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Matching in the labour market

– the significance of the composition of jobseekers

Summary and recommendations

Background and audit questions

Matching in the labour market refers to how new hires employment contracts are created for a given number of vacant jobs in relation to the number of jobseekers. Improving matching of jobseekers to vacant jobs is among the most important tasks of the Swedish Public Employment Service, but according to several studies matching in the Swedish labour market has deteriorated in recent years. Despite agreement on the fact that matching has deteriorated, there is a lack of knowledge about the reasons for it. Previous studies, including analyses by the Employment Service, suggest that the deterioration in matching can be explained by changes in the composition of the unemployed. Composition in the employment pool refers for example to the percentage with a low education level, a foreign background, advanced age or disability that lowers working capacity.

In the opinion of the Swedish NAO a more accurate picture of the significance of the composition of individuals can be achieved by using microdata and a more appropriate method. The audit studied the importance of the composition of the unemployed since it

is deemed probable that previous analyses may have drawn incorrect conclusions. Since the work of the Employment Service to improve matching is dependent on the best possible analyses, there is a risk that matching is not conducted effectively.

The purpose of the audit is to examine whether the Employment Service has an adequate and well-founded factual basis for developing its matching activities effectively. The focus lies on studying whether the Employment Service has drawn well-founded conclusions in its annual report and in its labour market report concerning the significance of composition of unemployed for the impaired matching. The question is answered by decomposing the matching deterioration into two parts: one part that is due to changed composition of the unemployed, and another part that cannot be explained by these changes. The results of the decomposition are compared with the Employment Service's conclusions on the significance of the composition for the deterioration in matching. The analysis also studies how job opportunities have developed for different groups of jobseekers.

The audit's main analyses study to which extent the composition of unemployed can explain the deterioration between October 2007 and October 2015. During the period studied, as well as other periods since the beginning of the 1990s, there were extensive changes in labour market policies that could have impacted labour market outcomes. Reforms in other policy areas, in particular social insurance policy, have also led to changes. To the extent that these changes lead to an *altered mix of individuals* among registered unemployed by the Employment Service, or *altered job opportunities* for different groups of unemployed, the decomposition method used takes them into account. This is a strength in the method chosen compared to previous studies that assume that job opportunities for disadvantaged groups, for example, are constant over time. As in previous studies, however, the results of the audit may be sensitive to such things as quality deterioration in the Employment Service's vacancy statistics or changes in statistics that measure transfers to work. In these respects, we decided to follow previous studies to achieve comparability. We also performed sensitivity analyses with regard to vacancy measurement, measurement of transfer to work, individual characteristics not observed directly in the period examined.

Audit findings

The main finding of the audit is that the composition of individuals is significant but far from decisive and explains about one third of the deterioration in job finding rate after the financial crisis. Since the study constitutes the first direct estimate, it is difficult to compare with previous findings.

The report shows that the job finding rate, measured as a transfer from being registered as unemployed by the Employment Service to having unsubsidised work, has decreased by 3.7 percentage points on a monthly basis between 2007 and 2015. Changes in the composition of individuals accounts for -1.2 percentage points (i.e. 33 %) of this reduction, where the most important explanation is the country of birth, which accounts for -1.0 percentage point. To a great extent the decrease in job opportunities is thus not explained by means of a changed mix of individuals or changes in the number of vacancies in relation to the number of unemployed people (i.e. tightness). The deterioration is rather related to an unexplained general reduction in job finding rate for a relatively well-established group in the labour market. In the group consisting of men born in Sweden in the age category 35–45 years with upper secondary education, without disability that reduces working capacity, with average previous sickness benefit and who are seeking jobs in a county with average tightness, the job finding rate has decreased by 2.8 percentage points between 2007 and 2015. In other words, as much as three quarters of the reduced job finding rate are unexplained, which is demonstrated as a reduced job finding rate for this group. This result is confirmed in a sensitivity analysis where we also include subsidised employment in the job finding rate measurement. As the focus, both in previous research and in the Employment Service's follow-up on matching, has been on the significance of the composition, the decline in job finding rate for this average group has received too little attention. An important conclusion of the audit is therefore that the deterioration for this group needs to be examined more closely.

In an analysis of how job opportunities for different groups have changed over time, the report shows, as expected, that the job finding rate for the unemployed who by the Employment Service are characterized as belonging to a group that has a disadvantaged position in the labour market, on average is lower compared to the average group. This so-called disadvantaged group consists of jobseekers with disabilities that lowers working capacity, with no higher than compulsory school level education, aged over 55, or born outside Europe. Unlike the conclusions drawn by the Employment Service, the findings in this analysis show that the job finding rate for these groups have improved, in some cases considerably, relative to the average group since the financial crisis.

Recommendations

The Swedish NAO has found insufficiencies both in the Employment Service's previous analyses and in other existing studies and therefore recommends the following:

- The Swedish Public Employment Service should consider making deeper analyses of the deterioration in job finding rate compared with the analyses currently made in

the Employment Service's annual report and labour market reports. The method used in this audit illustrates the importance of using microdata in the way prescribed by research literature on decomposition. Previous analyses at macro level may in many cases give misleading results.

- The audit shows that about three quarters of the matching deterioration cannot be explained by changes in the composition of individuals. It is rather relatively well-established groups in the labour market whose job opportunities have deteriorated. The Swedish National Audit Office recommends that the Swedish Public Employment Service tries to find out the reasons for this deterioration so that resources are correctly allocated. One suggestion is to decompose the change in job finding rate using variables directly linked to the Employment Service's work on matching unemployed to vacant positions, such as for example number of meetings at individual level with an employment officer. Another important question concerns the types of job that are vacant today compared to previously and how these relate to the skills of the unemployed. In the audit, a combination of the type of sought occupation and county of residence of the unemployed, as well as vacancies at occupation- and county level, is used. It is important to investigate all possibilities, in terms of data and methods, in order to gain better insights into this issue.