Data report on work attitudes - Background paper

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Data report on work attitudes

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1. Introduction

Attitudes may be defined as propensities, or tendencies, to respond in a favorable or unfavorable way toward an object. Attitudes reflect a person's likes and dislikes toward other persons, events, and activities. It is important to study and know about attitudes (for instance attitudes toward supervision, pay, benefits, promotion, or anything that might generate positive or negative reactions) because strong attitudes will very likely affect how an individual will behave (Harrison, Newman and Roth, 2006). As a result, employee satisfaction and attitudes to work represent one of the key areas for measuring organizational effectiveness.

The concepts of "workers' performance" and "job satisfaction" have been studied by different lines of inquiry and in different disciplines, i.e. economics and psychology (see the integrated survey of Pugno and De Pedri, 2010). The main issues regard the direction of causality of the relationship between job performance and job satisfaction and also its sign. Connected issues regard the effectiveness of the economic incentives for job performance and job satisfaction with respect to individuals' characteristics and contextual variables. Furthermore, work attitude affects job satisfaction and job performance; but, at the same time, job satisfaction and job performance affect work attitude. In short, it is important to take into account the wide concept of "work attitude" in measuring both job performance and job satisfaction. Hence, it is worth investigating the causality link between job performance, job satisfaction and work attitude.

The conventional view in economics – *which argues that economic incentives raise workers' job performance by increasing both their effort and utility* – should be extended on the basis of the psychological concepts of intrinsic motivations, self-esteem, and life satisfaction (Pugno and De Pedri, 2010). Indeed, also motivations, aspirations, and moral considerations drive individual behaviour. It follows that work attitude may be important to understand the two main economic choices of individuals: work *vs.* leisure and being an entrepreneur *vs.* being a wage-earner. Attitudes towards leisure and work, for instance, are likely to be affected by a person's own labour market experience and by the experience of those around her/him.

Another important link is that between "cultural attitude" and "work attitude". The evolution over time of the employment rates of women and of the young, and of hours worked in OECD countries is crucially affected by cultural attitudes towards work, gender and the young. More specifically, attitudes towards a woman's role in the family and towards leisure are statistically and economically important determinants of the employment rate of women and of average hours worked (Giavazzi et al., 2009). Furthermore, education matters in determining work aspirations and life satisfaction (Ferrante, 2009).

Finally, Bartel et al. (2004) show the importance of the on-the-job interpersonal environment for work performance. They consider the role of work attitude in the performance of branches of the same firm, rather than individual workers' performances. They first define attitude as the composite index of employees' judgments on supervisors, team cooperation, transparency in employees' evaluations and distributive fairness. They then observe that the heterogeneity of attitudes within branches is smaller than the heterogeneity across them, which demonstrates employees' conformism, or something called the 'branch's attitude'. The economic performance of the various branches in terms of sales, turnovers, and closures proves to be correlated with the 'branch's attitude'.

Hence the concept of "work attitude" is fundamental to answer to questions as *why people have jobs, what kind of jobs they choose, how much effort they put in work, what they want from jobs, how they experience work, how they are happy about one's job, how motivations are changing and so on*. In this work we aim at investigating this concept in a multi-dimensional fashion, collecting available information on a number of qualitative and quantitative dimensions. In particular, this report will investigate in detail the following main aspects of work attitudes:

- Work and Life balance

- Work ethics
- Attitude toward female work
- Individual preferences over job characteristics
- Job and Life satisfaction
- Attitude toward entrepreneurship.

A total of 32 countries are covered by the study: EU-27 countries (without Luxembourg and Malta, plus Switzerland and Norway) and some Extra-European countries (Canada, China, India, Japan, U.S.A.). Unfortunately, due to data availability, different dimensions of work attitudes could only be analysed by subsets of countries. In order to enhance data comparability, 2007 has been chosen as reference year in most cases, as in that year we observe the maximum data availability.

The nature of this report is descriptive, as it shows available evidence along the different dimensions of work attitudes without seeking relationships among variables nor causal links. In particular, no attempt will be made to link work attitudes indicators to outcome indicators (such as wages, productivity, GDP per capita, and so on), as this exercise would require a complete econometric model, which falls outside the scope of this study. Rather, the information included in the report will provide a detailed cross-country overview of the main dimensions of work attitudes, which could serve as inspiration for future research in the field.

Another important remark concerns the interpretation of results. Dealing with surveys on cultural values, one should carefully look at country rankings, as underlying cultural, social and economic factors might cause selected indicators to point at other issues than the related dimensions of work attitudes. For instance, preferences between family and work in a country could be influenced by macroeconomic conditions (e.g., the incidence of unemployment), by the quality of available services (e.g. childcare and healthcare) and by underlying cultural attitudes which could have little to do with work attitudes. Accordingly we suggest to consider country rankings with caution and taking into account the possible influence of exogenous variables.

This report is structured as follows. Section 2 presents the macroeconomic background of the countries included in the study. Section 3 presents the main data sources on work attitudes that have been used throughout the study. Section 4 shows an overview of the main descriptive results on work attitudes, as concerns the areas of work-life preferences, work ethic, preferences over job characteristics, job and life satisfaction, attitude toward female work and attitude to entrepreneurship. A final sections draws some conclusions.

2. Macroeconomic background

In this section we provide a synthetic overview of the main structural features of the economies that will be analysed throughout the report. The selected data are provided by harmonized sources, such as OECD, World Bank, ILO and the World Penn Table, in order to avoid incomparability problems with extra-EU countries. However, this choice implies that some missing values could emerge for specific variables, mostly in more recent years.

As in most of the report we will refer to 2007 data (in that year we observe the maximum data availability in our datasets), the base year for the macroeconomic background here provided is 2007. Nonetheless, this choice will help coping with the problem of missing data, by allowing to observe all countries in the same period (before the economic crisis). However, whenever possible, we will perform an update of the main trends up to 2009 (check Table 2.2 at the end of the chapter for recent updates of the main macro variables).

With the aim to describe the structural characteristics of the economies in real terms, we will take into account the following variables:

- GDP per capita (constant price, US$ in purchasing power parity)
- Employment to population ratio (analysed for total, male and female population)
- Employment by sector (agriculture, industry and services)
- Unemployment rate (total economy, male and female)
- Unemployment rate by level of education (primary, secondary and tertiary education)
- Long-term unemployment rate[1] (total economy, male and female)
- Youth unemployment (% of total labour force ages 15-24)
- Labour force by level of education (primary, secondary and tertiary education)
- Incidence of the shadow economy
- Unit Labour Cost
- Labour Income share (defined as the ratio of total labour cost to nominal output)
- Labour Productivity levels and growth (in purchasing power parity)
- Weekly working hours.

For sake of clarity we divide all countries into 6 macro-areas, which closely resemble the taxonomy of welfare regimes proposed by Esping Andersen (1990):

- Northern countries (Finland, Sweden, Norway, Denmark)
- Continental countries (Austria, Belgium, France, Germany, Netherlands, Switzerland)
- Anglo-Saxon countries (Ireland, United Kingdom)
- Eastern countries (Czech Republic, Hungary, Latvia, Poland, Romania, Slovenia)
- Southern countries (Greece, Italy, Portugal, Spain)
- Non-European countries (Canada, China, India, Japan, USA)

In the following paragraphs we will present, for each variable, a summary figure and a brief comment.

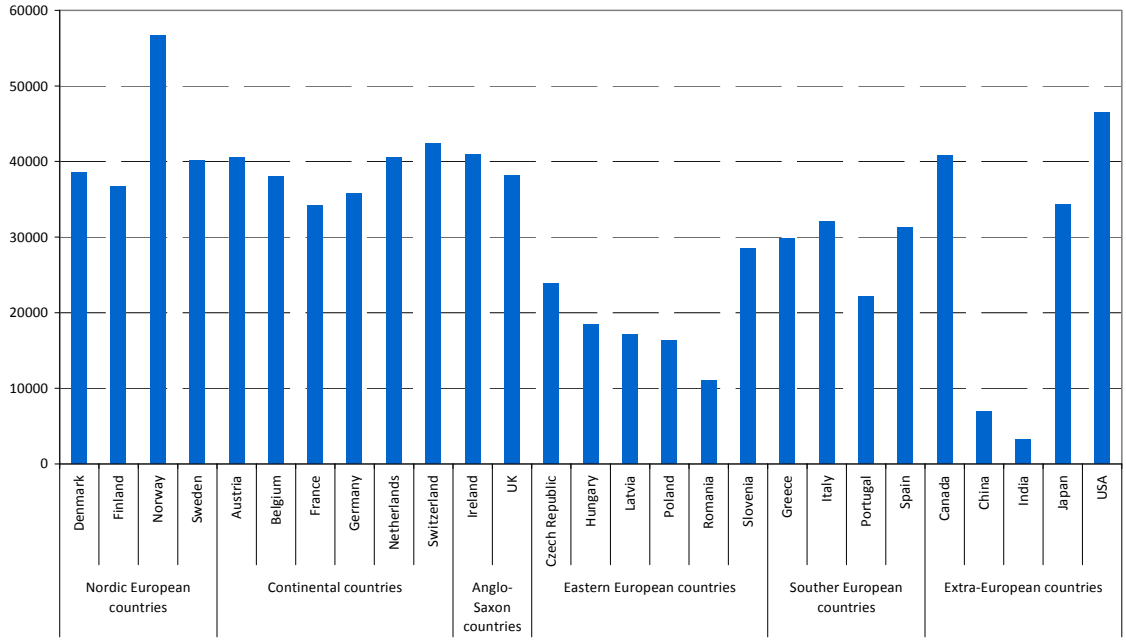
2.1. GDP per capita

Referring to the pre-crisis period (2007), Figure 2.1 shows that – not surprisingly – Northern, Continental, Anglo-Saxon and some Extra-European countries (Canada, Japan and USA) present higher values of GDP per capita than other macro-areas. GDP per capita is expressed in US dollars at 2005 prices, in purchasing power parity (thanks to Penn World Table data). In particular, Norway and the USA present the highest levels of GDP per capita (respectively US$ 57,000 and US$ 46,000), while Sweden, Austria, Netherlands, Switzerland, Ireland and Canada all show a GDP per capita at around US$ 40,000. Among large industrialised economies, lower values can be observed in France and Germany (around US$ 35,000), and Italy (around US$ 32,000). At intermediate levels (with an average of about US$ 29,000) we find Southern countries. Significantly lower (about US$ 19,000) appears the average GDP per capita in Eastern European countries.

[1] Long-term unemployment refers to the number of people with continuous periods of unemployment extending for a year or longer, expressed as a percentage of total unemployed.

China and India represent a singular case, with respectively US$ 6,996 and US$ 3,207 levels of GDP per capita. However, at the same time, these countries – as well as Poland – are the only ones showing a positive trend both in 2007-2008 and 2008-2009 period. On the contrary, all other countries show (at least in one of these periods) a negative trend, because of the recent world crisis.

Figure 2.1. GDP per capita in 2007 (US dollars at 2005 prices in PPP)



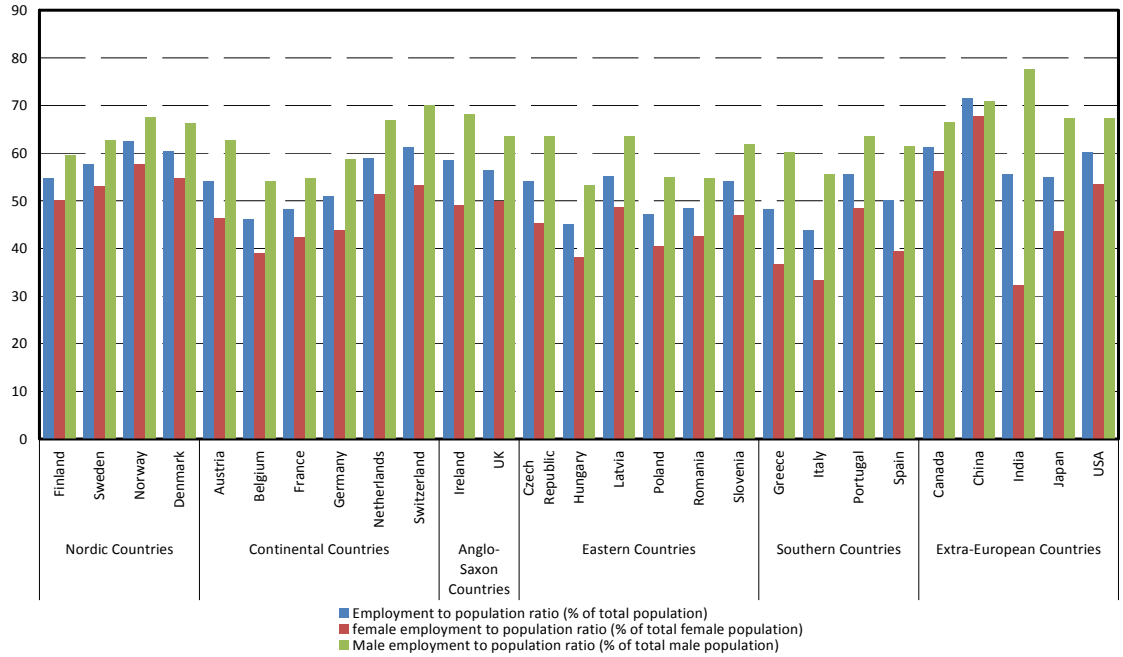
Source: Penn World Table

2.2. Employment

Employment rates (here computed as the ratio of employment to 15+ population) follow a peculiar distribution across macro-areas. Not surprisingly, the highest employment rates in Europe are recorded in Scandinavian countries (with an average of 58.7%), followed by Anglo-Saxon countries (57.4%) and Continental countries (53.3%) which, however, show a large variability (their values range from 46.2% of Belgium to 58.9% of the Netherlands, and 61.4% of Switzerland). This ranking is followed by Eastern European countries, which show an average value of 50.4% (though with peaks at 54% in Czech Republic and Slovenia) and by Southern countries, whose average stands at 49.4% (Italy, in particular, exhibits the lowest value, 43.4%). Among Extra-European countries, the highest employment rate is observed in China (71.5%), followed by Canada and USA (around 60%), Japan and India (around 55%). Nonetheless, the low value recorded in India stems from a strong employment gender gap.

In fact, when looking separately at male and female employment rates, India exhibits the highest value of male employment (77.5%) but, at the same time, the lowest employment rate among women (32.5%). The emergence of a gender employment gap is a common feature across all considered countries (see Table 1.1): it is maximum in India (45.2 percentage points), followed by Japan, Greece, Italy and Spain (where it ranges between 22 and 23 percentage points). Accordingly, low average employment rates for females appear a common characteristic of Southern European countries. At the bottom of this ranking, with gender employment gaps lower than 10 percentage points, are placed Northern countries as Norway, Sweden and Finland (around 9 percentage points) and China (whose employment gender gap stands at 3.3 percentage points).

Figure 2.2. Employment rate in 2007 (total economy, male and female)



Source: World Bank

Table 2.1 – Employment gender gap

This table ranks countries according to the difference between male and female employment rates in 2007

India	45.2
Japan	23.8
Greece	23.6
Italy	22.3
Spain	22.1
Ireland	19.0
Czech Republic	18.3
Switzerland	16.7
Austria	16.2
Netherlands	15.4
Portugal	15.3
Hungary	15.2
Belgium	15.1
Germany	15.0
Latvia	15.0
Slovenia	14.9
Poland	14.4
UK	13.7
USA	13.7
France	12.5
Romania	12.1
Denmark	11.6
Canada	10.4
Norway	9.8
Sweden	9.6
Finland	9.4
China	3.3

Source: World Bank

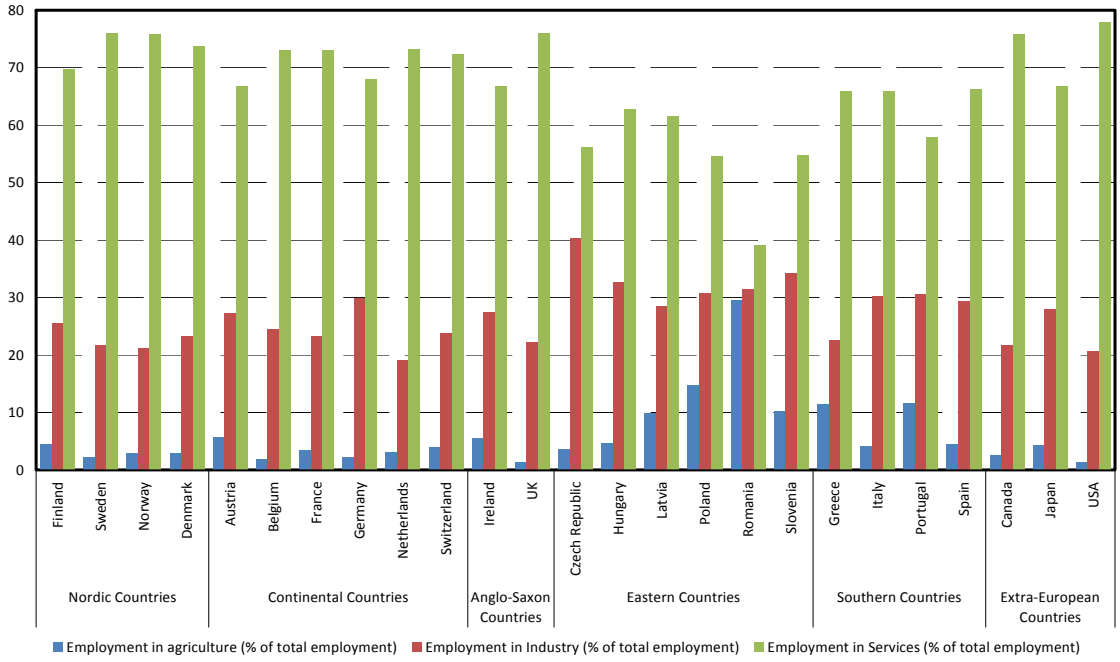
When considering the sectoral composition of employment (Figure 2.3), we immediately observe that in most countries the process of tertiarisation appears at an advanced stage, as the percentage

of employment in services is much higher than in the other sectors (please notice that sectoral data are not available for China and India).

In particular, for Nordic, Anglo-Saxon, Continental and Extra-European countries (Canada, Japan and USA) employment in services stands, on average, at 70% of total employment (peaking at almost 80% in the USA, UK and Canada). This value drops at an average 60% for Southern and Eastern European countries, with the exception of Romania (where it stands at 40%). In these countries manufacturing still employs a large share of workers, reaching 40% in Czech Republic and standing at 30%, on average, in the others. It should be noted that also Germany exhibits a large share of employment in manufacturing (almost 30%).

Finally, it appears interesting to observe that in some countries employment in agriculture still surpasses 10% of total employment (thus showing a significant reallocation potential towards more productive sectors). These countries are Latvia, Poland, Romania, Slovenia, Greece and Portugal. In particular, employment in the primary sector is still largely diffused in Romania, where it reaches 29.5%.

Figure 2.3. Employment by sector (agriculture, industry and services) in 2007



Source: World Bank

2.3. Unemployment

According to the World Bank definition used throughout this paragraph, unemployment refers to the share of the labor force that is without work but available for and seeking employment.

Looking at Figure 2.4, the situation in terms of total unemployment rate – in 2007, thus before the business crisis – was different even within the same macro-area (data for China and India are not available). In particular, countries showing a low overall unemployment rate were Norway (the only one exhibiting a value below 3%), Netherlands (3.6%), Switzerland (3.6%), Denmark (3.8%) and Japan (3.9%). On the contrary, unemployment rate was more evident in countries such as Poland (9.6%), Germany (8.6%), Greece (8.3%) and Portugal (8.0%).

Different trends can be observed if we focus on unemployment rate by gender. In extra-European (Canada, Japan and USA) and Anglo-Saxon countries, as well as in Latvia and Romania, male unemployment rate is generally larger than female one. Interesting is the case of United Kingdom, where the male unemployment rate is nearly 10 percentage points, the highest value among the selected countries.

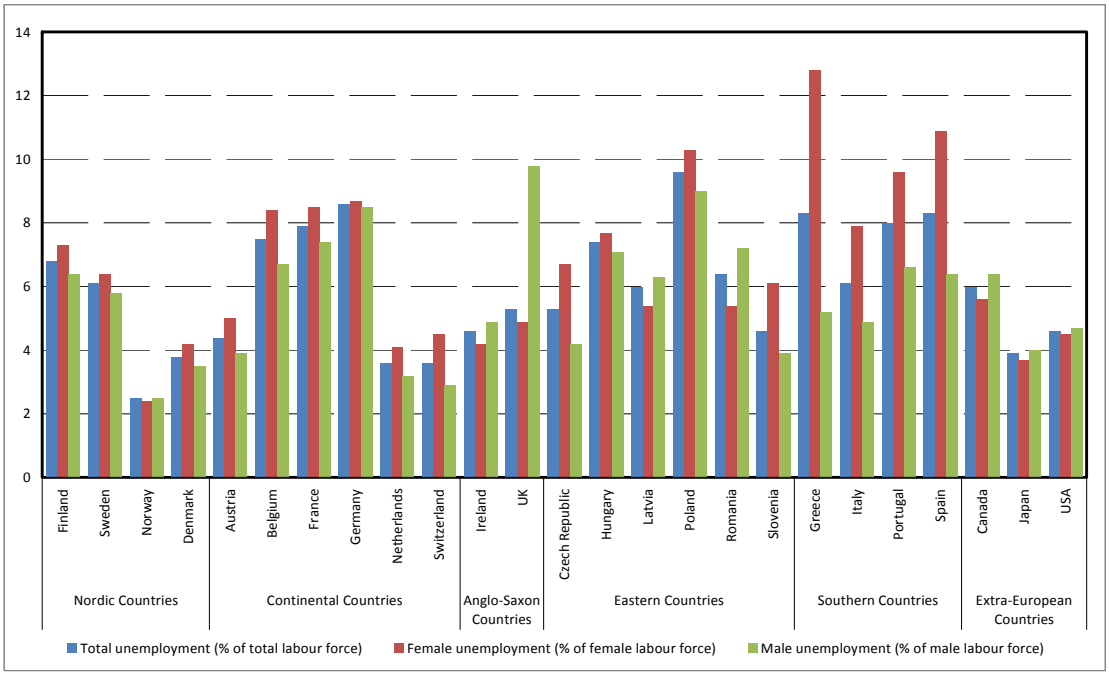
An opposite situation is evident in Northern, Continental and Southern countries, where the female unemployment rate generally exceeds the male one. Large unemployment gender gaps were evident in Greece (7.5 percentage points), Spain (4.5 percentage points), Portugal and Italy (3 percentage points).

Analyzing the trend of more recent years (2007-2008), a good performance in terms of unemployment was recorded by some countries, such as Poland (where the total unemployment rate decreased from 9.6% to 7.1%), Germany (from 8.6% to 7.5%) and Netherlands (from 3.6% to 2.8%). On the contrary, the effects of the first phase of the crisis were more evident especially in Spain (where total employment rate increased from 8.3% to 11.3%), Ireland (from 4.6% to 6.0%) and the USA (from 4.6% to 5.8%).

It also seems interesting to observe to what extent unemployment represents a structural problem, namely looking not only at its incidence on the labour force, but also at its duration. To this purpose, we consider the share of long-term unemployment, that is, the number of people with continuous periods of unemployment extending for a year or longer. Figure 2.5 shows that the highest share of long-term unemployed can be observed in Eastern and Southern countries (except Spain), as well as in two continental countries as Belgium and Germany. In all these countries the share of long-term unemployed stands at around 50% of total unemployment. At the opposite of the scale we find countries such as Sweden, Norway, Canada and USA (showing an average long-term unemployment share of 10%), followed by Denmark (18.2%), Finland (23%), UK (24.5%), Austria (26.8%) and Spain (27.6%).

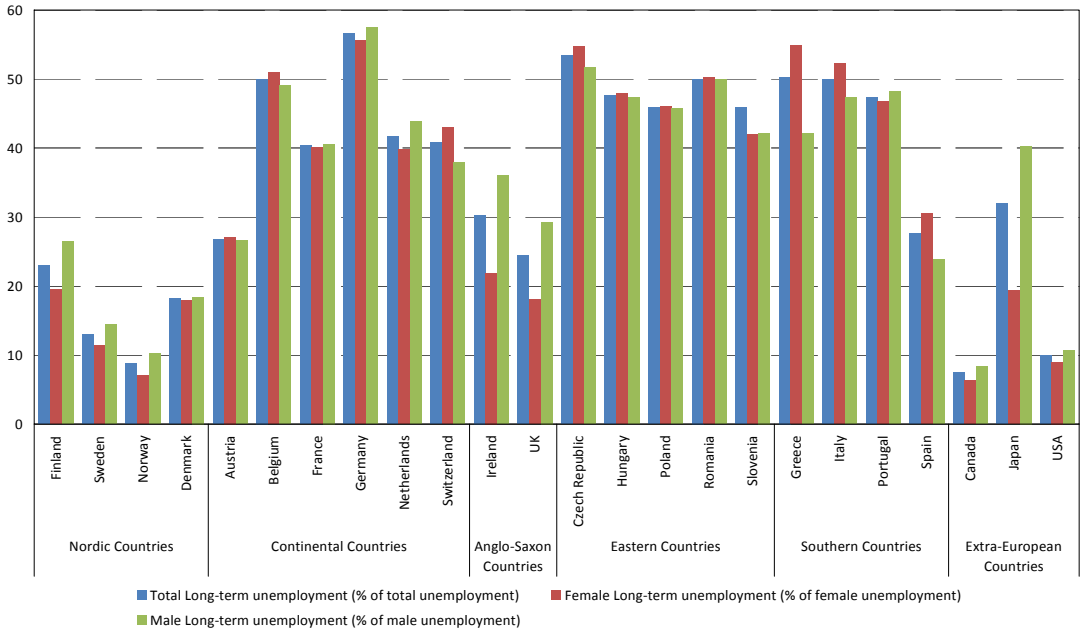
It should be noted that, if we consider two countries with the same unemployment rate, long-term unemployment can be considered as a proxy of flows in and out of unemployment (when these flows are lower, the average duration of unemployment increases). According to this interpretation, the incidence of long-term unemployment should be lower in countries characterized by a more flexible labour market and by more effective active labour market policies. The distribution of long-term unemployment across selected countries seems to follow the common knowledge about these two features.

Figure 2.4. Unemployment rate in 2007 (total economy, male and female)



Source: World Bank

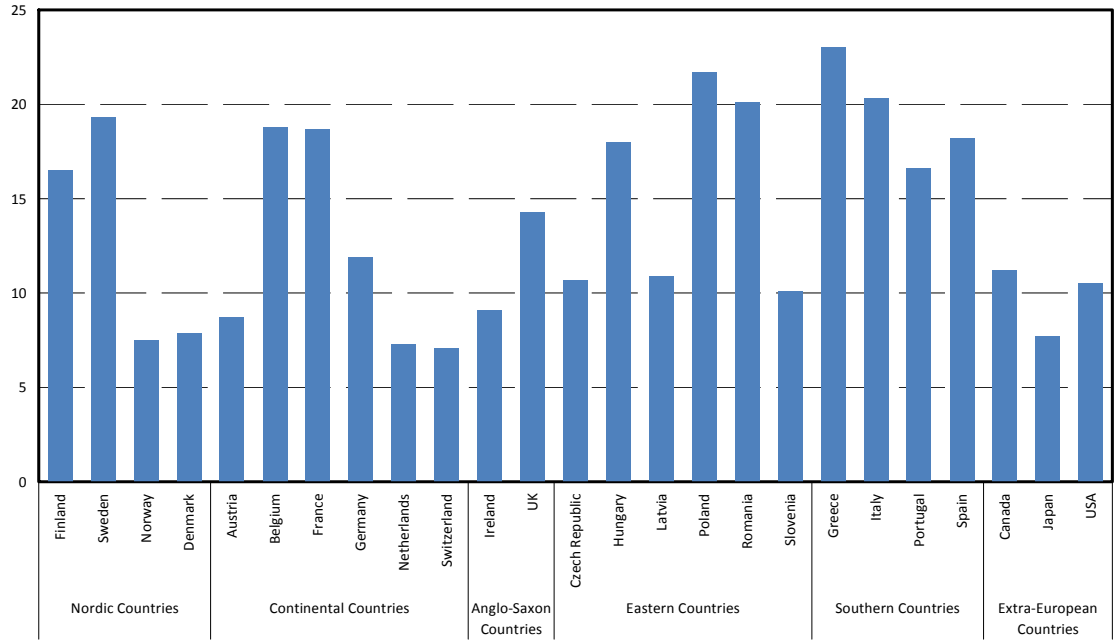
Figure 2.5. Long-term unemployment in 2007 (total economy, male and female)



Source: World Bank

Finally, we consider the incidence of unemployment among young people. Youth unemployment has become a serious problem in several European countries, pointing at difficult transitions from education to employment and, more in general, at a difficult job insertion for young people. Figure 2.6 shows youth unemployment as a percentage of total labour force aged 15-24, in 2007. This picture does not evidence any common recognizable pattern in our macro-areas, except for a significant incidence of youth unemployment in all Southern European countries (with an average of 19.5%). Going into detail, countries showing the highest levels of youth unemployment are Greece (23.0%), Poland (21.7%), Italy (20.3%) and Romania (20.1%). On the contrary, the lowest rates are recorded in Switzerland (7.1%), the Netherlands (7.3%), Norway (7.5%) and Japan (7.7%).

Figure 2.6. Youth Unemployment rate in 2007 (% of total labor force ages 15-24)



Source: World Bank

2.4. Shadow economy

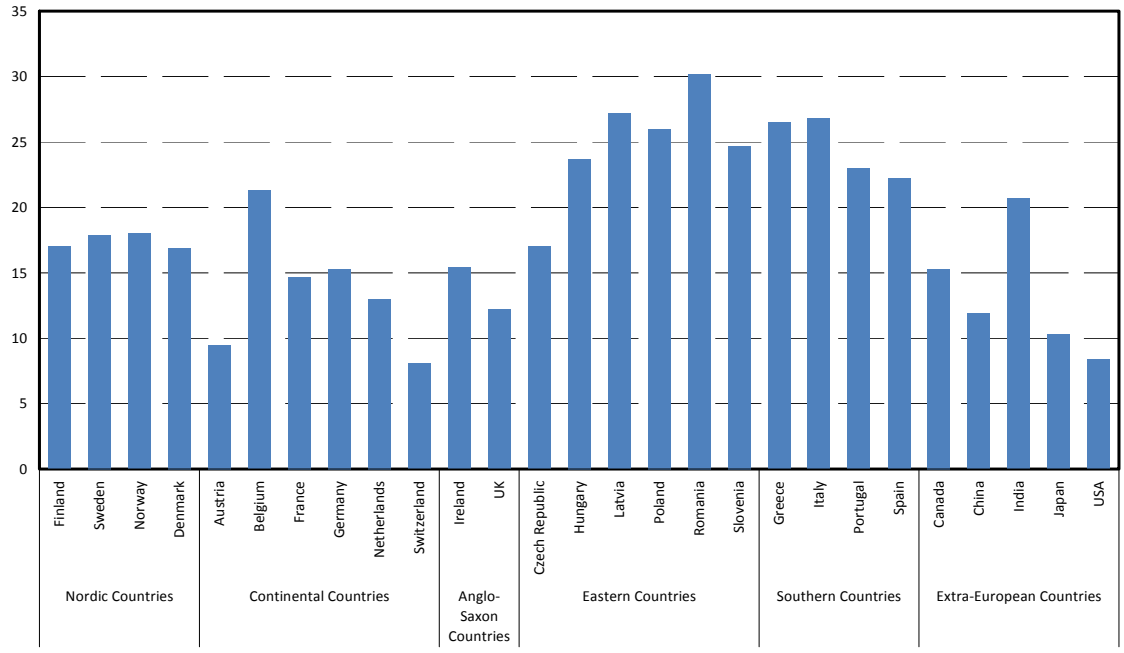
Figure 2.7 shows the incidence of the shadow economy on GDP in 2007 according to the estimates of Schneider et al. (2010). These authors use the following definition of shadow economy: "all market-based legal production of goods and services that are deliberately concealed from public authorities for any of the following reasons: (i) to avoid payment of income, value added or other taxes, (ii) to avoid payment of social security contributions, (iii) to avoid having to meet certain legal labour market standards, such as minimum wages, maximum working hours, safety standards, etc., and (iv) to avoid complying with certain administrative procedures, such as completing statistical questionnaires or other administrative forms". Accordingly, illegal activities are strictly excluded from the estimates.

The incidence of the shadow economy is estimated using an econometric methodology named Multiple Indicators Multiple Causes (MIMIC) model, which falls into the category of structural equations models (SEM). Through this model, the shadow economy is treated as an unobserved variable and is analysed with respect to its relationship to observed variables (such as the tax burden, indexes of business and economic freedom, and so on) using their covariance matrix. For more details please refer to Schneider et al. (2010).

According to these estimates (Figure 2.7), the highest incidence of shadow economy on "official" GDP is found in Eastern and Southern European countries, where this share (with the exception of Czech Republic, which shows lower values) ranges from 22.2% of Spain to 30.2% of Romania. Other countries with a high estimated incidence of undeclared economy are Belgium (21.3%) and India (20.7%). On the contrary, the lowest rates are recorded in Switzerland (7.1%), Netherlands (7.3%), Norway (7.5%) and Japan (7.7%).

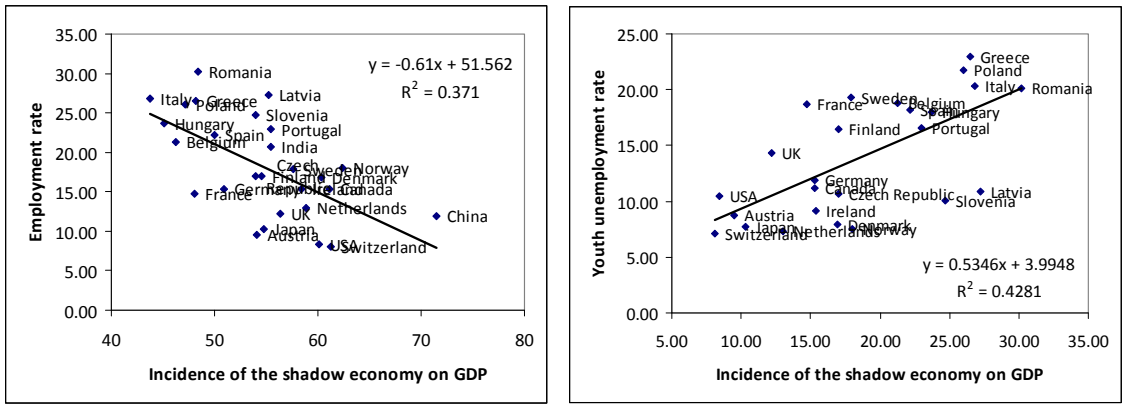
Interestingly, the incidence of the shadow economy appears positively correlated with the youth unemployment rate and negatively correlated with the employment rate (Figure 2.8). Undeclared work is surely more diffused where the conditions for regular employment are more difficult. Nonetheless, this evidence also points at a low reliability of official statistics on employment and unemployment (which hardly capture the incidence of undeclared work) in countries with a high share of shadow economy.

Figure 2.7. Size of the Shadow Economy in 2007 (Schneider Estimates)



Source: Schneider et al. 2010

Figure 2.8. Relationship between shadow economy, employment rate and youth unemployment rate



Source: Schneider et al. 2010, World Bank

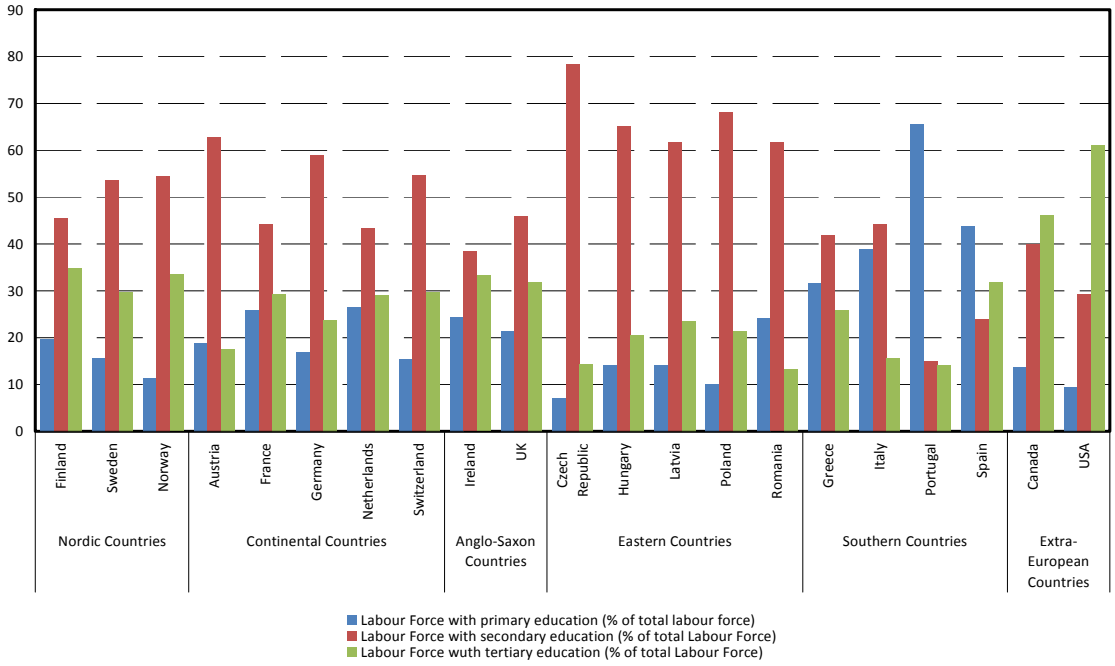
2.5. Labour force per level of education

Among the structural characteristics of the economies which could impact on work attitudes, it seems interesting to look at the educational level of the labour force. Interesting trends could be defined by looking at Figure 2.9. The first trend is related to Southern European countries, where the incidence of primary education over the labour force is still high, compared to other European countries. In particular, in Portugal and Spain this share stands respectively at 65.7% and 43.8%. This feature is mostly due to the low educational level of older people, which still represent a high percentage of the total labour force, while the average educational level of younger workers (as it can be drawn from Eurostat statistics) is generally higher.

The second trend is about the high percentage of labour force with tertiary education in Canada and USA (46.2% and 61.1%), which reflects both the higher wage premium for education envisaged in those countries and the effectiveness of their educational system. A high incidence of university education (over 30%) can be found as well in some European countries such as UK, Ireland, Finland, Sweden, Norway and Spain.

Finally, higher levels of secondary education can be found in Eastern European countries, which historically (also in the socialist era) have shown high educational attainment, due to the length of compulsory schooling in the national educational systems.

Figure 2.9. Labour Force per level of education in 2007 (primary, secondary and tertiary education)



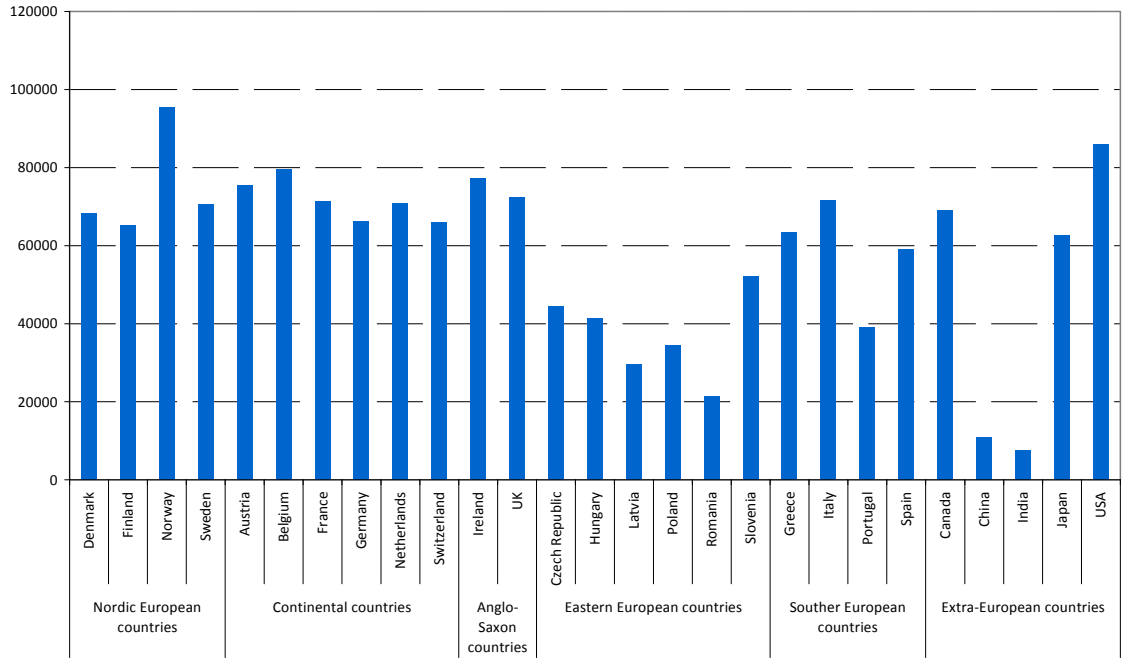
Source: World Bank
Note: Data for the Netherlands refer to 2005.

2.6. Labour productivity, unit labour cost and labour income share

A relevant indicator of technological development is represented by labour productivity. We consider here labour productivity as output per worker, although output per worked hour would be a better measure. Nonetheless, information on working hours is not available for all countries. Data are expressed in purchasing power parity (US dollars at 2005 prices) thanks to the Penn World Table data. It comes out that Norway shows the highest values of output per worker (around US$ 95,000) followed by the USA (US$ 86,000), Belgium (US$ 80,000) and Ireland (US$ 77,000). Most other Nordic and Continental European countries (plus Italy, the UK and Canada) stand in a range between US$ 65,000 and 75,000. Labour productivity in Japan, once measured in purchasing power parity (around US$ 63,000), lags behind other industrialized countries.

Lower levels of GDP per worker (less than US$ 40,000) can be found in Eastern European countries and Portugal. China and India close this ranking with GDP per worker at about US$ 11,000 and 8,000.

Figure 2.10. GDP per worker in 2007 (US dollars at 2005 prices in PPP)

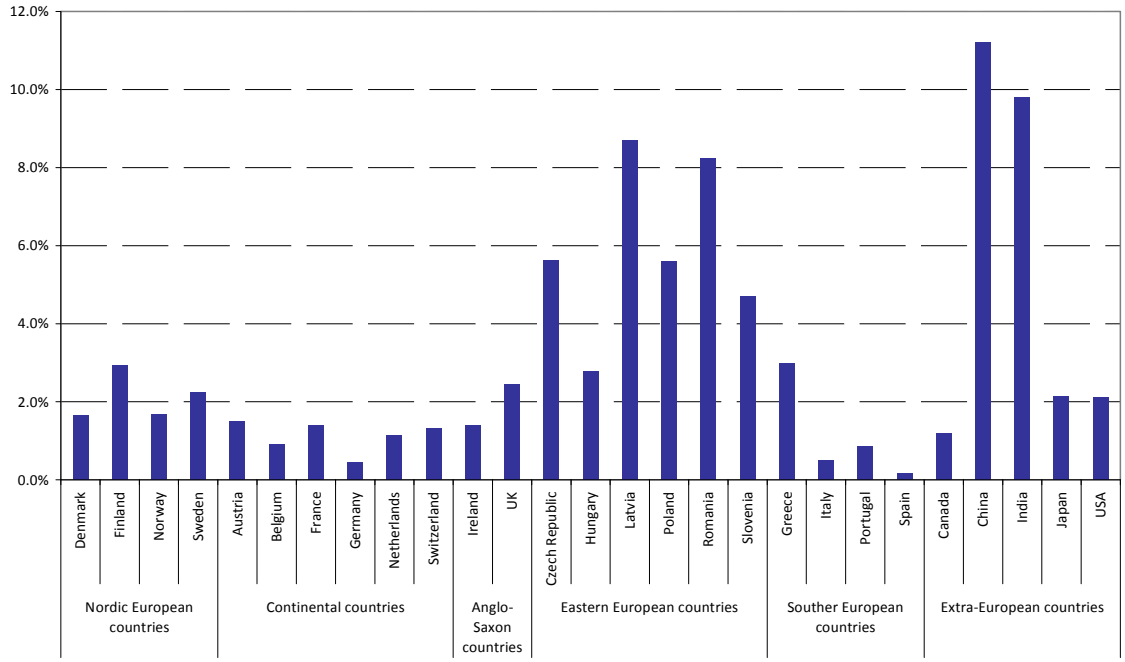


Source: World Penn Table

Figure 2.11 shows the average yearly growth rate of labour productivity (output per worker in purchasing power parity) for the period 2002-2007, according to Penn World Tables data. From Figure 2.11 it clearly emerges that catching up countries (Eastern European countries plus China and India) unsurprisingly present quite higher labour productivity growth rates than most other economies. The highest annual growth rates are recorded in China (11.2%) and India (9.8%), followed by Latvia (8.7%) and Romania (8.2%). All other Eastern European countries included in our sample present yearly labour productivity growth rates higher than 4%, with the exception of Hungary.

Among the other countries, those showing the highest productivity growth rates (higher than 2%) over the 2002-2007 period are Finland, Sweden, the UK, Greece, Japan and the USA. On the contrary, the lowest rates (less than 1%) are recorded in Belgium, Germany, Italy and Spain.

Figure 2.11. Yearly growth rate of labour productivity between 2002 and 2007 (US dollars at 2005 prices in PPP)



Source: World Penn Table

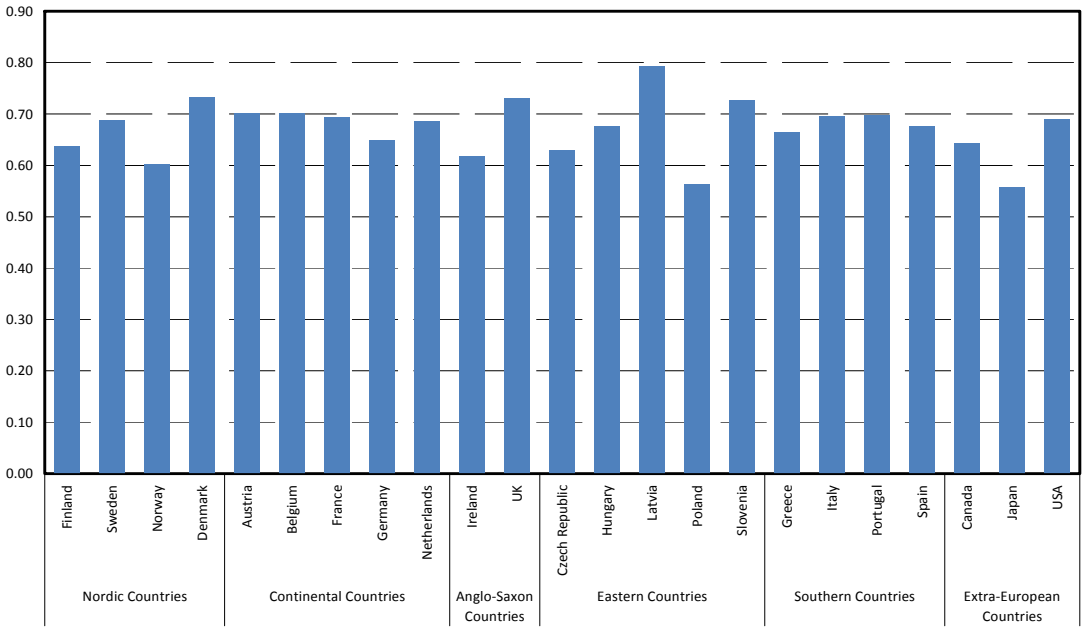
The ratio of average labour costs per hour to labour productivity (output per hour) offers a measure of unit labour cost, which is an important index of competitiveness. Labour costs per se, in fact, are not a good measure of competitiveness, if they are not linked to a measure of output.

Figure 2.11 shows that the unit labour cost index computed by OECD (unfortunately, China, India and Romania are not available in this comparison). The unit labour cost index stands at around 0.70 in most countries (the unweighted average in our sample is 0.67). Nonetheless, some exceptions – in both directions – can be found. Among Eastern European countries, which are usually deemed to present lower labour costs than the rest of Europe, we can find a couple of country exhibiting higher ULC, namely Latvia (0.79) and Slovenia (0.73). On the contrary, Czech Republic and Poland show lower than average ULC values.

Among industrialised countries, it is interesting to observe the relative positioning of Norway (0.60), Germany (0.65), Canada (0.64) and Japan (0.56). They show, in spite of generally higher wage levels, a good competitiveness because of a better performance in terms of labour productivity.

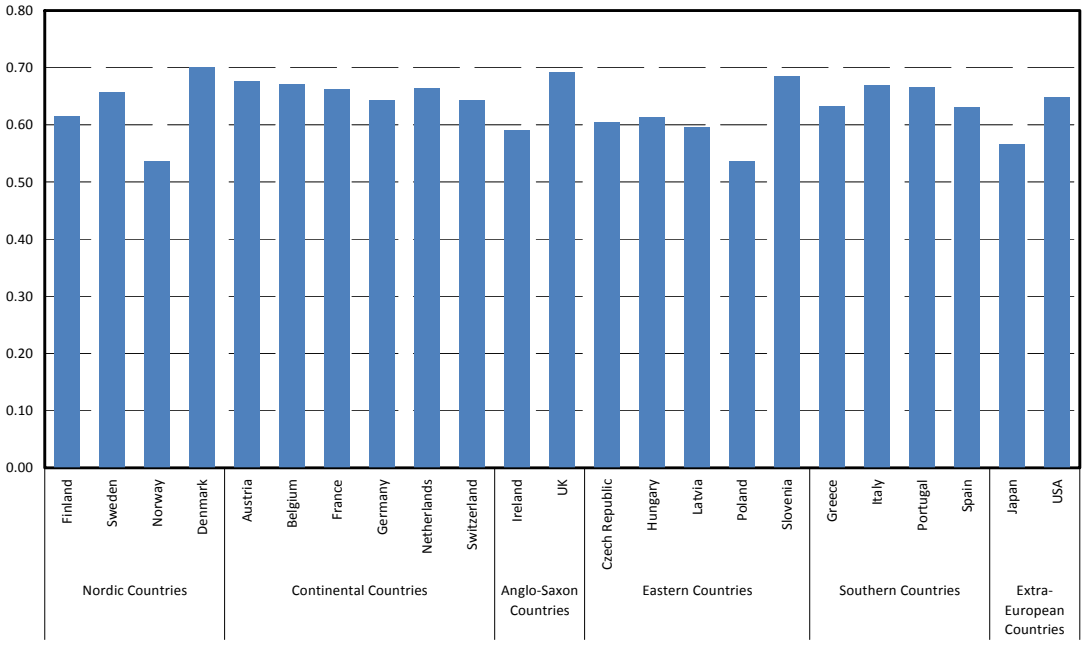
Figure 2.12 is about the incidence of labour income over total income. This variable provides a synthetic representation of the distribution of income between factors of production – capital and labour. The labour income share appears higher in Continental and Southern countries (the average amounts respectively to 0.66 and 0.65), while it is lower, on average, in Eastern countries (0.61). UK and Denmark show the highest values (0.70 and 0.69).

Figure 2.11. Unit Labour Cost in 2007



Source: OECD

Figure 2.12. Labour income share (Total labour cost / nominal output) in 2007

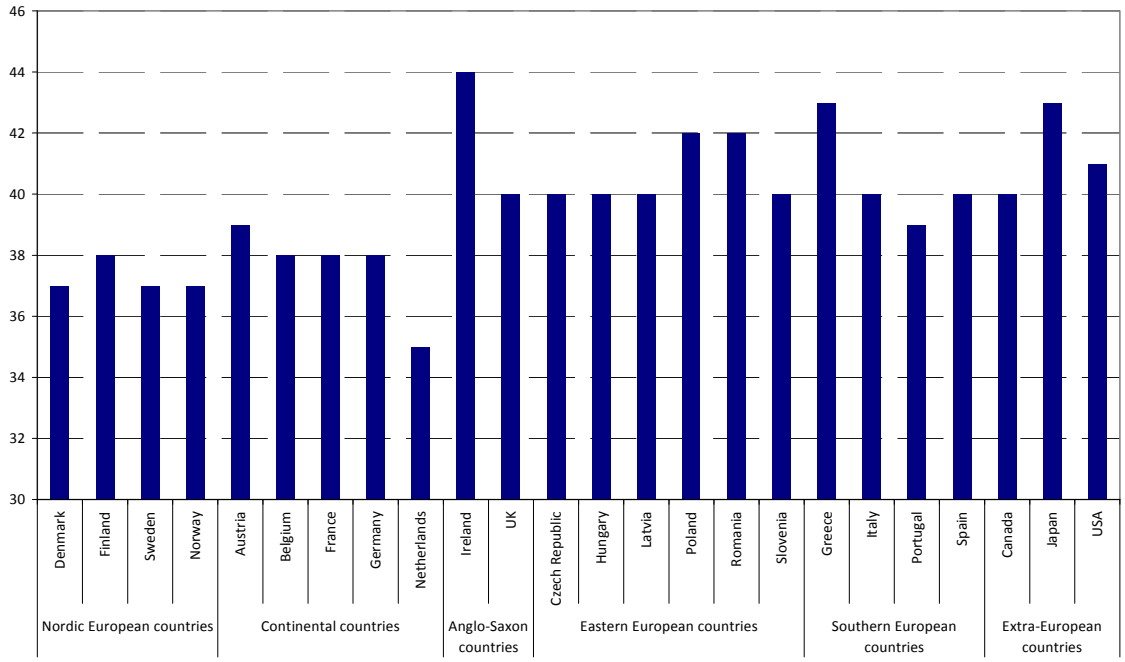


Source: OECD

2.7. Working Hours

Figure 2.13 shows average weekly working hours according to ILO data (unfortunately, data are not available for Switzerland, India and China). It immediately emerges that Nordic European countries and Continental countries show shorter working hours than other countries, with an average of respectively 37.3 and 37.6 hours per week. Among these countries, Austria shows the highest value (39 hours) and the Netherlands show the lowest (35 hours). Longer working hours emerge in other country groupings, namely Anglo-Saxon countries (42 hours), Eastern European countries (40.7 hours) and Southern European countries (40.5 hours). The most frequent modality is represented by 40 average working hours per week, while higher values can be observed in Ireland (44 hours, the highest value in our sample), Poland and Romania (42 hours) and Greece (43 hours). Among extra-European countries, the highest number of working hours is recorded in Japan (43 hours) followed by the USA (41 hours) and Canada (40 hours).

Figure 2.13. Weekly working hours in 2007



Source: ILO

2.8. Appendix. Recent trend of the main macroeconomic variables

Table 2.2 – Recent trends in macro variables

This table shows recent trends in GDP per capita (US dollars at 2005 prices in PPP), employment and unemployment rates

	Countries	GDP per capita			Employment rate		Unemployment rate	
		2007	2008	2009	2007	2008	2007	2008
Nordic Countries	Finland	36713	37650	34768	54.6	54.7	6.8	6.4
	Sweden	40195	41310	39298	57.6	57.6	6.1	6.2
	Norway	56715	62311	56508	62.4	62.3	2.5	2.6
	Denmark	38573	39632	37382	60.3	60.3	3.8	3.3
Continental Countries	Austria	40507	42458	41067	54.1	54.5	4.4	3.8
	Belgium	37944	38902	38586	46.2	46.5	7.5	7.0
	France	34166	35283	34388	48.1	47.9	7.9	7.4
	Germany	35783	37272	36229	50.9	51.7	8.6	7.5
	Netherlands	40552	42645	40676	58.9	59.3	3.6	2.8
	Switzerland	42418	44360	44380	61.3	61.2	3.6	3.4
Anglo-Saxon Countries	Ireland	40913	39265	35879	58.4	57.8	4.6	6.0
	UK	38153	39109	37000	56.4	56.3	5.3	5.6
Eastern European Countries	Czech Rep.	23857	24857	24352	54.0	54.3	5.3	4.4
	Hungary	18457	19045	18002	45.1	44.8	7.4	7.8
	Latvia	17128	17033	14129	55.2	55.0	6.0	7.5
	Poland	16375	17710	18367	47.2	48.2	9.6	7.1
	Romania	11117	12493	11706	48.4	48.1	6.4	5.8
	Slovenia	28528	30330	28135	54.0	54.1	4.6	4.4
Southern Countries	Greece	29777	30946	30203	48.2	48.4	8.3	7.7
	Italy	32098	32272	30898	43.8	43.6	6.1	6.7
	Portugal	22161	22686	22340	55.5	55.7	8.0	7.6
	Spain	31215	31904	30911	50.0	48.6	8.3	11.3

Source: Penn World Tables, OECD

Table 2.2 (continued) – Recent trends in macro variables

This table shows recent trends in GDP per capita (US dollars at 2005 prices in PPP), employment and unemployment

	Countries	GDP per capita			Employment rate		Unemployment rate	
		2007	2008	2009	2007	2008	2007	2008
Extra-European Countries	Canada	40777	42681	40026	61.1	61.2	6.0	6.1
	China	6996	8051	8826	71.5	71.0	4.0	4.2
	India	3207	3402	3589	55.5	55.6	NA	NA
	Japan	34367	33975	32852	54.8	54.2	3.9	4.0
	USA	46458	47210	45614	60.1	59.2	4.6	5.8

Source: Penn World Tables, OECD

3. Data sources on work attitudes

Three main data sources have been used throughout the study on work attitudes: the World Values Survey (WVS), the European Working Conditions Surveys (EWCS) and the Global Entrepreneurship Monitor (GEM).

The World Values Survey (WVS) is a worldwide investigation of the basic values and beliefs of individuals in a large cross-section of countries. The survey contains information about demographics (sex, age, education, etc.), self-reported economic conditions, political preferences, attitudes, and religion. With some exceptions (for African countries), all samples are probability based and nationally representative of the resident population. In our analysis we will focus on the following 20 countries surveyed in the fifth wave (2005-2008) of the WVS: Bulgaria, Canada, China, Cyprus, Finland, France, Germany, India, Italy, Japan, Netherlands, Norway, Poland, Romania, Slovenia, Spain, Sweden, Switzerland, United Kingdom and U.S.A.

We use the EWCS (fourth wave) to derive an indicator of job satisfaction (only for European countries). The EWCS is conducted every 5 years (since 1990) by Eurofound. The aim is to investigate several aspects of working conditions among European Union countries. Respondents to the survey are selected by multistage random sampling, to be representative of the working age population in the countries covered.

Finally, data on aspirations and perception toward entrepreneurship come from the Global Entrepreneurship Monitor, which is a research programme started as a partnership between London Business School and Babson College (UK), and aiming at an annual assessment of entrepreneurial activity at the national level. The Global Entrepreneurship Monitor was initiated in 1999 with 10 countries and gradually expanded up to 56 countries in 2009. It is based on a harmonized assessment of the level of national entrepreneurial activity for all participating countries, and involves exploration of the role of entrepreneurship in national economic growth.

In order to ensure cross-country comparability, in most cases categorical or ordinal variables have been treated in order to obtain "scores", which could be directly used in the analysis. Simple econometric techniques have been applied to this purpose[2].

Appendix 1 describes in detail the methodology followed for the transformation of variables, while Appendix 2 presents a comprehensive list of variables.

4. Aspects of work attitudes: an overview

This section presents an overview of the main results about the chosen dimensions of work attitudes, namely work-life preferences, preferences over job characteristics, work ethic, job and life satisfaction, attitude toward female work and entrepreneurship. It seems important to remark that the evidence here presented is purely descriptive, and no attempt has been made to link the indicators of work attitude to performance indicators or other macro-economic variables such as employment, income, education level, and so on. Moreover, as stressed in the introduction, most indicators come from subjective assessments, which are likely to be influenced by social and cultural factors, which have not been controlled for in the study. Accordingly, the idea is to provide a wide description of the main phenomena concerning work attitudes, in order to provide hints and suggestions for future research.

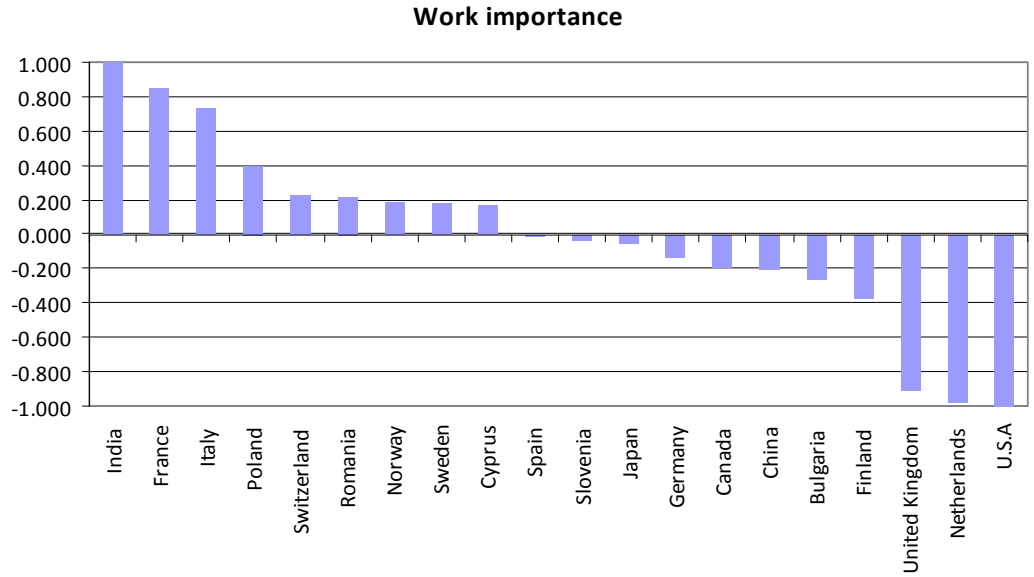
4.1 Work-life preferences

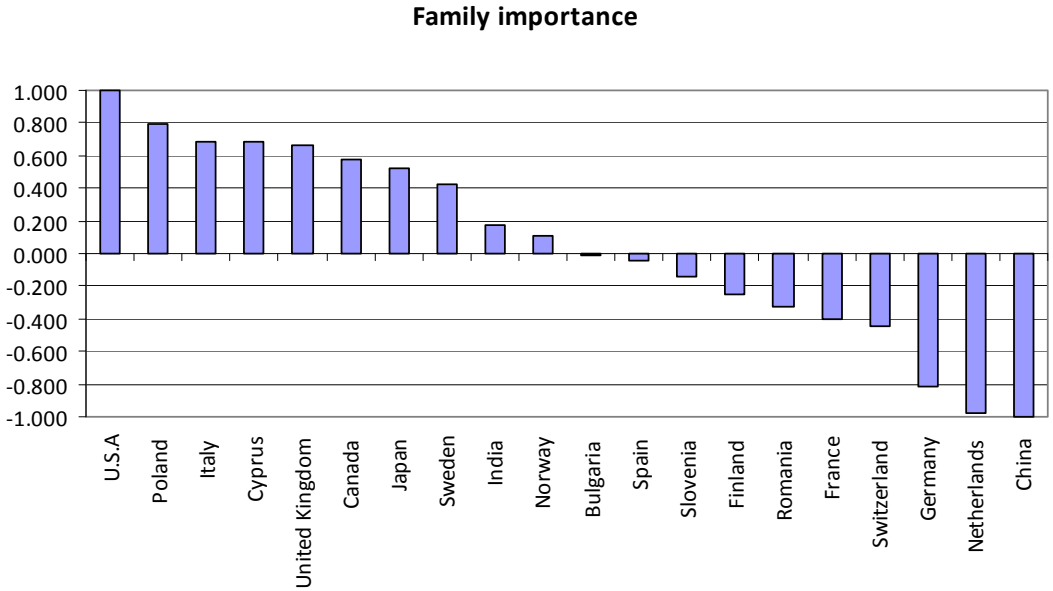
Work-life preference is a broad concept including proper prioritizing between "work" (career and ambition) on one hand and "life" (health, pleasure, leisure, family and spiritual development) on the other. Heller and Ruiz-Quintanilla (1995) find that work centrality in life is higher in countries that have only recently moved away from agriculture and towards industrialization (Japan, China, Slovenia) while more emphasis on hobbies, sport, recreation, and social activity is placed in countries like Britain, Germany, and the Netherlands, which had their industrial revolution some two and a half centuries ago. An intermediate position between these two extremes is that of U.S.A.

Our preliminary findings on work-life preferences are reported in Figure 4.1, which shows the importance respectively attributed to work, family, leisure and friends for all countries in the WVS sample. It should be noted that these variables just measure the "importance" that individuals attribute (in absolute terms) to these aspects in life, without expressing a preference, for instance, between work and leisure or between work and family (this preference will be investigated through supplementary variables). Accordingly, this evidence should be carefully considered. In particular, some countries might show at the same time high (or low) scores on both work and leisure, or both work and family, due to country-specific cultural and socio-economic factors. Table 4.1 shows country profiles according to the importance associated to the life dimensions analysed.

Figure 4.1. Work-life importance

[2] The chosen methodology has been to apply probit or ordered probit regressions to raw variables on country fixed-effects, which have been interpreted as shifts in the average of the latent work attitude dimensions.

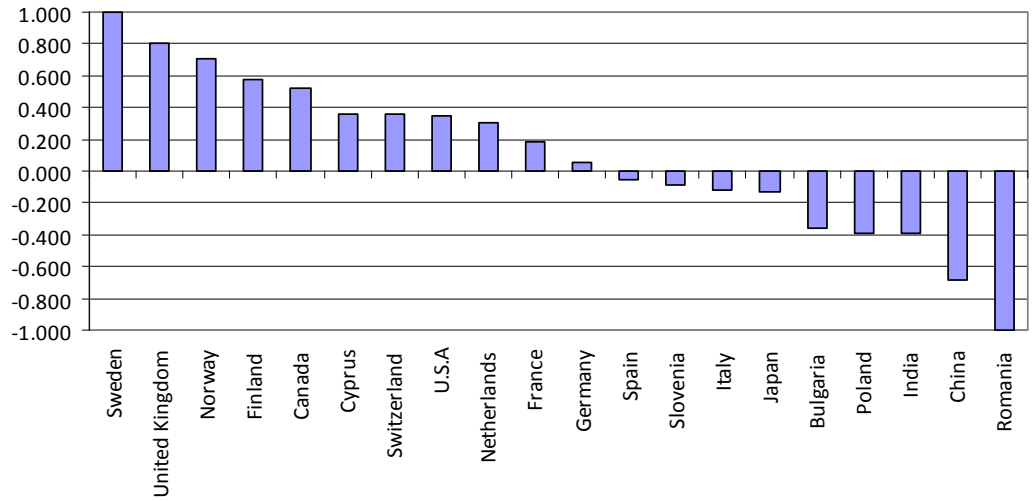




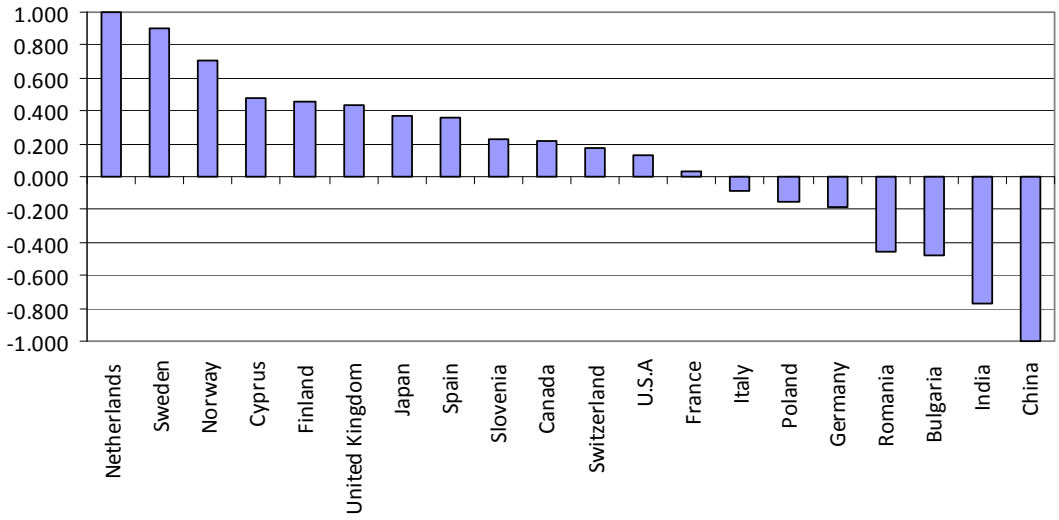
Source: own computation on World Value Survey
Note: variables are standardized in the (-1, +1) range

Figure 4.1 (continued). Work-life importance

Friends importance



Leisure importance



Source: own computation on World Value Survey
Note: variables are standardized in the (-1, +1) range

Table 4.1 – A closer look to work-life preferences

Country profiles on the basis of the importance attributed to life dimensions

Country	Comment
Bulgaria	All the four life dimensions are not considered particularly important. The most important dimension for this country is family, while the least important is leisure.
Cyprus	All the four life dimensions are considered particularly important. The most important dimension for this country is family, while the least important is social life.
Finland	Family and social life are considered particularly important. The most important dimension is social life while the least important is work.
France	Work and social life are considered particularly important. The most important dimension is work while the least important is family.
Germany	Social life is considered particularly important, while the other three dimensions are not. The least important dimension is family.
Italy	Work and Family are particularly important. The least important dimension is social life.
Netherlands	This is the country that places the most importance on leisure time. Family and Work are not considered particularly important.
Poland	Work and Family are particularly important. The least important dimension is social life.
Romania	Work is considered particularly important. This is the country that places the least importance on social life.
Slovenia	Leisure is considered particularly important, while the other three dimensions are not. The least important dimension is family.
Spain	Leisure is considered particularly important, while the other three dimensions not. The least important dimension is social life.
Sweden	All the four life dimensions are considered particularly important. This is the country that places the highest importance on social life.
UK	Family, social life and leisure are considered particularly important. The last important dimension is work.
Norway	All the four life dimensions are considered particularly important. The most important dimension is leisure.
Switzerland	Work, leisure and social life are considered particularly important, while family is the least important dimension.
Canada	Family, leisure and social life are considered particularly important while work is least important dimension.
China	This country places the lowest importance both on leisure time and on family. The most important dimension is work.
India	This is the country that places the highest importance on work. Also family is particularly important while leisure and social life are not.
Japan	Family and leisure are considered particularly important.
USA	This is the country that places the most importance on family and the least importance on work.

Table 4.2 – Work vs. family and work vs. leisure trade-off

Country rankings according to the reported desirability of a future emphasis on work rather than on family life and of the agreement with the statement "Work should always come first, even if it means less spare time"

Rank	Country	Desirability to shift emphasis on work rather than on family life	Country	Work should always come first, even if it means less spare time
1	Japan	1.000	Romania	-1.000
2	Romania	0.560	India	-0.846
3	China	0.505	Bulgaria	-0.623
4	India	0.354	China	-0.437
5	Slovenia	0.312	Germany	-0.363
6	Bulgaria	0.275	Poland	-0.280
7	Norway	0.217	Cyprus	-0.249
8	Germany	0.104	Slovenia	0.005
9	Netherlands	0.002	Italy	0.020
10	Poland	-0.061	Spain	0.199
11	U.S.A	-0.070	Switzerland	0.252
12	Italy	-0.193	Norway	0.306
13	Finland	-0.376	Finland	0.733
14	Canada	-0.541	Sweden	0.789
15	Spain	-0.547	Canada	0.844
16	UK	-0.623	U.S.A	0.846
17	Sweden	-0.670	Japan	1.000
18	Cyprus	-0.720		
19	France	-1.000		

Note: variables are standardized in the (-1, +1) range

More indicative of the preference between work and other dimensions of life are the variables reported in Table 4.2. Table 4.2 inspects at first the desirability of a future reallocation of time on family rather than on work: this represents a more direct measure of the trade-off between work time and family time, because in this case people are asked to confront the time allocated to the two life dimensions. Countries are ranked so that at the top of the ranking the desirability of a greater emphasis on work with respect to family life is highest (Japan), while at the bottom of the ranking it is lowest (France).

This result seems to support Heller and Ruiz-Quintanilla (1995) findings. However, their results are only partly confirmed when the work-leisure trade-off is accounted for. Table 4.2 also offers a

closer look to the leisure-work trade-off: in particular, countries are ranked according to the belief that work should come first even if this implies less leisure time (in highly ranked countries this belief is stronger).

A neoclassical microeconomic prediction is that the supply of work increases with income up to a point, and beyond this point a further increase of the income induces people to reduce the amount of working hours that they supply. Not surprisingly, we observe that, on average, countries characterized by lower GDP per capita (with the exception of Germany) are more prone to put work before leisure time. This tendency will be confirmed by the joint analysis with life satisfaction in the following sections.

4.2. Preferences over job characteristics

A better understanding of the preferences over job characteristics can help both firms and policy makers to create a working environment that can spur both job satisfaction and job performance.

In this section we present some findings on the preferences over job characteristics according to the WVS sample (detailed results on single variables can be found in appendix). Using data from the WVS, we focused on the following job characteristics: income, job security (intended as a low probability of being fired), the quality of social interactions with co-workers – approximated by the importance attributed to the possibility of working with pleasant persons – and the possibility of doing an important job. Table 4.3 summarizes the main findings, while Table 4.4 shows country rankings on the selected variables. In general, it appears that Central-Eastern European countries (Bulgaria, Poland and Romania) and Cyprus tend to consider income and job security as the main determinant of the job choice. Scandinavian countries (plus Netherlands) tend to attribute a great importance to the quality of social interactions with co-workers, while for Mediterranean countries (Italy, Spain and France) plus Germany, Romania, Bulgaria and India job security is very important.

Table 4.3 – Preferences over Job characteristics

Some comments on the preferences over job characteristics

Countries where 'a good income' is particularly important for job seekers	Bulgaria, Romania, Cyprus, Poland, India, USA
Countries where 'working with pleasant people' is particularly important for job seekers	Sweden, Netherlands, Finland, Japan, Canada
Countries where 'job security' is particularly important for job seekers	Bulgaria, Cyprus, France, Germany, Italy, Romania, Slovenia, Spain, India
Countries where 'having an important job' is particularly important for job seekers	Sweden, Norway, Switzerland, Canada

Table 4.4 – Preferences over job characteristics

Country rankings according to the preference for a good income and working with pleasant people in choosing a job

Rank	Country	A good income	Country	Working with pleasant people
1	Romania	1.0000	Sweden	1.0000
2	Bulgaria	0.8503	Japan	0.9081
3	Poland	0.6501	Netherlands	0.6646
4	Cyprus	0.4869	Finland	0.5175
5	U.S.A	0.4820	France	0.3979
6	India	0.3968	Canada	0.3446
7	UK	0.3346	Switzerland	0.2312
8	China	0.3250	Spain	0.2194
9	Spain	0.1478	Norway	0.1052
10	Netherlands	0.0714	Slovenia	0.0923
11	Canada	-0.1320	UK	0.0705
12	Italy	-0.1925	China	-0.0856
13	Germany	-0.3088	Cyprus	-0.3156
14	France	-0.3119	U.S.A	-0.3182
15	Slovenia	-0.3733	Italy	-0.3264
16	Finland	-0.5278	Poland	-0.4736
17	Japan	-0.6928	India	-0.5017
18	Norway	-0.7682	Germany	-0.5704
19	Sweden	-0.8787	Bulgaria	-0.6589
20	Switzerland	-1.0000	Romania	-1.0000

Note: variables are standardized in the (-1, +1) range

Table 4.4 (continued) – Preferences over job characteristics

Country rankings according to the preference for job security and having an important job in choosing a job

Rank	Country	Job security	Country	Having an important job
1	Germany	1.0000	Switzerland	1.0000
2	Spain	0.5385	Sweden	0.7905
3	Slovenia	0.4928	Norway	0.7734
4	Cyprus	0.4030	Canada	0.5474
5	India	0.3856	UK	0.2962
6	Italy	0.3750	Netherlands	0.2944
7	France	0.3443	Italy	0.2288
8	Japan	0.2596	U.S.A	0.2220
9	Finland	0.2205	Finland	0.2085
10	Bulgaria	0.1813	Slovenia	0.0593
11	Romania	0.1610	France	0.0220
12	Poland	0.1004	Japan	0.0040
13	China	-0.0174	Germany	-0.2208
14	Norway	-0.1976	Poland	-0.2409
15	U.S.A	-0.3238	Cyprus	-0.3946
16	Canada	-0.4811	Spain	-0.4557
17	Switzerland	-0.5204	China	-0.6634
18	UK	-0.6571	Bulgaria	-0.7668
19	Netherlands	-0.7629	Romania	-0.8609
20	Sweden	-1.0000	India	-1.0000

Note: variables are standardized in the (-1, +1) range

4.3. Work ethic

In this section we will use a definition of work ethic derived from Max Weber (1930). Weber explained the origin of the capitalism, among other factors, by the development of a moral system, which he called "the Protestant Ethic". The notion of the Protestant Ethic is based on two fundamental concepts: the idea of 'calling' and the 'Puritan asceticism'. The notion of calling requires individuals to fulfil their duty in this world and interpret occupational success as a sign of being elected, and the notion of Puritan asceticism adds the positive evaluation of hard work and a negative view of idleness, luxury, and time wasting. The term Protestant ethic is still used to describe a positive attitude to hard work: possibly, unconsciously as a way of indicating an explanation of social approval. People who hold these values believe that economic, social and environmental conditions should not be considered to be causes for social deprivation and poverty. Furnham (1982) has analysed the relationship between the *Weberian work ethic* and the attitude towards the unemployed finding support to the idea that people who strongly endorse the Protestant work ethic regard unemployed as lazy persons and therefore responsible for their own situation. This belief is reflected in their aversion to the provision of unemployment benefits.

We investigate the *Weberian work ethic* across countries included in the WVS sample using, first of all, an indicator which measures the belief that work is something that people owe society rather than an entitlement (something that the society owes them). Moreover, we use indicators associated to the belief that unemployed persons are lazy, to the belief that it is humiliating to receive money without working, to the belief that hard work in the long run brings success and to the belief that to develop talent one needs a job. Table 4.5 shows country rankings on these variables, while in Table 4.6 we summarize the main results.

In general terms, Central-Eastern European countries (Poland, Bulgaria, Romania, Slovenia) show a stronger belief that work is a duty, that unemployed persons are lazy and that a job is necessary to develop talent (among Extra-European countries a very similar picture is offered by China), but at the same time they do not believe that hard work in the long run brings success (the last result is not true for Romania and for China). Perhaps these results may derive by cultural factor due to the collectivistic approach that has characterized these countries for many years.

Scandinavian countries do not believe that laziness causes unemployment and that a work is necessary to develop talent (among extra-European countries, Canada shows a very similar situation), while the evidence is mixed for what concerns the belief that work is an entitlement rather than a duty; Norway, in particular, shows a strong belief that work is a duty towards society. The first results are not surprising, since Scandinavian countries are generally characterized by a high generosity of the social insurance system (Bassanini and Duval, 2006).

Table 4.5 – Work ethics

Country rankings according to the belief that work is a duty toward society, that people who don't work turn lazy and that it is humiliating to receive money without having to work for it

Rank	Country	Work is a duty toward society	Country	People who don't work turn lazy	Country	It is humiliating to receive money without having to work for it
1	Norway	1.0000	Romania	1.0000	India	1.0000
2	India	0.6554	Slovenia	0.6016	Bulgaria	0.7087
3	Romania	0.6400	India	0.5715	Romania	0.4914
4	Slovenia	0.4476	Poland	0.3554	China	0.3825
5	Cyprus	0.3208	Cyprus	0.3320	Cyprus	0.3490
6	China	0.2918	Bulgaria	0.3249	Italy	0.3196
7	Italy	0.0717	China	0.2917	Poland	0.1909
8	Poland	0.0284	Italy	0.1725	Norway	-0.1584
9	Switzerland	-0.0927	Japan	0.1542	Japan	-0.1604
10	Germany	-0.1125	Spain	-0.1565	Slovenia	-0.2735
11	Spain	-0.2831	Finland	-0.2594	U.S.A	-0.3750
12	Japan	-0.3296	U.S.A	-0.3208	Switzerland	-0.4069
13	Canada	-0.5393	Switzerland	-0.4554	Canada	-0.4268
14	Finland	-0.5522	Norway	-0.4713	Spain	-0.5619
15	Bulgaria	-0.6201	Canada	-0.5164	Finland	-0.5919
16	Sweden	-0.9330	Germany	-0.5670	Germany	-0.5950
17	U.S.A	-1.0000	Sweden	-1.0000	Sweden	-1.0000

Note: variables are standardized in the (-1, +1) range

Table 4.5 (continued) – Work ethics

Country rankings according to the belief that to fully develop one's talent one needs to have a job and that hard work brings success.

Rank	Country	To fully develop your talents, you need to have a job	Country	Hard work brings success
1	Poland	1.0000	India	-1.0000
2	Romania	0.9636	Romania	-0.8155
3	Bulgaria	0.8454	China	-0.5937
4	Germany	0.4615	Finland	-0.5123
5	India	0.4252	U.S.A	-0.3967
6	China	0.4037	Canada	-0.3085
7	Switzerland	0.3069	Slovenia	-0.2357
8	Slovenia	0.1127	Spain	-0.1549
9	Cyprus	-0.0049	Sweden	0.0504
10	Japan	-0.1212	United Kingdom	0.0205
11	Norway	-0.1785	Bulgaria	0.1492
12	Italy	-0.1976	Germany	0.2238
13	Spain	-0.4168	Norway	0.3265
14	Finland	-0.5376	Netherlands	0.3502
15	Canada	-0.7837	Cyprus	0.3700
16	U.S.A	-0.7843	Japan	0.3961
17	Sweden	-1.0000	Switzerland	0.5355
18			Italy	0.5635
19			France	0.5740
20			Poland	1.0000

Note: variables are standardized in the (-1, +1) range

Table 4.6 – Work ethics

Summary of the findings on work ethics

Country	Comment
Bulgaria	Both the belief that hard work brings success and that work is a duty are weak, while the other dimensions are very strong (in a Weberian sense)
Cyprus	The belief that hard work brings success is particularly weak. The other dimensions are very strong (in a Weberian sense)
Finland	There is a strong belief that hard work brings success while the other dimensions are not particularly strong (in a Weberian sense)
Germany	There is a strong belief that to develop talent a job is needed. The other dimensions are not particularly strong (in a Weberian sense)
Italy	The belief that hard work brings success is particularly weak.
Poland	The belief that hard work brings success is the weakest. The other dimensions are particularly positive (in a Weberian sense)
Romania	All the five dimensions of work ethic are particularly strong
Slovenia	All the five dimensions of work ethic are particularly strong
Spain	All the five dimensions are not particularly strong
Sweden	This is the country with the most benevolent view toward the unemployed persons
Switzerland	There is a strong belief that to develop talent a job is needed. The other dimensions are not particularly positive (in a Weberian sense)
Norway	There is a strong believe that work is a duty while the other dimensions are not particularly strong (in a Weberian sense)
Canada	There is a strong believe that hard work brings success while the other dimensions are not particularly strong (in a Weberian sense)
China	All the five dimensions of work ethic are particular strong
India	All the five dimensions of work ethic are particular strong
Japan	The belief that hard work brings success is particularly low
USA	There is a strong believe that hard work brings success while the other dimensions are not particularly strong (in a Weberian sense)

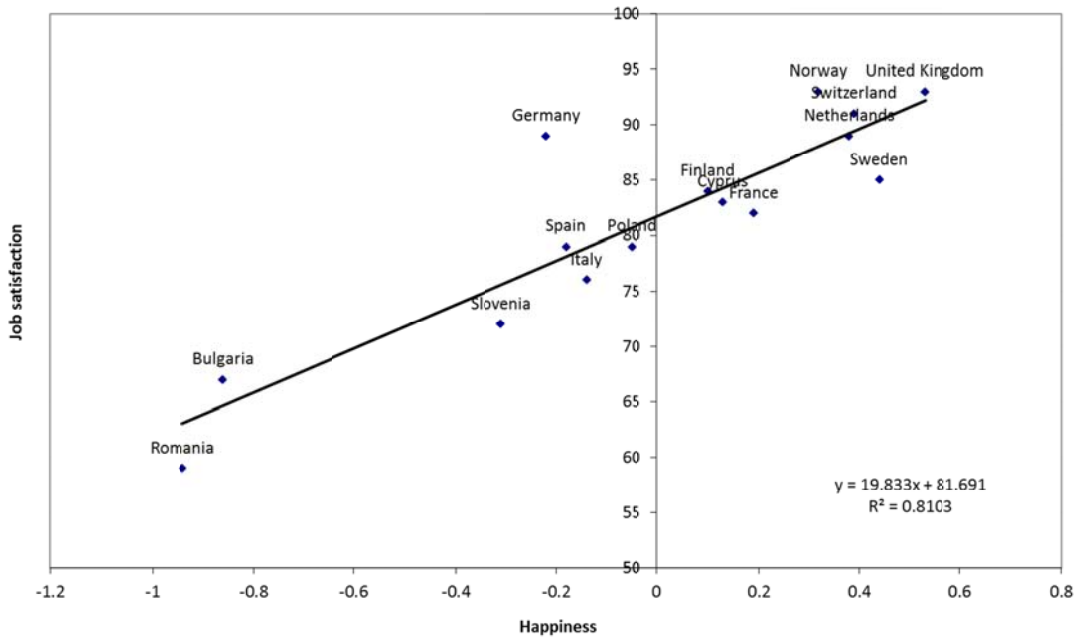
4.4. Job and Life satisfaction

In this section we report some findings on job and life satisfaction. Several researches have established that the relationship between job and life satisfaction is significant and positive (De Cuyper & De Witte, 2006; Moser & Schuler, 2004; Rode, 2004). In Figure 4.2 we investigate the relationship between happiness and job satisfaction. In particular, we plot an indicator of overall reported happiness (taken from the World Values Survey) against an indicator of job satisfaction (based on the EWCS job satisfaction indicator and measuring the share of people "satisfied" and

"very satisfied" about their working conditions). Due to data limitation, the countries considered are Bulgaria, Cyprus, France, Finland, Germany, Italy, Netherlands, Poland, Slovenia, Spain, Sweden, United Kingdom, Switzerland and Norway. The base year is 2005.

The correlation between happiness and job satisfaction is strongly positive and statistically significant (the Pearson's correlation coefficient is 0.90, and the level of significance 0.01). Romania and Bulgaria are the countries with the lowest level of both happiness and job satisfaction, while Northern European Countries are those characterized by the highest level of both happiness and job satisfaction.

Figure 4.2. Happiness vs. Job satisfaction



Various explanations have been suggested for this relationship. On the one hand, some authors believe that job satisfaction and life satisfaction are the same construct, with job satisfaction being an underlying dimension of overall life satisfaction. On the other hand, a causality relation from life satisfaction to job-satisfaction has been proposed, i.e., those who have a disposition to be satisfied in life also tend to find satisfaction on the job. However, it is not the scope of this work to investigate on the nature of this relationship, so we limit our analysis to give a picture of job and life satisfaction across European Union countries.

4.5. Attitude toward female work

In the economic literature it has been claimed that attitudes towards gender and the young, what is sometimes referred to as a country's "culture", are important determinants of the cross-country and time series differences in the employment rates of various demographic groups (see for instance Algan and Cahuc, 2006, Giavazzi et al., 2009, and Fortin, 2005). In this section we will focus on the attitude towards female work.

In Figure 4.3 we plot two indicators of attitude towards female work for all the countries of the WVS sample. The first indicator measures to what extent the population believes that when job are scarce, men have more rights to work than women. The smaller the value assumed by the indicator, the weaker the belief that men have more rights than women. The second indicator measures to what extent the population believes that men are better business executives than women. The higher the value assumed by the indicator, the stronger the belief that men are better business executives than women. Hence countries positioned on the first quadrant of Figure 4.3 are those characterized by a negative attitude towards female work, while countries positioned on the third quadrant of **Error! Reference source not found.**4.3 are those characterized by a positive attitude towards female work. Sweden and India are placed at the opposite side, the first being the country with the most positive attitude towards female work while the latter being the country with the most negative attitude toward female works. Among EU countries, Eastern European countries plus Italy and Cyprus are those with the more negative attitude towards female work. China and Japan are positioned in the fourth quadrant. Scandinavian countries are all in the second quadrant as well as Northern America countries. The situation is mixed for countries like Slovenia and United Kingdom, where both the indicators assume intermediate values. In Germany, France, Spain and Switzerland the attitude toward female business executives is particularly positive, while the belief that men have more rights to work than women is intermediate.

Quite interestingly, the correlation between both indicators of attitude toward female employment and the employment gender gap (as defined in Section 2.2) is positive and significant. The Pearson's correlation coefficient in both cases stands at 0.47, not much in absolute terms, but enough to affirm that labour market inclusiveness for women is lower where the attitude toward female employment is less positive (please note that no causal link can be identified in this simple framework: the direction of causality could run from attitudes to employment rates, but there could also be external factors determining jointly both attitudes and the difference between male and female employment rates).

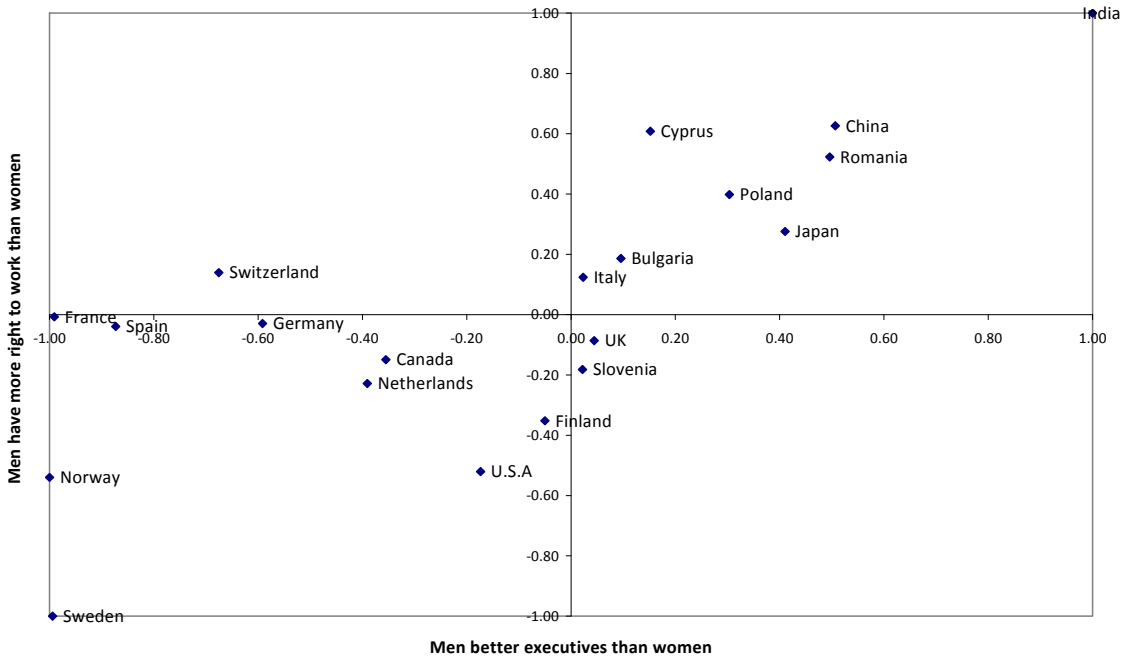
In this context, it would be also interesting to study the relationship between attitude towards female work and the gender pay gap, which represents another important indicator of discrimination against women in the labour market. Here a relevant data availability problem emerges, as standardised and comparable data on wages available for both EU and extra-EU countries are rather hard to find. While Eurostat and OECD provide reliable statistics respectively for EU-27 and the OECD countries, still the comparison cannot be extended to China and India.

Apart from subjective surveys (e.g. the Executive Opinion Survey used by the World Economic Forum for its Global Gender Gap report), the only source available for all the countries included in our study is the United Nations Development Programme (UNDP), which estimates a global indicator of the ratio between female and male earned income. This indicator originates from an estimation of the female share of the wage bill, which is then applied to GDP and then divided by respectively the male and female population[3]. Accordingly, it is not a measure of the simple

[3] Please refer to: http://hdr.undp.org/en/media/HDR_20072008_EN_Technical1.pdf for details on the estimation methodology.

gender differentials in wages but also depends on the proportion of the female economically active population over total population: this is why this indicator assumes values generally higher than the wage gap indicators provided by Eurostat for EU countries. Table 4.7 shows the ranking on this indicator for the countries object of study.

Figure 4.3. Attitude towards female work: an international comparison



Note: variables are standardized in the (-1, +1) range

Also in this case, a significant correlation emerges between the indicators of attitude towards female work and the earned income gap. The Pearson's correlation coefficient between the "Men have more right to work than women" indicator and the female/male income ratio is -0.68, while between the "Men are better executives than women" and the female/male income ratio is -0.57. This evidence reinforces the previous results about employment gender gap, with the same *caveats* about the direction of causality.

Table 4.7 – Ratio of female to male earned income (estimated)

This table ranks countries according to the ratio of female to male earned incomes in 2006.

Sweden	0.84
Norway	0.79
Finland	0.72
Romania	0.70
UK	0.70
Netherlands	0.66
Switzerland	0.66
Bulgaria	0.66
Canada	0.65
China	0.65
USA	0.64
France	0.62
Slovenia	0.62
Germany	0.61
Poland	0.60
Cyprus	0.60
Spain	0.53
Italy	0.49
Japan	0.46
India	0.32

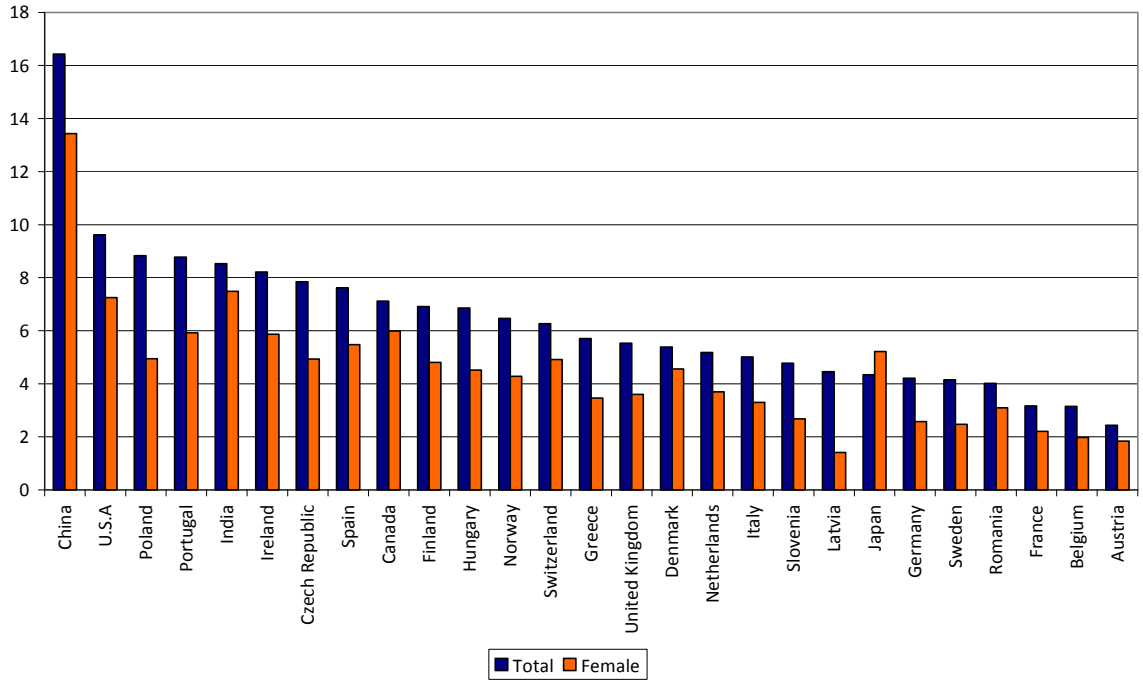
Source: UNDP Human Development Report

4.6. Entrepreneurship

Entrepreneurship (and, more generally, self-employment) represents an important alternative to economically dependent employment in many countries. Nonetheless, attitude to entrepreneurship might depend on several different aspects, ranging from the economic context to regulation (competition regime, taxation regime, labour law, bureaucracy load to start a business, etc.), to "cultural" factors such as the social status usually attributed to entrepreneurs in one country.

Early stage entrepreneurship represents a first proxy of attitude toward entrepreneurship. The Global Entrepreneurship Monitor computes the Total Early Stage Entrepreneurial Activity (TEA) index, identifying the proportion of working age adults who are either setting up or have been running a business for less than 42 months. As it immediately emerges from Figure 4.4, the highest early entrepreneurship rates appear in China (more than 16%), followed by the United States (9.6%), Poland (8.8%), Portugal (8.8%), India (8.5%) and Ireland (8.2%).

Figure 4.4. Early Stage Entrepreneurial Activity rate (TEA) in 2007



Source: Global Entrepreneurship Monitor.
Note: Canada, Czech Republic and Germany: 2006

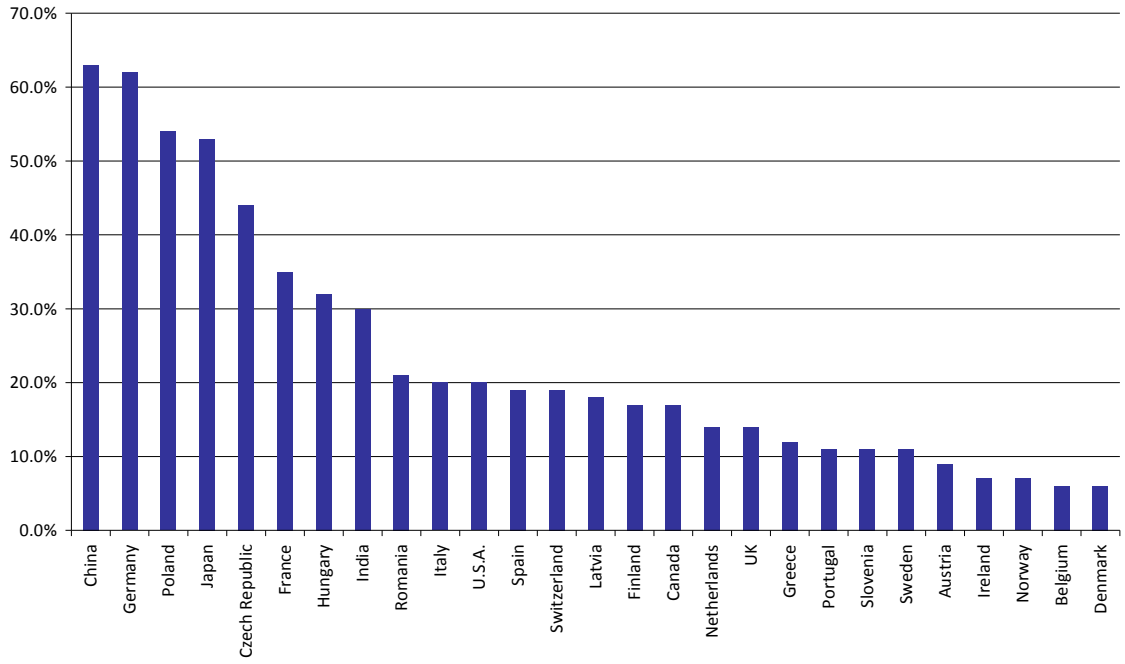
According to the data, it seems that in 2007 (year chosen for the comparison, due to a better availability of data), prior to the economic crisis, early entrepreneurial activity was more diffused in emerging or fast growing countries, while most mature European economies rank in the right side of the picture (in particular, France, Belgium and Austria show a TEA rate lower than 4%). For a limited set of country, we were able to observe continuously the trend of early stage entrepreneurship from 2002 to 2009. From this observation it emerges that in most countries a large drop of the TEA rate occurred between 2008 and 2009, as a consequence of the business downturn. This trend is clearly evident in Denmark, Finland, France, Greece, Italy, Slovenia,

Spain, Japan and the United States. Nonetheless, some other countries show an opposite trend, namely the Netherlands and China, which reaches an outstanding TEA rate of 18.8% in 2009.

Another interesting indicator provided by the GEM concerns the degree of innovativeness of early stage business. The survey offers information on the percentage of early stage entrepreneurs who indicate that their product or service is new to at least some customers. Although no significant correlation among the degree of innovativeness among nascent firms and the TEA rate can be found in our sample of countries, it emerges that the two countries placed at the bottom of the TEA ranking – Austria and Belgium – are those which show the highest rate of innovative firms, standing at more than 30%; on the contrary, China and India, although presenting high rates of entrepreneurial activity, are among the least innovative countries (please note that we refer only to *product* innovation here, and not to *process* innovation). From these data it seems that the industrialization process in fast developing countries as China and India, at this stage, is more based on imitation rather than on the development of innovative products.

Other indicators included in the GEM allow to analyse more specifically attitude to entrepreneurship, investigating: i) the motivations which persuade entrepreneurs to start their businesses; ii) measures of potential entrepreneurship among the working age population, and iii) an assessment of the social "desirability" of entrepreneurship.

Figure 4.5. Ratio between the share of early stage entrepreneurs out of necessity and out of opportunity (2007)



Source: Global Entrepreneurship Monitor.

The first dimension that we take into account here is the motivation for starting an entrepreneurial activity. Two variables are considered: the first one is the percentage of persons aged 18-64 who are involved in TEA out of necessity, i.e., because they had no other option for work ("entrepreneurs out of necessity"); the second one is the percentage of persons aged 18-64 who

are involved in TEA out of opportunity, as opposed to finding no other option for work ("entrepreneurs out of opportunity"). We computed the ratio between these variables, in order to verify which motivation prevails in each country (Figure 4.5). As evident from the figure, China, Germany, Poland and Japan are the countries where the "necessity" motivation prevails over the "opportunity" one, showing a ratio higher than 50%. On the other hand, in Denmark, Belgium, Norway, Ireland and Austria, which show the lowest values (less than 10%), the opportunity motivation seems to lead most business start-ups. Quite interestingly, in two large industrialized countries as Germany and Japan the percentage of entrepreneurs out of necessity appears higher than the average, at odds with the percentage of entrepreneurs out of opportunity. This could mean that in countries with a consolidated industrial structure and a prevalence of large corporations, finding a job as employees represents the primary employment choice for job-seekers; those who choose to start a business on their own, are more likely than average to do this because they do not find other option to work.

In what follows, we will discuss country rankings on more genuine indicators of "attitude to entrepreneurship". In particular we will focus on a couple of variables measuring the degree of potential entrepreneurship among adult population. The first one is the share of people (in the age bracket 18-64) who believe to have the required skills and knowledge to start business (potential entrepreneurship); the second one is the share of people who agree with the statement that in their country, most people consider starting a business as a desirable career choice (desirability of entrepreneurial choice).

As evident from Table 4.8, India tops the ranking on confidence in entrepreneurial capacities, as 73% of its working age population believes to have the necessary skills and knowledge to start a business – although this attitude is probably directed to entrepreneurial activities with low skills intensity, given the country specificities. India is followed, in this peculiar ranking, by Portugal, Canada, Austria and Italy. At the bottom of the scale, with less than 30% of the population reporting to have the necessary entrepreneurial skills, are placed Romania, Latvia and Japan.

As concerns the *desirability* of an entrepreneurial career, the ranking is led by Netherlands, followed by Italy, Spain, Canada, China and India. Interestingly, Canada, Italy and India appear at the first places in both rankings, evidencing strong entrepreneurial attitudes. On the other hand, Japan appears at the bottom also of both rankings, showing low entrepreneurial attitudes (this confirms the prevalence of necessity-driven entrepreneurs among business starters shown in Figure 4.5).

Table 4.8 – Attitude to entrepreneurship

Country rankings on attitude to entrepreneurship indicators

Rank	Country	Potential entrepreneurship	Country	Desirability of entrepreneurship

Rank	Country	Potential entrepreneurship	Country	Desirability of entrepreneurship
1	India	73	Netherlands	85
2	Portugal	58	Italy	73
3	Canada	53	Spain	72
4	Austria	52	Canada	71
5	Italy	51	China	69
6	Poland	50	India	67
7	UK	49	Portugal	66
8	Ireland	49	Greece	66
9	Slovenia	48	Poland	65
10	Greece	48	France	65
11	U.S.A	48	Czech Rep.	65
12	Spain	45	Ireland	63
13	Hungary	44	Romania	61
14	Sweden	42	Slovenia	58
15	Switzerland	41	Hungary	58
16	Finland	40	Germany	56
17	Germany	39	Denmark	56
18	Netherlands	39	UK	55
19	China	39	Norway	55
20	Czech Rep.	38	Latvia	54
21	Belgium	37	Sweden	52
22	Norway	36	U.S.A	50
23	Denmark	36	Switzerland	48
24	France	33	Belgium	45
25	Romania	29	Finland	37
26	Latvia	26	Austria	35
27	Japan	15	Japan	29

5. Concluding remarks

The concept of work attitude represents a complex and multidimensional issue: not only it consists of the mere preference between work and leisure, but it encompasses other notions as the preference over job characteristics, the stance toward work ethics and the attitude to start a business (e.g. the choice between being entrepreneur vs. wage earner).

This background report tried to assess the main dimensions of work attitudes in the European Union and in a selected sample of extra-EU countries, by analysing several data sources in a comparative way. The main aim of the study was to provide a comprehensive descriptive picture, ending up to country rankings along with the different dimensions considered.

Some preliminary conclusions can be sketched. First of all, it seems that countries at different stages of industrial development experience different combinations of preference for work, job characteristics, work ethics and life satisfaction. Developing countries are characterized by stronger work ethics in a "Weberian" sense; in turn, they seem to put work before family and leisure time, while assigning a lower overall importance to social life and relational goods. This evidence could stem – in line with neoclassic economic theories – from the relative scarcity of paid work and abundance of leisure in these countries.

On the other hand, advanced, post-industrial economies seem to assign a higher relevance to social life, while showing a preference for intangible job characteristics, higher levels of life satisfaction and weaker work ethics in a "Weberian" sense (which means, however, a higher tolerance regarding unemployment). This dichotomy translates on entrepreneurial attitude: unsurprisingly, "necessity" (as opposed to "opportunity") appears to be the first motivation for starting a business in developing countries. Nonetheless, overall attitude to entrepreneurship (i.e. "potential entrepreneurship") seems to follow other drivers, not being related to the degree of industrial development of the countries under investigation.

Further research should be needed to investigate more in detail the determinants of these results and the effects of work attitudes on economic performance, which has not been directly dealt with in this study. Accordingly, our evidence might be a starting point to understand what impact work attitudes – beside the drivers traditionally identified by economic theory – can exert on economic development.

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ILO Database of Labour Statistics, http://laborsta.ilo.org/
OECD Statistics, http://stats.oecd.org/Index.aspx
UNDP Human Development Reports, http://hdr.undp.org/en/
World Bank Data, http://data.worldbank.org/
World Penn Table, http://pwt.econ.upenn.edu/
World Values Survey, http://www.worldvaluessurvey.org

Appendix 1. List of work attitudes variables

Table A1. List of variables

The table summarizes the work attitudes variables used in the report

Area	Variable	Description	Source
Work-life preferences	Family1	How important is family in your life?	World Values Survey
	Friends1	How important are friends in your life?	
	Leisure1	How important is leisure time in your life?	
	Work1	How important is work in your life?	
	Workfirst1	Agreement with the statement: "Work should always come first, even if it means less spare time"	
	Workfamily1	Desirability to shift emphasis on work rather than on family life	
Work ethics	Talentjob1	Agreement with the statement: "To fully develop your talents, you need to have a job"	World Values Survey
	Humnojob1	Agreement with the statement: "It is humiliating to receive money without having to work for it"	
	Lazy1	Agreement with the statement: "People who don't work turn lazy"	
	Workduty1	Agreement with the statement: "Work is a duty towards society"	
	Hardwork	Disagreement with the statement: "Hard work brings success"	
Preference over job characteristics	Goodincome	Preference for a "good income" in job search	World Values Survey
	Security	Preference for "a safe job with no risks" in job search	
	Peoplejob	Preference for "working with people you like" in job search	
	Impjob	Preference for "doing an important job" in job search	
Life satisfaction	Happiness1	Degree of "happiness" reported by respondents	World Values Survey
	Financialsat	Degree of satisfaction with the financial situation of one's household	
	Worksat	Percentage of people satisfied at work	EWCS
Entrepreneurship	Fuen	Share of people (18-64) expecting to start a business within three years	Global Entrepreneurship Monitor
	Fefr	Share of people (18-64) that would abstain from setting up a business when they would sense a fear of failure	

Area	Variable	Description	Source
	Potentr	Share of people (18-64) who believe to have the required skills and knowledge to start business	
	Good	Share of people (18-64) who agree with the statement that in their country, most people consider starting a business as a desirable career choice	
	Respect	Share of people (18-64) who agree with the statement that in their country, successful entrepreneurs receive high status	
	Media	Share of people (18-64) who agree with the statement that in their country, you will often see stories in the public media about successful new business	
	Opnec	Ratio between the share of early-stage entrepreneurs out of necessity and out of opportunity	
Attitude toward women and immigrant workers	Menbusiness1	Agreement with the statement: "On the whole, men make better business executives than women do"	World Values Survey
	Rightman	Agreement with the statement: "When jobs are scarce, men should have more right to a job than women"	
	Emplimm	Agreement with the statement: "When job are scarce local people have more rights to work than immigrants"	
	Immigrpolicy	Agreement with a strict immigration policy	

Appendix 2. Data summary

	Work-life preferences						Work ethics					
	work1	family1	leisure1	friends1	workfirst1	workfamily1	rightman	talentjob1	humnojob1	lazy1	workduty1	hardwork
Austria	na	na	na	na	na	na	na	na	na	na	na	na
Belgium	na	na	na	na	na	na	na	na	na	na	na	na
Bulgaria	-0.1	0.0	-0.4	-0.3	0.4	0.3	0.2	0.5	0.4	0.2	-0.2	0.1
Cyprus	0.1	0.2	0.2	0.2	0.2	-0.5	0.6	0.0	0.2	0.2	0.1	0.2
Czech Republic	na	na	na	na	na	na	na	na	na	na	na	na
Denmark	na	na	na	na	na	na	na	na	na	na	na	na
Estonia	na	na	na	na	na	na	na	na	na	na	na	na
Finland	-0.2	-0.1	0.2	0.3	-0.4	-0.2	-0.4	-0.3	-0.3	-0.2	-0.2	-0.3
France	0.4	-0.2	0.0	0.1	na	-0.7	0.0	na	na	na	na	0.3
Germany	-0.1	-0.4	-0.2	0.0	0.3	0.1	0.0	0.3	-0.3	-0.4	0.0	0.12
Greece	na	na	na	na	na	na	na	na	na	na	na	na
Hungary	na	na	na	na	na	na	na	na	na	na	na	na
Ireland	na	na	na	na	na	na	na	na	na	na	na	na
Italy	0.3	0.2	-0.1	-0.1	0.0	-0.1	0.1	-0.1	0.2	0.1	0.0	0.31
Latvia	na	na	na	na	na	na	na	na	na	na	na	na
Lithuania	na	na	na	na	na	na	na	na	na	na	na	na
Netherlands	-0.4	-0.4	0.5	0.2	na	0.0	-0.3	na	na	na	na	0.2
Poland	0.2	0.3	-0.1	-0.3	0.2	0.0	0.4	0.6	0.1	0.2	0.0	0.54
Portugal	na	na	na	na	na	na	na	na	na	na	na	na
Romania	0.1	-0.1	-0.4	-0.8	0.7	0.5	0.5	0.6	0.3	0.7	0.2	-0.5
Slovenia	0.0	-0.1	0.1	-0.1	0.0	0.3	-0.2	0.1	-0.1	0.4	0.2	-0.1
Slovakia	na	na	na	na	na	na	na	na	na	na	na	na
Spain	0.0	0.0	0.2	0.0	-0.1	-0.4	0.0	-0.3	-0.3	-0.1	-0.1	-0.1
Sweden	0.1	0.1	0.4	0.5	-0.4	-0.4	-1.1	-0.6	-0.5	-0.7	-0.3	0.03
UK	-0.4	0.2	0.2	0.4	na	-0.4	-0.1	na	na	na	na	0.0
Norway	0.1	0.0	0.4	0.4	-0.2	0.2	-0.6	-0.1	-0.1	-0.3	0.4	0.2
Switzerland	0.1	-0.2	0.1	0.2	-0.1	na	0.1	0.2	-0.2	-0.3	0.0	0.3
Canada	-0.1	0.2	0.1	0.3	-0.5	-0.4	-0.2	-0.5	-0.2	-0.4	-0.2	-0.2
China	-0.1	-0.4	-0.9	-0.6	0.3	0.5	0.6	0.2	0.2	0.2	0.1	-0.4
India	0.5	0.1	-0.7	-0.3	0.6	0.3	0.9	0.2	0.6	0.4	0.2	-0.6
Japan	0.0	0.2	0.2	-0.1	-0.5	1.0	0.3	-0.1	-0.1	0.1	-0.1	0.2
USA	-0.4	0.3	0.1	0.2	-0.5	0.0	-0.6	-0.5	-0.2	-0.2	-0.3	-0.2

	Preference over job characteristics				Entrepreneurship							Attitude toward women and immigrants			
	goodincome	security	peoplejob	impjob	fefr	fuen	potentr	good	respect	media	opnec	menbusiness1	rightman	emplimm	immigrpolicy
Austria	na	na	na	na	0.4	0.1	0.5	34.9	71.7	57.1	0.1	na	na	na	na
Belgium	na	na	na	na	0.2	0.1	0.4	44.5	51.3	37.2	0.1	na	na	na	na
Bulgaria	0.6	0.1	-0.4	-0.6	na	na	na	na	na	na	na	0.1	0.2	0.5	-0.2
Cyprus	0.3	0.2	-0.2	-0.3	na	na	na	na	na	na	na	0.2	0.6	0.7	0.3
Czech Republic	na	na	na	na	0.4	0.1	0.4	65.5	47.5	63.1	0.4	na	na	na	na
Denmark	na	na	na	na	0.4	0.1	0.4	56.0	79.1	35.5	0.1	na	na	na	na
Estonia	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Finland	-0.3	0.1	0.3	0.2	0.3	0.1	0.4	37.5	84.8	68.3	0.2	0.0	-0.4	0.0	0.1
France	-0.2	0.2	0.2	0.0	0.5	0.2	0.3	64.8	69.7	43.0	0.4	-0.5	0.0	-0.3	na
Germany	-0.2	0.6	-0.3	-0.2	0.5	0.1	0.4	56.2	75.1	46.1	0.6	-0.3	0.0	0.0	0.1
Greece	na	na	na	na	0.6	0.1	0.5	66.1	65.9	43.4	0.1	na	na	na	na
Hungary	na	na	na	na	0.3	0.1	0.4	57.7	66.6	23.9	0.3	na	na	na	na
Ireland	na	na	na	na	0.4	0.1	0.5	63.0	82.6	68.2	0.1	na	na	na	na
Italy	-0.1	0.2	-0.2	0.2	0.4	0.1	0.5	72.8	68.5	43.9	0.2	0.0	0.1	0.2	0.0
Latvia	na	na	na	na	0.4	0.1	0.3	54.4	71.1	64.8	0.2	na	na	na	na
Lithuania	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Netherlands	0.0	-0.5	0.4	0.2	0.2	0.1	0.4	84.8	68.8	61.1	0.1	-0.2	-0.3	-0.4	na
Poland	0.5	0.1	-0.3	-0.2	0.4	0.2	0.5	65.2	58.1	36.4	0.5	0.3	0.4	0.7	0.1
Portugal	na	na	na	na	0.4	0.1	0.6	65.6	67.2	51.2	0.1	na	na	na	na
Romania	0.7	0.1	-0.6	-0.7	0.3	0.1	0.3	61.0	62.5	50.4	0.2	0.5	0.5	0.2	-0.3
Slovenia	-0.2	0.3	0.1	0.0	0.3	0.1	0.5	57.7	76.0	68.2	0.1	0.0	-0.2	0.5	0.0
Slovakia	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Spain	0.1	0.3	0.1	-0.4	0.5	0.1	0.5	71.6	61.0	45.5	0.2	-0.5	0.0	0.0	0.0
Sweden	-0.6	-0.7	0.6	0.7	0.3	0.1	0.4	52.4	67.4	62.8	0.1	-0.5	-1.1	-1.3	-0.4
UK	0.2	-0.4	0.0	0.2	0.4	0.1	0.5	54.8	73.6	56.8	0.1	0.0	-0.1	-0.1	na
Norway	-0.5	-0.1	0.1	0.6	0.2	0.1	0.4	54.9	56.6	69.5	0.1	-0.5	-0.6	-0.5	0.0
Switzerland	-0.6	-0.3	0.1	0.8	0.4	0.1	0.4	47.7	72.9	60.5	0.2	-0.4	0.1	-0.2	-0.2
Canada	-0.1	-0.3	0.2	0.5	0.2	0.1	0.5	71.3	70.3	75.7	0.2	-0.2	-0.2	-0.4	-0.1
China	0.2	0.0	-0.1	-0.5	0.3	0.4	0.4	68.6	70.6	84.4	0.6	0.5	0.6	0.0	-0.3
India	0.3	0.2	-0.3	-0.8	0.5	0.5	0.7	66.8	74.7	81.3	0.3	1.1	0.9	0.5	0.3
Japan	-0.4	0.2	0.5	0.0	0.4	0.1	0.2	29.5	47.7	61.1	0.5	0.4	0.3	0.1	0.2
USA	0.3	-0.2	-0.2	0.2	0.2	0.1	0.5	49.6	50.2	50.0	0.2	-0.1	-0.6	0.0	0.3

	Life satisfaction		
	fincialsat	worksat	happiness1
Austria	na	90	na
Belgium	na	89	na
Bulgaria	-1.0	67	-0.9
Cyprus	0.1	83	0.1
Czech Republic	na	80	na
Denmark	na	93	na
Estonia	na	75	na
Finland	0.4	84	0.1
France	-0.1	82	0.2
Germany	-0.1	89	-0.2
Greece	na	60	na
Hungary	na	76	na
Ireland	na	87	na
Italy	0.1	76	-0.1
Latvia	na	70	na
Lithuania	na	68	na
Netherlands	0.2	89	0.4
Poland	-0.5	79	-0.1
Portugal	na	85	na
Romania	-0.6	59	-0.9
Slovenia	0.0	72	-0.3
Slovakia	na	76	na
Spain	-0.2	79	-0.2
Sweden	0.4	85	0.4
UK	0.2	93	0.5
Norway	0.5	93	0.3
Switzerland	0.8	91	0.4
Canada	0.4	na	0.5
China	-0.1	na	-0.3
India	-0.4	na	-0.2
Japan	-0.1	na	0.1
USA	-0.2	na	0.2

Appendix 3. Variables transformations

The WVS questions associated to the work attitude dimensions reported above are:

A) Work and Life balance

- A1-4)"Please say, for each of the following, how important it is in your life": A1) Leisure time; A2) Work; A3) Family; A4) Friends. For each dimension, respondents can answer on a scale from 1 ("very important") to 4 ("not at all important").
- A5-6) "I'm going to read out a list of various changes in our way of life that might take place in the near future. Please tell me for each one, if it were to happen, whether you think it would be a good thing, a bad thing, or don't you mind?" A5) "Less importance placed on work in our lives"; A6) "More emphasis on family life". For each question, respondents can answer: 1 Good thing; 2 Don't mind; 3 Bad thing.
- A7) "Do you agree or disagree with the following statement? Work should always come first, even if it means less spare time". Respondents can answer to this question on a scale from 1 ("strongly agree") to 5 ("strongly disagree").

B) Work ethics

- B1-4) **"**Do you agree or disagree with the following statements?" B1) "To fully develop your talents, you need to have a job"; B2) "It is humiliating to receive money without having to work for it"; B3) "People who don't work turn lazy"; B4) "Work is a duty towards society". For each question, respondents can answer on a scale from 1 ("strongly agree") to 5 ("strongly disagree").
- B5) "How would you place your views on this scale (1 means you agree completely with the statement on the left; 10 means you agree completely with the statement on the right; and if your views fall somewhere in between, you can chose any number in between)". Statement: "Hard work brings success (1. in the long run, hard work usually brings a better life - 10. hard work doesn´t generally bring success – it's more a matter of luck and connections)".

C) Attitude toward female work and immigrants

- C1) "Do you agree or disagree with the following statement? When jobs are scarce, men should have more right to a job than women". Respondents can answer to this question on a scale from 1 ("agree") to 3 ("disagree").
- C2) "On the whole, men make better business executives than women do". Respondents can answer to this question on a scale from 1 ("strongly agree") to 4 ("strongly disagree").
- C3) "Do you agree or disagree with the following statement? When job are scarce local people have more rights to work than immigrants". Respondents can answer to this question on a scale from 1 ("agree") to 3 ("disagree").
- C4) "How about people from other countries coming here to work. Which one of the following do you think the government should do?" Respondents can answer: 1. Let anyone come; 2. As long as jobs available; 3. Strict limits and 4. Prohibit people from coming.

D) Individual preferences over job characteristics

- D1) "Regardless of whether you're actually looking for a job, which one would you, personally, place first if you were looking for a job?". Respondents can answer: 1 "A good income"; 2 "A safe job with no risk"; 3 "Working with people you like"; 4 "Doing an important job".

E) Life satisfaction

- E1) "How satisfied are you with the financial situation of your household?". Respondents can answer to this question on a scale from 1 ("dissatisfied") to 10 ("satisfied").
- E2) "Taking all things together, would you say you are": 1 "Very Happy"; 2. Quite Happy; 3. Not very happy; 4. Not at all happy.

In order to obtain normalized measures, the following methodology has been used.

A) For what regards work-life preferences:

- We ran ordered probit regressions[4] for each of the variables A1, A2, A3, A4, A7 on a series of country fixed effects (with no other controls), and treated the fixed effects as average levels of the associated dimension of work attitude. The ordered probit model makes a parametric assumption, imposing a standard normal distribution of the underlying latent "work-attitude" measure. Two normalizations are also imposed: that the latent variable has a mean of zero and that it has a standard deviation of 1. The country fixed effects we estimated (and interpreted as the associated level of the dimension of work attitude) are simply shifts in the mean of this distribution. In order to increase interpretability, so that at higher values of the indicators corresponds a higher importance of the specified aspect, country fixed effects have been multiplied by -1. The indicators obtained with this method are respectively named: *leisure1, work1, family1, friends1, workfirst1*. Note that the indicators can assume both positive and negative values.
- As concerns questions A5 and A6 we generated a dummy variable equal to one (*workfamily*) if an individual answered "a good thing" to questions A5 and A6. Hence this variable will capture the desirability of a future reallocation of time on family rather than on work. We then ran a probit regression of this dummy variable on the country fixed effects to get the shifts in the mean of the distribution of the latent attitude. We then multiplied country fixed effects by -1, so that an increase in the indicator implies a stronger desire to reallocate the emphasis placed on family and on work in favour of the second. This indicator has been named *workfamily1*.

B) For what regards work ethics:

- We ran ordered probit regressions for each of the variables B1, B2, B3, B4, B5 on a series of country fixed effects (with no other controls), and then interpreted these fixed effects as average levels of the associated dimension of work ethic within a country. These indicators are respectively named *talentjob, humnojob, lazy, workduty, hardwork*. In order to increase interpretability, so that an increase in the indicator is associated to an increase in the agreement to the associated statement, these variables (excluding *hardwork*) have been multiplied by -1 and named *talentjob1, humnojob1, lazy1, workduty1*.

C) For what regards the attitude towards female work and immigrants:

- We ran an ordered probit regression on the variable C2 on a series of country fixed effects (with no other controls), and then interpreted these fixed effects as average levels of the associated dimension of the attitude towards female work within a country. This indicator is

[4] In all the regressions described in this paragraph, we used sample weights as suggested by the survey's authors to ensure that our estimates are nationally representative for each country.

named *menbusiness*. Also in this case, this variable has been multiplied by -1 to increase interpretability (an increase of the indicator is interpreted as a more negative attitude towards female work) and named *menbusiness1*.

- We created a dummy variable equal to one if the answer to C1 is 'agree'. We then ran a probit regression of this dummy variable on the country fixed effects and interpreted these effects as shifts in the mean of the distribution of the latent attitude. We named *rightmen* this indicator. Note that an increase in this indicator implies a more negative attitude towards female work.
- We created a dummy variable equal to one if the answer to C3 is 'agree'. We then ran a probit regression of this dummy variable on the country fixed effects and interpreted these effects as shifts in the mean of the distribution of the latent attitude. We named *emplimm* this indicator. Note that an increase in this indicator implies a more negative attitude towards immigrant workers.
- We ran an ordered probit regression on the variable C4 on a series of country fixed effects (with no other controls), and then interpreted these fixed effects as average levels of the attitude towards a strict immigration policy. This indicator is named *immigrpolicy*.

D) For what regards the individual preferences over job characteristics the construction of indices has followed two steps:

- A dummy variable has been created for each modality of question D1, in the following way: a) a variable equal to one if the first choice for the individual is a good income; b) a variable equal to one if the first choice for the individual is a safe job; c) a variable equal to one if the first choice for the individual is an important job; d) a variable equal to one if the first choice for the individual is to work with person that he/she likes.
- We then ran a probit regression of each dummy variable on the country fixed effects and interpreted these effects as shifts in the mean of the distribution of the latent attitude. The indicators obtained in this way have been named *goodincome*, *jobsecurity*, *impjob*, *people*. An increase in these indicators implies an increase of the importance of the associated job characteristic.

E) For what regards life satisfaction:

- We ran ordered probit regressions for variables E1, E2 on a series of country fixed effects, and then interpreted these fixed effects as average levels of the associated dimension of life satisfaction. Also in this cases fixed effects have been multiplied by -1, so that an increase of the indicator is associated to a higher level respectively of happiness and satisfaction about the financial situation. These indicators are named respectively *happiness1 and financialsat1*.