Bridging the Gender Gap in Entrepreneurship: Evidence from Europe

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Elvin Afandi[1] & Majid Kermani[1]

Abstract

There is no gender difference between success in establishing a business once both males and females have the same preference to self-employment and attempts towards establishing a new business. However, the gender gap tends to be huge when it comes to individual preferences and attempts to start up an entrepreneurial activity. In this study, we empirically estimate the role of inequality in individual and country attributes between man and woman in the bridging this gender entrepreneurship gap. Using Oaxaca-type decomposition and its extensions on choice of weighting matrix for non-linear probability models, we found that differences in both individual as well as country characteristics largely favor males, while the former play greater role in explaining the gender gap. About a one third of the gender gap in both latent as well as nascent entrepreneurship can be traced back to females owning smaller endowments than males. Empirical results also show differences in return to measured characteristics favor males. Nevertheless, a portion of gender gap that is unexplained by the differences in these characteristics and their coefficients (or return) could still indicate gender discrimination.

Keywords: latent entrepreneurship, nascent entrepreneurship, gender gap

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1. Introduction

Although women have significantly increased their participation in self-employment, female entrepreneurship is still regarded as one of the untapped sources of entrepreneurial activities and happens to be a worldwide phenomenon (Van der Zwan et al., 2012; Klapper and Parker, 2010; Estrin and Mickiewicz, 2009, Bardasi et al., 2009). Empirical studies suggest that women are less likely to prefer entrepreneurial activity (early-decision stage or latent entrepreneurship) and they seldom take a concrete steps to start a new business (later-action stage or nascent entrepreneurship) (Bonte and Piegeler, 2013, Langowitz and Minniti, 2007). However, once women decide to get involved in self-employed they have equal likelihood to enterprise compared to men (Nikolova et al., 2012).

There is a growing body of empirical literature that aims at investigating the causes of the gender differences in entrepreneurship. However, many of the existing studies focus either on differences in individual characteristics of respondents, or factors influencing the gender gap in entrepreneurship. For example, Verheul et al. (2011) find that relatively low risk tolerance of women make them less likely to become self-employed, while Bonte and Piegeler (2011) used a wider set of personality traits factors to decompose the gender difference in entrepreneurship and found that gender differences are significant in latent and nascent entrepreneurship. Estrin and Mickiewicz (2011) investigated the impact of macro and gender-specific institutional variables on men and women's decisions to establish new business start-ups, and found the latter to be more significant in explaining the women entrepreneurship.

With this background, we focus on two types of entrepreneurial activities regarding individual's involvement at three different stages of the entrepreneurial process. Using survey data from a sample of 33,000 respondents from 30 European countries, we distinguish between three engagement levels in entrepreneurial process: preference, trial and success. The first ladder refers to latent entrepreneurship, while the last two stages consider the nascent entrepreneurship activities. This distinction allows us to accurately assess in which stages and why in the entrepreneurial process women begin to lag behind men. Whether the same lists of individual-level as well as country-specific attributes explain the gender gap in latent and nascent entrepreneurship? Whether gender differences in individual and country-level characteristics and in their respective returns have the same power to explain the gender gap in entrepreneurship or not? Is bridging the gap between endowments of men and women sufficient to make them equally likely to become entrepreneur? Or is there uncontrolled gender discrimination in different ladders of entrepreneurial process?

To address these questions, we decomposed the gender entrepreneurship differentials using Oaxaca-Ransom decomposition technique for non-linear models. We also use three

variations of the Oaxaca-type decomposition (Reimers, Cotton and Nemark) in order to overcome the problem of gaining an appropriate non-discriminatory entrepreneurship activity or weighting matrix.

In general, our study compliments and extends the ongoing discussion on gender gap in entrepreneurship in the following two ways. First, to the best of our knowledge this is the first study which attempts to decompose gender difference in entrepreneurship using a wide spectrum of individual-level as well as country-specific characteristics. Although the methodology of our study is mainly benefited from the Bonte and Piegeler (2011), but this study goes beyond the "task matched personality traits' variables. Using high-quality nationally-representative micro data set from 30 European countries as well as a diverse set of country-level indicators, we tend to investigate the contribution of difference in individual and country endowments and their importance to the gender gap in both latent as well as nascent entrepreneurship. Second, we use Oaxaca-type decomposition and its three variations (Reimers, Cotton and Neumark) for non-linear models to accurately estimate the main factors that explain the entrepreneurship differentials. In this way, we are able to quantify the share of endowments and their respective coefficients (or return) in the gender gap in entrepreneurship.

Our regression analysis points to a positive relationship between the respondents' age, urban residence, number of children, good health, car ownership, risk tolerance, willingness to move for job and hard working behavior and latent entrepreneurship for both males and females. Nearly all these variables found to be significant in explaining the nascent entrepreneurship too, while secondary education and optimism also became significant in explaining the nascent entrepreneurship for both genders. Among the country-level variables, GDP per capita, credit to private sector, time to start a business, gender inequality, law and order appears to be significant in explain the latent entrepreneurship, while majority of these indicators became insignificant for the nascent entrepreneurship. Our results also suggest that there are positive spillovers from existing entrepreneurial activities in the region which respondent belongs.

Using Oaxaca-type decomposition and its extensions on choice of weighting matrix for non-linear probability models, we found that differences in both individual as well as country characteristics largely favor males, while the former play greater role in explaining the gender gap. About one third of the gender gap in both latent as well as nascent entrepreneurship can be traced back to females owning smaller endowments than males. Empirical results also show differences in return to measured characteristics favor males. Nevertheless, a portion of gender gap that is unexplained by the differences in these characteristics and their coefficients (or return) could still indicate gender discrimination

The remainder of the paper is organized as follows. Section 2 describes the data, followed by the methodology is which discussed in Section 3. Section 4 discusses the empirical results. The conclusion can be found in Section 5.

2. Data Source and Description

2.1. Individual level data

Our individual level data are drawn from the Life-in-Transition survey (LITS) that was conducted in 2010 by the European Bank of Reconstruction and Development in collaboration with the World Bank (EBRD, 2011). Our sample of the LITS micro data set includes 30 European countries comprising of 25 developing and 5 developed European countries. The LITS assembles a comprehensive and directly comparable set of indicators about socio-demographic characteristics of respondents (e.g. age, gender, and educational attainments, social attitudes) and households (e.g. dwelling ownership and rural/urban place of residency) (EBRD, 2011). The LITS collected the information from approximately 1,000 to 1,616 respondents in the same set of the European countries (see Table A.1 in the appendix). The data is collected through face-to-face interviews with trained interviewers. Since the complete description of the LITS's methodology, including a report on observations and a discussion of the experiences with data collection is disclosed elsewhere (EBRD, 2011), we limit ourselves to a succinct discussion of the data set below.

A consistent sampling methodology was used across all the countries. At least 1,000 households were interviewed in each country, with a total of 33,000 households interviewed altogether. The sample is nationally representative. The LITS questionnaire consists of two sections. The first section of the questionnaire is administered to household head who is defined as the most knowledgeable person in the household and is designed to collect information on household composition, housing, expenditures and wealth. The second section of the questionnaire is administered to adult household member in order to gather the individual's personal information, information about her or his economic activities, values and attitudes, as well as life history. The individual member of household was selected for the interview based on the "last birthday" sampling rule.

2.2. Country level data

In addition to the LITS data, we used country-level statistics on the macro, institutional and gender inequality variables that might affect the degree of entrepreneurship in general, and female versus male difference, in particular. Our macro and banking

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indicators come from the World Bank's Development Indicators, while measure of quality of institutions is from the computed aggregate data from the LITS data. For the gender-specific variables we utilized United Nations' International Human Development Indicators. In addition, we calculated the average PSU level individual responses on preference and trial of entrepreneurship using the LITS data. This is referred to as regional cluster effects (Chen et al., 2010, Giannetti and Simonov, 2009). Detailed discussion of outcome and explanatory variables can be seen below.

2.3. Data Description

We used 3 outcome variables (Prefer, Try and Succeed) of entrepreneurship, which all were taken from the LITS data. The survey asks a question to respondents whether they prefer self-employment to any other type of formal employment (Prefer). If they do, they are asked if they had ever tried to start a business (Try). If they had, they are also asked whether they succeeded in establishing a new business (Succeed). The first variable refers to latent entrepreneurship, while the last two questions consider the nascent entrepreneurship activities of respondents. To empirically investigate the determinants of both latent as well as nascent entrepreneurship for different genders, and decompose the gender difference in two type of entrepreneurship, we complement our analysis by a set of individual-level and country-specific explanatory variables.

Our individual level independent variables reflect those of existing literature and range from respondent's social-demographic characteristics, economic endowments, social attitudes and personality traits (Nikolova and Simroth, 2013; Van der Zwan et al., 2012, Estrin and Mickieqicz, 2011). We included a respondent's age, number of children, urban residence, religion, education, wealth, access to bank services, risk tolerance, optimism, and subjective health. In order to distinguish between generalized trust and particularized trust, which may exhibit different effects on entrepreneurship depending upon the size of engagement in entrepreneurial activity, we also use the frequency of meeting friends. We expect the frequency of meeting friends to capture cooperation through friend ties and have positive effect on involvement in entrepreneurial activity particularly if this is a small-size business (Fukuyama, 2005). Finally, we also account for a respondent's attitudes towards hard working and efforts.

In terms of the country level indicators, we include both some aggregate variables that may influence the entrepreneurial activity regardless of gender, as well as some gender-specific indicators that may capture a gender inequality at the country level. General macro indicators include GDP per capita, bank credits to private sector and average time of starting a new business. In addition, we calculate aggregated individual perception on law and order in the country. For the gender-specific country variables, we utilize a gender inequality definition of United Nations (UN) and include indicators such as, the share of women in national parliament, female participation in labor force, maternal

mortality ratio and adolescent fertility rate (UNDP, 2011). Finally, we also investigate the effect of the average PSU level individual responses on preference and trial of entrepreneurship using the LITS data as a regional cluster effects. Table A.1 in the appendix reports the sources and definitions of the country-level data set, along with the actual interview questions.

3. Methods
3.1. Descriptive

First of all, we use descriptive methods to portrait and compare our outcome variables on entrepreneurship (Prefer, Succeed and Try) for total sample and across the regions as well as countries. Specifically, t-test is used to compare the level of the latent and nascent entrepreneurship between women and men. We test the null hypotheses that the means for entrepreneurship variable i are the same for the women and men in the countries of European continent. Moreover, the difference in individual level as well as country specific endowments of female and male is also investigated. Here we test whether mean characteristics are different between men and women.

3.2. Regression

In order to identify the individual level and country specific determinants of entrepreneurship, we estimate several non-linear probability models. We include individual and country-level variables separately in order to avoid overloading the specification. Econometrically, we estimate binary probit models for men and women separately assuming that individual's underlying response can be described by the following equation:

$$Prefer_{i,k} = \beta_0 + I(X'\beta_1) + K(Z'\beta_2) + \varepsilon \qquad (1)$$

$$Try|Prefer_{i,k} = \gamma_0 + I(X'\gamma_1) + K(Z'\gamma_2) + \eta \qquad (2)$$

where $Prefer_{i,k}$ denotes preference of self-employment by respondent i in country k, and $Try|Prefer_{i,k}$ is a dummy variable equal to 1 if this individual i from country k has tried to set up a business. $I(X'\beta_1)$ and $I(X'\gamma_1)$ are vectors of individual and households-level independent variables, while $K(Z'\beta_2)$ and $K(Z'\gamma_2)$ are vectors of country-specific explanatory variables. Finally, ε and η are disturbance parameters, which are assumed to be normally distributed.

3.3. Decomposition

We use Blinder-Oaxaca decomposition technique for non-linear regression models to decompose the gender difference in entrepreneurship. The decomposition allows us to estimate what share of the total variation in the difference of latent and nascent entrepreneurship between men and women is explained by characteristics and

coefficients effects. The standard Blinder-Oaxaca decomposition of the gender difference in average predicted probabilities of the entrepreneurship variables can be expressed as follows (Sinning et al., 2008):

$$\overline{Y}_{uf} - \overline{Y}_{um} = [E_{\beta_f}(Y_{if}|X_{if}) - E_{\beta_f}(Y_{im}|X_{im})] + [E_{\beta_f}(Y_{im}|X_{im}) - E_{\beta_m}(Y_{im}|X_{im})] \quad (3)$$

Where u is an index representing early-stage entrepreneurship (Prefer) and later-stage entrepreneurship (Try), $\overline{Y}_{uf}$ and $\overline{Y}_{um}$ are expected value of entrepreneurship for female and male respectively[2]. $\overline{Y}_{uf} - \overline{Y}_{um}$ represents the gender gap in early-stage (latent) or later-stage (nascent) entrepreneurship. $E_{\beta_f}(Y_{if}|X_{if})$ refers to the conditional expectation of Y_{if}, and $E_{\beta_f}(Y_{im}|X_{im})$ refers to the conditional expectation of Y_{im} evaluated at the parameter vector β_f, with $f \neq m$. The first term on the right-hand side displays the part of the differential in the latent or nascent entrepreneurship between men and women that is due to the differences in covariates (endowments) X_{if} and X_{im}, and the second term displays the part of the differential that is due to the differences in coefficients.

Oaxaca and Ransom (1994) give an overview of the application of the following generalized linear decomposition:

$$\overline{Y}_{uf} - \overline{Y}_{um} = [E_{\beta^*}(Y_{if}|X_{if}) - E_{\beta^*}(Y_{im}|X_{im})]$$

$$+[E_{\beta_f}(Y_{if}|X_{if}) - E_{\beta^*}(Y_{if}|X_{if})] + [E_{\beta^*}(Y_{im}|X_{im}) - E_{\beta_m}(Y_{im}|X_{im}) \quad (4)$$

In equation (4), nondiscriminatory coefficients vectors (β^*) is defined as weighted average of the coefficient vectors, β_f and β_m:

$$\beta^* = \Omega\beta_f + (I - \Omega)\beta_m$$

Where Ω is a weighting matrix and I is diagonal unit matrix. Blinder-Oaxaca decomposition in (3) represents special case of the generalized equation in which Ω is a null matrix or is equal to I. However, there are three more assumptions about the form of weighting matrix (Ω) that we will consider in our decomposition analysis. First, Reimers's (1983) scalar matrix that proposes weighting matrix $\Omega = (0.5)I$. Second, Cotton's (1988) suggestion on the weighting matrix $\Omega = sI$, where s denotes the relative sample size of the majority group. Finally, we also consider Neumark's (1988) pooled model to derive the counterfactual coefficient vector. Although there is no empirically significant difference between these techniques, the Neumark technique appears to place a higher weight to the characteristics effect and a lower weight to the remuneration effect

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[2] Since women and men are equally likely to be succeeded in opening a new business, ones they both prefer and attempt to open it, we exclude the final-stage of entrepreneurial process from our regression and decomposition analysis.

when compared to other approaches of Oaxaca-type decomposition (Silber and Weber, 1999).

4. Empirical Results

4.1. Descriptive Statistics

First we employ some descriptive analysis in order to understand in what extend the level of entrepreneurship differs between men and women in the selected European countries. Table 1 reports the gender gap in entrepreneurship in three different ladders of entrepreneurial activity (Prefer, Try and Succeed) for entire Europe and different regional groupings.

[Insert Table 1 about here]

A close look at the results of Table 1 reveals that the first two stages of entrepreneurial activity (Prefer and Try) are significantly lower for females compared with males. As reported in the table, the t-values associated with the null hypotheses are significant at the 1% level. For instance, average entrepreneurship preference and trial among female respondents in 30 European countries are 20 percent and 15 percent respectively, which are significantly lower than respective figures for male respondents. This result does not differ across the regions of the continent. In general, all regions of the Europe report higher entrepreneurship among men compared with women. Although, relatively more female respondents from Eastern Europe and the Caucasus tend to prefer entrepreneurship to any type of formal employment (25 percent) and greater share of females from Western Europe tried to open a new business in the past (26 percent), males still appear to report significantly higher entrepreneurial activity in both regions.

It could be argued that gender difference in entrepreneurship might be related to culture and could be country specific. In Appendix 2, we report the computed average scores for entrepreneurial preference and trial levels of men and women by country. Although there is some deviation in the magnitude of the gender gap across countries, in all 30 European countries those entrepreneurial activities appear to be lower for females compared to males[3].

In contrast to the first two ladders of entrepreneurial activity, men and women are equally likely to succeed in opening a new business once their preference and trial are controlled. The t-values associated with the null hypotheses are not significant at the 10% level. This is true across all regions and consistent with similar literature (Nikolova et al., 2012).

To aid our interpretation of the subsequent econometric results, in Table 2 below, we present the descriptive statistics on individual and country characteristics of both male

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[3] Only exception is Bosnia and Herzegovina, where the level of trial of opening a new business is slightly higher (1 percentage point) for women compared with men.

and female respondents. Last column of the table reports the t-values associated with the null hypotheses that these mean values of respondents' characteristics are the same for the men and women. Some salient aspects of the data, drawn from the mean characteristics are as follows:

[Insert Table 2 about here]

First, among social-demographic characteristics, there is not that much difference between the men and women. For instance, average age of female respondents is 47, while this figure stands at 46 for male respondents. The share of Muslims, the number of children, the level of education and place of residence do not also differ significantly between women and men. However, respondents' perception about their health is noticeably lower for women compared with men. About 49 percent of female respondents report their health good or very good, while 59 percent of male respondents assess their health as good or very good.

Second, an economic situation appears to be in favor of male respondents. For instance, among women, fewer respondents own bank accounts/cards (61 percent) compared to male respondent (66 percent). In terms of having at least one car in the household that respondents belongs to, about 51 percent of women respond positively, while 61 percent of households of male respondents report that they have at least one car.

Third, there is no difference between the level of social capital among female and male respondents. About 33 percent of respondents of both gender report that the people around them can be trusted, whereas frequency of meeting their friends also exhibit quite similar magnitude.

Fourth, concerning the personality traits of respondents, women's average scores of risk tolerance and readiness to move for job are significantly lower than average scores of men in the full set of 30 countries. Average risk tolerance score of women is 0.8 points lower than men, while score for readiness to move is 0.1 smaller for females. Concerning the other two personality traits, there is no difference between women and men. On average, female and male respondents report the same level optimism and hard working attitudes.

Fifth, in terms of the country as well as regional characteristics of women versus men, there is not much difference. For example, regional averages for Prefer and Try appear to be very similar for both women and men. Other country level variables (e.g. GDP per capita, credit to private sector, time to start a business and rule of law) also tend to be same for male and female respondents, only very minor difference in favor of the formers. Aggregate gender-specific variables (e.g. share of females in Parliament, share of women in labor force, maternal mortality ratio and adolescent fertility rate) also

exhibit very similar magnitude for both genders with only small difference in favor of males.

4.2. Regression Results

We estimate three separate probit regressions for both latent and nascent entrepreneurship. The two binary dependent variables used in the regressions are: (a) *Prefer* – whether the respondent prefers a self-employment to any other type of employment; and (b) *Try* – whether the respondent ever tried to set up a business, conditional on outcome (a). The first category of entrepreneurs refers to latent entrepreneurship, while the second category stands for nascent entrepreneurship. Since the second category of entrepreneurship (Try) is a subset of our first entrepreneurship (Prefer), it enables us to estimate the determinants of each category of entrepreneurial activity separately, without concern for cross-equation correlation (Wooldridge, 2002). Table 3 displays the estimated marginal effects of the individual-level explanatory variables on these two dependent variables. In each regression model we include country fixed effects to eliminate the effect of slowly changing country-level variables that could cofound the results.

[Insert Table 3 about here]

Columns (1) and (4) of Table 3 use pooled sample and include both male and female respondents. The estimation results show that women are less likely to prefer and try self-employment as compared to men after controlling for a wide range of individual characteristics. The marginal effects of *Female* dummy suggest that the probabilities of preferring self-employment and trying to open a new business are respectively 5.4 and 7.9 percentage points lower for women as compared to men holding the individual-level control variables constant at their mean.

In general, among the individual-level control variables such as *Age*, *Having a car*, *Taking a risk*, *Willingness to move*, *Reason is laziness,* and *Did better than parents* seem to have a similar influence on the preference for being self-employed as well as the trial of opening a business. However, individual-level variables such as *Number of children*, *Urban*, *Muslim*, *Subjective health*, *Bank account/card,* and *Meeting friends* enter insignificant in one of the stages of entrepreneurship, although their respective signs are consistent with the findings in the literature. Nevertheless, the education and social capital variables tend to affect the latent and nascent entrepreneurship differently. Education positively affects the probability of trying to be an entrepreneur, but does not necessarily increases the likelihood of individual preference of being self-employed. This can be explained by the nature of *Try* dependent variable which basically captures the concept of opportunity entrepreneurship. According to Nikolova et al. (2012), "if an individual who has tried to start a business prefers self-employment to other types of

work, he or she is more likely to be an opportunity entrepreneur". Since the opportunity entrepreneurs are more likely to establish bigger and more sophisticated enterprises, this may require a higher degree of education and skills as compared to people who just prefer to be self-employed. Finally, generalized trust variable, which captures part of the social capital concept, contributes to a lower likelihood of an individual's preference of being self employed, while it does increase his or her trials to set up a business.

In Table 3, we also report the results of probit regressions that were run separately for men and women. Columns (2) and (5) use a sample of female respondents, while Columns (3) and (6) displays the estimates for male respondents. The estimated marginal effects suggest that individual-level variables that found to be significant in explaining the likelihood of respondents' preference of being self-employed and their trials to open a business are nearly the same for both men and women. *Age*, *Having a car*, *Taking a risk*, *Willingness to move*, *Reason is laziness,* and *Did better than parents* tend to have a similar influence on the preference for being self-employed as well as the trial of opening a business for both genders. However, there a couple of variables that enters significantly only for female respondents. These variables are *Subjective health*, *Meeting friends* and *Reason is laziness* for the latent entrepreneurship, while *Reason is laziness* variable appears to be also significant predictor of female nascent entrepreneurship. Finally, estimation results further point to unobserved environmental effects on male and female entrepreneurship (i.e. culture), since country fixed effects are statistically significant throughout all regressions.

In Table 4, we report the estimated marginal effects of country-level determinants of entrepreneurship. In addition, we also show the marginal effects of average PSU level individual responses on latent and nascent entrepreneurship. We run three sets of probit regressions for our two dependent variables. In each regression model we include, but not report, all individual-level variables that we used in Table 3.

[Insert Table 4 about here]

Columns (1) and (4) of Table 4 show the results for the pooled sample and include both male and female respondents. Our estimations show that the probability of becoming an entrepreneur is lower for women even after controlling for country-level independent variables. The likelihoods of latent and nascent entrepreneurship are respectively 5 and 8.1 percentage point lower for women as compared to men. Turning to country-level controls of entrepreneurship, our results appear to be largely consistent with the finding in the literature. As far as the latent entrepreneurship is concerned, there is a negative and significant association with *GDP per capita*, while it has statistically insignificant effect on nascent entrepreneurship. Since our latent entrepreneurship variable *Prefer* may largely refer to necessity entrepreneurship then higher proportion of people may prefer a self-employment to any other types of work due to the absence or shortage of the latter.

Overall business environment appears to be positively associated with the entrepreneurship, which is evident from the signs and significance of estimated marginal effects of *Credit to private sector* and *Time to start a business*. Similarly, one can also observe that the impact of our institutional variable (*Rule of Law*) has expected sign and is statically significant. Our regional-level variables (*Regional average Prefer* and *Regional average Try*) show, that there are positive spillovers from existing entrepreneurial activities. The larger the presence of entrepreneurship in a specific region the higher would be the likelihood of preferring self-employment and trial of setting up a business. The magnitude and statistical significance of these effects are large. For gender-specific country-level variables, we avoid to discuss the estimated marginal effects for male and female respondents combined, since it is very difficult to interpret the results.

Table 4 also presents the results of probit regressions that we run separately for males and females. Columns (2) and (5) displays the estimated marginal effects only for female respondents, while Columns (3) and (6) displays the estimates for male respondents. Our previous analysis on the estimated marginal effects of the general country-level variables (non-gender-specific variables) are mainly confirmed for men, while none of them found to be statistically significant in explaining the nascent entrepreneurship amongst female respondents. Only *Regional average Try* remains statistically significant with large positive magnitude in explaining the women's try in setting up a new business. However, our gender-specific country-level variable *Adolescent* fertility rate appears to negatively affect female respondents' entrepreneurial try.

4.3. Decomposition Analysis

In Table 5, we report the individual and country-level characteristics effects on gender differences in entrepreneurship using the Blinder-Oaxaca non-linear decomposition and its three extensions on choice of weighting matrix. The results are based upon the same samples that are used for the probit regression analyses presented in the previous section.

[Insert Table 5 about here]

According to Table 5, differences in individual-level characteristics explain about the one-third of gender gap in latent entrepreneurship (*Prefer*) and about half of the gender difference in nascent entrepreneurship (*Try*). Changes in country-level characteristics can explain a negligible portion (3 percent) of gender gap in latent entrepreneurship, while about 13 percent of the gender gap in nascent entrepreneurship found to be explained by the differences in country-level variables. The comparison of various decomposition techniques yields the two main findings. First, there is no significant difference between the results of decomposition techniques used. Generally, firm-level endowments explain larger portion of the gender differential in entrepreneurship as compared to the differences in country-level characteristics. Second, standard Blinder-Oaxaca

decomposition appears to overestimate the role of changes in individual and country-level characteristics on the gender the gender gap in entrepreneurship, while Cotton decomposition technique seems to underestimate the contribution of the both portions.

In order to understand among many, which of the individual and country-level characteristics are mainly explaining the gender gap in entrepreneurship, we apply a detailed Blinder-Oaxaca decomposition technique and present the results in Table 6. A closer look at the results of Panel A of Table 6 reveals that the explained effect in gender gap is almost exclusively driven by the gender difference in risk taking behavior. The gender difference in *Taking a risk* characteristics explains 22 percent and 18 percent of the gender gap in latent and nascent entrepreneurship, respectively. The second largest contributor to the gender gap appears to be a gender difference in the wealth. The difference in *Having a car* explains 2 percent and 7 percent of the gender gap in latent and nascent entrepreneurship, respectively. Divergence in the level of *Willingness to move* between men and women also explain some statistically significant gender gap in both types of entrepreneurship. Among the country-level variables, the difference in *GDP per capita* and *Maternal mortality ratio,* along with the *Regional average Prefer,* also found to be the most significant contributors to the gender gap in latent entrepreneurship. However, one single variable, namely the difference in the *Regional average Try*, tends to be a significant in explaining the gender difference in the nascent entrepreneurship.

[Insert Table 6 about here]

In Panel B of Table 6, we also report the breakdown of coefficients effects on the gender gap. This allows us to estimate the impact of differences in effectiveness of characteristics on gender gap in entrepreneurship. The results are very similar to the one we have obtained from the characteristics differences. In general, women would be better off if there is no difference in the return to the individual and country-level characteristics between them and men. Gender differences in the coefficients of individual variables such as *Taking a risk* and *Did better than* parents significantly explain the gender gap in both latent as well as nascent entrepreneurship. The difference in the coefficients for the risk tolerance alone contributes about 40 percent of gender gap in entrepreneurship. The contribution from the gender differences in coefficients from the country-level variables, *GDP per capita, Time to start a business* and *Maternal mortality rate* appear to be significant in explaining the gender gap in latent entrepreneurship, while only the coefficient for *Credit to private sector* found to be statistically significant contributor to the gender gap in nascent entrepreneurship.

5. Conclusion

There is no gender difference between success in establishing a business once both males and females have the same preference to self-employment and attempts towards establishing a new business. However, the gender gap tends to be huge when it comes to individual preferences and attempts to start up an entrepreneurial activity. This holds true even after controlling for a wide range of individual-level and country-specific variables.

Our regression analysis points to a positive relationship between the respondents' age, urban residence, number of children, good health, car ownership, risk tolerance, willingness to move for job and hard working behavior and latent entrepreneurship for both males and females. Nearly all these variables found to be significant in explaining the nascent entrepreneurship too, while secondary education and optimism also became significant in explaining the nascent entrepreneurship for both genders. Among the country-level variables, GDP per capita, credit to private sector, time to start a business, gender inequality, law and order appears to be significant in explain the latent entrepreneurship, while majority of these indicators became insignificant for the nascent entrepreneurship. Our results also suggest that there are positive spillovers from existing entrepreneurial activities in the region that respondent belongs.

According to the decomposition analysis, individual level variables in general and risk tolerance specifically, tend to explain the main part of the gender gap in both latent and nascent entrepreneurship. In addition, gender differences in economic conditions, optimism are also found to be significant in explaining the gender gap in entrepreneurship. Not only the difference in the individual endowments, but also their differential effectiveness (or return) appeared to explain the gender gap in entrepreneurship. However, differences in both country-level characteristics and their effectiveness do not seem that important in explaining the gender gap in latent and nascent entrepreneurship.

In general, our study confirms the main causes of previous studies in terms of importance of personal traits variables in explaining the gender difference in entrepreneurship. Moreover, we also show some income inequality between men and women which can explain the minor, but the significant gender gap in entrepreneurship.

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Table 1 – Gender Entrepreneurship Gap by Region

		Female	Male	Difference	Standard Error	Significance
Whole Sample	Prefer	19.960	26.990	-7.030	0.005	***
	Try	15.150	28.520	-13.370	0.008	***
	Succeed	69.460	71.620	-2.160	0.014	NS
Eastern Europe and the Caucasus	Prefer	24.660	33.900	-9.240	0.010	***
	Try	9.500	20.500	-11.000	0.012	***
	Succeed	48.600	53.140	-4.540	0.031	NS
Western Europe	Prefer	22.180	29.080	-6.900	0.012	***
	Try	26.430	44.410	-17.980	0.024	***
	Succeed	83.290	86.120	-2.830	0.023	NS
Central Europe and the Baltic States	Prefer	16.540	23.870	-7.330	0.009	***
	Try	16.680	25.860	-9.180	0.017	***
	Succeed	79.540	77.860	1.680	0.026	NS
South-eastern Europe	Prefer	17.700	23.940	-6.240	0.010	***
	Try	16.180	27.850	-11.670	0.018	***
	Succeed	70.730	68.300	2.430	0.028	NS

Note: Eastern Europe and the Caucasus include: Armenia, Azerbaijan, Belarus, Georgia, Moldova, Russia, Turkey and Ukraine; Western Europe include: France, Germany, Italy, Sweden and the United Kingdom, Central Europe and the Baltic States include: Croatia, Czech, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia; South-eastern Europe include: Albania, Bosnia and Herzegovina, Bulgaria, Macedonia, Montenegro, Romania and Serbia *** significant at the 1% level, ** significant at the 5% level, * significant at the 10% level. NS – not significant at 10% level.

Table 2 – Individual and Country Characteristics of Respondents: Gender Difference

	Female					Male					T-test
	Obs.	Mean	Std. Dev.	Min	Max	Obs.	Mean	Std. Dev.	Min	Max	sig.
Prefer	17999	0.199567	0.399686	0	1	12229	0.269932	0.443942	0	1	***
Prefer and try	5622	0.151548	0.358614	0	1	4197	0.2852037	0.451565	0	1	***
Prefer, try and succeed	1958	0.694586	0.4607	0	1	2452	0.716150	0.450956	0	1	NS
Individual characteristics											
Age	20097	47.4542	17.53638	18	99	13203	46.0996	17.3679	18	99	***
Age^2	20097	2559.41	1761.281	324	9801	13203	2426.795	1705.723	324	9801	***
Number of children	20106	0.582612	0.928728	0	8	13209	0.489590	0.869899	0	7	***
Urban	20106	0.638566	0.480428	0	1	13209	0.622984	0.484657	0	1	***
Muslim	20106	0.153487	0.360465	0	1	13209	0.160193	0.366799	0	1	*
Secondary education	20106	0.633741	0.481793	0	1	13209	0.668786	0.470667	0	1	***
Higher education	20106	0.197255	0.397936	0	1	13209	0.204784	0.403559	0	1	*
Subjective health	20106	0.490849	0.499929	0	1	13209	0.598531	0.490214	0	1	***
Bank account/card	20106	0.614792	0.486657	0	1	13209	0.657203	0.474662	0	1	***
Having a car	20106	0.506516	0.49997	0	1	13209	0.606329	0.488582	0	1	***
Generalized trust	20106	0.326072	0.468786	0	1	13209	0.332576	0.471154	0	1	NS
Meeting friends	20106	3.602855	1.078002	1	5	13209	3.764782	1.046546	1	5	***
Taking a risk	19494	4.445419	2.524608	1	10	12926	5.204240	2.543164	1	10	***
Willingness to move	20106	0.295733	0.456383	0	1	13209	0.394730	0.4888113	0	1	***
Reason is laziness	20106	0.200686	0.400524	0	1	13209	0.204103	0.403060	0	1	NS
Did better than parents	20106	0.435293	0.495808	0	1	13209	0.435839	0.495885	0	1	NS

Table 2 continued

Country Characteristics

Regional average Prefer	20106	0.227796	0.054215	0	1	13209	0.228930	0.0567118	0	1	*
Regional average Try	20055	0.216141	0.118693	0	1	13158	0.217763	0.124083	0	1	NS
GDP per capita	19486	9.581475	0.631328	8	11	12748	9.6449090	0.6161318	8	11	***
Credit to private sector	20106	64.720760	40.105290	16	203	13209	67.57338 0	42.226390	16	203	***
Time to start a business	20106	20.851450	12.824370	6	67	13209	21.161330	13.237820	6	67	**
Female in Parliament	19486	17.690000	8.016655	7	47	12748	18.653780	8.703223	7	47	***
Female in labor force	18076	45.241180	4.734262	28	50	11628	45.034760	4.442975	28	50	***
Maternal mortality ratio	19486	21.599510	15.248630	5	64	12748	20.210900	14.811890	5	64	***
Adolescent fertility rate	19486	22.461490	10.979960	4	50	12748	20.85747	10.58658	4	50	***
Law and Order	20106	3.022869	0.477237	2	4	13209	3.063878	0.489574	2	4	***

Note: *** significant at the 1% level, ** significant at the 5% level, * significant at the 10% level. NS – not significant at 10% level.

Table 3 – Probit Analysis Results: Individual Determinants

	A. Prefer			B. Try		
	Whole Sample	**Female**	**Male**	**Whole Sample**	**Female**	**Male**
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
Female	-0.054***			-0.079***		
	(0.005)			(0.008)		
Age	0.003***	0.002**	0.003**	0.018***	0.015***	0.021***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.003)
Age^2	0.000***	0.000***	0.000***	0.000***	0.000***	0.000***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Number of children	0.008***	0.006*	0.011**	0.003	0.004	-0.001
	(0.003)	(0.003)	(0.005)	(0.005)	(0.005)	(0.009)
Urban	0.017***	0.016**	0.018**	0.003	0.012	-0.010
	(0.005)	(0.006)	(0.009)	(0.009)	(0.009)	(0.016)
Muslim	-0.008	-0.004	-0.013	-0.067***	-0.052***	-0.081**
	(0.012)	(0.015)	(0.019)	(0.017)	(0.017)	(0.033)
Secondary education	-0.022***	-0.024**	-0.016	0.053***	0.046***	0.048*
	(0.008)	(0.010)	(0.014)	(0.013)	(0.014)	(0.025)
Higher education	-0.025***	-0.033***	-0.010	0.092***	0.078***	0.093***
	(0.009)	(0.011)	(0.016)	(0.019)	(0.023)	(0.032)
Subjective health	0.012**	0.019***	0.000	0.009	0.001	0.020
	(0.006)	(0.007)	(0.010)	(0.009)	(0.010)	(0.017)
Bank account/card	0.003	-0.005	0.015	0.051***	0.034***	0.067***
	(0.007)	(0.008)	(0.011)	(0.011)	(0.012)	(0.020)
Having a car	0.042***	0.032***	0.057***	0.095***	0.075***	0.120***
	(0.006)	(0.007)	(0.009)	(0.009)	(0.011)	(0.017)
Generalized Trust	-0.019***	-0.011*	-0.030***	0.007	-0.001	0.020
	(0.005)	(0.006)	(0.009)	(0.009)	(0.009)	(0.016)
Meeting friends	0.004*	0.005*	0.002	-0.005	-0.004	-0.006
	(0.002)	(0.003)	(0.004)	(0.004)	(0.004)	(0.008)

Table 3 continued

Taking a risk	0.023***	0.020***	0.029***	0.031***	0.023***	0.041***
	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.003)
Willingness to move	0.023***	0.020***	0.027***	0.039***	0.031***	0.048***
	(0.006)	(0.007)	(0.009)	(0.009)	(0.011)	(0.016)
Reason is laziness	0.016***	0.017**	0.013	0.036***	0.039***	0.026
	(0.006)	(0.008)	(0.010)	(0.010)	(0.012)	(0.018)
Did better than parents	0.009*	0.007	0.012	0.032***	0.017*	0.053***
	(0.005)	(0.006)	(0.009)	(0.008)	(0.009)	(0.015)
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	29655	17620	12035	9376	5312	4064
Pseudo R^2	0.0757	0.0666	0.0772	0.181	0.1811	0.1526
Log likelihood	-14740.4	-8228.77	-6487.88	-4015.89	-1904.55	-2082.22

Note: Regression analysis is conducted for the Entrepreneurship Prefer sample (Panel A) and for the Entrepreneurship Try sample (Panel B). The dependent variables are as follows: in models (1), (2) and (3) Prefer, which is dummy variable equal to 1 if the respondent prefers self employment to any type of employment; in models (4), (5) and (6) Try conditional on Prefer, which is a dummy variable equal to 1 if the respondent has preference and tried to set up a business. Probit estimations report marginal effects that are calculated as Average Partial Effects. Robust standard errors are in parentheses. All models include country fixed effects. *** significant at the 1% level, ** significant at the 5% level, * significant at the 10% level.

Table 4 – Probit Analysis Results: Country Determinants

	C. Prefer			D. Try		
	Whole Sample (1)	Female (2)	Male (3)	Whole Sample (4)	Female (5)	Male (6)
Female	-0505*** (0.0058)			-0.0809*** (0.0089)		
Regional average Prefer	0.9570*** (0.0457)	0.9249*** (0.0567)	0.9976*** (0.0757)			
Regional average Try				0.6736*** (0.0430)	0.5396*** (0.0472)	0.8412*** (0.0780)
GDP per capita	-0.0588*** (0.0076)	-0.0470*** (0.0090)	-0.0805*** (0.0133)	-0.0189 (0.0120)	-0.0185 (0.0125)	-0.0198 (0.0228)
Credit to private sector	0.0001* (0.0001)	0.0002* (0.0001)	0.0001* (0.0001)	-0.0001 (0.0001)	0.0001 (0.0002)	-0.0005** (0.0003)
Time to start a business	-0.0018*** (0.0003)	-0.0011*** (0.0003)	-0.0028*** (0.0005)	-0.0017*** (0.0005)	-0.0002 (0.0005)	-0.0042*** (0.0009)
Female in Parliament	0.0003 (0.0004)	0.0002 (0.0005)	0.0005 (0.0006)	-0.0003 (0.0006)	-0.0005 (0.0007)	0.0000 (0.0011)
Female in labor force	-0.0026*** (0.0007)	-0.0022*** (0.0008)	-0.0031*** (0.0012)	0.0003 (0.0012)	0.0006 (0.0013)	0.0004 (0.0022)
Maternal mortality ratio	-0.0019*** (0.0003)	-0.0014*** (0.0004)	-0.0026*** (0.0005)	-0.0003 (0.0005)	0.0001 (0.0005)	-0.0009 (0.0009)
Adolescent fertility rate	0.0005 (0.0004)	0.0005 (0.0005)	0.0005 (0.0006)	-0.0010* (0.0006)	-0.0012* (0.0007)	-0.0009 (0.0011)
Law and Order	0.0225*** (0.0079)	0.0209*** (0.0098)	0.0254* (0.0134)	-0.0083 (0.0134)	-0.0057 (0.0149)	-0.0097 (0.0243)
Observations	26412	15825	10587	8627	4924	3703
Pseudo R^2	0.065	0.0564	0.0649	0.1911	0.1831	0.1658
Log likelihood	-13505.078	-7613.5188	-5873.5956	-3662.8348	-1774.0754	-1873.3944

Note: Regression analysis is conducted for the Entrepreneurship Prefer sample (Panel A) and for the Entrepreneurship Try sample (Panel B). The dependent variables are as follows: in models (1), (2) and (3) Prefer, which is dummy variable equal to 1 if the respondent prefers self employment to any type of employment; in models (4), (5) and (6) Try conditional on Prefer, which is a dummy variable equal to 1 if the respondent has preference and tried to set up a business. Probit estimations report marginal effects that are calculated as Average Partial Effects. Robust standard errors are in parentheses. All models include individual characteristics that were listed in Table 5. *** significant at the 1% level, ** significant at the 5% level, * significant at the 10% level.

Table 5 – Non-linear Decomposition of Entrepreneurship Gap between Female and Male: Individual and Country Characteristics

	Prefer			Try		
	Estimate	Standard Error	Share in Gender Gap	Estimate	Standard Error	Share in Gender Gap
Blinder-Oaxaca						
Reference group: *male*						
Individual	-0.023***	0.002	*32%*	-0.064***	0.004	*47%*
Country	-0.002**	0.001	*3%*	-0.017***	0.003	*13%*
Pooled	-0.025	0.002	*35%*	-0.065***	0.004	*48%*
Reference group: *female*						
Individual	-0.017***	0.002	*24%*	-0.052***	0.004	*38%*
Country	-0.002*	0.001	*3%*	-0.015***	0.003	*11%*
Pooled	-0.022***	0.002	*30%*	-0.005***	0.005	*39%*
Reimers						
Individual	-0.020***	0.001	*28%*	-0.058***	0.003	*43%*
Country	-0.002**	0.001	*3%*	-0.016***	0.003	*12%*
Pooled	-0.024***	0.002	*32%*	-0.058***	0.004	*43%*
Cotton						
Individual	-0.020***	0.001	*27%*	-0.057***	0.003	*43%*
Country	-0.002**	0.001	*3%*	-0.016***	0.003	*12%*
Pooled	-0.023***	0.002	*32%*	-0.057***	0.003	*43%*
Neumark						
Individual	-0.021***	0.002	*30%*	-0.061***	0.003	*46%*
Country	-0.002**	0.001	*4%*	-0.017***	0.003	*13%*
Pooled	-0.026***	0.002	*35%*	-0.061***	0.004	*46%*

Note: Share is ratio of the contribution of respondents' individual and country characteristics to the predicted overall differences in entrepreneurship between male and female. Country characteristics also include regional average of Prefer and Try respectively. *** significant at the 1% level, ** significant at the 5% level, * significant at the 10% level.

Table 6 – Detailed Blinder-Oaxaca Decomposition of Gender Difference in Entrepreneurship

	A. Characteristics						B. Coefficients					
	Prefer			Try			Prefer			Try		
	Estimate	St.Er.	Share	Estimate	St.Er.	Share	Estimate	St.Er.	Share	Estimate	St.Er.	Share
Aggregate effect	**0.021*****	**0.002**	**29%**	**0.049*****	**0.004**	**36%**	**0.048*****	**0.006**	**65%**	**0.066*****	**0.009**	**50%**
Constant							0.435**	0.179	596%	0.081	0.274	61%
Individual Variables												
Age	-0.001	0.001	-1%	-0.033***	0.006	-24%	-0.048	0.084	-66%	0.173	0.132	129%
Age^2	0.002**	0.001	3%	0.031***	0.006	23%	0.011	0.045	15%	-0.072	0.073	-54%
Urban	0.000	0.000	0%	0.000	0.000	0%	-0.002	0.007	-2%	-0.004	0.012	-3%
Secondary education	-0.001**	0.000	-1%	0.001	0.001	1%	0.009	0.011	13%	0.009	0.016	6%
Higher education	0.000	0.000	0%	0.002**	0.001	1%	0.007*	0.005	10%	0.008	0.007	6%
Bank account/card	-0.001***	0.000	-2%	0.003***	0.001	2%	0.013	0.009	17%	0.012	0.012	9%
Having a car	0.002***	0.001	3%	0.009***	0.002	7%	0.009	0.006	12%	0.012	0.010	9%
Generalized trust	0.000	0.000	0%	0.000	0.000	0%	-0.010***	0.004	-13%	0.005	0.006	4%
Taking a risk	0.016***	0.001	22%	0.025***	0.002	18%	0.028***	0.010	38%	0.052***	0.017	39%
Willingness to move	0.001	0.001	1%	0.005***	0.002	3%	0.002	0.004	3%	0.003	0.006	2%
Did better than parents	0.000	0.000	0%	0.000	0.000	0%	0.008***	0.005	11%	0.017**	0.008	13%
Country Variables												
Regional average Prefer	0.002**	0.001	2%	0.007***	0.002	5%						
Regional average Try							0.004	0.020	5%	0.005	0.017	4%
GDP per capita	-0.003***	0.001	-4%	-0.001	0.001	-1%	-0.301**	0.151	-412%	-0.103	0.216	-77%
Credit to private sector	0.001*	0.000	1%	0.000	0.001	0%	-0.006	0.012	-9%	-0.027***	0.018	-21%
Time to start a business	0.000	0.000	0%	0.000	0.000	0%	-0.030***	0.011	-42%	-0.062	0.018	-46%
Female in labor force	0.000**	0.000	1%	0.000	0.000	0%	-0.038	0.063	-52%	-0.024	0.104	-18%
Maternal mortality ratio	0.001***	0.000	2%	0.000	0.001	0%	-0.025**	0.013	-34%	-0.022	0.022	-16%
Law and Order	0.001**	0.000	1%	0.000	0.001	0%	0.005	0.049	7%	-0.009	0.079	-7%

Note: The detailed Oaxaca-type decomposition for OLS regression shows the gender difference in entrepreneurship that is explained by individual and country-level characteristics of respondents and the return to these characteristics respectively. Country characteristics also include regional average of Prefer and Try respectively. We do not report the estimates of variables that were not statistically significant in at least one of the model specifications. Share is ratio of the contribution of each factor or group of factors to the predicted overall differences in entrepreneurship between male and female. *** significant at the 1% level, ** significant at the 5% level, * significant at the 10% level.

Table A.1 – Observation by Country

		Number of Observations
1	Albania	1,055
2	Armenia	1,000
3	Azerbaijan	1,002
4	Belarus	1,000
5	Bosnia-Herzegovina	1,087
6	Bulgaria	1,014
7	Croatia	1,006
8	Czech Republic	1,007
9	Estonia	1,002
10	France	1,009
11	Georgia	1,000
12	Germany	1,042
13	Great Britain	1,504
14	Hungary	1,054
15	Italy	1,049
16	Latvia	1,007
17	Lithuania	1,013
18	Macedonia	1,072
19	Moldova	1,043
20	Poland	1,616
21	Romania	1,078
22	Russia	1,584
23	Serbia	1,519
24	Slovakia	1,011
25	Slovenia	1,000
26	Sweden	900
27	Turkey	1,004
28	Ukraine	1,559
29	Kosovo	1,091
30	Montenegro	1,013
	Total	**33,341**

Table A.2 – Gender Entrepreneurship Gap by Country

		Prefer			Try		
		Female	Male	Difference	Female	Male	Difference
1	Albania	31.8	35.6	*-3.8*	26.6	37.6	*-10.9*
2	Armenia	14.3	24.0	*-9.7*	3.4	14.2	*-10.7*
3	Azerbaijan	7.8	14.2	*-6.5*	3.6	23.7	*-20.1*
4	Belarus	36.6	48.8	*-12.2*	10.8	14.9	*-4.2*
5	Bosnia and Herzegovina	13.0	14.6	*-1.7*	14.3	13.3	*1.0*
6	Bulgaria	16.7	25.9	*-9.2*	16.3	30.4	*-14.2*
7	Croatia	16.1	23.2	*-7.2*	15.5	29.4	*-13.9*
8	Czech	14.0	26.9	*-12.9*	25.8	48.3	*-22.5*
9	Estonia	19.7	27.4	*-7.7*	18.1	21.4	*-3.3*
10	France	30.0	38.3	*-8.3*	18.8	46.5	*-27.7*
11	Georgia	13.2	16.0	*-2.8*	8.9	13.7	*-4.8*
12	Germany	12.8	16.6	*-3.8*	40.9	54.9	*-14.0*
13	Hungary	8.3	13.9	*-5.6*	28.6	38.4	*-9.8*
14	Italy	23.9	31.6	*-7.8*	18.2	27.0	*-8.7*
15	Kosovo	14.1	16.6	*-2.5*	4.2	15.6	*-11.4*
16	Latvia	13.7	20.8	*-7.1*	9.4	27.6	*-18.2*
17	Lithuania	14.6	18.6	*-4.0*	9.9	18.1	*-8.2*
18	Macedonia	18.6	26.5	*-7.9*	15.1	27.7	*-12.5*
19	Moldova	27.4	39.9	*-12.5*	9.3	17.5	*-8.2*
20	Montenegro	17.5	25.7	*-8.2*	10.9	20.7	*-9.8*
21	Poland	23.0	31.7	*-8.7*	12.3	20.1	*-7.8*
22	Romania	18.0	22.6	*-4.6*	8.0	20.1	*-12.2*
23	Russia	23.3	30.7	*-7.4*	16.0	22.1	*-6.1*
24	Serbia	11.5	18.8	*-7.4*	21.1	36.8	*-15.7*
25	Slovakia	17.3	24.3	*-7.0*	26.7	40.7	*-14.1*
26	Slovenia	17.8	26.2	*-8.3*	21.5	25.2	*-3.7*
27	Sweden	21.7	28.5	*-6.8*	28.6	49.7	*-21.1*
28	Turkey	38.7	51.2	*-12.5*	4.9	30.2	*-25.3*
29	United Kingdom	22.7	29.9	*-7.2*	32.1	43.9	*-11.8*
30	Ukraine	31.7	42.0	*-10.2*	10.8	23.7	*-12.9*

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