“Labour flows, transitions and unemployment duration”

— Some Comments and Possible Extensions —

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Abstract
The second chapter of the ‘Employment in Europe 2009’ report analyzes dynamics of EU labour markets. Monitoring labour market movements is important to allow timely public policy responses (not only in times of a crisis). Fostering re-employment and avoiding a rise in long-term unemployment are aimed for where a successful ‘flexicurity’ strategy balances the income insurance function of benefit systems with appropriate activation mechanisms. Labour market dynamics can be characterized by various indicators which are considered in the first section of the chapter. While the second section calculates time trends for indicators of labour market transitions (including a decomposition into trend and cycle), the third section calculates various indicators of unemployment duration. In addition, this section also discusses the relationship between labour market institutions, labour market policies and the incidence of long-term unemployment. Overall, this is an interesting and necessary first step to be aware of arising problems in the labour market. A logical next step would have been to look at the consequences of these findings and translate them into possible public policy responses. This would have involved moving from observed correlations to causality issues and the report is less strong in this area. This lack could be easily overcome by using appropriate econometric methods for causal identification using the available individual (micro) data. I will comment the report from a microeconomic perspective based on job search theory and microeconometric empirical evidence. Starting with a (very) brief summary of the report, I will comment some specific parts, before I address three additional areas which are interlinked with my own research: 1) labour market dynamics as such, 2) active and passive labour market policies, and 3) recent trends in labour market research. This handout includes the main elements of my presentation and shall be distributed at the conference.

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This supplementary handout has been prepared in addition to my slides for the “Employment in Europe 2009” conference taking place in Brussels on November 26, 2009. It comments on the second chapter of the “Employment in Europe 2009” report entitled “Labor flows, transitions and unemployment duration”. Please do not quote or circulate.
1 Brief Summary of the Chapter

1.1 Labor Flows

Assessing the performance of labour markets with static variables can give a misleading impression of the underlying labour market dynamics. Gross flows into and out of employment are much higher than the net results and reflect both labour demand (e.g., firms’ adjustments of labour inputs to final demand, competitiveness) and labour supply (e.g., movements of workers, job-to-job transitions). In a dynamic framework job separations (quits and dismissals), job vacancies and job matching occur simultaneously. In practice, the matching process will be costly and lengthy and significant imbalances and mismatches will remain. The aim of this section is to examine what is known about such labour market flows in order to allow more effective policies.

A number of indicators are available to measure job flows and flows of workers or labour. Job flows are associated with labour demand and include indicators of job creation (JC), job destruction (JD) and job turnover (JT, the sum of JC and JD). Labor flows are associated with labour supply where labour turnover (LT) measures the number of workers changing employment status or moving between jobs. Comparisons between JT and LT can shed light on the relative importance of supply versus demand factors in driving labour market dynamics. International comparisons between JT and LT are difficult because flows might be measured at different frequencies, the unit of analysis might vary, and datasets might differ in their longitudinal quality/dimension. Recent work from Bassanini and Marianna (2009) uses internationally harmonized data sources to show that JT ranges from more than 25% (US and UK) to less than 15% (Germany, Slovenia, Sweden), whereas LT rates vary from more than 40% (US, UK, Denmark and Spain) to less than 30% (Hungary, Italy, Austria, Greece).

Firm and worker characteristics as well as business cycles will have an impact on the magnitude of the flows. JT tends to exhibit a counter-cyclical pattern in the US and UK and an acyclical pattern in Continental Europe; job destruction is counter-cyclical while job-creation is less sensitive to the economic cycle. LT is generally pro-cyclical (in particular hirings, separations are much less sensitive). Against this overall background, patterns of job and labour flows vary considerably between firms (sector, size) and workers (age, gender, education). Labor market institutions also play a role, where countries with less stringent employment protection legislation (EPL) or larger shares of temporary employment (TE) are characterized by higher turnover rates.

Finally, using data from the EU LFS and EU SILC the empirical evidence on labour turnover in Europe is assessed. It turns out that EU labour markets are very dynamic, the labour turnover rate for the EU-8 between 2002-07 averaged at 23% and exceeds net employment growth by 21%. There is a lot of heterogeneity across countries and this is especially true if rates are differentiated by gender, age, and education. Partial correlations of EPL and TE on labour turnover rates suggest that countries with more stringent EPL tend to have lower LT rates, while there is a positive relationship between TE and LT (as expected).
1.2 Labor Market Transitions in the EU

An alternative to monitor labour market dynamics is to follow transitions of individuals across different types of employment status (e.g., employed, unemployed, inactive) and/or different types of employment (fixed-term, permanent, high-/low-wage). This sheds light not only on the extent of mobility but also the overall quality. In a descriptive analysis empirical evidence on the labour market transitions based on the EU LFS is presented. One-year indicators are calculated for transitions between employment, unemployment and inactivity; ‘good’ moves are defined as movements from unemployment/inactivity to employment. There is considerable heterogeneity across countries where transitions from U to E vary between above 40% and below 20%; much fewer transitions are observed from I to E. Using an Hodrick-Prescott (HP) filter, an attempt is made to identify cyclical versus structural changes in transition indicators. Overall, the empirical evidence points to significant business cycle effects for transitions between U and E, while transitions between I and E are less responsive to business cycles. There is a lot of diversity across countries and if things are differentiated by gender, age, and education. In an attempt to assess both ‘good’ and ‘bad’ transitions, the authors also calculate net flows; which inherently does not take account of the effect of changes in the overall size of the relevant pool of workers. Overall, it seems that an increase in ‘good’ transitions has been broadly accompanied by reductions in ‘bad’ transitions. In particular, the recent trend in transitions from E to I might reflect pension reforms and new early retirement regulations. Considerations of net flows largely confirm the overall positive developments based on ‘good’ transitions.

1.3 Unemployment Duration and Long-Term Unemployment

The final section studies unemployment data to “throw some light on the factors determining its duration and the way employability is affected, and better target policies to facilitate re-employment.” Since a 10% unemployment rate might mean that every person in the labour force is unemployed during 5 weeks per year or that 10% of the population are unemployed the whole year, it is important to look not only at ‘location’ statistics (UE rate) but also its dispersion (share of long-term unemployment). Long-term unemployment (LTU) has detrimental effects for the individual (human capital depreciation, scars on employability) and the economy as a whole (increasing bargaining power of insiders, less efficient matches) and it is a common policy goal to avoid it. In Europe close to 45% of all UE spells last for longer than one year compared with only 10% in the US.

There are some measurement issues with regard to LTU, where the use of administrative data (usually more reliable, but different across countries) has to be weighted against the use of survey data (potentially harmonized, but with recall bias). Official statistics usually use the ‘average duration of current UE spells’ based on cross-sectional surveys, which tends to

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1 The authors note correctly, that this might be misleading because a descriptive analysis is not able to identify the relative importance of different factors affecting labour market transitions.
overestimate the average duration of completed spells (if the exit rate from UE declines with duration). Using longitudinal data (instead of cross-sectional) has clear advantages in terms of short interruptions and multiple spells. In better assessing the overall attachment to the labour force it is worth considering broader concepts, including ‘long-term joblessness’. On average, LTU slightly increased over time, with falling rates for young people (15-24) and increasing rates for older ones (55-64).

In an attempt to get an unbiased measure of the average duration of UE the authors use non-parametric methods to estimate the length of completed spells from spells in progress. The average duration of incomplete spells is a biased measure of completed spells because of ‘length bias’ (a large fraction of the UE spells are right-censored, which tends to under-estimate the complete spell length) and ‘sampling bias’ (higher probability to sample individuals with longer duration, stock sampling problem). Based on EU LFS data it is shown that the sampling bias outweighs the length bias; the average incomplete duration (IDU) is higher than the completed duration (CDU) by a factor of 2. Having been dismissed or made redundant is associated with a higher unemployment duration (e.g., when compared to becoming unemployed at the end of a fixed-term contract). Additionally, survival rates in UE (differentiated by age and education) are presented and the authors also show that there is a high correlation between CDU and various LTU rates. The authors also present evidence on the methods used to find work, where it turns out that the two most frequently used methods of job search in the EU are ‘contacted public employment office’ and ‘inserted, answered, or studied advertisements in the news’.

Since cross-sectional data is not able to monitor important aspects of unemployment experiences, the authors use detailed information on the labour market status for 14 European countries from the EU SILC database to calculate measures of incidence and duration of LTU. This is likely to be associated with a relatively small sampling bias compared to the length bias. It turns out that the CDU measures based on longitudinal data are much higher than the ones based on the cross-section; counting the total UE that occurred in the period from January 2003/04 to December 2006, more than 80% of unemployed (in July 2005) went on to spend 12 or more months in UE over a 3-4-year period. In Section 4.10 the authors describe some methods to estimate unemployment duration. They distinguish non-parametric, semi-parametric and parametric methods. The authors note that “parametric/regression methods have the potential advantage to identify major policies and risk factors associated with unemployment duration.”

Most available empirical studies find positive (but modest) elasticities of the average duration of unemployment to the level of benefits, that the duration of UE is more sensitive to the extension of entitlement periods and that exits spike close to the exhaustion point. Some studies also find that hazard rates decrease with UE where ‘true’ negative duration dependence has important policy implications, since this implies that the employability of jobless persons

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However, they also claim that “implementation of regression methods is associated with considerable technical difficulties. A major problem is that unobserved differences between individuals [...] can cause a systematic bias in estimation, favoring findings of negative duration dependence.” Finally, they state that “methods employed to disentangle ‘true’ duration dependence from unobserved heterogeneity [...] are not entirely convincing [...].”
deteriorates with the duration of UE itself. Adequate policy responses may involve, inter alia, better targeting of ALMP spending, possibly making use of profiling techniques. Institutions also matter, e.g., stricter EPL in Portugal seems to account for lower labour flows and higher UE duration when compared to the US. In the final subsection the authors address the consequences of LTU and give a forecast on its development in 2010.

2 Some Comments and Questions

1. A General Comment

This is a nice piece of work highlighting the importance of monitoring labour market flows and transitions (not only) in situations like the current crisis. The authors carefully describe different concepts to measure flows and transitions and discuss related (dis)advantages as well as methodological challenges. Based on micro level data from EU LFS and EU SILC they draw an accurate picture of labour flows and transitions in the EU on an aggregate level and they also look at developments over time across different countries and differentiated by individual characteristics (such as age or education). Overall, this is an interesting and necessary first step to be aware of arising problems in the labour market. A logical next step would be to look at the consequences of these findings and translate them into possible public policy responses. To put it differently: Once we know that problems of increasing (long-term) unemployment are on the horizon, what can we do about it? Clearly, this involves moving from observed correlations to causality issues. The report is less strong in this area and only quotes some strands of literature at the very end, e.g., about the effects of labour market institutions (like unemployment insurance or employment protection legislation) on the occurrence of (long-term) unemployment. Additionally, the report is somewhat overly pessimistic about the possibilities of modern microeconometric tools to identify causal effects of different factors (may they be observed or unobserved) on labour market outcomes. This limits the potential for policy-conclusions which can be drawn from the analysis. Overall, the analysis would have benefited from a more parsimonious use of descriptive elements in exchange for some more causality analysis. These are central for formulating policy recommendations and could be implemented easily using appropriate (econometric) methods for causal identification and the available individual (micro) data.

2. Unemployment, Employment, or Inactivity Rates?

The chapter focusses on unemployment rates, flows, and transitions as a measure for the overall performance of the labour market. Clearly, this is appropriate because the problem of unemployment is the most immediate one attracting most attention. However, in view of the recent demographic trends, most EU countries face the problem of a declining work force in the future. In the next 15 years the ratio from population aged 65 and more to the population between 15 to 64—the old-age dependency ratio—is projected to rise from 26% to 34% in the EU-27 (see Table 1). That means that the number of
Table 1: Some Statistics for the EU-27

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Total</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratio of population aged 65+ to population 15-64</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>25.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2025</td>
<td>34.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activity status (15-64) in 2008</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployed</td>
<td>5.0</td>
<td>5.2</td>
<td>4.8</td>
</tr>
<tr>
<td>Inactive</td>
<td>29.1</td>
<td>22.0</td>
<td>36.1</td>
</tr>
<tr>
<td>Employed</td>
<td>65.9</td>
<td>72.8</td>
<td>59.1</td>
</tr>
<tr>
<td>Share of working age population which is...</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disability or Illness</td>
<td>4.9</td>
<td>4.7</td>
<td></td>
</tr>
<tr>
<td>Retirement</td>
<td>7.3</td>
<td></td>
<td>6.9</td>
</tr>
<tr>
<td>Social expenditure on employment sensitive functions as % of GDP, EU-14, 2006</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployment</td>
<td>1.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disability</td>
<td>1.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social exclusion</td>
<td>0.3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Eurostat, LFS.

people supported by the working-age population will increase substantially in the future (and this is even more dramatic for countries with low fertility rates like German or Italy). Hence, the question arises whether focussing on unemployment is the right choice. Whereas unemployment rates for prime-aged individuals are rather low, inactivity rates are quite high; around 30% in the EU-27. Reducing inactivity rates and increasing labour supply in the working-age population will be one of the major challenges in the future in order to ensure sustainability of European welfare states. Therefore, it would be interesting to look at transitions to/from inactivity more closely. Table 1 also shows that around 5% of the working age population are in some form of disability state and another 7% are already retired. Previous experience has shown that some countries use either of the two routes to take surplus labour out of the market in times of a crisis, e.g., by relaxing gate-keeping for disability pension or easing the way into early retirement benefits. Since empirical evidence also suggests that disability and early retirement are terminal states, this would be a very detrimental strategy. Therefore, it would be worth monitoring these possible transitions more closely.

3. **Unbiased Measuring of the Average Duration of Unemployment**

The average duration of incomplete unemployment spells is a biased measure of completed spells because of ‘length bias’ (a large fraction of the UE spells are right-censored, which tends to under-estimate the complete spell length) and ‘sampling bias’ (higher probability to sample individuals with longer duration, stock sampling problem). To get an unbiased measure of the average duration of UE the authors use non-parametric methods to estimate the length of completed spells from spells in progress. The used methodology dates back to the early 1970s (Kaitz, 1970) and has originally been used for labour force surveys with a monthly periodicity in which the duration of unemployment is measured in weeks. Some restrictions in terms of interpretation apply (multiple spells, transitions to
employment/out of the labour force, reason for becoming unemployed). Recently, different methods to estimate unemployment duration have been suggested (Shimer, 2007) and applied (Shimer, 2005a,b; OECD, 2009). Inter alia Shimer (2007) points out that time aggregation leads to an overstatement of the cyclicality of the separation rate and offers a correction. Basically, he offers novel measures of the job finding probability for unemployed workers and the exit probability for employed workers. His approach allows for the possibility that a worker can only find or lose a job during certain portions of the month (e.g., during regular workdays from 9am to 5pm). Following Kaitz (1970) and Perry (1972) many authors adjust for time aggregation by computing a weekly probability of finding a job, which implicitly assumes that individuals cannot find and lose a job within a week. While this assumption is consistent with the BLFS definition that a worker is employed if she works at all during a particular week, there is neither a theoretical justification nor empirical evidence supporting the notion that a week represents the minimum duration of an employment or unemployment spell. This is why Shimer (2007) takes the time aggregation adjustment to a logical extreme by computing instantaneous job finding and employment exit rates.

4. Good and Bad Labor Market Transitions

The report focusses on transitions between unemployment/inactivity and employment. While it is of course interesting to look at these transitions, differentiations could be more detailed. One possible extension is already mentioned above, where the inactivity state could be further divided by disability and early retirement. A further possibility concerns the definition of ‘good’ and ‘bad’ labour market transitions. Currently, ‘good’ transitions are the ones from unemployment/inactivity to employment. While this is an obvious choice, additional differentiations have the potential to offer much more detailed and policy-relevant conclusions. For example, it would be interesting to analyze the movements from low paid to high paid jobs or from temporary to permanent employment. This is especially relevant in times of the crisis because being low paid might also lead to non-accumulation and deterioration of human capital. Hence, not only movements from employment to unemployment are ‘bad’ but also job-to-job transitions with an induced downgrading. McCormick (1990) argues that low paid jobs are low-quality jobs and the type of job may be used by firms as an indicator about worker quality. Being low paid could stigmatize employees and may be used as a screening device of employers (Stewart, 2007). Studies comparing the extent of a low wage sector across European countries indicate that there exist wide variations, with the highest incidence of low pay measured in the UK (see, e.g., European Commission, 2004; Asplund, Sloane, and Theodossiu, 1998; Uhlenhorff, 2006). Furthermore, we observe a trend of rising self-employment rates in some EU countries (independently of the recession). This can be a source of further growth—if the new entrepreneurs are ‘true’ entrepreneurs—but might also only be a way to transfer risk to former workers (who are hired back by their former employers). It would be
interesting to know, how this pattern evolves (especially in times of a crisis). The potential consequences and necessary policy reforms can be quite severe in terms of tax base, pension financing etc.

5. **Youth Unemployment**

The problem of youth unemployment is a major one. Even though, the incidence of LTU is low(er) for young (15-24) individuals when compared to older ones (see Figure 1)—which might partly be caused by institutional regulations putting young unemployed individuals ‘out of the system’ at some stage of their unemployment spell—the unemployment rates are higher and the gap in the rates between young and prime-aged individuals is increasing. Quintini, Martin, and Martin (2007) discuss recent developments for young individuals facing the “school-to-work” transition and the persistently high share of young labour market entrants who are caught in long-term spells of unemployment (with an increased risk for the low skilled). (Long-term) unemployment spells in the beginning of the career may be especially burdensome because of “scarring” effects in terms of long-term career perspectives. Studies show that there is a risk that a failed initial labour market integration will negatively affect future wages and labour market attachment in the long run (compare, e.g., Ellwood, 1983; Blanchflower and Bell, 2009). In order to fight youth unemployment, policy makers put into action specifically targeted active labour market programmes for youth who are already out of the initial educational system. The report would benefit from taking a more detailed look at the problem of youth unemployment, e.g., by addressing the issue of UE to school transitions or measuring youth long-term unemployment more broadly (youth joblessness).

6. **From Correlations to Causality**

A lot of the work focusses on correlations between different aggregate measures of labour market transitions additionally differentiated by countries or individual characteristics
While I agree that this is an interesting and necessary first step to be aware of arising problems in the labour market, it does not allow to address some key questions relating to adequate policy responses. To do so, it would be necessary to pose (and answer!) more causal questions. Only if we know what factors causally drive unemployment entries and duration, we will be able to make suggestions in order to reduce entries or prevent long-term unemployment. In this context it is not clear to me why the authors seem to put only little faith in the power of econometric methods to answer causal questions. The literature on identifying causal treatment effects (where the treatment may be any type of social policy, including active or passive labour market programs) is huge and well-established (for overviews, see, e.g. Imbens and Wooldridge, 2009; Caliendo, 2006; Blundell and Costa Dias, 2002). The issue of unobserved heterogeneity is also an important one, so let me comment briefly on it. Take the example of an unemployed job-seeker who exhibits some bad ‘unobserved’ characteristics (e.g., lack of motivation/patience/reliability) which make him less likely to find and keep a job. If this information is not available to the researcher, using econometric methods to estimate causal relationship will include some sort of bias. However, there are several ways to tackle this issue. First of all, researchers usually test the sensitivity of their results with respect to deviations from their identifying assumptions (see, e.g., Becker and Caliendo, 2007). Second, unobserved heterogeneity can also be accounted for within an econometric analysis. A good example are duration models distinguishing between different (unobserved) ‘types’ of individuals (see, e.g., Heckman, 1981a,b; Wooldridge, 2005; Caliendo and Uhlander, 2008). Finally, modern labour market research also tries to include previously ‘unobserved’ characteristics into surveys. A good example in this context is the IZA Evaluation Data Set (see Caliendo, Falk, Kaiser, Schneider, Uhlander, Van den Berg, and Zimmermann, 2009, for more details) which is a timely survey of 18,000 individuals entering unemployment who are asked ‘non-standard’ questions about attitudes, motivations, expectations, (non-)cognitive skills etc. Either of the three mentioned ways (or combinations of if it) will be able to address the problem of unobserved heterogeneity in estimations and has the potential to identify causal effects.

7. **Job Search Methods and Labour Market Success**

The authors scratch a very interesting topic in Section 4.8 that is ‘methods used in the previous four weeks to find work’. The relation between job search methods, job finding rates and resulting job quality is discussed heavily in the empirical and theoretical search literature. When unemployed search for jobs, they generally use a variety of formal and informal search channels. Informal channels (friends, relatives, or former colleagues) may be beneficial because they have the potential to minimize uncertainties and costs. This is true both for the unemployed job-seeker and the potential employer (employee-referral as a screening device). However, informal channels might offer only a limited subset of the available market, unnecessarily restricting the choice set of the individual. The ‘optimal’ that is the most productive search channel depends on a variety of factors and it can also

(age, education, etc.).
be shown, that some search channels are unproductive for certain types of individuals (see, e.g., Holzer, 1988; Blau and Robins, 1990; Fernandez, Castilla, and Moore, 2000; Ioannides and Datcher Loury, 2004; Mouw, 2003). Relating the (un)successful search channels to future incidences of long-term unemployment might give some indications for potential policy interventions (at early stages of the unemployment spell). Clearly, this would require a multivariate analysis in order to control for other factors influencing job search and labor market success.

8. Long-Term Consequences of Unemployment
There is an interesting literature on the long-term consequences of unemployment (not necessarily long-term unemployment) for individuals being displaced in a recession. von Wachter, Song, and Manchester (2009) and Schmieder, von Wachter, and Bender (2009) analyze the long-term consequences of layoffs in the 1982 recession on earnings, income, and employment and compare the effects in Germany and the US. Their findings imply that separation from a stable job during a mass-layoff leads to persistent losses in annual earnings of 10-15% lasting at least 15 years in Germany and this matches previous findings for the US. This implies that independently of the institutional environment in the labour market job displacement in a recession leads to a substantial reduction in lifetime earnings for affected workers. If the current recession is anything alike previous ones, this can lead to dramatic consequences which have to be taken into account (e.g., in terms of pension plans, social welfare, poverty rates, etc.).

3 Possible Extensions and Relations to my own Work

3.1 Labour Market Dynamics
Understanding the flows between different labour market states is one of the key issues in modern labour market research. Using a cross-sectional framework is not sufficient since it only explains why people are in a given labour market state at some point in time. This neglects the underlying labour market dynamics and more specifically state dependence which describes the fact that being in one labour market state—e.g., unemployment or wage employment—in one period itself (causally) increases the probability of being in the same labour market state in the next period. Taking account for the possibility of state dependence has been shown to be an important factor in the analysis of labour market dynamics. This is especially true when considering flows to and from unemployment. The existence of state dependence in employment dynamics can be explained by several factors such as altered preferences, prices or constraints which have an influence on the probability of future employment outcomes. For example, unemployment may prevent human capital accumulation and lead to a loss of work experience or firms may use unemployment spells as a proxy for unobserved components of ability in their hiring decisions. In Caliendo and Uhendorff (2008) we use dynamic multinomial logit panel
data models with random effects to analyze the mobility between self-employment, wage employment and unemployment. We show that there is strong true state dependence in all three states. The results also indicate, that there is a high cross-mobility between unemployment and wage employment. We also show that the probability to be unemployed is significantly higher for previous unemployment compared to previous self-employment. Hence, this indicates that self-employment can be a promising way to end individual non-employment.

3.2 Active and Passive Labour Market Policies

The interplay between active and passive labour market policies is of crucial importance to avoid long-term unemployment and re-integrate unemployed individuals in the first labour market. The generosity of the unemployment insurance system (UI) plays a central role for the job search behavior of unemployed individuals. Standard search theory predicts that an increase in UI benefit generosity, either in terms of benefit duration or entitlement, has a negative impact on the job search activities of the unemployed increasing their unemployment duration. Despite the disincentive effect of UI on unemployment duration, UI benefit generosity may also increase job quality by allowing individuals to wait for better job offers. In Caliendo, Tatsiramos, and Uhlendorff (2009) we use a sharp discontinuity in the maximum duration of unemployment benefits in Germany, which increases from 12 months to 18 months at the age of 45, to identify the effect of extended benefit duration on unemployment duration and employment stability, as a measure of job match quality. We find evidence of a significant positive effect of extended benefit duration both on unemployment and employment duration.

Identifying which active labour market policies (ALMP) work for what type of individuals is the driving force for my research on the effects of different ALMP measures. In Caliendo, Hujer, and Thomsen (2008a,b) we analyze the effects of job-creation schemes on the participating individuals using conditional difference-in-differences methods (see, e.g., Caliendo and Kopeinig, 2008; Caliendo and Hujer, 2006, for methodological issues). The overall results are rather discouraging, since the employment effects are negative or insignificant for most of the analyzed groups. One notable exception are long-term unemployed individuals who benefit from participation. Hence, one policy implication is to address programs to this problem group more tightly. In a different set of papers I focus on start-up subsidies for unemployed individuals (Baumgartner and Caliendo, 2008; Caliendo, 2009; Caliendo and Kritikos, 2009). Turning unemployment into self-employment has become a major focus of German ALMP in recent years and is usually tied to the hope of a double dividend: ending the unemployment spell for the subsidized individual and additional future job-creation through the new businesses. Our long-term results in Caliendo and Künz (2009) show that programs aimed at turning the unemployed into entrepreneurs may be a promising active labour market policy, both in Germany and elsewhere.
3.3 Recent Trends in Labour Market Research

In recent years labour market research has been adopting elements from various other disciplines like psychology, sociology, or even medicine. The key insight is, that factors such as psychological personality traits, intergenerational links, expectations, motivations, or (non-)cognitive skills play an important role in determining individual outcomes. While this has been acknowledged already for a long time in other disciplines, economists just started quite recently to use these elements in their models and empirical applications (see, e.g., Heckman, Stixrud, and Urzua, 2006; Borghans, Duckworth, Heckman, and ter Weel, 2008, for recent overviews). Modeling the effects of such factors on labour market dynamics is important, because policy conclusions drawn from models without such components might be very misleading. Job search theory and empirical estimations need to account for that and this is a growing field of literature with immediate policy implications.

Let me give some examples from my own research to highlight this: In van den Berg, Berge mann, and Caliendo (2009) we use subjective responses of unemployed individuals about their participation probability in ALMP to assess the ex-ante effects of such programs. Labour market programs may affect unemployed individuals’ behavior even before they enroll. Such ex-ante effects are hard to identify without model assumptions. We develop a novel method that relates self-reported perceived treatment rates and job-search behavioural outcomes, like the reservation wage, to each other, among newly unemployed workers. Job search theory is used to derive theoretical predictions. To deal with effect heterogeneity and selectivity, the effects of interest are estimated by propensity score matching. We apply the method to the German ALMP system and find that the system generates a negative ex-ante effect on the reservation wage and a positive effect on search effort. In Caliendo, Cobb-Clark, and Uhlendorff (2009) we examine the effect of individual’s locus of control, i.e., the extent to which a person believes that his or her own actions determine future outcomes, on job search behavior. Whereas standard job search theory assumes that unemployed individuals have perfect information about the effect of their search effort on the job offer arrival rate, we present an alternative model. We assume instead that each individual has a subjective belief about the impact of his or her search effort on the rate at which job offers arrive. These beliefs depend on an individual’s locus of control. Consistent with our theoretical predictions, we find that individuals with an internal locus of control have higher reservation wages and search more intensively than individuals with an external locus of control. In Caliendo, Fossen, and Kritikos (2008, 2009) we show that personality traits—like risk attitudes—have an impact on economic outcomes. To be more specific, we show that risk attitudes have an impact not only on the decision to become an entrepreneur but also the survival and failure rates of entrepreneurs.
References


