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# Entrepreneurial Progress: Climbing the Entrepreneurial Ladder in Europe and the United States

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## Abstract

VAN DER ZWAN P., VERHEUL I., THURIK R. and GRILLO I. Entrepreneurial progress: climbing the entrepreneurial ladder in Europe and the United States, *Regional Studies*. This study investigates which countries have the highest potential to achieve entrepreneurial progress. This progress is defined as an entrepreneurial ladder with five successive steps: 'never thought about starting a business', 'thinking about it', 'taking steps', 'running a young business' and 'running a mature business'. The influences of individual-level and country-level variables on the progression through these stages are analysed. Data from twenty-seven European countries and the United States are used (2007 Flash Eurobarometer Survey on Entrepreneurship). Findings show that in the United States many people think about setting up a business, whereas Europeans are better at achieving higher levels of engagement. Country differences can be explained

mainly by levels of risk tolerance and economic development. A country's level of administrative complexity does not play a role, but individual perceptions of this complexity are a hindering factor.

VAN DER ZWAN P., VERHEUL I., THURIK R. and GRILO I. Entrepreneurial progress: climbing the entrepreneurial ladder in Europe and the USA, *Regional Studies*. This study examines the countries that show the highest potential for entrepreneurial progress. We define this progress as an entrepreneurial ladder with five rungs: 'I never thought of starting a business'; 'I think about it'; 'I take steps'; 'I run a young business', 'I run a mature business'. We analyse the influence of variables relative to the individual and the country on the progress at each stage. We use data from 27 European countries and the USA (from the 2007 Flash Barometer survey on the spirit of entrepreneurship). The results show that many people in the USA think about starting a business, while Europeans are better at getting involved. The differences can be explained to a large extent by the levels of risk tolerance and economic development. The administrative complexity of a country does not play a role, but individual perceptions of this complexity are a hindering factor.

Entrepreneurial progress    Entrepreneurial ladder    Entrepreneurial progress    Entrepreneurial ladder

VAN DER ZWAN P., VERHEUL I., THURIK R. et GRILO I. Le progrès entrepreneurial: monter l'échelle entrepreneuriale en Europe et aux Etats-Unis, *Regional Studies*. Cette étude examine les pays qui font preuve du potentiel le plus élevé pour réaliser le progrès entrepreneurial. On définit ce progrès comme une échelle entrepreneuriale à cinq barreaux: 'Je n'ai jamais pensé à créer une entreprise'; 'j'y pense'; 'je prends des mesures'; 'je gère une jeune entreprise', 'je gère une entreprise à l'étape de la maturité'. On analyse l'influence des variables relatives à l'individu et au pays sur le progrès à chaque étape. On emploie des données auprès de vingt-sept pays européens et des Etats-Unis (provenant du sondage Baromètre Flash 2007 sur l'esprit d'entreprise). Les résultats laissent voir que beaucoup de gens aux Etats-Unis pensent à créer une entreprise, alors que les Européens réussissent mieux à s'y engager. Les différences s'expliquent dans une large mesure par les niveaux de tolérance au risque et par les niveaux de développement économique. La complexité administrative d'un pays ne joue aucun rôle, mais les idées que l'on se fait de cette complexité sont une entrave.

Esprit d'entreprise    Facteurs déterminants    Esprit d'entreprise naissant    Progrès entrepreneurial    Complexités administratives

VAN DER ZWAN P., VERHEUL I., THURIK R. und GRILO I. Unternehmerischer Fortschritt: Aufstieg auf der unternehmerischen Leiter in Europa und den USA, *Regional Studies*. In dieser Studie wird untersucht, welche Länder das höchste Potenzial zur Erreichung von unternehmerischem Fortschritt aufweisen. Dieser Fortschritt wird als unternehmerische Leiter mit fünf aufeinanderfolgenden Sprossen definiert: 'noch nie an Unternehmensgründung gedacht', 'denke daran', 'unternehme Schritte', 'leite ein neues Unternehmen' und 'leite ein etabliertes Unternehmen'. Wir analysieren den

Einfluss der Variablen auf individueller und Landesebene auf die Progression durch diese Phasen. Zum Einsatz kommen Daten aus 27 europäischen Ländern sowie aus den USA (Flash-Eurobarometer-Umfrage von 2007 über Unternehmertum). Aus den Ergebnissen geht hervor, dass viele Menschen in den USA an eine Unternehmensgründung denken, während die Europäer bei der Erzielung eines höheren Engagementniveaus erfolgreicher sind. Die Unterschiede zwischen den einzelnen Ländern lassen sich vor allem durch das Niveau der Risikotoleranz und Wirtschaftsentwicklung erklären. Das Niveau der administrativen Komplexität in einem Land spielt keine Rolle, wohl aber sind die Auffassungen der einzelnen Personen hinsichtlich dieser Komplexität ein behindernder Faktor.

Unternehmertum    Determinanten    Neuunternehmertum    Unternehmerischer Fortschritt    Administrative Komplexität

VAN DER ZWAN P., VERHEUL I., THURIK R. y GRILO I. Progreso empresarial: trepando la escalera empresarial en Europa y los Estados Unidos, *Regional Studies*. En este estudio investigamos qué países tienen el máximo potencial de conseguir el progreso empresarial. Este progreso es definido como una escalera empresarial con cinco peldaños sucesivos: 'nunca pensé en abrir un negocio', 'lo estoy pensando', 'estoy preparando el terreno', 'gestiono un negocio nuevo', y 'gestiono un negocio establecido'. Analizamos la influencia de las variables a nivel individual y por países en la progresión a través de estas fases. Utilizamos los datos de veintisiete países europeos y de los Estados Unidos (Encuesta Flash del Eurobarómetro sobre el Espíritu Empresarial 2007). Los resultados indican que en los Estados Unidos muchas personas piensan en comenzar un negocio, mientras que los europeos son mejores a la hora de conseguir niveles más altos de participación. Las diferencias por países pueden explicarse principalmente por los niveles de tolerancia de riesgo y el desarrollo económico. La complejidad administrativa de los países no desempeña un papel importante pero las percepciones individuales de esta complejidad representan un factor obstaculizador.

Empresariado    Determinantes    Nuevos empresarios    Progreso empresarial  
Complejidades administrativas

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## Notes

Note that the concept of competitiveness is surrounded by complexity and elusiveness (KITSON et al., [2004](#); KRUGMAN, [1991](#)), where some see productivity (growth) as an indicator of competitiveness (PORTER, [1990](#)) and others refer to measures such as (un)employment rates.

There is an ongoing debate about the question of whether or not entrepreneurship can be taught. Some authors suggest that business and management skills can be taught, while creativity and innovation are not ‘teachable’ (JACK and ANDERSON, [1998](#); MILLER, [1987](#)). Other stress that ‘entrepreneurial qualities’ (for example, the need for autonomy, creativity, risk taking) can be developed in primary and early secondary education (KOURILSKY and WALSTAD, [1998](#); VAN DER KUIP and VERHEUL, [2004](#)).

There is the risk of a selection effect because students who choose to follow an entrepreneurship major may already be interested in entrepreneurship, or have decided to start a business prior to following an entrepreneurship programme (WESTHEAD et al., [2001](#)). In addition, many studies only investigate one school and cannot generalize the results to other educational institutions.

For a summary of empirical evidence of the existence of all three of these factors, and for a description of several additional sources of agglomeration effects, see ROSENTHAL and STRANGE ([2004](#)).

Because country differences are controlled for (by including country dummies), it is believed that the self-perceived location variable is a proper measurement of location density.

Competitiveness is measured as labour productivity growth per person employed. The fifth section devotes more attention to this variable.

However, these differences vanish when unregistered firms are included in the analysis (CAPELLERAS et al., [2008](#)). DJANKOV et al. ([2002](#)) found that countries with stricter entry regulation are characterized by more corruption and larger unofficial economies.

These interviews were conducted by the Gallup Organization Hungary/Europe, 9–16 January 2007. In many countries (including the United States) the target sample size amounted to 1000 respondents. In Austria, Cyprus, Denmark, Estonia, Finland, Iceland, Ireland, Latvia, Lithuania, Luxembourg, Malta, Norway, Slovakia, Slovenia and Sweden the target size was 500. For background information on this data set, see [http://ec.europa.eu/public\\_opinion/flash/fl\\_192\\_en.pdf/](http://ec.europa.eu/public_opinion/flash/fl_192_en.pdf/).

In the original survey, respondents first had to answer ‘yes’ or ‘no’ to the question ‘Have you ever started a business or are you taking steps to start one?’ Subsequently, they had to select either one of the five ‘yes statements’ or one of the three ‘no statements’. As a consequence, entrepreneurs who have ‘completed’ a cycle by terminating a given business and are presently thinking about a new one will be classified under the ‘ex-entrepreneur’ category, rather than under ‘thinking’. For the same reason, those involved in more than one business that may be at different stages of development will only be counted for one of the stages (the respondent choice). In other words, this survey may create a bias in the case of serial or simultaneous entrepreneurs. Despite this possibility the authors believe that such cases are rare

based on information from a similar survey, wherein multiple entrepreneurship is recorded (HESSELS et al., [2011](#)). Therefore, this shortcoming of the survey is unlikely to distort the results significantly.

This three-year period corresponds with the Global Entrepreneurship Monitor (GEM) research programme that defines the level of involvement in early-stage entrepreneurial activity as anyone who is either actively engaged in the process of starting a new business or in owning/managing a business that is less than forty-two months old. REYNOLDS et al. ([2004](#)) explained that this choice of 3.5 years was mainly based on operational, not theoretical, issues, whereas they also noticed that the first four to five years of a firm are essential for its survival.

Note that for stigma of failure, deviations from the country averages are included as an individual-level factor in the model, but country averages are not included.

Note that the Czech Republic and Slovenia are not performing well either: they occupy positions nine and ten with respect to the level of gross national income per capita.

The non-reported investigation of moderation effects by means of interaction terms between all individual-level variables and gender reveals that there are three coefficients with significant differential impacts on female and male entrepreneurial progress in the 'overall' model: self-employed parents, risk tolerance and perception of a lack of financial support. Results can be obtained from the authors upon request. For a discussion of gender and moderation effects, see also VERHEUL et al. ([2011](#)).

For the binary dependent variables, a random intercept logistic regression is used. This two-level model is similar to the regular binary logit model with an additional country-specific random intercept. That is, each country has its own intercept which depends on the country-specific variables shown in [Table 1](#), an intercept, and an error term that captures country-specific influences that are not included in the model. Thus, observed and unobserved heterogeneity across countries is controlled for. For the estimation of the random-intercept logit model, a numerical approximation of integrals is needed. The Stata command xtlogit is used with adaptive Gauss-Hermite quadrature and fifty quadrature points. For the continuation ratio logit regression (the first column in [Table 6](#)) a simpler, but similar, approach is used. The estimated coefficients of the country dummies in [Table 5](#) (but then excluding observations from Iceland and Norway) are regressed on the country-specific variables in [Table 1](#) to obtain the coefficients of the country-level variables. A drawback of this simplified approach is that the coefficients of

the country dummies are treated as given, whereas actually they are included in a certain confidence interval.

Extending the set of country-level variables with a stigma of failure does not lead to different results, as this variable does not have a significant impact across all regressions. In addition, replacing risk tolerance with a stigma of failure leads to insignificant results for the stigma of failure. In both situations, the significances of the other country-level variables only marginally change.

Note that, given the data set, it is not possible to test for the direction of causality in this relationship. It could be that labour productivity growth results from start-up and young business activity, rather than vice versa.

The country-level risk tolerance variable results from the country average of the agreement with the statement: 'One should not start a business if there is a risk it might fail.'

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