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Human capital formation in the labour market

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The data from the OECD's Programme for the International Assessment of Adult Competences (PIAAC) allow comparable measures of several aspects of human capital in 13 developed economies to be obtained. Drawing on these data, this article shows that work experience improves the numeracy and literacy skills of low-educated workers, a result that is observed in economies with different labour market institutions, educational systems and workforce compositions. The analyses performed suggest that on-the-job learning contributes considerably to the human capital of less educated individuals, which may help steer the formulation of active employment policies.

HUMAN CAPITAL FORMATION IN THE LABOUR MARKET

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Introduction

Human capital is defined as the corpus of knowledge or skills that a worker accumulates throughout his/her life. Against a background of growing demand for skilled labour[2], average human capital in the population and its distribution among workers are increasingly significant elements for a country's economic development and the distribution of its income.

The skills that make up human capital are acquired through formal education and, later, during working life, through training or on-the-job learning. Distinguishing between the contribution of both channels (formal education and work experience) is important for several reasons. Firstly, in Spain's case one of the problems with equipping the population with professional skills is the high proportion of workers who have only basic schooling. The consequences of this low level of education for future productivity, however, may be lessened if the individuals concerned acquire a set of skills that partially replaces those they did not receive in formal education, through the accumulation of experience in the labour market. Furthermore, the high level of unemployment, which has a particular bearing on the lower-educated, poses the question as to whether the skillset of the unemployed is an obstacle to their employability, insofar as it does not coincide with what is demanded of them, given recent sectoral and occupational changes.[3]

Against this background, this article analyses how work experience contributes to the human capital of the lower-educated. In this connection, use is made of measures of the numeracy and literacy skills of a representative sample of the population in 13 countries: the Czech Republic, Estonia, Finland, France, Ireland, Italy, Korea Norway, the Netherlands, Slovakia, Spain, Sweden and the United Kingdom. The following section reviews the evidence available on the effect of human capital, measured through cognitive skills, on employment and wages. The third section presents the results obtained in relation to the contribution of work experience to human capital. The fourth section compares the role of work experience with formal education in human capital formation. The fifth section draws the main conclusions.

Measuring human capital in cognitive tests

Human capital can be empirically measured either through the formal level of educational attainment or, alternatively, by considering cognitive skills measured in cognitive tests. A problem with the first measure is that attainment levels differ from one country to another, meaning that similar qualifications may mask different levels of skills in different countries. However, the skills obtained in cognitive tests only offer a one-dimensional measure of an individual's professional ability, because they focus on very specific contents and depend on the availability of the respondent to participate and correctly answer a cognitive test at a given moment in time.

1 This article summarises the findings in Jimeno *et al.* (2016).

2 D. Acemoglu (2002), "Technical Change, Inequality, and the Labor Market", *Journal of Economic Literature,* vol. 40.

3 One means of determining the employability of the unemployed consists of analysing whether the tasks performed in previous jobs have enabled them to acquire general skills applicable in other circumstances. See, for instance, the analyses by Gathman and Schoenberg (2010) and, for the Spanish case, by Lacuesta *et al.* (2012), Izquierdo *et al.* (2013) and Puente and Casado (2016).

This article considers the second measure, for several reasons. Firstly, the results of cognitive tests have predictive power both about wages and about the probability of employment for workers, even when workers with a similar level of educational attainment are compared. For example, using internationally harmonised data, workers whose scores in numerical ability tests are higher than those of the average in one standard deviation are observed to have wages that exceed the average by between 10% and 22%, and they also have a greater probability of being employed.[4]

Secondly, according to the theory of human capital companies remunerate workers in accordance with their skills. At the same time, wages also depend negatively on the relative abundance of workers with a specific level of skills. However, with compatible data from several economies, increases in the relative supply of skilled workers (measured by the number of workers with a specific level of educational attainment) are not always observed to result in a lower level of remuneration of this level of skills. On the contrary, when worker ability is measured using the scores for cognitive tests, it is actually documented that, in economies in which there is a greater relative abundance of workers with a specific degree of numeracy or literacy skills, such workers obtain lower remuneration.[5] This result likewise suggests that, albeit in a limited fashion, human capital can be approximated on the basis of the skills measured in cognitive tests.

The measurement of cognitive skills in the PIAAC and work experience

The PIAAC (Programme for International Assessment of Adult Competences) is an initiative coordinated by the Organisation for Economic Co-Operation and Development (OECD) for the measurement of cognitive skills in the populations of 33 countries. As part of this initiative, three waves of surveys on numeracy, literacy and problem-solving skills were conducted on samples of around 5,000 individuals per country, which are representative of the population aged 16-65. Before the test, participants responded to a survey on their employment status and the type of work they did do or, in the event of being unemployed, that they used to do before becoming unemployed.

Table 1 shows the scores in the numeracy and literacy skills tests in 13 countries participating in PIAAC during the first wave of the survey (between 2008 and 2013).[6] These countries differ in terms of the degree of educational attainment of their population: according to the survey, in Spain and in Italy the proportion of the population aged 16-55 with only basic schooling exceeds 40%, while in France and the Czech Republic this figure does not reach 10%. As was to be expected, in all the countries analysed both numeracy and literacy increase with the level of education. It is interesting to note that differences in numeracy and literacy for the population with the same level of educational attainment are observed across the countries. Spain is specifically one of the countries posting the worst scores among respondents with secondary and tertiary schooling.

To understand how cognitive skills change with on-the-job learning, it is useful to compare, for each degree of educational attainment, the scores in the numeracy tests with the number of years worked in the labour market. Both for primary-education workers and for those of

4 Hanushek *et al.* (2015).

5 Leuven *et al.* (2004).

6 The first wave of the PIAAC was conducted between 2008 and 2013, involving the participation of 22 countries. Along with those shown in Table 1, participants included Belgium, Denmark, the Russian Federation, Poland, Japan, the United States, Austria, Canada and Germany. Nonetheless, these nine countries have not been used in the analysis performed here, owing to the fact that the information available on work experience or the age of participants was not comparable with the rest (the case of the United States, Austria, Canada and Germany), to a low proportion of respondents with basic schooling (the case of Belgium and Denmark) or to other problems of comparability with the other countries (the Russian Federation).

COGNITIVE SKILLS IN THE PIAAC BY LEVEL OF EDUCATIONAL ATTAINMENT AND WORK EXPERIENCE

TABLE 1

Scores in numeracy and literacy tests by educational level	Czech Republic	Estonia	Spain	United Kingdom	Finland	France	Italy
Numeracy							
Basic schooling (a)	236	239	228	222	251	169	228
Secondary education	272	269	256	261	282	239	264
Tertiary education	312	293	281	288	318	295	283
Literacy							
Basic schooling (a)	244	247	234	238	257	191	233
Secondary education	270	271	260	273	289	251	263
Tertiary education	304	294	285	297	323	295	284
Years of working experience	16.0	15.3	14.6	16.2	15.1	15.2	15.2
Percentage with:							
Primary education	*6*	*13*	*43*	*21*	*10*	*3*	*47*
Secondary education	*73*	*46*	*22*	*40*	*62*	*60*	*39*
Tertiary education	*20*	*40*	*34*	*39*	*28*	*36*	*14*
Sample size	3,620	5,034	4,265	6,441	3,313	4,607	3,214

Scores in numeracy and literacy tests by educational level	Ireland	Korea	Netherlands	Norway	Slovakia	Sweden
Numeracy						
Basic schooling (a)	218	228	247	245	221	239
Secondary education	253	259	284	275	278	278
Tertiary education	285	285	311	308	306	312
Literacy						
Basic schooling (a)	232	241	253	253	232	244
Secondary education	265	268	289	274	275	279
Tertiary education	292	291	314	305	296	311
Years of working experience	15.1	12.2	16.4	16.1	14.8	15.7
Percentage with:						
Primary education	*22*	*10*	*25*	*20*	*14*	*13*
Secondary education	*41*	*44*	*40*	*40*	*64*	*55*
Tertiary education	*37*	*45*	*34*	*40*	*22*	*32*
Sample size	4,322	4,522	3,361	3,311	3,837	2,801

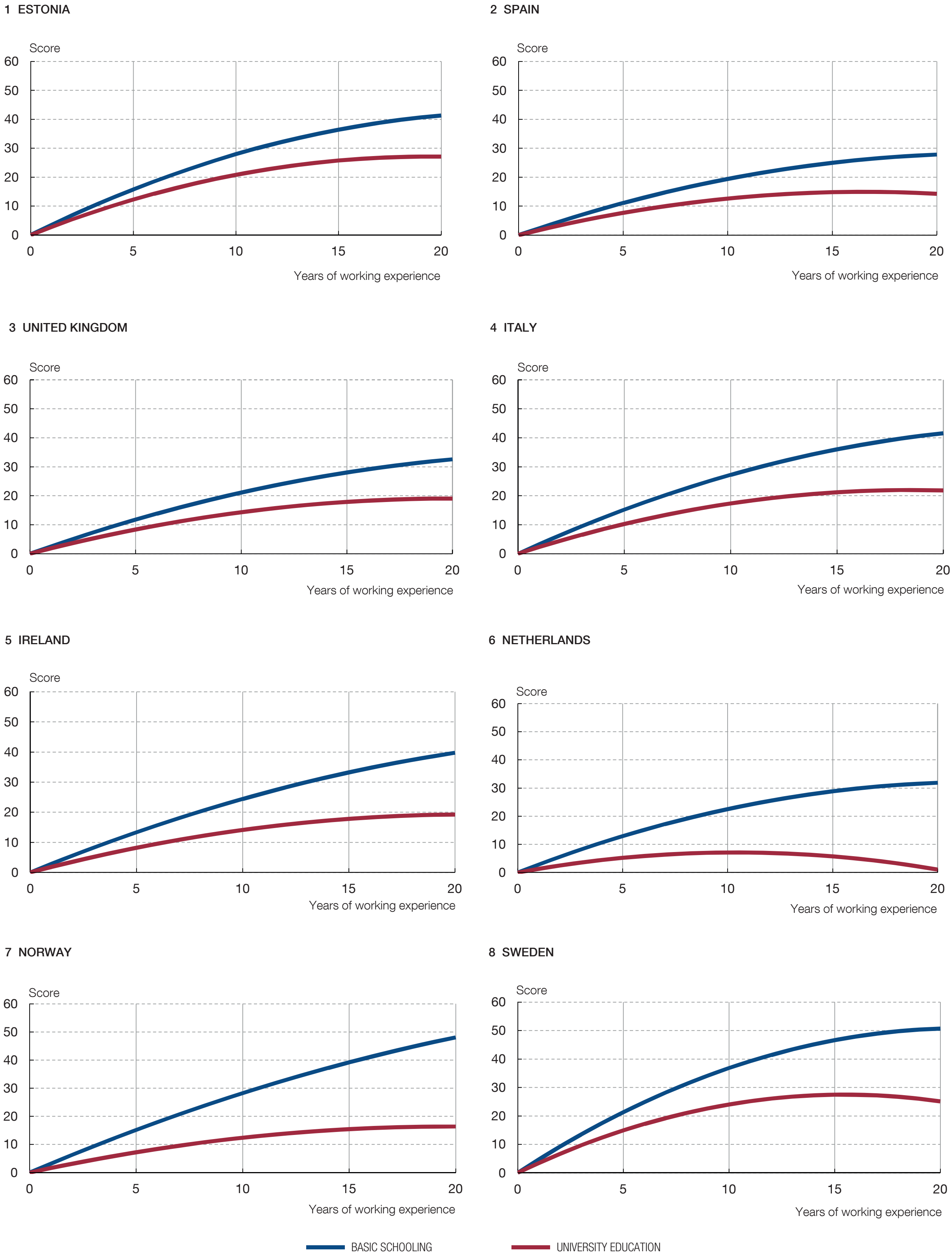
SOURCES: OECD and Banco de España.

a The scores in the test are expressed in a scale from 0 to 500.

secondary or tertiary level, numeracy increases with the number of years in which the respondent has participated in the labour market (see Chart 1). However, it is striking that in all the countries considered this increase in numeracy is much more marked among the primary-education population group than among those with a university education.[7] Likewise, the association between numeracy and work experience is particularly notable at the start of a career in the case of workers with basic schooling. For example, among primary-education respondents in Spain, the Netherlands and Ireland, the first 10 years of labour market participation are associated with an improvement in scores in the numeracy

7 The computerised PIAAC version adjusts the level of difficulty of the tests to the number of correct responses in the initial questions. In the subsequent processing of the data, the OECD adjusts the scores of the tests so that they are comparable among respondents.

WORK EXPERIENCE AND COGNITIVE SKILLS BY EDUCATIONAL LEVEL AND COUNTRY (a) CHART 1



SOURCE: Banco de España, using PIAAC data in 13 countries: Czech Republic, Estonia, Spain, United Kingdom, Finland, France, Italy, Ireland, Korea, Netherlands, Norway, Slovakia and Sweden.

a Relationship between standardised numerical skills and years of working experience, with the charts reflecting the predicted score in the numeracy test for each year of working experience for an individual with basic schooling and university education. The prediction is for a single man, aged 36-45, and whose mother has basic schooling.

test of around 20% of one standard deviation. In Sweden and Norway, the same increase is around 30% of one standard deviation. Conversely, in any of the countries considered, respondents with a higher education experience smaller increases in numerical skills associated with the first 10 years of working experience than the primary-education group, standing at between 5% for the Netherlands and 20% of one standard deviation in Sweden.

The increase in numeracy during the first 10 years of working experience suggests that individuals acquire certain skills that make up for the strong differences in cognitive skills between educational groups. This hypothesis is confirmed on finding similar results in countries with marked differences in their labour markets, their educational systems or in the relative weight of the population with a primary education.

However, there are other alternative hypotheses that might explain why numeracy grows with work experience among individuals with a lower level of educational attainment. For example, if employers were only to keep primary-education workers with greater numeracy skills in employment, it would be seen that only those with better skills could build up years of working experience.

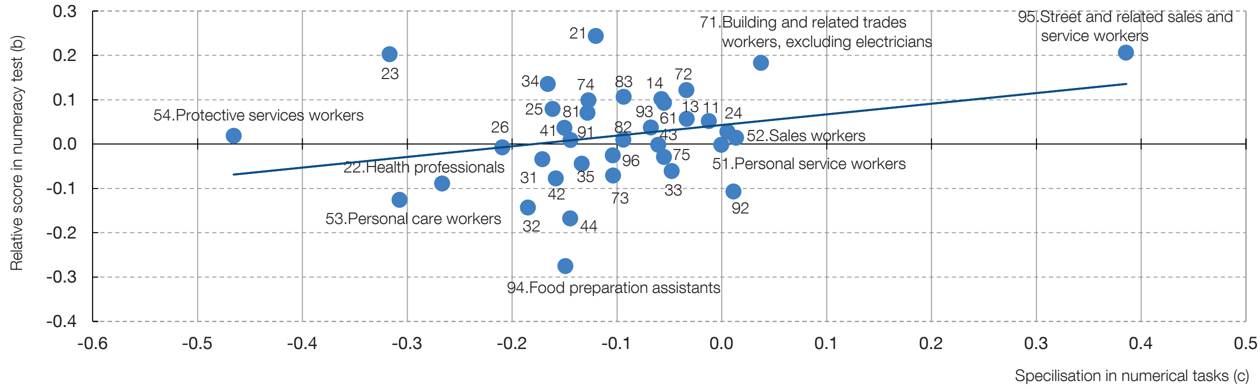
To understand the nature of the statistical association between work experience and numeracy and literacy, the composition of the tasks that workers with different levels of education perform is examined in greater detail. As earlier mentioned, the PIAAC includes a survey in which participants detail their occupation, industry and the type of functions they perform in their work (the work at the time of the survey, if the respondent is employed, or their latest job if they are not employed). This information allows jobs to be characterised as intensive in numerical tasks (as handling a calculator or calculating percentages could be) or in literacy-related tasks (such as the reading of manuals or the need to draft emails). If specialisation in mathematical tasks – relative to literacy-related tasks – were to contribute to greater numeracy skills, it should be observed that respondents specialising in jobs intensive in tasks associated with analytical calculation would obtain a better score in the numeracy test as opposed to the literacy test. This relationship between specialisation in tasks and relative scores in the cognitive tests enables workers with the same degree of experience to be compared, which mitigates composition bias whereby workers with greater skills build up a greater number of years of experience.

To illustrate this relationship between tasks and numerical or literary content, the x-axis in Chart 2 shows the specialisation in tasks of the different occupations for the respondents with a primary education. Occupations with a greater degree of numerical specialisation would be those associated with sales or with construction. Workers in these occupations report that they use calculators, calculate percentages or read charts with some frequency, but habitually they do not read manuals or draft documents (tasks that would be associated with literacy skills). Conversely, occupations with a greater literary content are those related to health care or security services. Workers in these occupations report they do not perform basic mathematical calculations on a day-to-day basis but do have to read manuals or guidelines with some regularity, according to their replies to the PIAAC.

Chart 2 also illustrates the association between relative specialisation in numerical as opposed to literary in an occupation and the difference between the average scores in the numeracy test and the scores in the literacy test of the workers in that occupation. This relationship is examined solely for respondents with basic schooling. Individuals who work in professions with a greater specialisation in numerical calculations (such as salespersons and masons) also obtained a better score in the part of the test that measures numeracy than in the part dedicated to literacy. Conversely, individuals who worked or had worked

JOB SPECIALISATION AND COGNITIVE SKILLS ACCORDING TO OCCUPATION (a) CHART 2

RELATIONSHIP BETWEEN SPECIALISATION IN NUMERICAL TASKS AND SCORES IN NUMERACY TESTS RELATIVE TO THOSE IN LITERACY TESTS



SOURCE: Banco de España, using PIAAC data in 13 countries: Czech Republic, Estonia, Spain, United Kingdom, Finland, France, Italy, Ireland, Korea, Netherlands, Norway, Slovakia and Sweden.

a Occupational classification based on the International Standard Classification of Occupations (ISCO) (two digits).
b The sample of respondents comprises primary-education individuals. The variable on the vertical axis is the difference between the scores in the numeracy and literacy tests, expressed as the difference relative to the average, and is divided by its standard deviation.
c The difference between the numerical and literary tasks measures the specialisation in numerical tasks. The variable takes the value one if the respondent has performed all the numerical tasks in the survey and none of the reading or writing tasks.

in professions requiring, above all, the performance of literacy-related tasks (such as protection services or work in the health care sector) obtained relatively better scores in the part of the test dedicated to literacy.[8]

The magnitude of this association between task specialisation and the scores in the tests is not negligible, since respondents whose work entailed full specialisation in numerical-type tasks obtained a score in the numeracy part of the test that exceeded by 15.6% of one standard deviation their score in the literacy test (see first column of Panel A of Table 2). By way of reference, in countries such as Spain and Italy this magnitude represents the difference between the median numeracy level (that possessed by the person who leaves half the distribution below) and that of the 60th percentile (that possessed by the person who has 60% of the population below). Alternatively, it is one-third of the difference between the average numeracy skills of a median respondent with basic schooling in Spain and in Finland (the country in which numeracy skills are greatest in the sample). According to the second row and first column of Table 2, the results are 5 pp lower for respondents with a higher level of education (secondary or university), since specialisation in mathematical tasks increases the score in the numeracy part by only 10% of one standard deviation relative to that of the literacy part.

To analyse the scores by educational levels more deeply, it may be useful to distinguish between the effect of simpler tasks (those that can be performed by lower-skilled workers) and that of complex tasks (performed by only a small proportion of workers with basic schooling).[9] Panel B of Table 2 shows that it is indeed simpler tasks that explain a large part of the association between job specialisation and greater relative skills in tasks in the case of

8 An alternative procedure for verifying whether work experience affects the skills acquired by workers consists of analysing whether workers who perform reading tasks in their job obtain better literacy results and, separately, if those who perform mathematical tasks have better results in the numeracy tests. This relationship, which does not examine the effect of specialisation on a type of task, is tested in Jimeno *et al.* (2016), *Education, Labour Market Experience and Skills: A First Look at PIAAC Results,* OECD Education Working Papers.

9 By way of example, using a calculator in one's job or preparing a budget would be basic tasks, while using algebra or statistical analysis would be complex tasks. In the case of literacy, reading guidelines or manuals would be simple tasks, while reading scientific books or articles would be considered a complex task.

RELATIONSHIP BETWEEN JOB SPECIALISATION IN NUMERICAL TASKS AND RELATIVE COGNITIVE SKILLS IN NUMERACY IN THE PIAAC (a)

TABLE 2

	16-55 years old	16-35 years old
Panel A: Specialisation in basic and advanced tasks (b) (c) (d)		
1 Difference between proportion of numerical and literary tasks in the job	0.156 (0.018)	0.173 (0.024)
2 Difference between proportion of numerical and literary tasks in the jobin secondary-education individuals	-0.053 (0.018)	-0.081 (0.025)
3 Difference between proportion of numerical and literary tasks in the job in tertiary-education individuals	-0.047 (0.020)	-0.045 (0.027)
Number of observations	50,608	35,016
R^2	0.075	0.094
Panel B: Specialisation in basic tasks (b) (c) (d)		
4 Difference between proportion of numerical and literary tasks in the job	0.092 (0.0213)	0.141 (0.037)
5 Difference between proportion of numerical and literary tasks in the job in secondary-education individuals	-0.013 (0.024)	-0.071 (0.041)
6 Difference between proportion of numerical and literary tasks in the job in tertiary-education individuals	-0.033 (0.025)	-0.099 (0.043)

SOURCES: Banco de España, using PIAAC data in 13 countries: Czech Republic, Estonia, Spain, United Kingdom, Finland, France, Italy, Ireland, Korea, Netherlands, Norway, Slovakia and Sweden.

a The dependent variable is the difference between the score in numeracy and literacy skills. In both cases the score is the difference relative to the average and is divided by its standard deviation.

b Classified as basic numerical tasks are the preparation of budgets, the use of percentages or calculators and the reading of diagrams and invoices. Classified as advanced numerical tasks are the preparation of charts and the use of algebra or statistical analysis. Basic literacy tasks are defined as the drafting of emails and the reading of guidelines, articles and manuals. Advanced literacy tasks include the reading of academic articles.

c The difference between the numeracy and literacy tests measures the specialisation in numerical tasks. The variable takes the value 1 if the respondent has performed all the numerical tasks about which the PIAAC asks and none of the reading or writing tasks. The magnitudes shown in rows 2 (secondary education) and 3 (tertiary education) are both relative to those in row 1 (primary education) and must be added to the corresponding coefficient in row 1 to obtain the impact for each educational group. Similarly, the magnitudes in row 5 (secondary education) and 6 (tertiary education) are relative to those in row 4 (primary education) and must be added to the coefficient in row 4 to obtain the impact for the educational group.

d Model estimated with individual fixed effects. Shown in brackets is the standard error of each estimate (see Jimeno et al. 2016).

workers with a lower level of skills. This effect is lessened for workers with a higher level of educational attainment, who may have acquired these skills in the formal education system.[10]

In sum, among respondents with basic schooling whose job requires basic numerical – as opposed to literacy-related – tasks, the PIAAC detects better scores in the parts of the tests that measure numeracy than in those that measure literacy. Similarly, respondents with basic schooling whose job requires literary as opposed to numerical tasks obtain better scores in the part of the test that measures literacy than in that which measures numeracy. This result is also observed among workers who have most recently joined the labour market (second column of Table 2), which is consistent with the hypothesis that the initial years of working experience allow less educated workers to acquire some of the skills that they do not acquire in the formal education system.

The role of formal education and experience in human capital formation

The high proportion of the unemployed with a low level of education lies behind the advisability of designing active policies aimed at promoting their reinsertion in the labour market. One possibility involves using formal education to promote the employability of

10 The fact that university-educated workers benefit from specialisation in basic tasks, albeit to a lesser extent, may be due to several factors. One possibility is that basic mathematical or reading skills are not acquired at university. An alternative hypothesis is that individuals choose the professions most tailored to their initial knowledge, whereby those with a greater natural inclination for mathematics choose professions that require the performance of numerical-type tasks, i.e. there is a selection bias in the magnitudes estimated in rows 1 and 4 of Table 2. The working paper summarised here discusses the fact that the correlations between specialisation in numerical tasks and the score in the numeracy test for respondents with a secondary or university education reflect this selection bias and enable it to be quantified.

THE ROLE OF FORMAL EDUCATION AND OF WORK EXPERIENCE IN HUMAN CAPITAL

TABLE 3

Increase in numeracy in terms of formal education and job specialisation

	Estimate (a) (1)	Number of years (2)	Effect by year (3) = (2) / (1)
1 Effect of extending basic schooling by one year in the United States (b)	0.029	1	0.029
Population aged 16-55			
2 Effect of specialisation in numerical tasks on numeracy relative to literacy	0.156	16	0.010
3 Contribution of work experience (c)			0.336
Population aged 16-35			
4 Effect of specialisation in numerical tasks on numeracy relative to literacy	0.173	10	0.017
5 Contribution of work experience (c)			0.597
Population aged 16-55, selection adjustment (d)			
6 Effect of specialisation in numerical tasks on numeracy relative to literacy	0.013	16	0.001
7 Contribution of work experience (c)			0.028
Population aged 16-35, selection adjustment (d)			
8 Effect of specialisation in numerical tasks on numeracy relative to literacy	0.010	10	0.010
9 Contribution of work experience (c)			0.341

SOURCE: Banco de España, using PIAAC data in 13 countries: Czech Republic, Estonia, Spain, United Kingdom, Finland, France, Italy, Ireland, Korea, Netherlands, Norway, Slovakia and Sweden.

a Effect of extending basic schooling by one year on PIAAC numeracy measures (first row). The other rows show, in each case, the effect of specialisation in numerical tasks on the score in the numeracy test (relative to the score in the literacy test).
b Estimated effect of increasing basic schooling by one year on numeracy (upper bound of the effect for Spain).
c The contribution of experience to human capital is the result of dividing the effect of specialisation in numerical tasks by the effect on numeracy of an extra year of schooling (first row and third column).
d The "selection adjustment" strips out the part of the effect of specialisation in numerical tasks on numeracy that may be due to more numerate individuals choosing jobs intensive in numerical tasks.

the unemployed. The alternative is the use of labour market training programmes that emphasise specific skills. To facilitate the reinsertion of the unemployed with basic schooling into the labour market, it is therefore informative to know the relative contribution of formal education and work experience to human capital formation. One common means of analysing the level of individual human capital is through workers' wage levels. Nonetheless, exercises of this type are relatively uninformative in economies with a high level of long-term unemployment, as they exclude from the analysis the working-age population that does not work. Accordingly, this section examines the contribution of work experience and formal education to performance in the tests that measure numeracy or literacy skills that are available for the entire population.

Various papers have analysed how extending formal education affects workers' human capital. The evidence for the United States suggests that extending compulsory schooling by two years increases numeracy skills by approximately 6% of one standard deviation (approximately the difference between the numeracy skills of respondents with basic schooling in Spain and in the United Kingdom[11]). The evidence available for the Spanish case is limited, but it suggests in any event that the recent increase of two years in compulsory schooling has had a far lesser impact than this 6%.[12] By way of illustration the results for the United States are used, which might serve as an upper bound (see the first

11 Hanushek *et al.* (2015).
12 RoblesZurita (2013).

row of Table 3). On the basis of the quantitative results summarised in Table 2 and assuming that workers have specialised in numerical-type tasks throughout their working life (around 16 years on average), one year of specialisation in basic on-the-job tasks would contribute to the skills of the least well-educated around one-third of what one year of formal education would (see row 3 of Table 3).[13]

The effect is similar when the youngest population group (under 35) is considered. In this case, specialisation in numerical tasks – relative to literacy-related tasks – raises the score in numeracy tests – relative to the score in literacy tests – by a magnitude of 17% of one standard deviation, or one-third of the gap between the numerical skills of the population with basic schooling in Spain and in Finland. It should be stressed that the youngest cohort have, on average, had 10 years to build up labour market skills, while the average experience for the total population is 16 years. Comparing the effect of specialisation with that of formal education would show that, for the under-35s with a lower level of education, one year of specialisation in numerical tasks would increase numeracy by around 60% of what formal education would.

As mentioned, part of the effect detailed above may reflect the effects of unobserved variables that make individuals with a greater initial advantage in numeracy specialise in numerical-type tasks (so-called "selection bias"). The working paper summarised in this article discusses the fact that, once this bias is taken into account, specialisation in numerical-type tasks increases numeracy by 1.3% of one standard deviation for the entire population and by 10% for the population aged 16-35 (see rows 6 and 8 of Table 3). These results continue to show that one year of specialisation in numerical tasks increases numeracy by around 34% of what formal education would (see row 9 of Table 3). The results are identical when the effect of specialisation in literacy-related tasks on the literacy scores of youths with basic schooling is considered.

Conclusions

This article has analysed how work experience contributes to the acquisition of numeracy and literacy skills in 13 countries that have participated in the PIAAC (Programme for the International Assessment of Adult Competences), paying particular attention to the population group with basic schooling.

In all the countries analysed, work experience plays an important role in the formation of numeracy and literacy skills (two factors that predict individuals' employment and wages). Moreover, in this connection, work experience is especially important for the population with basic schooling. These results suggest that in economies with different labour market institutions, education systems and labour force compositions, labour market participation enables the low-skilled population to build up skills that increase their employability. These results are confirmed when the relationship between the tasks performed on the job and the different skills measured in the assessment is analysed in detail. Specifically, among respondents with basic schooling whose job requires basic numerical-type but not literacy-related tasks, the PIAAC detects better scores in the test that measures numeracy than in that which measures literacy. Similarly, respondents whose job requires reading-related as opposed to mathematical tasks obtain better scores in the part of the test that measures literacy than in that which measures numeracy.

The findings have implications for the design of active employment policies. Firstly, it is documented that basic tasks performed on the job contribute to building up the analytical

13 The return per year of working experience is the result of dividing the figure of 15.6% in Panel A in Table 2 by an average of 16 years of working experience

skills of individuals with a lower educational level. This conclusion is important, given the uncertainty over the effectiveness of non-work-related training courses aimed at the low-skilled unemployed. Secondly, the scores of numeracy and literacy tests for the unemployed may be a useful tool for identifying which groups pose most problems when it comes to joining the labour market. Finally, a description of tasks in different occupations in terms of level of educational attainment may also be a useful tool for identifying which jobs offer most benefits in terms of the human capital of the workers in question.

31.10.2017.

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