment performance is displayed by

workers with technical training; university-trained workers perform far better in terms of unemployment rates than all other workers. Over time, education differentials in unemployment performance are widening further. Our calculations demonstrate that education is not the main driving force behind the distinct age-unemployment profiles; instead, both characteristics combine into shaping the observed patterns.

In a second set of empirical analyses we ask how long-term unemployment is distributed for unemployed Polish workers across the detailed set of gender/marital status-age-education cells. On average, slightly more than one third of all unemployed workers were searching for a job unsuccessfully for more than one year at survey time. Differences between gender and marital status groups were usually within the range of single-digit percentage points. Single women displayed the lowest share of long-term unemployed, married women the highest. Overall, young workers (who have the highest unemployment rates) display comparatively low long-term unemployment shares. Furthermore, long-term unemployment shares are clearly declining in education.

Thus, long-term unemployment is not a disproportionately large problem for labor force groups with comparatively high unemployment rates, such as the young and workers with technical training. By contrast, across individual observation cells, long-term unemployment shares are distributed quite uniformly. Most importantly, long-term shares have declined, not increased throughout the analyzed period. Moreover, periods with high unemployment rates are usually also periods with a low share of long-term unemployed. These patterns are indicative of substantial heterogeneity of re-employment probabilities even within detailed population strata and are also consistent with the presence of measurement problems in the survey data.

In addition, we have characterized the prevalence of very long-term unemployment (searching for more than two years) across the same detailed labor force groups. According to our figures, very long-term unemployment is a severe phenomenon, particularly for married women (again either a reflection of low re-employment opportunities or of measurement problems); the share of very long-term unemployed is rising with age and falling with education. By contrast to conventionally measured long-term unemployment (more than one year), among unemployed workers the share of the very long-term unemployed has been rising substantially over time. Thus, there is a rising share of very long-term unemployed workers among the unemployed who seem to be lost (for whatever reason) for the labor market, irrespective of improvements the labor market might experience in future years.

A final aspect of our empirical analysis concerned the question of what are the main sources of personal income for labor force participants, unemployed workers and long-term unemployed workers. Income from work is the main source of personal income throughout the labor force, for four out of five men and four out of five married women, and for almost two thirds of single women. Among the unemployed, unemployment insurance benefits and informal support by other members of the household are the most important income sources; most remarkably, the income category including social assistance is not nearly as important.

The most remarkable intertemporal change in these patterns is the dramatic decline of UI benefit recipients among the long-term unemployed that characterizes the aftermath of the 1991 reform (abolishing open ended benefit duration). Corresponding increases in their role as most important source of personal income could be observed for the income category including social assistance, but much more so for informal support by other household members. This demonstrates that the informal network provided by families and extended families is an important pillar of the Polish society, and also why tightening UI benefit eligibility for the long-term unemployed did not lead to a dramatic increase in social assistance expenditures.

In conclusion, instead of the extension of the duration of unemployment support, we recommend a tighter division of responsibilities between support systems and a serious effort at improving the implementation of unemployment support, in particular regarding the enforcement of eligibility rules and the monitoring of job search activities. It is not fighting poverty that should be the priority for Polish labor offices, but rather fostering re-employment. Fighting poverty might be an important goal in itself, but it should not be compromised by an inadequate implementation. Allocating a sufficient share of the government budget to the administration of labor offices may be an important prerequisite for improvement.

References

- Björklund A, Freeman R (1995), *Generating Equality and Eliminating Poverty the Swedish Way*. Discussion Paper No. 228, Centre for Economic Performance, LSE, London.
- Boeri T (1994), *Labour Market Flows and the Persistence of Unemployment in Central and Eastern Europe*. In: OECD, *Unemployment in Transition Countries: Transient or Persistent?*, OECD, Paris, 13-56.
- Góra M, Lehmann H (1995), *How Divergent is Regional Labour Market Adjustment in Poland?* In: Scarpetta S, Wörgötter A (eds), *The Regional Dimension of Unemployment in Transition Countries*. OECD, Paris.
- Góra M, Lehmann H, Socha M, Sztanderska U (1996), *Labour Market Policies in Poland: An Assessment*. In: Boeri T, Lehmann H, Wörgötter A (eds), *Lessons From Labour Market Policies in the Transition Countries*, OECD, Paris, 151-176.
- Lehmann H (1995), *Labour Market Flows and the Evaluation of Labour Market Policies in Poland - 1990-92*. In: Lehmann H, Wadsworth J (eds), *Labour Force Survey Design. Proceedings of a Technical Workshop*. Ifo-Institut für Economic Research, Munich.
- Puhani PA (1996), *Poland on the Dole. Unemployment Benefits, Training, and Long-Term Unemployment during Transition*. Discussion Paper 96-30, ZEW Mannheim.
- Puhani PA, Steiner V (1996), *Public Works for Poland? Active Labour Market Policies during Transition*. Discussion Paper 96-01, ZEW Mannheim.
- Schmidt CM (1996), *Cohort Sizes and Unemployment: Lessons for Poland*, in: Lehmann H, Wadsworth J (eds), *Labour Markets by Design? Labour Market Policies and Creative Use of Household Surveys in Transition Economies*, Munich, 126-154.
- Steiner V, Kwiatkowski E (1995), *The Polish Labour Market in Transition*, Discussion Paper 95-03, ZEW Mannheim.
- Steiner V, Puhani P (1996), *Public Works for Poland? Active Labour Market Policies during Transition*. Discussion Paper 96-01, ZEW Mannheim.

Table 1: Unemployment Rates, Poland 1992-95, by Age

Males	Age 15-24	Age 25-34	Age 35-44	Age 45-54	Age 55-64	All Ages
1992	26.4%	12.0%	9.5%	7.8%	7.1%	12.4%
1993	24.2%	10.6%	9.3%	6.9%	4.1%	11.0%
1994	30.4%	11.3%	10.3%	7.6%	6.2%	12.7%
1995	29.7%	10.4%	9.4%	7.6%	5.3%	12.1%

Single Fem.	Age 15-24	Age 25-34	Age 35-44	Age 45-54	Age 55-64	All Ages
1992	31.6%	13.6%	8.0%	6.1%	2.4%	23.2%
1993	29.0%	13.1%	8.2%	10.3%	8.1%	22.2%
1994	36.5%	16.4%	9.8%	13.7%	6.8%	27.5%
1995	38.5%	13.9%	8.0%	10.0%	6.5%	27.8%

Marr. Fem.	Age 15-24	Age 25-34	Age 35-44	Age 45-54	Age 55-64	All Ages
1992	29.8%	19.3%	12.2%	8.8%	4.0%	13.8%
1993	26.9%	19.7%	12.4%	7.4%	3.6%	13.5%
1994	32.4%	20.6%	14.6%	8.7%	3.9%	15.2%
1995	33.0%	20.0%	12.9%	8.5%	3.4%	14.0%

All Genders	Age 15-24	Age 25-34	Age 35-44	Age 45-54	Age 55-64	All Ages
1992	28.5%	14.7%	10.6%	8.2%	5.9%	13.8%
1993	26.2%	14.0%	10.6%	7.2%	4.0%	12.8%
1994	32.6%	15.1%	12.2%	8.2%	5.4%	14.8%
1995	32.9%	14.2%	10.9%	8.1%	4.7%	14.1%

Source: Polish Labour Force Survey, Aug. 1992 - Aug. 1995; own calculations. Widowed and divorced men and women are excluded.

Table 2: Unemployment Rates, Poland 1992-95, by Education

Males	Educ. 1	Educ. 2	Educ. 3	Educ. 4	All Educ.
1992	11.8%	14.7%	11.3%	5.8%	12.4%
1993	12.5%	13.1%	8.7%	3.5%	11.0%
1994	14.1%	15.3%	9.8%	4.5%	12.7%
1995	13.4%	14.4%	10.3%	3.4%	12.1%
Single Fem.	Educ. 1	Educ. 2	Educ. 3	Educ. 4	All Educ.
1992	19.3%	32.1%	22.2%	10.5%	23.2%
1993	21.9%	30.1%	21.1%	4.5%	22.2%
1994	28.7%	34.6%	27.6%	3.9%	27.5%
1995	29.0%	33.3%	28.7%	5.7%	27.8%
Marr. Fem.	Educ. 1	Educ. 2	Educ. 3	Educ. 4	All Educ.
1992	11.8%	18.8%	14.0%	6.2%	13.8%
1993	13.1%	18.8%	12.8%	3.0%	13.5%
1994	14.8%	20.6%	14.5%	4.9%	15.2%
1995	13.5%	19.0%	13.9%	2.6%	14.0%
All Genders	Educ. 1	Educ. 2	Educ. 3	Educ. 4	All Educ.
1992	12.3%	16.9%	13.8%	6.3%	13.8%
1993	13.4%	15.7%	11.9%	3.4%	12.8%
1994	15.2%	18.0%	13.9%	4.6%	14.8%
1995	14.2%	16.9%	14.0%	3.3%	14.1%

Source: Polish Labour Force Survey, Aug. 1992 - Aug. 1995; own calculations. Widowed and divorced men and women are excluded.

Table 3: Unemployment Rates, Poland 199-95, by Age
(Holding Education Constant as that of Age Group 25-34 in the Same Gender)

Males	Age 15-24	Age 25-34	Age 35-44	Age 45-54	Age 55-64	All Ages
1992	28.0%	12.0%	9.4%	8.0%	9.4%	12.9%
1993	24.7%	10.6%	9.0%	6.9%	4.9%	11.1%
1994	29.1%	11.3%	10.2%	7.8%	6.9%	12.6%
1995	29.9%	10.4%	9.4%	7.9%	4.6%	12.2%
Single Fem.	Age 15-24	Age 25-34	Age 35-44	Age 45-54	Age 55-64	All Ages
1992	39.2%	13.6%	8.7%	5.3%	6.9%	28.0%
1993	31.2%	13.1%	8.0%	11.5%	12.6%	23.6%
1994	30.9%	16.4%	10.3%	13.9%	7.4%	24.2%
1995	37.4%	13.9%	8.4%	10.7%	5.5%	27.2%
Marr. Fem.	Age 15-24	Age 25-34	Age 35-44	Age 45-54	Age 55-64	All Ages
1992	30.8%	19.3%	12.1%	9.6%	7.0%	14.2%
1993	24.1%	19.7%	12.1%	7.3%	5.3%	13.3%
1994	31.4%	20.6%	14.5%	8.5%	7.8%	15.3%
1995	29.8%	20.0%	12.7%	8.6%	5.1%	13.9%
All Genders	Age 15-24	Age 25-34	Age 35-44	Age 45-54	Age 55-64	All Ages
1992	31.7%	14.7%	10.6%	8.5%	8.8%	14.6%
1993	26.8%	14.0%	10.3%	7.1%	5.1%	12.9%
1994	31.1%	15.1%	12.1%	8.2%	7.1%	14.6%
1995	32.8%	14.2%	10.8%	8.2%	4.9%	14.1%

Source: Polish Labour Force Survey, Aug. 1992 - Aug. 1995; own calculations. Widowed and divorced men and women are excluded.

Table 4: Unemployment Rates, Poland 1992-95, Labor Force Core
 (Age 25-54, Educ. 2 & Educ. 3)

	Males	Single Fem.	Marr. Fem.	All Genders
1992	10.2%	10.3%	14.7%	12.0%
1993	9.0%	11.8%	14.4%	11.2%
1994	9.8%	15.3%	15.9%	12.5%
1995	9.4%	12.4%	14.8%	11.8%

Source: Polish Labour Force Survey, Aug. 1992 - Aug. 1995; own calculations. Widowed and divorced men and women are excluded.

Table 5: Long-Term Unemployment Shares, Poland 1992-95, by Age

Males	Age 15-24	Age 25-34	Age 35-44	Age 45-54	Age 55-64	All Ages
1992	27.1%	37.7%	36.6%	32.6%	36.3%	33.2%
1993	26.2%	40.6%	40.9%	35.3%	41.4%	35.3%
1994	24.9%	36.0%	37.1%	44.8%	38.4%	33.4%
1995	24.1%	35.2%	33.1%	36.7%	39.4%	30.8%
Single Fem.	Age 15-24	Age 25-34	Age 35-44	Age 45-54	Age 55-64	All Ages
1992	29.2%	39.0%	52.4%	16.7%	100.0%	31.3%
1993	28.6%	45.3%	36.4%	41.7%	0.0%	31.1%
1994	27.1%	37.7%	69.2%	38.9%	66.7%	30.6%
1995	23.3%	41.2%	42.9%	64.3%	33.3%	26.7%
Marr. Fem.	Age 15-24	Age 25-34	Age 35-44	Age 45-54	Age 55-64	All Ages
1992	31.9%	37.0%	40.2%	37.3%	27.6%	37.3%
1993	40.8%	41.9%	46.4%	49.1%	35.7%	44.1%
1994	28.0%	38.3%	44.7%	49.3%	43.3%	40.9%
1995	29.4%	35.4%	44.2%	49.8%	53.8%	40.3%
All Genders	Age 15-24	Age 25-34	Age 35-44	Age 45-54	Age 55-64	All Ages
1992	28.5%	37.5%	38.8%	34.5%	34.7%	34.4%
1993	29.2%	41.6%	43.6%	41.6%	38.2%	38.1%
1994	26.1%	37.3%	41.8%	46.6%	40.3%	35.9%
1995	24.5%	35.7%	39.1%	43.6%	43.0%	33.6%

Source: Polish Labour Force Survey, Aug. 1992 - Aug. 1995; own calculations. Widowed and divorced men and women are excluded. Figures express the share of unemployed workers with an elapsed unemployment duration of one year or more, among all unemployed.

Table 6: Long-Term Unemployment Shares, Poland 1992-95, by Education

Males	Educ. 1	Educ. 2	Educ. 3	Educ. 4	All Educ.
1992	34.6%	32.4%	33.7%	31.9%	33.2%
1993	39.8%	34.1%	33.6%	27.7%	35.3%
1994	36.7%	33.6%	27.7%	38.1%	33.4%
1995	36.8%	29.1%	28.2%	30.0%	30.8%
Single Fem.	Educ. 1	Educ. 2	Educ. 3	Educ. 4	All Educ.
1992	32.5%	29.2%	33.3%	25.0%	31.3%
1993	39.6%	30.8%	27.2%	30.0%	31.1%
1994	41.6%	32.0%	26.4%	0.0%	30.6%
1995	35.5%	36.6%	16.7%	14.3%	26.7%
Marr. Fem.	Educ. 1	Educ. 2	Educ. 3	Educ. 4	All Educ.
1992	35.6%	35.9%	40.4%	26.4%	37.3%
1993	43.8%	44.9%	44.0%	35.7%	44.1%
1994	46.8%	39.9%	38.7%	35.3%	40.9%
1995	47.9%	40.2%	37.0%	21.4%	40.3%
All Genders	Educ. 1	Educ. 2	Educ. 3	Educ. 4	All Educ.
1992	34.8%	32.9%	36.8%	28.9%	34.4%
1993	41.3%	37.0%	37.4%	30.6%	38.1%
1994	41.1%	35.3%	32.8%	34.1%	35.9%
1995	40.8%	33.4%	29.6%	25.0%	33.6%

Source: Polish Labour Force Survey, Aug. 1992 - Aug. 1995; own calculations. Widowed and divorced men and women are excluded. Figures express the share of unemployed workers with an elapsed unemployment duration of one year or more, among all unemployed.

Table 7: Long-Term Unemployment Shares, Poland 1992-95, Labor Force Core
 (Age 25-54, Educ. 2 & Educ. 3)

	Males	Single Fem.	Marr. Fem.	All Genders
1992	37.1%	38.6%	39.7%	38.5%
1993	39.2%	44.1%	45.0%	42.3%
1994	37.5%	44.7%	41.4%	39.8%
1995	32.2%	40.5%	40.2%	36.7%

Source: Polish Labour Force Survey, Aug. 1992 - Aug. 1995; own calculations. Widowed and divorced men and women are excluded. Figures express the share of unemployed workers with an elapsed unemployment duration of one year or more, among all unemployed.

Table 8: Very Long-Term Unemployment Shares, Poland 1992-95, by Age

Males	Age 15-24	Age 25-34	Age 35-44	Age 45-54	Age 55-64	All Ages
1992	5.8%	10.6%	12.0%	8.3%	9.9%	9.0%
1993	6.9%	16.8%	16.1%	16.3%	13.8%	13.2%
1994	6.5%	15.1%	16.0%	20.6%	22.1%	13.2%
1995	6.8%	17.9%	15.6%	22.8%	26.8%	14.0%
Single Fem.	Age 15-24	Age 25-34	Age 35-44	Age 45-54	Age 55-64	All Ages
1992	3.9%	5.1%	19.0%	16.7%	100.0%	5.1%
1993	5.9%	15.6%	13.6%	8.3%	0.0%	7.4%
1994	9.6%	18.2%	26.9%	33.3%	66.7%	12.3%
1995	7.9%	25.0%	23.8%	28.6%	0.0%	10.5%
Marr. Fem.	Age 15-24	Age 25-34	Age 35-44	Age 45-54	Age 55-64	All Ages
1992	5.4%	9.1%	13.2%	9.9%	6.9%	10.2%
1993	18.3%	15.4%	17.5%	17.0%	25.0%	16.9%
1994	11.8%	15.8%	19.5%	23.9%	20.0%	17.8%
1995	9.1%	15.0%	23.5%	27.9%	30.8%	19.5%
All Genders	Age 15-24	Age 25-34	Age 35-44	Age 45-54	Age 55-64	All Ages
1992	5.1%	9.6%	12.8%	9.2%	9.9%	8.9%
1993	8.1%	16.0%	16.8%	16.3%	16.9%	13.7%
1994	8.4%	15.7%	18.1%	22.6%	22.7%	14.8%
1995	7.5%	16.9%	19.9%	25.3%	27.0%	15.5%

Source: Polish Labour Force Survey, Aug. 1992 - Aug. 1995; own calculations. Widowed and divorced men and women are excluded. Figures express the share of unemployed workers with an elapsed unemployment duration of two years or more, among all unemployed.

Table 9: Very Long-Term Unemployment Shares, Poland 1992-95, by Education

Males	Educ. 1	Educ. 2	Educ. 3	Educ. 4	All Educ.
1992	10.2%	8.0%	9.9%	10.1%	9.0%
1993	17.2%	10.9%	13.0%	17.0%	13.2%
1994	15.9%	12.5%	12.6%	6.3%	13.2%
1995	18.6%	11.9%	13.5%	18.0%	14.0%
Single Fem.	Educ. 1	Educ. 2	Educ. 3	Educ. 4	All Educ.
1992	6.0%	4.3%	5.8%	0.0%	5.1%
1993	10.4%	5.1%	7.8%	10.0%	7.4%
1994	21.8%	12.3%	9.3%	0.0%	12.3%
1995	17.2%	14.2%	5.8%	7.1%	10.5%
Marr. Fem.	Educ. 1	Educ. 2	Educ. 3	Educ. 4	All Educ.
1992	9.3%	11.7%	10.2%	1.9%	10.2%
1993	18.3%	16.9%	16.4%	7.1%	16.9%
1994	22.1%	17.5%	16.1%	11.8%	17.8%
1995	22.9%	18.0%	19.3%	10.7%	19.5%
All Genders	Educ. 1	Educ. 2	Educ. 3	Educ. 4	All Educ.
1992	9.5%	8.6%	9.3%	5.6%	8.9%
1993	16.8%	12.0%	13.7%	12.9%	13.7%
1994	18.9%	14.0%	13.6%	8.1%	14.8%
1995	20.1%	14.0%	14.4%	14.1%	15.5%

Source: Polish Labour Force Survey, Aug. 1992 - Aug. 1995; own calculations. Widowed and divorced men and women are excluded. Figures express the share of unemployed workers with an elapsed unemployment duration of two years or more, among all unemployed.

**Table 10: Very Long-Term Unemployment Shares, Poland 1992-95, Labor Force Core
(Age 25-54, Educ. 2 & Educ. 3)**

	Males	Single Fem.	Marr. Fem.	All Genders
1992	10.9%	8.8%	12.1%	11.4%
1993	14.9%	14.7%	16.3%	15.6%
1994	16.6%	22.4%	17.9%	17.5%
1995	16.3%	21.6%	20.5%	18.7%

Source: Polish Labour Force Survey, Aug. 1992 - Aug. 1995; own calculations. Widowed and divorced men and women are excluded. Figures express the share of unemployed workers with an elapsed unemployment duration of two years or more, among all unemployed.

Table 11: Main Source of Personal Income for Polish Men, 1992-95

		(i)	(ii)	(iii)	(iv)
1992	Work	80.7%	3.0%	0.9%	0.6%
	Pension	5.3%	9.7%	10.3%	11.9%
	UI Benefits	6.3%	46.7%	45.5%	31.4%
	Other Income	0.7%	4.4%	5.3%	8.2%
	Informal Support	7.0%	36.2%	38.1%	47.8%
1993	Work	82.3%	1.3%	1.6%	0.9%
	Pension	4.6%	5.1%	5.5%	4.3%
	UI Benefits	5.2%	43.7%	17.8%	7.8%
	Other Income	0.7%	5.8%	9.4%	10.9%
	Informal Support	7.2%	44.1%	65.7%	76.1%
1994	Work	82.2%	0.1%	0.0%	0.0%
	Pension	3.2%	8.3%	7.9%	9.7%
	UI Benefits	5.4%	37.7%	13.6%	8.9%
	Other Income	0.9%	6.3%	10.0%	9.3%
	Informal Support	7.6%	47.5%	68.5%	72.1%
1995	Work	83.1%	0.1%	0.0%	0.0%
	Pension	3.2%	7.7%	7.0%	9.1%
	UI Benefits	5.7%	41.0%	16.6%	12.4%
	Other Income	0.7%	5.0%	8.5%	8.4%
	Informal Support	7.0%	45.9%	67.1%	69.3%

Source: Polish Labour Force Survey, Aug. 1992 - Aug. 1995; own calculations. Widowed and divorced men are excluded. Column (i) refers to labor force participants, column (ii) to unemployed workers, column (iii) to long-term unemployed workers (more than one year), and column (iv) to very long-term unemployed workers (more than two years).

Table 12: Main Source of Personal Income for Polish Single Women, 1992-95

		(i)	(ii)	(iii)	(iv)
1992	Work	62.7%	0.2%	0.0%	0.0%
	Pension	1.4%	1.8%	1.3%	4.0%
	UI Benefits	9.4%	37.4%	48.4%	32.0%
	Other Income	1.0%	3.0%	3.2%	8.0%
	Informal Support	25.5%	57.6%	47.1%	56.0%
1993	Work	63.7%	0.6%	0.0%	0.0%
	Pension	1.3%	1.9%	1.2%	2.6%
	UI Benefits	7.2%	28.8%	14.0%	5.1%
	Other Income	1.1%	3.8%	4.9%	7.7%
	Informal Support	26.7%	65.0%	79.9%	84.6%
1994	Work	65.9%	0.0%	0.0%	0.0%
	Pension	1.5%	3.5%	3.6%	0.0%
	UI Benefits	7.5%	24.3%	9.8%	9.0%
	Other Income	1.1%	3.3%	6.7%	10.3%
	Informal Support	25.6%	69.4%	79.9%	80.8%
1995	Work	66.5%	0.0%	0.0%	0.0%
	Pension	1.4%	2.9%	3.4%	1.4%
	UI Benefits	7.8%	24.4%	12.4%	8.6%
	Other Income	0.9%	2.7%	5.1%	8.6%
	Informal Support	25.2%	70.0%	79.1%	81.4%

Source: Polish Labour Force Survey, Aug. 1992 - Aug. 1995; own calculations. Column (i) refers to labor force participants, column (ii) to unemployed workers, column (iii) to long-term unemployed workers (more than one year), and column (iv) to very long-term unemployed workers (more than two years).

Table 13: Main Source of Personal Income for Polish Married Women, 1992-95

		(i)	(ii)	(iii)	(iv)
1992	Work	80.1%	1.7%	0.8%	0.8%
	Pension	4.8%	5.6%	3.8%	2.3%
	UI Benefits	6.9%	48.7%	48.0%	33.1%
	Other Income	0.7%	2.6%	2.5%	3.1%
	Informal Support	7.5%	41.4%	44.9%	60.8%
1993	Work	80.6%	0.8%	0.3%	0.0%
	Pension	4.8%	3.2%	2.3%	3.0%
	UI Benefits	4.8%	34.2%	14.9%	9.7%
	Other Income	0.9%	4.6%	6.2%	5.1%
	Informal Support	8.9%	57.2%	76.3%	82.2%
1994	Work	80.9%	0.1%	0.0%	0.0%
	Pension	3.2%	4.6%	3.8%	3.7%
	UI Benefits	4.3%	26.3%	8.1%	6.1%
	Other Income	1.1%	5.3%	6.3%	8.1%
	Informal Support	11.1%	63.7%	81.5%	81.8%
1995	Work	82.6%	0.1%	0.0%	0.0%
	Pension	3.2%	4.8%	4.3%	5.1%
	UI Benefits	4.6%	30.4%	12.3%	7.5%
	Other Income	0.9%	4.6%	4.9%	6.1%
	Informal Support	9.5%	60.1%	78.3%	81.0%

Source: Polish Labour Force Survey, Aug. 1992 - Aug. 1995; own calculations. Column (i) refers to labor force participants, column (ii) to unemployed workers, column (iii) to long-term unemployed workers (more than one year), and column (iv) to very long-term unemployed workers (more than two years).

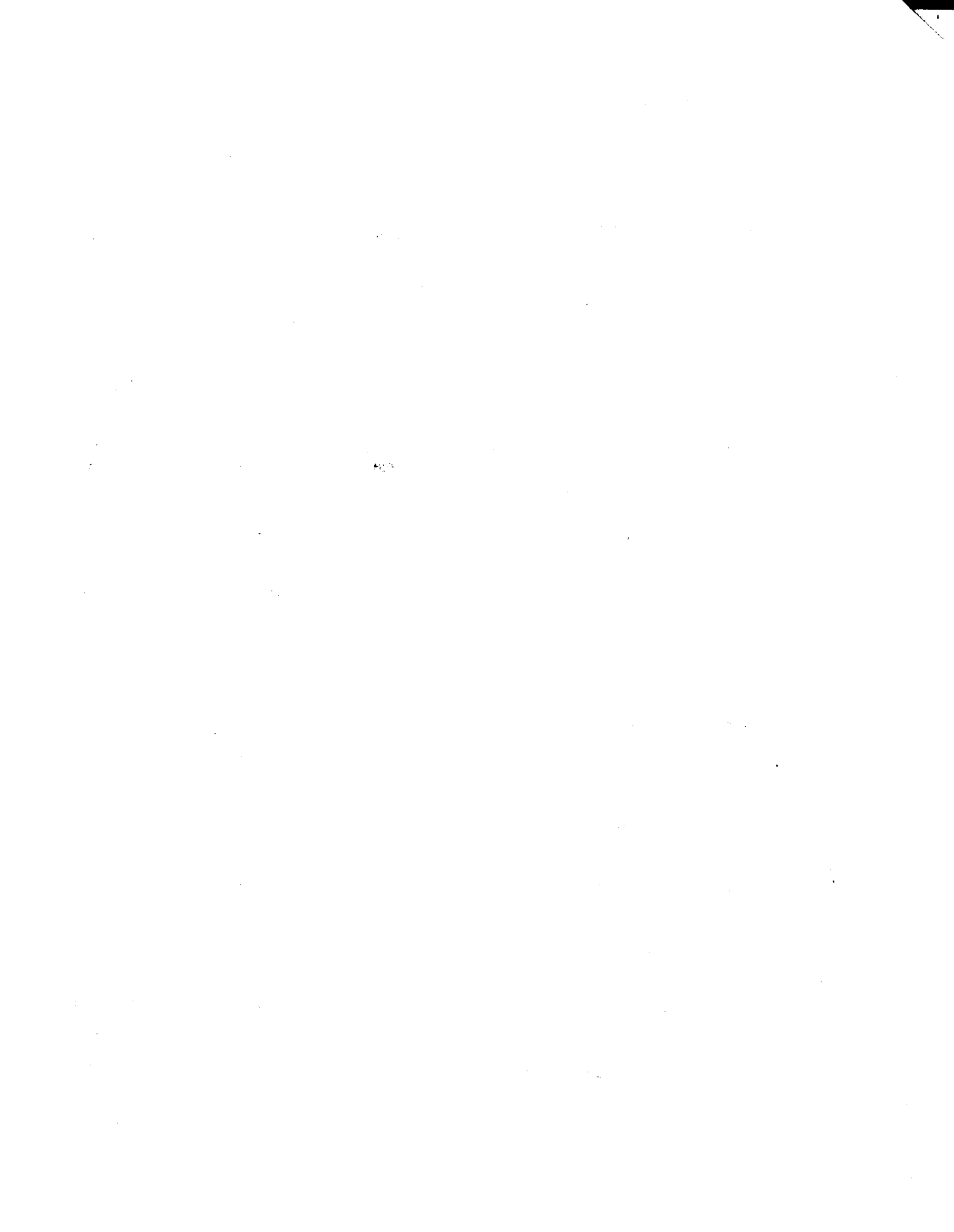
Table 14: Main Source of Personal Income for Polish Men and Women, 1992-95

		(i)	(ii)	(iii)	(iv)
1992	Work	79.0%	2.1%	0.7%	0.6%
	Pension	4.8%	7.1%	6.6%	7.3%
	UI Benefits	6.8%	46.1%	46.8%	32.2%
	Other Income	0.7%	3.5%	3.9%	6.1%
	Informal Support	8.7%	41.1%	41.9%	53.8%
1993	Work	80.1%	1.0%	0.9%	0.4%
	Pension	4.4%	3.9%	3.6%	3.6%
	UI Benefits	5.2%	37.9%	16.1%	8.5%
	Other Income	0.8%	5.1%	7.4%	7.9%
	Informal Support	9.4%	52.1%	72.1%	79.6%
1994	Work	80.4%	0.1%	0.0%	0.0%
	Pension	3.1%	6.2%	5.6%	5.7%
	UI Benefits	5.2%	31.4%	10.7%	7.6%
	Other Income	1.0%	5.5%	8.0%	8.9%
	Informal Support	10.3%	56.9%	75.6%	77.6%
1995	Work	81.5%	0.1%	0.0%	0.0%
	Pension	3.0%	5.8%	5.3%	6.4%
	UI Benefits	5.5%	34.5%	14.2%	9.7%
	Other Income	0.8%	4.5%	6.5%	7.4%
	Informal Support	9.4%	55.0%	73.6%	76.1%

Source: Polish Labour Force Survey, Aug. 1992 - Aug. 1995; own calculations. Widowed and divorced men and women are excluded. Column (i) refers to labor force participants, column (ii) to unemployed workers, column (iii) to long-term unemployed workers (more than one year), and column (iv) to very long-term unemployed workers (more than two years).

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**Long-Term Unemployment, Unemployment Benefits
and Social Assistance: The Polish Experience**

by

Marek Góra and Christoph M. Schmidt

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