Flexicurity: conceptual issues and effects on the OECD labour markets

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Introduction

Across the European continent, labour market institutions are still rigid, especially when compared to Anglo-Saxon countries like the United States or Canada. This poses a challenging problem for the near future, particularly in the context of recent demographic, social and economic developments. Increased competition from globalisation, and ever-accelerating developments in technology, information and communication, are factors that have drastically altered the environment in which firms operate. In order to stay competitive and innovative, companies, on one hand, need flexible labour markets so that they can quickly adapt their workforce in response to changing conditions. Workers are also affected. On the other hand, employees need new kinds of security to help them update their skills, remain in employment, or return to employment if they lose their job.

Further challenges, such as the unsustainability of national social protection systems, have recently initiated the discussion on labour market reform at both the national level and the European level. Societies are ageing rapidly, causing tensions between the economically active and inactive population to rise. In addition, average employment rates are still relatively low in most EU-countries, while long- term unemployment remains high.

It is evident that, in order to meet these challenges, European countries will have to rethink their labour market institutions, but the question is how reform should take place. One possibility would be to conduct labour market policy along Anglo-Saxon lines, which implies loosening employment protection and cut back spending on social security. This is frequently argued to be of vital importance in increasing employment and participation rates. However, measures to achieve these aims are vastly unpopular among the general public and therefore difficult to implement.

In reshaping their labour market policies, politicians are faced with the challenging task of deciding what is economically necessary on the one hand and socially viable on the other. More flexibility in labour markets is required to meet the economic objectives of competitiveness and

growth, but should not lead to unacceptable outcomes in the field of social security. A form of labour market policy to deal with this 'flexibility-security nexus', as Wilthagen has called it (Wilthagen & Tros 2004), is flexicurity. Ideally, flexicurity provides a 'best of both worlds', smoothening the functioning of the labour market, while still providing employees with ample employment security. The concept has sprung to attention through its success in Denmark, where a dynamic labour market model commonly referred to as the 'golden triangle' has contributed to impressive macro- economic results.

The Danish system is characterised by three main features, namely: a flexible labour market facilitated by low employment protection; a generous system of unemployment benefits; and a set of active labour market policies aimed at getting unemployed workers back into employment as soon as possible. Since 1994, the Danish economy has fared well, especially when compared to other European countries.

The Danish case shows that it is possible to introduce more flexibility in labour markets without sacrificing the attainments of the welfare state. This suggests that there may be a Scandinavian alternative to the more traditional school of thought that labour market reform in European countries ought to take place along Anglo-Saxon lines.

While flexicurity has been frequently discussed, thorough econometric research on its labour market effects is rather sparse. Most studies focus on its more theoretical aspects rather than its empirical ones: this has provided a great variety of ways to understand the term but lack of measurement studies.

The goal of this paper is to define flexibility indentifying suitable indicators for its measurement, and to find out how these components of flexicurity influence unemployment, participation and employment growth rates. We will present a model consisting of three exogenous variables that represent the underlying fundamentals of the Danish 'golden triangle' of flexicurity, namely: the degree of employment protection legislation (EPL); government expenditure on active labour market policies (ALMP); and government expenditure on unemployment benefits (UB).

However, before measuring something, one needs to be clear as to what one wants to measure; so what seemed to us as essentially a technical issue, turned out to involve a considerable amount of conceptual work. Thus, the first part of this paper will be about the conceptual discussion of how the notion of flexicurity is understood in the literature, but this represents just the starting point of our discussion about measurement.

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Chapter 1

Historical, Economical & Social background for flexicurity debate

1.1 Preface

In the last 25 the general employment insecurity has significantly increased in Europe. In particular this insecurity has been not only reflected in the increase of unemployment, but also in the exponential growth of the atypically employment, like part-time, fixed-term, self-employed and agency contracts.

In 1980 this kind of employment started to grow and its growth do not show any signs of stopping. In fact even nowadays the atypical employment represents a great concern since on one hand it increases flexibility, but on the other hand it is not only less secure but also provides less carrier prospects and training chances. Besides, it often disqualifies workers from social benefits, since the eligibility of atypically employed is substantially lower than that of permanently employed.

The growth of atypical employment can be explained by several factors. The main can be identified in:

- *Globalization*

Globalization is presented as a recent phenomenon having its roots in the 1980s, not surprising when atypical employment appeared.

The opening financial markets in 1980 was thought to improve living standards in industrialized countries and to solve the poverty problem in the third world. Investments in countries with low labour costs promised cheap goods for consumers and high returns for investors; at the same time, the target countries could have gained profit from modern technologies and job creation. That was the theoretical starting point for the current globalization.

But the project did not ended as it was thought. In fact even if top earners managed to improve their living standards, the same do not happened in

developing countries where not only the poverty problem was not solved, but inequalities even increases. The legal opportunity of making foreign investments allowed European employers to make pressure on their governments to relax the restrictive employment protection threatening to continue moving jobs abroad. To improve competitiveness of firms in the background of exporting industries to countries with cheap labour, European employers required the liberalization of national economies. As a result, a general flexibilization of employment relations was adopted and the employment protection legislation became more relaxed

- *Rapid technological changes*

Expanding information technologies are often implemented within relatively short-time projects which can be realized by small temporary teams with a limited longevity or even by a single individual. It's not difficult to understand what a great saving for a firm this can be.

These particularities and dynamics are transmitted to all branches using information technologies. Thus, the share of temporary employment in the total employment doubled or even tripled in France, Italy Netherlands and Spain during 1985-2000.

- *Long-term unemployment*

During the 1990s all OECD experienced an increase in long-term unemployment that has become a very serious problem. In1990 the unemployed for 6-12 months and for more than 12 months constituted respectively 44,6% and 30,9% of all unemployed. This situation, already critical, got worse in the years after since these percentages went on growing. For example in 1998 they attained 48,6% and 33,4%. This means that the average duration of unemployment together with the share of long-term in total unemployment has increased. The main consequence of this process is that workers having experienced a long-time unemployment are more likely to be offered shorter contracts than other workers.

- *Immigration*

As stated by OECD, "while admissions of new permanent foreign workers are currently very few in number, […] the temporary employment of foreigners appear to be becoming more wide spread. […] The temporary employment of foreign workers introduces flexibility into the labour market." Moreover, foreigners are overrepresented among long.-term unemployed whose chances to get a "normal" job are relatively low.

- *High welfare*

Finally, high earnings and accumulated welfare in some European countries enabled a fraction of population to turn to part-time jobs. For instance, the demand for part-time employment by full-time in Netherlands is twice as large. For women this ratio is even higher and surpasses 3:1.

The growth of atypical employment resulted in a new social situation which should be adequately reflected in public policy. Unfortunately it's not easy to implement a policy able to satisfy at the same time the employers' claims and the employees' needs.

The actual contradiction between the flexibilization pursued by employers and strict labour market regulation defended by trade unions makes topical the discussion on flexibilization and employment protection legislation as far as economical performance and unemployment are concerned.

In order to find a solution that could have ended this contrast, the advantages and disadvantages of labour market flexibility versus employment were investigated by numerous scholars. The studies at the end were of little help and since their conclusions can be summarized by "the link between labour market regulation and employment is hard to pin down" (Esping – Andersen, 2000). Here are even cases in which the same legislative changes caused different effects; for instance, the impact of almost equal deregulation measures on the use of fixed – terms contracts was sharply difference in Germany and Spain (Esping –

Andersen, 2000). At the same time, a good labour market performance under little regulation was inherent in the "Anglo-Saxon" model (applied in USA, Canada, UK and Australia). Moreover, the deregulation of labour market in the Netherlands, which had a different kind of economy, coincided with the "Dutch miracle"[1] of the 1990s.

All of these convinced some scholars and politicians of the usefulness of labour market deregulation. It was believed that employment flexibility improved competitiveness of firms encouraging production which in turn stimulated labour markets.

But the claims for a major flexibilization met a hard resistance, above all in those countries with old traditions of labour rights as France and Germany.

To handle the growing of flexibility of employment relations with lower job security and decreasing eligibility to social benefits, the notion of flexicurity has been introduced.

Its conception is ascribed to a member of the Dutch Scientific Council of Government Policy, Professor Hans Adriaansens, and to the Dutch Minister of Social Affairs, Ad Melkert. In 1995 Adriaansens suggested the compensation of the decreasing job security (due to fewer permanent jobs and easier dismissals) with the improvement employment opportunities and social security. In the same year Melkert presented a memorandum "*Flexibility and Security*", about the relaxation of employment protection legislation of permanent workers, provided that temporary employment protection status, without adopting the concept of flexicurity as such.

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[1] The Dutch miracle refers to the Netherlands' remarkable transformation of its social policy from 1984, when the crisis-ridden system swallowed up a staggering 21 percent of gross domestic product, to its dramatic turnaround in the mid-1990s.

1.2 The Danish Case

Although the concept of flexicurity was coined by two Dutch experts, the OECD identifies the born of the flexicurity model in Denmark; a country that now is characterized by a weak employment protection, highly developed social security (with a relatively generous unemployment insurance scheme) and easiness to find a job.

The very flexible labour market measured by the restrictiveness of employment protection legislation on the one side, and, on the other, the generous system of unemployment benefits and high level of spending on active labour market programmes describe the Danish flexicurity model in the form of *"the golden triangle"*.

The golden triangle
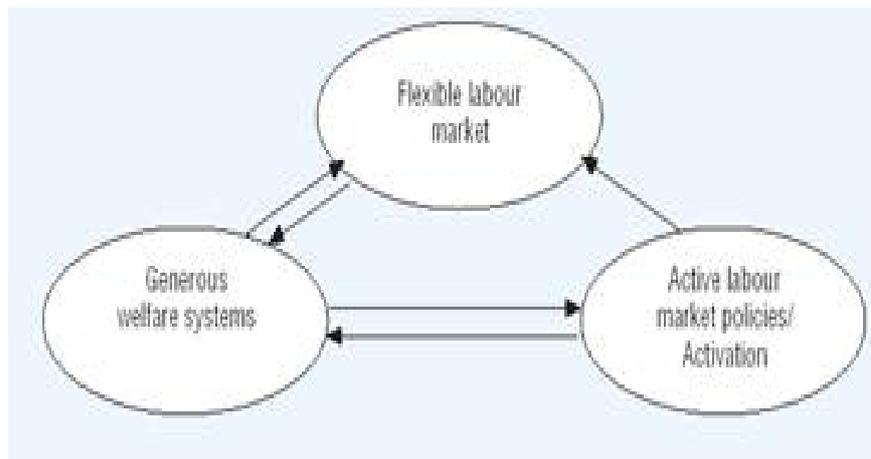
T.M. Andersen and M.Svaner

The Danish discussion and experience have brought interesting insights on how to strengthen labour market incentives under tight distributional constraints. Nowadays, Denmark has an extended welfare state with tightly knit social safety net and high level of public service provisions, all of which are tax financed. Labour market policies and institutions are an integral part of the welfare state. The Danish welfare model is based on ambitious egalitarian objectives, and the strengthening of the incentive structure by general reductions in various benefits included in the social safety net is not a possible policy avenue. Working poor is not a policy option either. At the same time, it is important to underline that

an extended tax financed welfare state presupposes a large fraction of the population being employed. Thus, for the model to be financially viable, the employment rate must be high. The reason is simple: when losing their jobs, most people have an entitlement to some income support, and, at the same time, their tax payments are lowered. There is therefore no surprise that Denmark, as other Scandinavian countries, have a high labour participation rate. To put it differently, the Danish welfare model is employment focussed. The critical and challenging issue of this kind of model is how to strike a balance between the social/distributional objectives and the need to maintain a high employment ratio. This balance was lost in the 1970s and 1980s, where Denmark was routinely listed as a crises country with problems for almost any macroeconomic indicator (including high and persistent unemployment) but the reform process since the mid-1990s has contributed to re-establish it. The main thrust of these was a shift from a passive focus of labour market policies to a more active focus on job search and employment. The policy tightened eligibility for unemployment benefits and their duration as well as introduced workfare[2] elements into unemployment insurance and social policies in general. The shift in policy and labour market performance is also to be seen in perspective of macroeconomic developments which contributed to an upturn in economic activity, and thereby also to the political support for changes

Even if the "flexicurity experiment" made in Denmark was possible only thanks to the particular social/economic characteristics of that country, it was recognized a "good-practise example" and inspired the international flexicurity debate. Although some scholars still consider flexicurity a specific Dutch/Danish phenomenon, the idea spread all over Europe in few years.

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[2] The workfare is an alternative to the classical welfare state. It consists in active policies aimed at avoiding the discouraging effects on the labour supply, typically produced by the classical welfare state.

1.3 Flexicurity in the EU sphere

In 2000, at the Lisbon summit, the EU already referred to this concept.
The European Council in Lisbon stated that "The Union has today set itself a new strategic goal for the next decade: to became the most competitive and dynamic knowledge-based economy in the world capable of sustainable economic growth with more and better jobs and greater social cohesion. Achieving this goal requires an overall strategy aimed at:

- preparing the transition to a knowledge-based economy and society by better policies for the information society and R&D, as well as by stepping up the process of structural reform for competitiveness and innovation and by completing the internal market;
- modernising the European social model, investing in people and combating social exclusion;
- sustaining the healthy economic outlook and favourable growth prospects by applying an appropriate macro-economic policy mix.

Four years later a high-level group led by Wim Kok published the so-called *Kok report* in which the progress of Lisbon strategy was considered bad and ill-coordinated.

The Commission responded to Kok report with a re-launch of the Lisbon strategy focusing their efforts on a strategy of jobs and growth. The re-launch solicited strong reactions from environmental and social NGOs (Non-Governmental Organizations) who found that the Commission was drifting away from the original commitment to sustainability and social cohesion.

It is therefore with a great interest that social NGOs are following the debate on flexicurity.

Flexicurity is a part of the European Employment Strategy, which is an important component in the Lisbon strategy.

Chapter 2

The flexicurity concept

The notion of flexicurity promotes the idea of compensation of labour market deregulation with advantages in employment and social security. To give an idea, flexicurity can be metaphorically characterized by analogy with the motto of Prague Spring (1968) "socialism with a human face":

> *"Flexicurity is a flexibilization (deregulation) of labour market with a human face, that is, compensated by some social advantages, in particular, for the groups affected".*

The main distinction captured by this simplified definition is that flexicurity differs from unconditional deregulation in introducing compensatory measures in social security and employment activation without caring of flexibilization. Therefore, "enhancing security" is not flexicurity's primary goal, instead its policy is imagined as an increase in five forms of flexibility previously mentioned, compensated by improvements in the four types of security.

In other words, flexicurity is rather a means to attain a compromise between employers, who seek for deregulation of labour market, and employees, who wish to protect their rights.

2.1 Definitions of flexicurity

Despite the growing diffusion of the concept both in scientific debate and in the policy agenda of EU, there is still no commonly agreed definition of flexicurity. Nowadays, in fact, different definitions of flexicurity are used in the labour market literature.

One of the most widely used definitions in the one suggested by Wilthagen ad Rogowski. They define flexicurity as:

"a policy strategy that attempts, synchronically and in a coordinated way, to enhance the flexibility of labour markets, the work organisation and labour relations on the one hand, and to enhance security – employment and social security – on the other, with the object to combine employment and income security with flexible labour markets, work organisation and labour relations".

Withagen and Tros acknowledge that this definition is "rather strict", but they argue that a strict definition is needed to make empirical research possible.

Unfortunately this definition creates some problems as far as the measurement of flexicurity is regarded. First of all, defining flexicurity as a "policy strategy" makes difficult to characterize it with a quantitative index and express it numerically. Second, according to the definition, flexicurity must be a "coordinated" strategy acting at the same time on flexibility and security. Thus all those policy strategies that increase both flexibility and security but in an uncoordinated way should not be considered as flexicurity strategies.

In order to make the measurement of flexicurity with quantitative indicators possible, Tangian suggested a more simplified definition for operational purposes:

"Flexicurity is the employment and social security of atypically employed, that is, other than permanent full-time".

The European Commission also relies on a less precise definition suggested again by Wilthagen and Rogowski:

"Flexicurity can be defined as an integrated strategy to enhance, at the same time, flexibility and security in the labour market".

The Commission also add that:

"Flexicurity is about striking the right balance between flexible job arrangements and secure transactions between jobs so that more and better jobs can be created. The idea is that flexibility and security should not be seen as opposites but as complementary ".

Another definition in the one suggested by Wilthagen and Thos who refer to flexicurity as a state of affairs in the labour market, which is often the outcome of an historic social-economical process. This brought them to understand flexibility as:

" …a degree of job, employment, income and combination security that facilitates the labour market careers and biographies of workers with a relatively weak position and allows for enduring and high quality labour market participation and social inclusion, while at the same time providing a degree of numerical (both internal and external), functional and wage flexibility that allows for labour markets' (and individual companies') timely and adequate adjustment to changing conditions in order to maintain and enhance competitiveness and productivity"
(Wilthagen and Thos 2004: 170).

To some extent, this mix of flexibility and security may seem like a paradox. High levels of labour market flexibility are often thought to be a disadvantage for employees, while a high level of job security is generally associated with a burden on a employer's ability to answer quickly to the change of market conditions. However, the key principle under flexicurity in that flexibility and security should not be seen as

opposites. Within a well implemented flexicurity strategy, flexibility and security can coexist peacefully leading to a situation in which both employers and employees are satisfied.

2.2 Flexicurity dimensions

As discussed above, the concept of flexicurity deals with the labour market flexibility and the socio-economic security. Unfortunately the multi-variability aspect of these concepts makes the flexicurity analysis extremely complicated and almost impossible to provide a precise and unique definition of the concept.

In fact, both flexibility and security cannot be defined in general terms, since they stand for a multivariate aggregates.

As far as flexibility is concerned, OECD has identified five different forms of flexibility which are:

- *External numerical flexibility*: "The employer's ability to adjust the number of employees to current needs". In other words, it its the ease of "hiring and firing" which manifests itself in the mobility of workers between employers (external job turnover).

- *Internal numerical flexibility*: "The employer's ability to modify the number and distribution of working hours with no change of the number of employees". It appears in shift-working, seasonal changes in the demand of labour, weekend/holiday working, over time and variable hours.

- *Functional flexibility*: "The employer's ability to move their employees from one task or department to another, or to change the content of their work".

- *Wage flexibility*: "The employer's ability to alter wages in response to changing labour market or competitive conditions".

- *Externalization flexibility*: "The employer's ability to order some works from external workers or firms without employment contracts but with commercial contracts".

While, from the point of view of security, Standing (1999) identifies seven types of security, but not all are relevant to flexicurity debate. Later on, in 2003, Wilthagen, Thos and Van Lieshout restrict Standing's list, focusing on four types of security (considered to be consistent in the flexicurity debate):

- *Job Security* (*employment security* by Standing (1999:52)): "the certainty of retaining a specific job with a specific employer". So it represents the protection of employees against dismissals and significant changes of working conditions.

- *Employability security* (*job security* by Standing (1999:52)): "The certainty of remaining at work". It means the availability of jobs for dismissed and unemployed, corresponding to their qualification and previous working conditions. In the labour economics and social literatures, the idea of employability security refers to a person's capability of gaining initial employment, maintaining employment and obtaining new employment if required.

- *Income* (*social*) *security*: "The income protection in the event that paid work ceases". More generally it can be considered as the protection of income through minimum wage machinery, wage indexation, comprehensive social security, including progressive taxation.

- *Combination security*: "The certainty of being able to combine professional activity with private responsibilities". It can be explained as a work-life balance, work-family balance, early flexible part-time retirement, flexible working hours and leave facilities.

Whiltagen and Thos were referring to these different forms of security and flexibility when they elaborated their view of flexicurity.

Unfortunately, their approach to flexicurity, can be theoretically well accepted, but it makes its empirical analysis almost impossible since this would imply to exactly define the relationships existing between all the forms of security and flexibility.

For this reason, other authors (i.e. Sperber and Tangian) or institutions (i.e. European Foundation for Improvement of Living and Working Conditions) have tried to provide a more simplified approach to flexicurity.

These studies aim at constructing flexicurity indexes in order to facilitate its study; among all the indicators proposed, three seem to be the most relevant:

- *the strictness of employment protection legislation* (EPL);
- *the summary generosity measure of unemployment benefits* (UB);
- *the active labour market policy* (ALMP).

Employment Protection Legislation

Employment protection legislation (EPL) refers to the set of norms and procedures to be followed in case of dismissals of redundant workers: it imposes legal restrictions against dismissals and compensations to the workers to be paid by the former employers in case of earlier termination of permanent employment contract. EPL is a multidimensional institution, but, from the standpoint of economic theory, it can be reduced to two components: a tax and a transfer. The *transfer component* in a monetary transfer from the employer to the employee (similar in nature to wage), while the *tax component* corresponds to a payment to a third party, external to the worker-employer relationship. Conceptually, the transfer component of EPL matches up the severance payments and the mandatory advance notice period, instead the tax component corresponds

to trial costs (the parcels fro the lawyers, etc) and all the other procedural costs. Thus, EPL represents a cost that must be paid by firms in order to adjust the level of the workforce. In other words, employers can avoid paying severance payments and procedural costs by deciding not to change employment levels in response to shocks. Lack of response to shocks could reduce profits of firms, but this loss could possibly be compensated by a decline in wages: if employers cannot adjust employment levels in response to shocks, they are forced to modify wages in order to avoid losses or, in alternative, they can decide to enjoy *flexibility at the margin*, meaning to hire and fire workers on a temporary basis without reducing the existing stock of permanent contracts. This choice is possible thanks to the asymmetric nature of many EPL reforms that can change regulations only for a subset of the eligible population. This unbundling of reforms, reducing EPL only al margin of hirings, seems to be a viable political economic strategy when there are strong political obstacles to reforms (Saint-Paul, 1997). As suggested by Boeri and Garibaldi, these two-tier reforms[3] involve important transitory job creation (*honeymoon*) effects and a decline in productivity. The intuition runs as follows: if employers are not allowed to adjust employment to cyclical conditions, they will choose to use temporary contracts in order to be free to hire and fire as they want. Thus in good times the firm will hire temporary workers up to the optimal employment level and dismisses these workers in bad times. This implies that, during upturns, there will be more employees than before the two-tier reforms, while during downturns employment will be as in a fully rigid environment, that is, higher than in a flexible one. It follows that these dual-track reforms temporarily increase average employment. These transitional honeymoon effects dim as the stock of permanent workers is gradually replaced with flexible contracts. Natural retirement diminishes gradually the stock of permanent workers, and hence the firms can construct a buffer stock of workers with flexible contracts

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[3] An institutional change is defined as a two-tier reform when it involves either a partial phasing-in or when its complete phasing-in requires more than 30 years. Two-tier reforms are typically related to the presence of strong political obstacles to reforms.

(Bentolina and Dolado, 1994), letting them adjust employment optimally to business conditions; when all employees are replaced, the economy is under a fully flexible regime.

For all the duration of the honeymoon, firms enjoy higher profits and lower labour productivity because total output is the same as in the rigid environment, but employment is higher. Profits increase all over the transition until they reach the same levels as in the flexible regime. The positive effects on employment and the negative effects on labour productivity of the two-tier regimes are transitory: they fade away when the honeymoon ends.

Unemployment benefits

Unemployment benefits protect individuals against uninsurable labour market risk. Unlike EPL who defend the jobholders' interests, UBs offer replacement income to workers experiencing unemployment condition after having lost their job.

Unemployment benefits are treated by the OECD indicators as one dimensional institution. However, there are at least three key dimensions that identify an unemployment benefit system:

- *eligibility*: the norms determining access to the benefit,
- *entitlement*: the rules concerning the duration of payment,
- *the replacement rate*.

Typically, for job losers with short unemployment durations, the income replacement system mimics an insurance scheme: benefits are proportional to past contributions, which are in turn proportional to wages. However, the presence of benefit floors and ceilings compresses considerably the distribution of unemployment benefits with respect to the distribution wages. Transfer to jobseekers at longer unemployment durations are generally independent of past contributions and are offered in combination with other cash transfer to individuals who are not working, notably social assistance of the last resort. Eligibility to this

second, unemployment assistance (UA) component of UBs can be indifferent of payments made during previous work experience. When the individual exhaust the maximum duration of the benefits, she can have access to social assistance, in which case the transfer is offered for unlimited duration, but subject to means-testing, that is, provided only to the unemployed individuals who have incomes and family assets lower than a given poverty threshold.

The main effect of UBs in a competitive labour market is the increase of the (static) reservation wage of individuals. The relationship existing between UBs and reservation wage is particularly significant because it influences directly the labour market in terms of unemployment levels, as we will state in the next chapter.

The effect of UBs on reservation wages becomes quite clear just analysing a simple model in which each individual has a utility function defined over consumption, c, and leisure, l, which are both assumed to be normal goods. The utility function is concave in c, implying that individuals are risk adverse: their welfare can be increased by giving them the opportunity to purchase some fair insurance scheme that reduces their uncertainty about income security to which they have access. This is indeed the insurance role attributed to UBs.

In order to keep things simple, we shall consider an environment in which there is no uncertainty as to potential income and labour/leisure levels.

The reservation wage is formally defined as the *marginal rate of substitution* between leisure and consumption at the kink of the budget constraint, or:

$$U_l(m, l_0)/ U_c(m, l_0) = w^r$$

where l_0 is the endowment of time, m is the individual's non-labour income and U_c represents the utility function of consumption, while U_l the utility function of leisure.

In general, the slope of the indifference curve at the kink will differ from the slope of the budget constraint, which is given by the market wage, w. Now, for any $w > w^r$, that is, any market wage exceeding the reservation wage, the individual will supply some positive hours of work, where $h > 0$ hours of work are supplied. If instead $w < w^r$, then the worker will not supply any positive hour of work because that worker can be better off devoting time entirely to leisure and consuming m.

It may be more realistic to consider a case where there is a constraint in the total number of hours to be worked, for example, that the individual deciding to supply labour is forced to work *hft* hours, corresponding to a full-time position. Now, the reservation wage will implicitly solve the condition:

$$U(m, l_0) = U(m + w^r_{hft}, l_0 - hft).$$

Suppose now that an unemployment benefit, b, is introduced. Non-labour income will now be $m+b$. Notice that the benefit is conditional on not working. Thus, in the presence of unemployment benefits, the reservation wage is implicitly given by

$$U(m+b, l_0) = U(m + w^r_{hft}, l_0 - hft).$$

Since utility is strictly increasing in both arguments, the reservation wage will be increasing with the level of unemployment benefits: the larger the b, the stronger the increase of w^r after the introduction of the UB system. This negative participation effect can be partly mitigated by allowing the individual to combine the unemployment benefit with work income, at least partly, making the benefit also conditional on employment at low wages.

Active Labour Market Policies

In the years, Active Labour Market Policies have been intended in many different ways. Currently ALMPs aim at improving the functioning of the labour market by enhancing labour market mobility and adjustment, facilitating the redeployment of workers. Such policies intend to overcome market failures arising from generous unemployment benefit and welfare benefit schemes.

To be more precise, four basic functions of ALMPs can be identified:

- to raise output and welfare by putting the unemployed to work or having them invest in human capital,
- maintain the size of the effective labour force by keeping up competition for available jobs,
- help reallocate labour between different submarkets,
- alleviate the moral hazard problem of unemployment insurance.

There are four types of ALMPs:

- *training*: it concerns training for unemployed adults, those at risk of losing their jobs, and employed ones.
- *subsidized employment:* it consists of targeted measures to promote or provide employment for the unemployment and other priority groups. Subsidized employment also concerns wage subsidiaries paid to private-sector firms in order to encourage the recruitment of targeted workers and the support of unemployed persons starting enterprises.
- *public employment services (*PESs*):* these services concern placement, counselling and vocational guidance, job search courses and administration of unemployment benefits.
- *Activation programs:* these measures provide incentives for unemployed to increase job finding either directly through benefit sanctions or through mandatory participation in training or subsidized employment.

Thus, ALMPs may eliminate mismatch in the labour market, promote more active search behaviour on the part of jobseekers and have a screening function because they substitute for regular work experience in reducing employer uncertainty about the employability of job applicants. Placements in labour market programs may provide a work test as an alternative to eligibility for unemployment benefits, since some of those who are not genuinely interested in work will prefer to lose registration rather than participating in a program. An adverse side effect of ALMPs is that workers are locked in to training and job creation programs: because of their participation, they reduce their search intensity.

ALMPs might affect the functioning of the labour market and the effects con be proved by using the well-known Beveridge curve, the empirical relationship between unemployment rates and vacancy rates.

The Beveridge curve
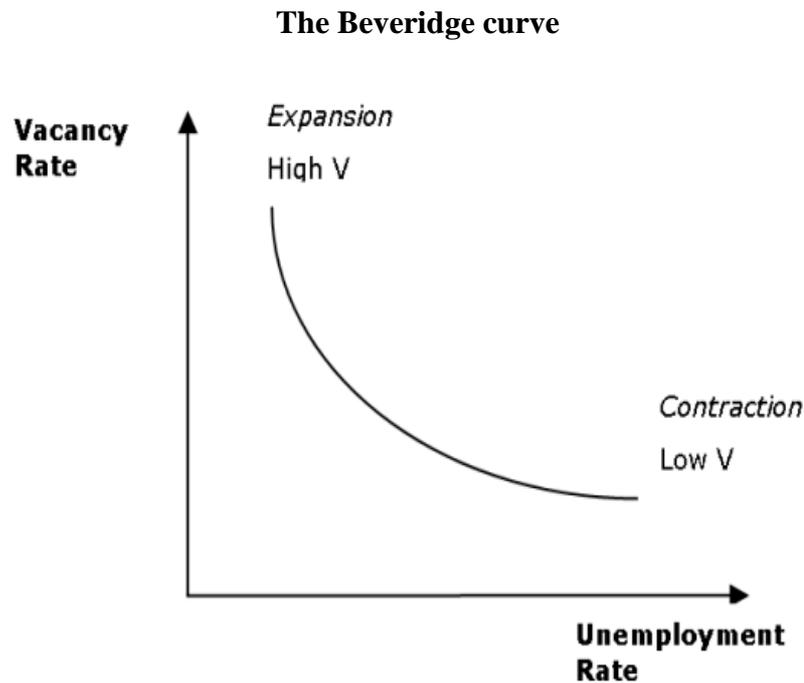
Theoretical foundations for Beveridge curve were provided: in these studies, labour market was described by a matching process (Pissarides 1979; Blanchard and Diamond 1994). Through this matching process

vacancies are filled and unemployed workers find jobs. The process may be described by a matching function:

$$m = A(U^{1-\alpha})V^{\alpha}$$

where m is the number of matches per time period, U(V) is the number of unemployed workers (vacancies) at the beginning of that time period, A represents the efficiency of the matching process and α is usually assumed to be equal to 0,5. In a dynamic labour market individuals change position frequently: not only unemployed find jobs, but also many employed lose their jobs because of the reduction of the workforce by firms.

The reallocation of labour across different firms causes a regular flow of workers into and out of unemployment. Often the flow of workers from employment to unemployment is assumed to be a constant fraction of total employment:

$$F_u = \delta^s L$$

where F_u is the inflow into unemployment, δ^s is the job separation rate, and L is in the number of employed workers. In a steady state labour market there are constant stocks of unemployed workers and vacancies; the inflow into unemployment Fu equals the outflow from unemployment m, and therefore:

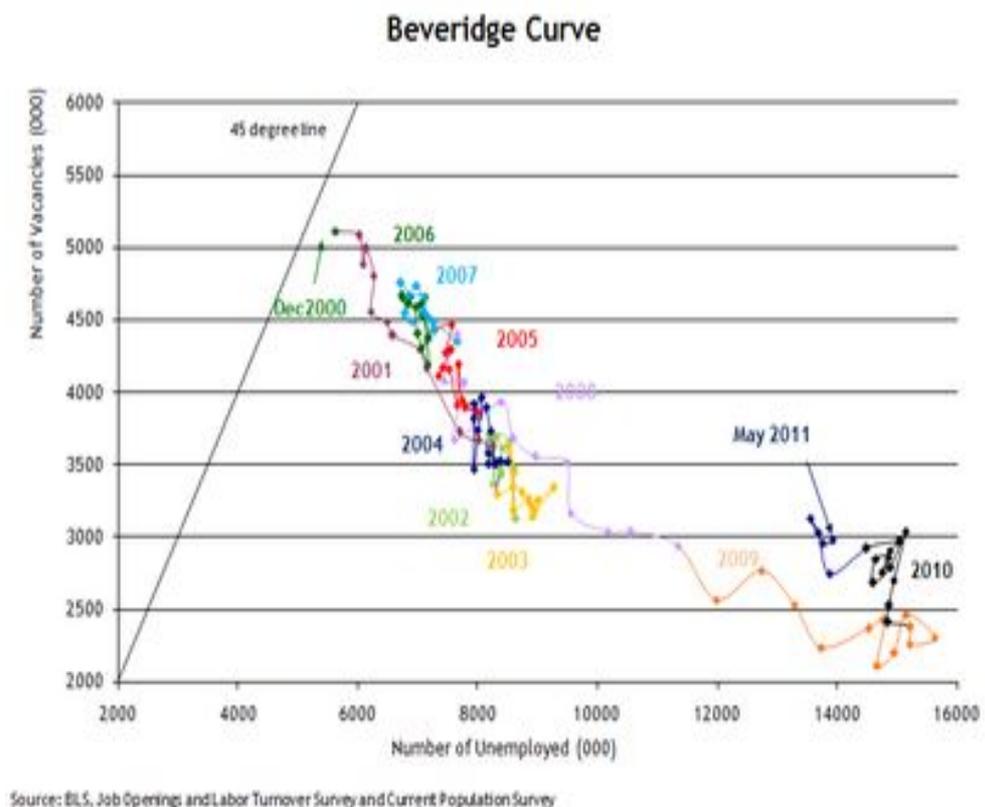$$(\delta^s)L = A(U^{1-\alpha})V^{\alpha},$$

or, dividing by AL:

$$\delta^s / A = (U/L)^{1-\alpha}(V/L)^{\alpha} \approx u^{1-\alpha}(v^{\alpha})$$

where u is the unemployment rate and v is the vacancy rate. If the matching process becomes more efficient, for example, through ALMPs,
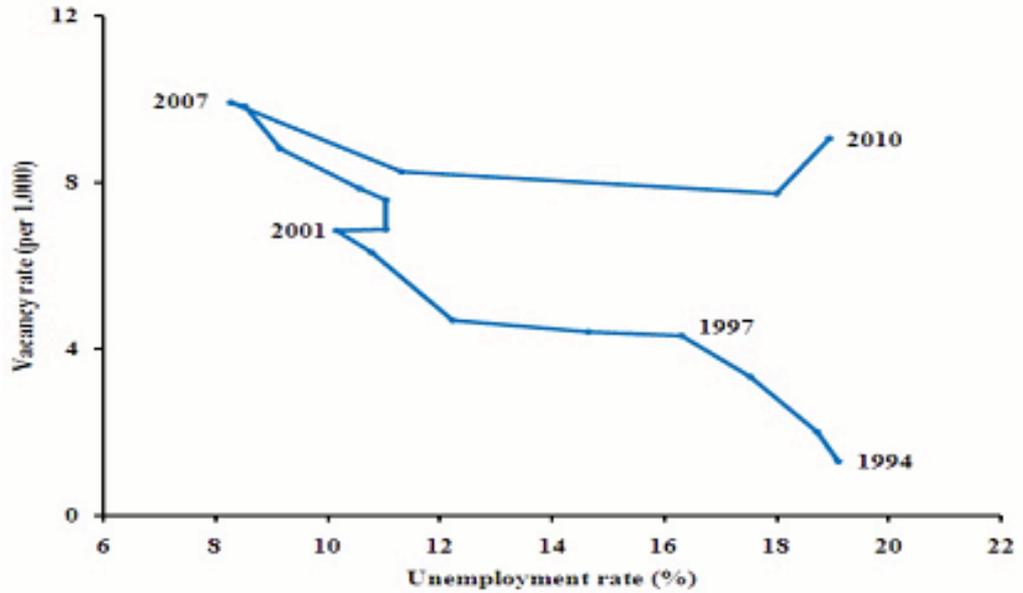
the parameter A increases and the Beveridge curve shifts inward. This implies a more efficient labour market since it would make easier to fulfil the vacant places with unemployed workers. In this sense the possibilities of being re-employed should increase thanks to the use of efficient ALMPs.

Unfortunately, the model previously described is just a simplification of the Beveridge curve. In fact if we analyze the "real" Beveridge curve of a nation it is immediately clear that drawing conclusions on the effectiveness of ALMPs on the basis of shifts in the Beveridge curves is almost impossible. This statement results particular instantaneous to comprehend just looking at the picture below. The graphs proposed represent the actual relationship between vacancy and unemployment rates analyzed in three of the major countries (US, Spain and Denmark) whose social/economical characteristics change consistently.

The Beveridge curve in US

Source: BLS, Job Openings and Labor Turnover Survey and Current Population Survey

The Beveridge curve in Spain

Source: http://voxeu.org/index.php
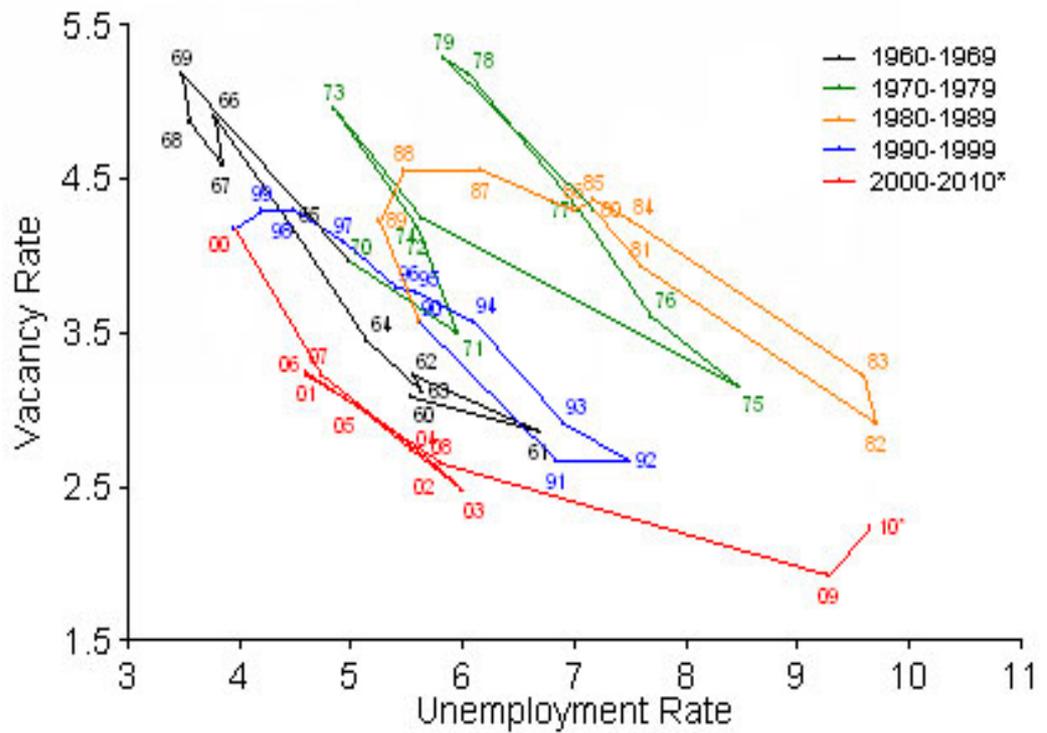
The Beveridge curve in Denmark

Source:http://pul.se/Victims-of-domestic-violence-need-immediate-prote-Valletta-Europe-Malta-World-News

As it is possible to understand by just looking at the pictures, the effectiveness of ALMPs is not obvious, besides its behaviour changes according to the State taken into consideration.

This unclear relationship is due to the complex nature of ALMPs themselves.

In fact ALMPs consist not only in direct effects, but also in indirect ones which must be taken into consideration (Calmforms, 1994).

There are four major effects:

- *Displacement effects* because jobs created by one program can replace other jobs.
- *Deadweight effects* because labour market programs subsidize hiring that would have occurred anyway in the absence of the program.
- *Substitution effects* because jobs created for a certain category of workers replace jobs for other categories as wage relativities change.
- *Fiscal substitution effects* because the programs must be financed on the behaviour of everyone in the society.

2.3 Measurement issues

When it comes to measurement of flexicurity, unfortunately, a number of complications arise. These are discussed in the paragraphs below.

The multidimensional chapter of flexicurity

As it has been clearly explained before, flexicurity is a multidimensional concept since it takes into consideration at least two dimensions: flexibility and security. This makes difficult to develop a flexicurity index that would, for example, rank countries depending on how "flexsecure" they are. Thus, there is not a unique indicator able to define the level of flexicurity within a country; it is necessary to combine the results of different indicators in order to have an answer to this question.

This necessity of dealing with and combining different factors makes the analysis of flexicurity very complex.

The measure of economic security

It may be complicated to find an appropriate measure of economic security, since it can be measured in at least three different ways:

- by looking at policies
- by looking at outcomes,
- by looking at subjective perceptions.

The advantage of focusing on *policies* is the relative facility in finding comparable indicators, the drawback is the fact that this measurement would miss the impact of functional equivalents that represent the base of the flexicurity debate: EPL, protection through collective agreements etc. Moreover, studies of these functional equivalents in provision of economic security have revealed that these can be found in various policy areas as competition and trade policy. Including various indicators in an already composite index does not seem a promising avenue, since it could make the index too complicated to analyze. Besides, there is no guarantee that every policy contributing to provision of economic security will be included.

The analysis of *outcomes* can represent a sort of poverty rate and it would be particularly appropriate since the risk of poverty is present in the list of background indicators relevant for flexicurity edited by the Commission (European Commission 2007c: 38). However, a poverty rate tells us little about how the poverty risk is distributed in a society. The fact that there are many poor in a society does not necessary involve a major exposition for people to such risk.

Third, one could focus on subjective perception of economic security, on the basis of survey data. This strategy would not face the problems identified when working with policy or outcomes data since data would be collected at individual level. However also this approach cannot be

considered free of complications. The problem here is that subjective perception may not reflect accurately actual economic risks or be impartial.

In sum, there is not a superior way to measure economic security, however in general the preferred one is that regarding outcomes.

Strictness of EPL

The most commonly used indicator to measure the labour market flexibility are EPL indexes. Among these, the one developed by the OECD (1999: 48-132, 2004: 61-125) is the most popular one. This indicator is available for a large number of countries (28 to be precise) over a reasonable period of time. However, this does not mean that there are no measurement problems involved in the indicator. Emmenegger (2007: 10-12) summarises the main criticisms that have been addressed to OECD index:

-   The importance of non statutory regulations such as a collective agreements, that sometimes play a bigger role than legal provisions;
-   The implementation of the legislation – or rule of law – can strongly differ among countries and also within countries;
-   The difference between legislation and current practise, with attention to the judges decisions;
-   The subjectivity of the weighting of the different elements of the index.

Anyway, despite all these problems, the OECD is, without any doubt, the most detailed indicator available nowadays.

Generosity of UB

Mapping all the various features of UBs into one-dimensional measure is not an easy task. The indicator thought to be the most suitable for this purpose was the net replacement rate, that is, the ratio of the unemployment benefit to previous earnings at different earnings levels, both measured after taxes.

However, the problems do not end with the identification of the right indicator to be used, in fact it turns out that it is difficult to make cross-country comparisons of replacement rates because these vary considerably across earning levels and at different unemployment durations. So another complication is represented by the decision of what replacement rate should be taken as the reference in international comparisons of UB generosity. The OECD tabulates a summary measure of benefit generosity, which is defined as the average of the replacement rates in the first four years of unemployment for an average production worker.

A serious problem with the OECD summary measure is that it neglects eligibility and entitlement conditions. Because of strict eligibility conditions and shirt entitlement relative to the typical duration of employment spells, the coverage of unemployment benefits (the fraction of unemployed workers receiving the benefits) can sometimes be very low. Unfortunately, it is difficult to obtain cross-country-comparable measures of coverage.

Gender, immigrant and outsider status

In the search for indicators suitable to measure flexicurity at macro level, it is important to take into account the various social divisions present in every country.

In fact, within a country variations in flexicurity analysis may take place because of a number of social cleavages such gender, sectoral or insider/outsider ones.

This scenario is possible since economic security can be provided in many ways and some citizens would benefit more than other depending on the social group they belong to.

The concentration of particular groups in different sectors may thus contribute to a sort of inequality. For instance, in some countries women and immigrants tend to be segregated in sectors enjoying less social and employment protection.

This observation is particularly relevant in the context of the insider/outsider debate, especially in Southern Europe countries where high levels of employment protection are experienced by core workers (insiders) while the so called "atypical employees" are subject to extremely low protection.

Thus, any measurement of flexicurity should take these social divisions into consideration.

Two strategies seem to be available. Either the flexicurity (in particular the security) measurements are weighted by the proportion of the relevant population that is concerned by a given arrangement, or different indexes can be calculated for different groups in each society. The firs approach has the advantage of keeping the observation at the macro-level, but loses information concerning who is covered by which arrangement. The second, on one hand, let us to keep this kind of information, but, on the other hand, makes us to move to a sub-national level of observation.

The use of different channels to provide security

Economic security can be provided by a series of different channels in different countries and at different points in time. This represents a quite significant problem in relation to policy-based measurement of security. An additional complication arises from the fact that policies promoting economic security can take a direct or indirect route: the direct route guarantees either employments or replacements income, while the indirect one promotes the chances to succeed in the labour market for instance through education or training.

Whether indirect policies should or should not be included in flexicurity measurements is still an unsolved issue. It perhaps is an argument in favour of the other economic security measurements since measurements based on outcomes and subjective perceptions should not be affected by this problem.

The gap between formal rules and their actual implementation

Comparative studies have highlighted that the same formal rules can be applied and interpreted differently between countries. This is clearly represented by EPL, where the enforcement of legal rules by the administration or the courts may vary across countries. This is why some authors prefer survey based on measurements of EPL strictness asking directly multinational employers about the difficulty of terminating an employment relationship in different countries.

An alternative can be to look at indicators of the actual implementation: i.e. the frequency of dismissals that are rejected by the counts.

The OECD collects data on the proportion of dismissals that are challenged in the courts and the cases won by workers. This information, however, is not available in all countries, just in few ones.

Feedback effects from security to flexibility and vice-versa

The whole conceptual debate on flexicurity assumes that flexibility and security are two unrelated dimensions of the concept. However, there are certainly feedbacks effects. For instance, a long lasting unemployment or social assistance benefit would be a major source of economic security but it would reduce wage flexibility by raising the "reservation wage"[4]. Higher reservation wages in some EU countries relative to US can explain the slower job creation in the low-skill service sector in that continent.

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[4] The wage below which people are not prepared to accept a job.

Chapter 3

Flexicurity and labour market outcome

3.1 Theoretical considerations and previous empirical evidence

As we suggested in the previous chapter, both EPL, UBs and ALMPs influence consistently, it order, the level of the number flexibility in the market labour, the income social security and the employability.

These factors, in turn, contribute to the changes in the unemployment level and duration.

In this part, we provide an explanation on how unemployment is subject to the changes induced by the factors previously discussed.

EPL and Unemployment level

Since the analysis of EPL effects on unemployment, welfare of workers and profits is quite complex and several authors have turned to multivariate analysis in the attempt of finding clear conclusions, we prefer to provide a simple static framework describing the adjustment mechanism involved under various assumptions about wage determination and the nature of EPL. We will start by presenting the study of Edward Lazear (1990), which implies three basic assumptions, and then we will continue our analysis by removing, one by one, these assumptions and seeing how the model changes.

According to Lazear, EPL has no effects on employment, welfare of workers and profits under these conditions:

- Workers are risk-neutral[5].
- Wages are flexible.

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[5] A risk neutral worker is interested only in the discounted value of the job, not in the time profile of the wage.

- EPL consists only of the transfer component; the tax component is zero.

Under these circumstances, neutrality occurs because EPL affects only the intertemporal structure of wages, leaving the net discounted value of a job for a worker and the worker's employer unchanged. The core of this result is that the presence of severance payment is taken into account in the wage contract: to put it in another way, employers initially pay a lower wage, forcing their employees to buy from them a sort of insurance that will give them the right to receive a deferred compensation (the severance payment) at the time of separation.

Suppose a two-period contract offering w in both periods. Without EPL the employees would receive: $w + w/1+i$. Now introduce EPL as a severance scheme, paying TR to the worker at the termination of the two-period contract. In order to keep labour costs unchanged with respect to the situation without EPL, the employer would propose to the employee a contract offering a lower wage in the firs period, $(w - B)$, where B s the bond entitling the worker to TR in the second period. For the worker there is no loss as long as:

$$w - B + (w + TR)/1+I = w + w/1+i$$

Meaning $B = TR/1+i$, that is the worker in lending to the firm the transfer that will be delivered at the end of the contract, as depicted in the figure below

A Bonding Scheme Undoing The severance Payment
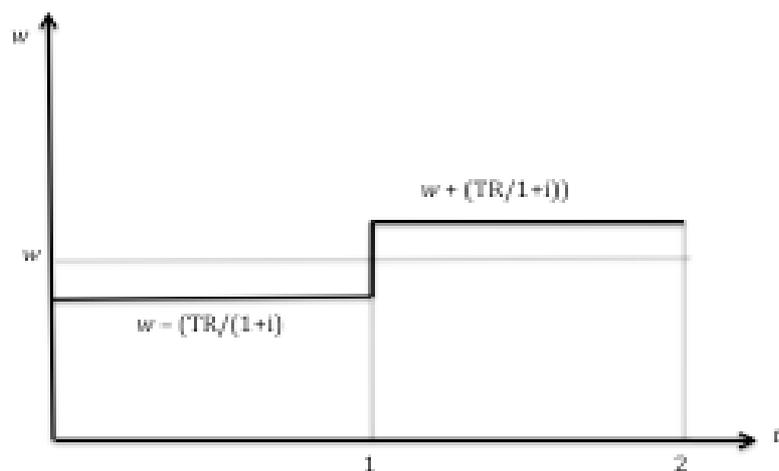
So, the key to the neutrality result is that worker receives the same payment in discounted value terms from offering labour with or without EPL.

It is sufficient to relax any of the previous assumptions to have some effects on EPL on labour allocation.

If workers were risk-adverse, they will suffer a welfare loss from expecting fluctuations in their earnings even if the net discounted value of job is unchanged with respect to the situation without EPL. So, workers may then ask for higher wages in order to be compensated for the future fluctuations in earnings associated with the bonding arrangement.

Suppose now that wages are rigid and therefore do not adjust after introduction of EPL.

Studies have proved that EPL with fixed wages has no effect on employment and unemployment (since the optimal employment level would be a weighted average of the level of employment that, without EPL, would prevail during the expansions and the regressions, respectively, where weights are given by the probabilities of the two events), lowers the volatility of employment over the business cycle and reduces profits. The third conclusion came out from the fact that the employment level chosen without EPL is the only level that maximizes profits in every period. Consequently, in each period profits are higher without EPL making the firm more efficient.

Finally, we remove the third assumptions taking into consideration EPL as a tax. The EPL tax is a particular type of tax on the firm since it cannot be paid by the employer if he does not reduce employment levels over time. This implies that the presence of the EPL tax is taken into account by the employer also in case of issuing a vacancy and hiring an employee because this carries with it a higher risk of having to pay the tax in the future. In brief, the EPL tax shows its effects by acting mainly on labour market flows: an EPL tax reduces job creation because employers are more reluctant to open a vacancy, the net discounted value of job is lower with EPL than without EPL. At the same time, job destruction is also

lower in the presence of EPL because it is more costly fro firms to lay off workers. The effects of EPL on employment and unemployment are there difficult to be estimated. They can increase or decrease according to the relative strength of the effects on job creation and job destruction margins. An unambiguous prediction, however, is that labour market flows decline with employment protection: a world with an EPL tax is one with less job creation, job destruction and unemployment inflows, as well as unemployment outflows, and hence longer unemployment duration (Bentolila and Bertola, 1990). From the point of view of wages, which increase with the bargaining power of the workers, EPL has two effects on their setting. On the one hand, it increases the bargaining power of the insiders (those with a job) who are more protected from becoming jobseekers, or outsiders. But, on the other hand, under strict EPL the possibility of being reemployed decreases, reducing wages under EPL tax regime. Because of these two offsetting effects, the relationship between EPL and wages is likely to be hump shaped: for low values of EPL, wages would increase as a result of the increase bargaining power of insiders, but for high level of EPL wages may decline because off the welfare loss associated with unemployment becomes very large.

What is certain is that, even when EPL does not increase wages, insiders are better off with the EPL tax because the risk of job loss lowers. With regard to income distribution, EPL involves lower profits for firms and lower welfare for outsiders who experience longer unemployment duration.

● **In brief**, theory predicts that EPL lowers labour market turnover (both hiring and lay off) on the one hand, but increases the length of unemployment spells on the other, with ambiguous net effects on aggregate employment and unemployment rates.

As we have already stated, according to standard standard job search theory, in a competitive labour market the reservation wage increases with the level of UBs. With higher reservation wages, unemployed individuals will spend more time searching for a job. Or, put differently, when benefits are high, workers will be less eager to accept a job offer. A rise in UBs therefore decreases the outflow rate from unemployment, increases unemployment duration and leads to a higher unemployment rate. This theoretical assumption is relatively straightforward and although the effect might be small, it is also supported by the empirical literature. For example, Solon (1979) has studied the labour supply effects of unemployment insurance by comparing empirical data on two groups of unemployed New Yorkers. He discovered that the availability of extended benefits provides a work disincentive for unemployed workers. Moreover, Moffitt and Nicholson (1982) find that an increase in the net replacement ratio results in an increase in terms of weeks unemployed.

Until now, we have assumed a competitive labour market with no imperfections, such as frictions in the job creation process, wage bargaining or imperfect information. If we move to an imperfect labour market subject to these kind of defects, the UBs will affect labour market outcomes via three main channels:

- *The Job Search Effect*[6]
They increase the reservation wage of UB recipients because they make workers more choosy when deciding upon available job offers, reducing their search intensity and hence increasing the duration of their unemployment spells. This happens because, in this framework, the opportunity cost of having a job increases too. As a result of the decline in search intensity, the job-finding probability declines as well, increasing the duration of unemployment.

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[6] pioneered by Lippman and McCall, 1979

These negative effects of UBs on job search can be reduced by offering benefits only for a limited period of time. This implies that the negative effects on job search intensity decreases together with the length of the spell of joblessness, mitigating the effects of UBS on unemployment duration.

- *The Wage Effect*

UBs improve the fallback option of workers, putting higher floor in wage setting and increasing claims at the bargaining table, or in any event the wages required to deter shirking.

Because there are costs in job search, even if product markets are competitive, filled vacancies generate some positive rent to be split between the employer and the employee involved. In particular, wages will be increasing with the fallback option of workers and so with the unemployment income and the job-finding probability per any given level of search intensity.

Thus, in addiction to reducing search intensity, UBs increase the equilibrium market wage. This effect will be larger the stronger the effect of UBs on the fallback option of workers, that is, the value of unemployment. This value increases with the generosity of UBs because job-seekers get a higher income per any given level of search effort. However, more generous UBs reduce the vacancy rate since it becomes more difficult to fill vacancies when people search with less intensity. The increase in wage itself reduces the job-finding probability per any given level of search intensity.

- *The Entitlement Effect*

UBs induce more people to participate in the labour market insofar as they increase the value of employment and unemployment over the value of inactivity, at least for those who do not receive any benefits.

● **In brief**, the availability to UBs for a relatively long time can have adverse effects on labour market performance. In particular they may rise

unemployment by reducing the job-search intensity of the unemployed and their willingness to accept job offers or by lowering the economic cost of unemployment, they may put upward pressure on workers' wage claims and ultimately reduce vacancies and increase separations.

ALMPs and Unemployment

As we have discusses previously, ALMPs would, theoretically, increase the possibilities of finding a job, reducing so the unemployment levels.
This effect has been deeply studied by two main scholars: Boone and Van Ours.
In this connection, Boone and Van Ours (2004) present a theoretical model in which they distinguish three types of ALMPs:

- training of unemployed workers,
- subsidized employment,
- public employment services.

They model training as a subsidy to training costs of unemployed workers. The idea is that placement workers help unemployed workers find the most suitable courses for them so that they do not waste time and effort enrolling in less effective courses. Furthermore, the government sometimes creates courses that are directly relevant to targeted groups of the unemployed. The effect of employment services is modelled as a subsidy to search costs of workers. Here the placement workers help filter all vacancy information so that only the vacancies most relevant for an unemployed worker come up. This reduces the search cost for the unemployed. Finally, subsidized employment is modelled as a subsidy to the value of the match of low-productivity jobs.
In the model of Boone and Van Ours there are two channels through which ALMPs can potentially reduce unemployment. First, the job-finding rate may be increased. Second, through training the unemployed can get better jobs (with higher wages and lower job destruction rates). If ALMPs cause more unemployed workers to end up in high-skilled jobs,

this reduces unemployment by decreasing flow from employment to unemployment. It turns out that the effects of ALMPs on the job-finding rate are theoretically ambiguous. However, the mechanism via the quality of the job and the flow from employment to unemployment discriminates between the different ALMPs. Boone and Van Ours (2004) show that training may do very well in reducing unemployment, while subsidized jobs and public employment services may not be as effective in reducing unemployment. They also show that there may be an interaction effect of unemployment benefits and training: training is more effective if unemployment benefits are more generous.

● **In brief**, properly designed ALMPs can reduce unemployment by improving the efficiency of the job matching process and by enhancing the work experience and skills of the unemployed.

3.2 Flexicurity across countries

In this part we are going to observe how the various countries are placed in terms of flexicurity. This observation can be achieved by plotting in a Cartesian plane the countries according to their level of security and flexibility.

The level of security (in income) is represented by the duration (calculated in years) of UBs, while the flexibility index is given by the measurement of EPL, since a greater value of this index means a lower flexibility for the firms.

Our period of observation will be from 1982 to 2003.
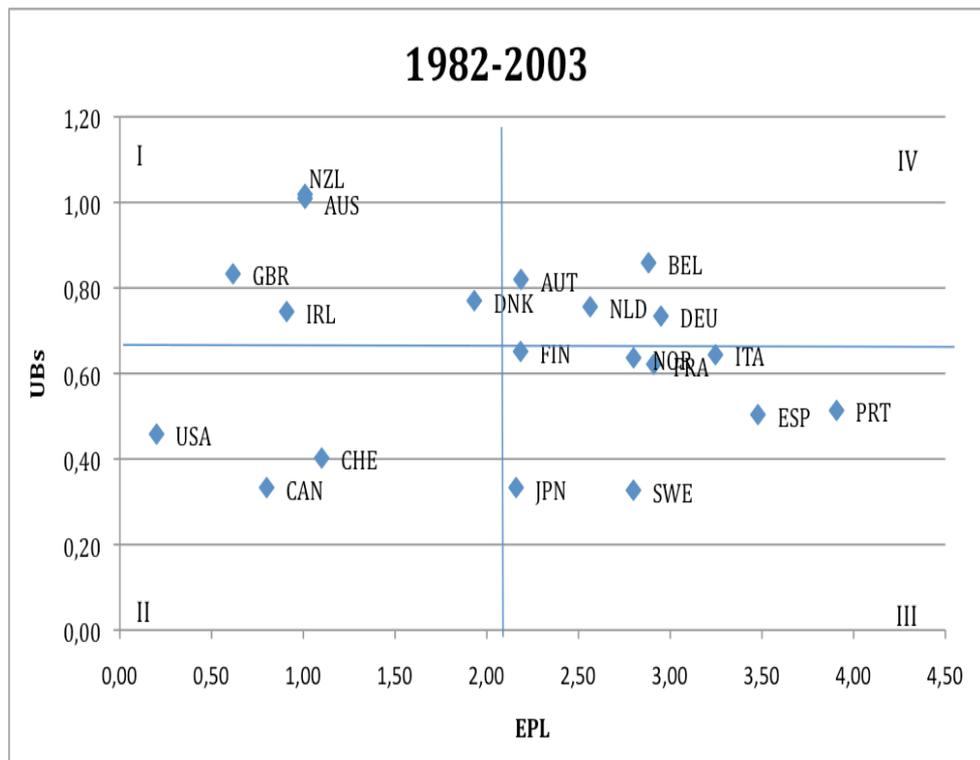
● N.B. the blue lines represent the mean values of UB duration and EPL indeces.

The countries placed in the I quadrant are those with the higher security of income associated with the higher flexibility. Thus, they are those to have combined better these two factors, while the States who find them selves in the III quadrant are characterized by either low security or low flexibility and, because of that, they shuold perfom worse in the labour market.

According to this analysis we are interested in noticing how countries have moved through this graph in time.

So we have divided the our time line in two periods made of 10 years each (1982-1992\ 1993-2003).

In order to make the analysis of the two graphs more immediate, we have decided to put them together, one under the other.

Both pictures[7] are provided in the next page.

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[7] All the pictures and tables present in this chapter are not taken from any source, they were made by using the programmes "Microsoft Word" and "Microsoft Exel"

1982-1992

1993-2003

43
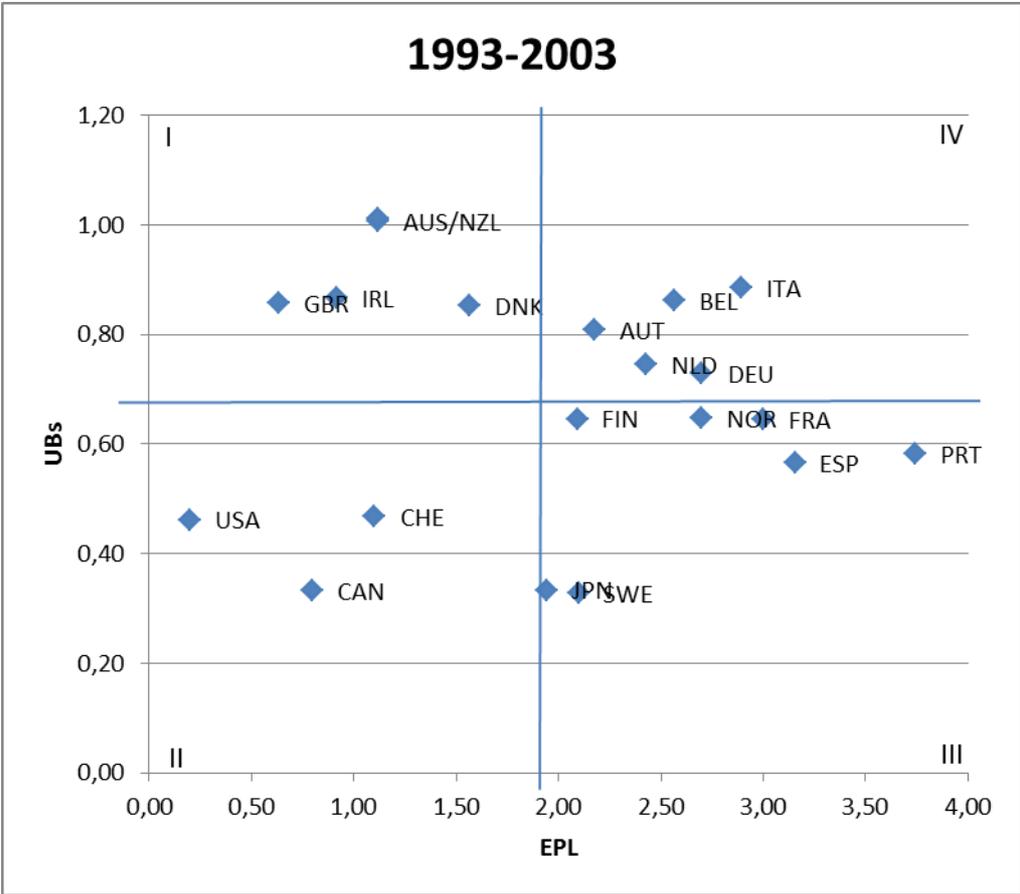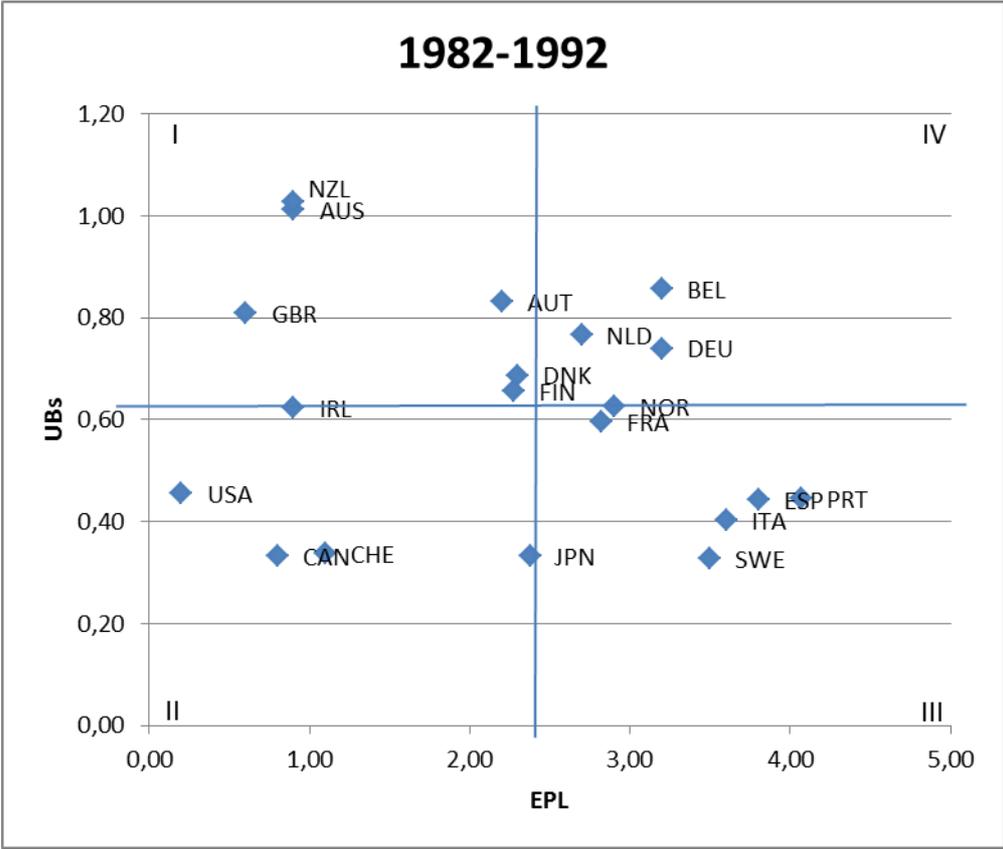
As we can see from the graphs many countries have moved from one quadrant to another. We can take as an example the Italian case that has increased its security policies, moving from the III quadrant to the IV one. As Italy, also Ireland has modified its previous situation increasing markedly its security level and it has moved from the II quadrant to the I one.

An interesting case may be represented by Finland who has decrease both its security and flexibility levels. These changes are not as big as those made in Italy and Ireland, but they still have made the country move from the I quadrant to the III.

There are also countries which have not made the shift from a quadrant to another, but the adjustments on their labour market policy are clear. An example is embodied by the Sweden which has remained in the III quadrant even if it has reduced its flexibility sensitively. Something similar has happened in Spain, which has not changed quadrant but the increase of its duration of UBs can be seen instantaneously.
Also Denmark has not changed quadrant, but it has moved inside it increasing security and flexibility. In fact we should not forget that in this country, since 1993 the first rules linked to the concept of flexicurity has begun to be applied. Thus this shift is the result of the "flexicurity inspired" policy.

Finally there are those countries who seem not to have changed their policies at all, or at least very lightly. Some examples are Great Britain, USA and Canada.

3.3 Flexicurity in EU countries looking at OECD data

According to what has been stated before, we are going to study the OECD data of some European countries in order to observe if the above results are consistent with our empirical analysis.

Through the use of the program "STATA" we make relationships between our variables of interest and see which relation emerges.

First of all we run a simple regression:

$$Unemployment = \beta_0 + \beta_1 epl + \beta_2 unden + \beta_3\ ubendur1 + \beta_4 rr1 + \beta_5 almpu + \varepsilon_i$$

Where: - *Unemployment* is the general term that contains the two dependent variables on which we run our regressions (unemployment rate=*urt1564* and unemployment duration=*dur_unemployment*); - *epl* stands for the measure of EPL and *undens* for union density, together they represent the flexibility; - *ubendur1* is the UBs duration and with the initial UB replacement rate (*rr1*) represents the measure of security; finally – *almpu* is the ratio of ALMP spending per unemployed over GDP per capita which gives us an idea of re-employability and it gives us an idea of re-employability (security of being re-employed).

In order to avoid the error coming from the assumption that these variables do not change across countries, we will use Dummy variables[8] to distinguish between the different countries. The notation "Crtl. Dummies" means that the regression was run by using the expedient of Dummy variables (in order to eliminate the error from the regression).

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[8] A dummy variable is a numerical variable – it can take values 0/1 – used on regression analysis to represent subgroups of the sample.

Explanatory Variables	Dependent Variable urt1564*			Dependent variable dur_unemployment**		
	Coef.	Std.Error	P-Value	Coef.	Std. Error	P- Value
epl	0,724	0,363	0,047	1,404	1,377	0,309
undens	0,071	0,020	0,001	0,022	0,068	0,741
ubendur1	-0,455	0,913	0,618	-5,079	2,793	0,070
rr1	0,060	0,016	0,000	0,059	0,053	0,268
almpu	-0,081	0,006	0,000	-0,224	0,040	0,000
_cons	3,184	1,663	0,057	37,628	5,932	0,000
Ctrl.Dummies	YES					

*Number of obs =338
**Number of obs=293

These results, on one hand, seem to be consistent with our previous analysis; for example they show the predicted negative relationship between ALMPs and unemployment; on the other hand, however, there are some unexpected outcomes. The variable of UBs duration (ubendur1) does not behave as we have thought: in fact, we should have expected it to be in a positive relation with both unemployment rate and duration, since a longer duration of UBs should deter unemployed to accept jobs drawing them to future more satisfying proposals since their income will be guaranteed for a longer period.

According to our data, instead, the UBs'duration presents a positive coefficient (significant at 10%) just in the case of unemployment duration. On the contrary, the UBs duration is negatively linked with unemployment rate but this result cannot be taken into consideration since it is not significant as we can notice by examining its p-value.

If we examine the regression run on unemployment duration we can see that the results are substantially equal to those obtained in the previous regression. So its analysis does not stray from that on unemployment rate.

If we want to be more precise in our study, we can run other regressions changing our explanatory variables: for example we can specify either EPL for temporary (eplt) or permanent workers (eplr) or the various

component on ALMPs spending: training (almptrain), youth measures (almpyouth), subsidized employment (almpemp1), PES (almppes).

Explanatory Variables	Dependent Variable urt1564*			Dependent variable dur_unemployment**		
	Coef.	Std.Error	P-Value	Coef.	Std. Error	P- Value
eplt	0,257	0,208	0,217	1,967	0,869	0,024
undens	0,058	0,021	0,006	-0,128	0,078	0,102
ubendur1	-0,424	1,333	0,751	-5,630	4,265	0,188
rr1	0,064	0,024	0,008	0,108	0,082	0,186
almptrain	-0,060	0,021	0,004	-0,045	0,109	0,678
almpyouth	-0,108	0,065	0,098	-0,929	0,227	0,000
almpemp1	-0,148	0,024	0,000	0,008	0,103	0,931
almppes	-0,295	0,038	0,000	-0,831	0,177	0,000
_cons	4,814	1,663	0,021	40,709	7,054	0,000
Ctrl.Dummies	YES					

*Number of obs=330
**Number of obs=285

Explanatory Variables	Dependent Variable urt1564*			Dependent variable dur_unemployment**		
	Coef.	Std.Error	P-Value	Coef.	Std. Error	P- Value
eplr	0,324	0,575	0,574	2,140	1,883	0,257
undens	0,065	0,021	0,002	-0,082	0,077	0,258
ubendur1	0,596	1,344	0,658	-4,811	4,322	0,267
rr1	0,059	0,024	0,015	0,039	0,077	0,613
almptrain	-0,059	0,021	0,005	-0,141	0,010	0,159
almpyouth	-0,073	0,062	0,246	-0,743	0,227	0,001
almpemp1	-0,152	0,024	0,000	0,026	0,103	0,801
almppes	-0,292	0,038	0,000	-0,846	0,179	0,000
_cons	4,472	2,467	0,071	41,535	7,929	0,000
Ctrl.Dummies	YES					

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**Number of obs=285

Here our analysis becomes a little more complex, in fact we have to take into account many other factors, and this made our results less significant since the p-values have increased significantly. However, in general, we can state that, once again, the behaviours of ALMPs' variables are the most predictable, in fact the majority of them show again a negative sign

and are still significant. The same cannot be addressed to the variable "ubendur1" since its effects cannot be captured as we can see from the changes in sign of its coefficient. Moreover in none of these last regressions its outcomes can be considered statistically significant.

● **In brief**, we would state with certainty the negatively relationship between ALMPs and unemployment both rate and duration. It's not clear instead the relationship between unemployment and security indices that seem to have a significant and negative impact on the duration of unemployment rather than on its rate.

Conclusion

The study of the concept of flexicurity and its components exposed in this paper, starting from the theoretical definition to the empirical analysis, has allowed us to state that flexicurity cannot be considered merely a political instrument. The idea that labour market flexibility, which is good for job creation, can be combined with economic security, good for people's well being, has relevance to both policy and research.

In this paper we have highlighted several problems and difficulties involved in providing a measurement of a complex concept such as flexicurity. Some of these problems were related to the lack of clarity surrounding the concept itself. We dealt with this the first type of problem by pragmatically deciding to focus on the narrower definition. A second series of problems proved more intractable: the identification of measurement indicators able to capture both the multi-dimensional aspect of flexicurity and its influence on the labour market performance.

According to Sperber and Tangian's literature, we have identify the main flexicurity indices in three parameters: EPL (employment protection legislation), UBs (unemployment benefits) and ALMPs (active labour market policies).

These indicators seem to be the most suitable for measuring flexicurity, but there are still subject to many complications, highlighted in the "Measurement issues" chapter.

Probably it is because of these unresolved problems that the results of our empirical study have been neither completely satisfying, nor always significant. In fact we can only state with certainty the negative effect of ALMPs on unemployment (both rate and duration), but the effects provoked by the other variables are to complex to be evaluated empirically.

Anyway, despite of all these inconveniences, we have conducted an analysis that makes us understand not only what flexicurity stands for, but also what does mean to change one of its components and how these

changes may be interpreted and reflected in the labour market performance of a country.

In the end, flexicurity is still a very complex and ambiguous argument and we are certain that in the future the European debate on its policy will continue, but, its importance and potential benefits are perfectly understandable also nowadays. In fact, even if its measurement issues are not completely resolved, the application of the flexicurity concept has already given a positive outcome in the countries that, for first, have applied it.

References

Barone A., (2001). *Employment protection legislation: a critical review of the literature*, European Economic Review.

OECD, (2004). *Employment Protection Regulation and Labour Market Performance*, OECD Employment Outlook, Chapter 2.

Tangian A., (2004). *Defying the flexicurity index in application to European countries*, Discussion Paper Nr. 122.

Tangian A., (2005). *Monitoring flexicurity policies in the EU with dedicated composite indicators*, Discussion Paper Nr. 137.

Tangian A., (2006). *European flexicurity: concepts and consistent policies*, Hans Bocler Foundation, D-40476 Dusseldorf, Germany.

Bassanini A., Duval R., (2006). *Employment Patterns in OECD Countries: Reassessing the Role of Politics and Institutions,* OECD Social, Employmant and Migration Working Papaers Nr. 35.

EURODIACONIA, (2007). *Background for the Flexicurity Debate*, Eurodiaconia Briefing Paper.

Andersen T., Svarer M., (2007). *Flexicurity – Labour Market Performance in Denmark*, CESifo Economic Studies, Vol. 53, 3/2007, 389-429.

Boeri T., Van Ours J., (2008). *The Economics of Imperfect Labour Markets*, Princeton Univerity Press, Capp. 1, 10,11,12,13.

Boeri T., (2009). *Institutional Reforms in European Labour Markets*, Università Bocconi e Fondazione Rodolfo Debenedetti, JEL codes: J63, J64, J86.

Bertozzi F., Bonoli G., (2009). *Measuring Flexicurity at the Macro Level – Conceptual and Data Availability Challenges*, Working Paper on the Reconciling of Work and Welfare in Europe (REC-WP 10/2009).

Graziano P., Jessoula M., Madama I., (2008). *Italy*, Paper prepared for the task "The Politics of Flexicurity in Europe".

De Groot A., Elhorst P., (2009). *Labour Market Effects of Flexicurity from a Regional Perspective*, Tijdschrift voor Economische en Sociale Geografie, Vol 101, No. 4, pp. 392-408.

Dekker R., (2010). *Employment security: a conceptual exploration*, Working document for the programme "Employment security: new securities for a changing labour market".

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