

# DETERMINANTS OF EMPLOYABILITY AND THE EXTENT TO WHICH THEY CAN BE INFLUENCED AT POLICY LEVEL

Author: Joost Bollens and Vicky Heylen

## 1. Abstract

This study comprises a list of possible determinants of employability. Employability is determined by more than just the traditional human capital. This overview shows that it is indeed worth taking the role of certain psychological characteristics, health characteristics, an individual's labour market history, financial and family circumstances and certain social-cultural factors into account.

### **Key words:**

Employability, psychological effects, scarring

## 2. Study objectives

Identifying characteristics that influence an individual's employability in one way or another may give rise to at least two important applications. Firstly, this knowledge can be used to evaluate the effectiveness of labour market programs, wherever this may contribute to a better comparison of comparison groups.

A second application of better knowledge in terms of the relationship between certain characteristics and employability relates to the design of future employment measures. The finding that certain psychological characteristics are important for employability for example, and that some types of jobseekers typically score lower scores for these characteristics may lead to the incorporation of certain components in the labour market measures that need to be developed for these target groups. These will ensure that they obtain better scores for these psychological characteristics.

In addition to influencing certain characteristics with a view to increasing employability this influence itself can also be an objective. In this case the objectives of the activating policy are potentially extended: besides improving the labour market situation, another potential objective of an activating policy could also consist of promoting the individual's health, wellbeing, social contacts, etc.

## 3. Methods and data

This study relates to a literature review. We used the framework described below to classify the insights obtained from literature.

Employability may be defined as the ability to find work, to retain it and failing that, to find another job. This study examines what are the determinants of employability. Knowledge of these determinants is important in at least two respects. Firstly, this knowledge can be used when developing policy measures aimed at increasing employability. Secondly, this knowledge may also contribute to a better understanding of the opportunities of specific individuals in the labour market (e.g., when predicting which unemployed individual stands a good chance of being unemployed for a longer period of time and thus should be given priority access to activating measures).

We used the "employability process model" (Forrier & Sels 2003; 2005) which we completed below (see Figure 1). An individual has a certain quantity of movement capital, i.e., attributes that enhance his/her mobility. This applies to the combination of personal assets and limitations which influence an individual's ability to make (or not make) certain labour market transitions.

Given the current labour market position and the accumulated movement capital the individual is capable of a series of labour market transitions, while other labour positions may not be possible. The collection of accessible labour market positions describes the movement alternatives. If this collection does not contain elements, except for the continuation of the individual's current position, then s/he will remain in his/her starting position without any subsequent transition. But even if the collection of movement alternatives comprises more elements, then this is still not necessarily followed by a transition. The individual's personal preferences in particular will determine the most attractive option for the individual; i.e., to remain in his/her current position or to transit to another position. In other words, the individual's preferences determine his/her willingness to move. Some transitions have to be made, however, whether the individual likes it or not (from *employment to inactivity* in case of an unexpected dismissal, upon reaching retirement age, in case of serious illness, from unemployment with benefit to unemployment without benefit in case of a sanction, etc.). In these cases the individual has no choice but to move. This occurs because the continuation of the starting position is no longer included in the collection of movement alternatives because of one or other circumstance.

In essence, the employability process model describes the situation at a particular moment in time, for example time  $t$ . The individual occupies a given labour market position and has a vector  $k_t$  at his disposal with movement capital. Capital as a concept only becomes meaningful because of the time dimension. Capital is often achieved because of an investment decision, which means that at some point the individual refrains from consumption in exchange for subsequent higher (expected) consumption. This clearly applies when building human and financial capital (these two forms of capital can also be inherited in which case no investment is involved). In the case of other forms of capital (psychological capital, social capital) the investment analogy may be less relevant, but here too it is obvious that the capital acquired at time  $t$  was acquired in the individual's past, starting at birth (hereditary) and further influenced by his/her environment (e.g., education) and by important events in his/her life. Important events are the labour market positions occupied at certain points in time ( $t-1$ ), ( $t-2$ ) etc. In this sense the movement capital at time  $t$  in figure 1 may be considered as the result of a continuous building process which unfolded in a person's past, whereby the labour market positions which were occupied at each point of the person's past played an important role. The term "building" not only refers to an increase; a capital can also decrease and/or age.

A second way in which an individual's employment past influences his/her current employability is not indirectly, through the influence of previous labour market positions on the capital building process, but rather, in a sense, directly, from the vector of past labour market positions as such. Two for the most part identical individuals, one of whom has experienced ten periods of unemployment and the other ten periods of employment, will probably not have the same collection of movement alternatives at their disposal, as a result of the (statistical) discrimination processes that come into play in the labour market. This element was introduced in the figure using the "career" box under movement capital.

The model was subsequently completed by designing the decision-making model that underpins the individual's decision to invest in his/her movement capital. We also enumerated a number of exogenous factors which may influence an individual's employability.

## 4. Findings

### 4.1 Various personal characteristics, and their role in employability and during activation

In what follows we examine some of the above aspects with an emphasis on the potential components of movement capital.

#### 4.1.1 Human capital

A lot has already been written about the relationship between human capital and employability and so we will not elaborate upon this. The study does, however, examine the Heckman model as regards the development of cognitive and non-cognitive skills throughout one's lifecycle (Heckman 2008, Cunha et al. 2006). This theory, which is highly focused on describing a human's ability to build capital during childhood also has implications for adulthood, more specifically because the acquired capitals will be essential factors in adulthood contributing to the individual's efficiency in terms of acquiring further capital.

When applied to education there are various empirical conclusions that underpin this position (Heckman 2000). In practice, the conclusion is that participation in lifelong learning is very unequally distributed. Those individuals who have a good basic education tend to participate in lifelong learning in disproportionately higher numbers. This can be explained in part by the fact that highly-educated individuals have to make less of an effort to learn, and thus will enjoy a higher return on an additional investment in education and training.

Following from this, we conclude that the estimated returns of education investments by the private sector (employee training) are generally good. Meanwhile the estimated return of public training for the unemployed is significantly less profitable. This is also related to the finding that typically low-skilled workers are excluded or clearly under-represented in employee training programs. In training for the unemployed the number of low-skilled workers or unemployed with obsolete skills is higher. "The lack of interest of private firms in training disadvantaged workers indicates the difficulty of the task and the likely low return of this activity" (Heckman 2000, p. 39).

Heckman is rather pessimistic about training programs for low-skilled unemployed individuals and workers whose skills are obsolete due to newer production methods: "the available evidence clearly suggests that adults past a certain age and below a certain skill level obtain poor returns to skill investment" (Heckman 2000, p. 51). Older low-skilled workers and unemployed can be better helped by allocating targeted wage cost subsidies.

#### 4.1.2 The past career

The nature of an individual's career, prior to time  $t$ , or the succession of various labour market positions which one has occupied prior to time  $t$ , can autonomously influence an individual's career alternatives at time  $t$ . Autonomous should be understood as follows: the career capital that one may have acquired during one's career up until time  $t$  has been taken into account. The scarring phenomenon should clearly be included here: when time in unemployment causes an individual to stand a greater chance of becoming unemployed again in the future *than would have been the case if this individual had not been unemployed in the first place*, or if it causes an individual to earn less *than would have otherwise been the case*, then literature refers to "scarring" (Clark et al. 2001). If scarring is found to be

empirically important, meaning if it occurs and in a sufficient number of cases, then it is most definitely labour-relevant. Scarring implies long-term effects, which are clearly undesirable for the unemployed individual and for society. The individual experiences higher unemployment and/or earns less than would have been the case in the absence of scarring. Society for its part faces higher unemployment, a larger volume of unemployment benefit to be paid and less tax and social security revenue.

An overview of the available empirical studies shows that various studies concerning the US labour market conclude that there is no scarring in unemployment. Several European studies indicate a potential presence of scarring however. This seems to indicate that the importance of scarring is an empirical matter, which may potentially depend on certain labour market characteristics.

#### **4.1.3 Psychological capital**

A commonly used model for mapping personality traits is the so-called "big five" approach, using five factors to describe an individual's personality. These five factors are: openness to experience (the measure in which an individual requires intellectual stimulation, change and variation), conscientiousness (the measure in which an individual is prepared to accept existing rules, norms and standards), extraversion (the measure in which a person requires attention and social interaction), agreeableness (the measure in which an individual requires pleasant and harmonious relationships with others) and neuroticism (the measure in which an individual considers the world to be threatening and as something over which one no longer exerts control). These personality traits consist of a mixture of beliefs, behaviours and emotions.

In addition to these five factors there are a number of other traits which are regularly cited in literature. Self-efficacy relates to the trust people have in the fact that a certain task will be successfully completed. Locus of control indicates the extent to which an individual believes that s/he has a grip on his/her life. Self-confidence is the confidence (or lack thereof) in one's own capabilities and capacities and in one's judgment. Self image is the image one has of oneself. Self-esteem is the evaluation or assessment that one makes of oneself.

Besides the personal characteristics and convictions there are also a number of concepts that are more related to preferences as they are called in economic speak. In general there are the individual's aspirations, as well as his/her motivations, including involvement at work or an individual's work ethic, and more specifically preferences as regards time (time preference, the extent to which one prefers current pleasure to future pleasure) and preferences in terms of risks (more or less inclined to shun risks).

Finally one should also refer to the individual's mental health in psychological capital. Various psychological problems (such as depression, various personality disorders and other phobias) are obviously an obstacle in terms of employability.

The following conclusions were drawn from the overview of empirical studies on the relationship between psychological characteristics and employability: "locus of control" and "optimism" do not or barely correlate with the various labour market outcomes; there is a marked negative correlation between neuroticism and labour market outcomes. The four other personality traits of the 'big five' have a clear positive correlation with the search behaviour exhibited by the individual. The same applies to self-efficacy, self-esteem and to the two traits that deal with motivation, namely financial pressures and work ethic. The study also examines the relationship between employability on the one hand and health status on the other, cultural capital, social capital, financial assets, family situation and other social-demographic characteristics.

#### **4.2 Effect of policy interventions on personal characteristics**

In what follows, we examine the extent to which personal characteristics may be affected by specific policy interventions. The emphasis is mainly on traits pertaining to the psychological (and social) capital (it goes without saying that there is a link between professional training and human capital).

There are two different approaches: on the one hand there are the traditional activating measures, which are mainly aimed at activating, but which may potentially also have an effect on a number of psychological capital aspects. Then there are policy interventions that are specifically designed to influence elements of psychological (or social) capital. In the literature review by Gelderblom et al. (2007), a number of programs which specifically target motivation, psychological and social capital are listed. The effects that were established are generally all deemed to be positive. This was also the case for a program that was evaluated with an experimental design, in different countries, often with various repeated measurements, and a huge sample population, so the reported beneficial effects may be considered to be solid.

Literature often also refers to the effects of traditional activating measures on this behaviour, in addition to the programs that were specifically implemented to influence psycho-social behaviour, although the number of available studies is rather limited. In terms of education for young people who have been unemployed for a long time Creed et al. (1996) established that participation in training has a positive effect on self-esteem, but not on the extent of psychological suffering. Eardly et al. (2005) examined the effects of sanctions on health and social capital in Australian benefit recipients. Nearly one quarter of the sanctioned unemployed tries to save on medical expenditure and thirteen percent starting drinking more or resorted to drug abuse after the sanction. A quarter of the individuals who were sanctioned says that their relationship deteriorated after the sanction. Forty percent decreased their expenditure for social activities and leisure. Rubbrecht et al. (2005) studied the effects of various Flemish social

employment programs. They used repeated follow-ups in order to be able to examine long-term effects. No effects were established in terms of health; the effects on family relations, however, were concluded to be favourable in the medium to long term.

This study comprises a list of possible determinants of employability. Employability is determined by more than just the traditional human capital. This overview shows that it is indeed worth taking the role of certain psychological characteristics, health characteristics, an individual's labour market history, financial and family circumstances and certain social-cultural factors into account.

Identifying characteristics that influence an individual's employability in one way or another may give rise to at least two important applications. Firstly this knowledge can be used to evaluate the effectiveness of labour market programs. In order to estimate net effects the results of the beneficiaries of the labour market program are often compared with the results of a comparison group. One of the main stumbling blocks in this frame is that the comparability of both groups often is not optimal; this is largely due to the differences between both groups as regards certain characteristics that are associated with employability. This problem can be better controlled if a more extensive set of characteristics related to employability may be taken into account in the evaluation.

A second application of better knowledge in terms of the relationship between certain characteristics and employability relates to the design of future employment measures. The finding that certain psychological characteristics are important for employability for example, and that some types of jobseekers typically score lower scores for these characteristics may lead to the incorporation of certain components in the labour market measures that need to be developed for these target groups. These will ensure that they obtain better scores for these psychological characteristics. Secondly, this knowledge may also contribute to a better understanding of the opportunities of specific individuals in the labour market (e.g., when predicting which unemployed individual stands a good chance of being unemployed for a longer period of time and thus should be given priority access to activating measures).

The conclusion that programs aimed at motivation and other psychological effects are beneficial leads to the recommendation to introduce such programs in the Flemish labour market.

In addition to influencing certain characteristics with a view to increasing employability this influence itself can also be an objective. In this case the objectives of the activating policy are potentially extended: besides improving the labour market situation, another potential objective of an activating policy could also consist of promoting the individual's health, wellbeing, social contacts, etc.

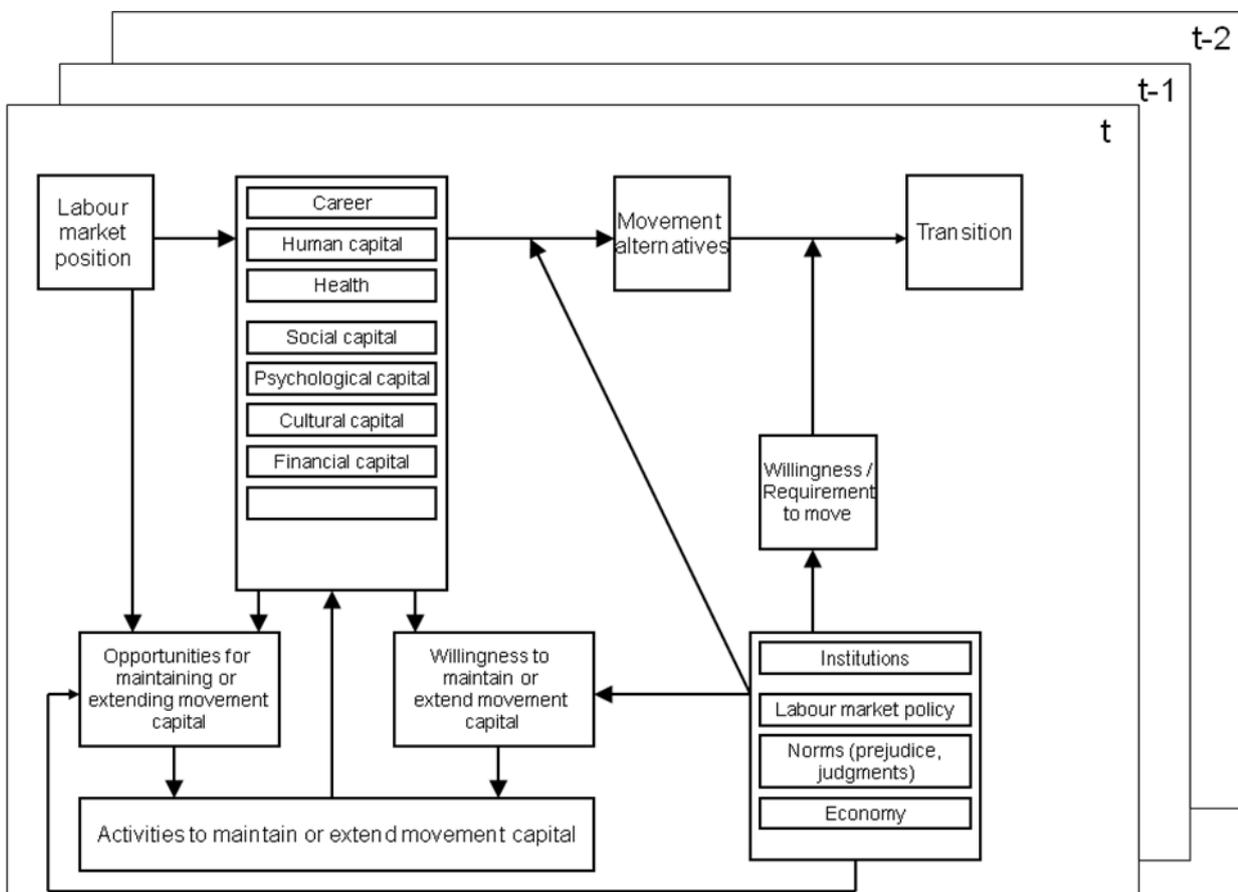


Figure 1 The complete employability process model

Full reference of study report(s) and or paper(s) and other key publications of the study summarised here

**Bollens, J., & Heylen, V. (2010). Determinanten van de inzetbaarheid en de mate waarin ze beleidsmatig beïnvloedbaar zijn, WSE Report. Leuven**

Clark, A. E., Georgellis, Y., & Sanfey, P. (2001). Scarring: the psychological impact of past unemployment. *Economica*, 68, pp. 221-241.

Creed, P., Machin, M., & Hicks, R. (1996). Neuroticism and mental health outcomes for long-term unemployed youth attending occupational skills training programs. *Personality and Individual Differences*, 21, pp. 537-544.

Cunha, F., Heckman, J. J., Lochner, L., & Masterov, D. (2006). Interpreting the evidence on life cycle skill formation. In E. Hanushek, & F. Welch (Eds.), *Handbook of the Economics of Education*, Volume 1. Elsevier.

Eardly, T., Brown, J., Rawsthorne, M., Norris, K., & Emrys, L. (2005). *The impact of breaching on income support customers. Australia: Social Policy Research Centre.*

Forrier, A., & Sels, L. (2003). The concept employability: a complex mosaic. *International Journal of Human Resource Development and Management*, 3, pp. 102-124.

Forrier, A., & Sels, L. (2005). Het concept employability. *Tijdschrift voor HRM*, 3, pp.47-73.

Gelderblom, A., de Koning, J., m.m.v. Lachhab, K. (2007). *Effecten van 'zachte' kenmerken op de reïntegratie van de WWB, WW en AO populatie : een literatuurstudie. Seor.*

Heckman, J. J. (2000). Policies to foster human capital. *Research in Economics*, 54, pp. 3-56.

Heckman, J. J. (2008). *Schools, Skills, and Synapses. IZA Discussion Paper No.3515.*

Rubbrecht, I., Matheus, N., D'Addio, A., & Nicaise, I. (2005). *Sociale tewerkstelling in Vlaanderen: effectiviteit en maatschappelijk rendement op langere termijn. Leuven: HIVA-KULeuven.*