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Symptoms and Causes: Gender Effects and Institutional Failures

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INTRODUCTION

The existence and causes of gender gaps in pay and in occupational choice have been increasingly at the centre of research in economics, sociology, psychology, managerial science, and other fields. The research findings across countries and over time generally suggest that gaps exist and are significant, indicating that gender inequality remains persistent in many areas, even in the developed Western democracies. Forcefully closing the gaps directly, however, may not be sufficient in the long run. Trying to fix the symptoms without addressing the causes is likely to create other distortions and lead to further welfare losses over time.

One hotly debated issue is that of the gender effect on business performance. Women are in a striking minority when it comes to managerial roles and entrepreneurship. According to Terjesen, Aguilera and Lorenz (2015), in 2013 the average proportion of women on the corporate board of directors across 67 countries was only 10.3 per cent, although empirical evidence suggests that higher presence of women on corporate boards is often positively correlated with various measurements of high performance. For example, according to the Fawcett Society (2013), "companies with more women on their boards were found to outperform their rivals with a 42 per cent higher return in sales, 66 per cent higher return on invested capital and 53 per cent higher return on equity". Do women make better leaders, better managers, better "bosses", and, if yes, why don't we see more women than men in these roles?

A broad answer to this question is institutional failure, including both formal and informal institutions. Many countries have outlawed gender discrimination and have legislated measures towards eliminating gender gaps. However, even in these countries societal norms and perceptions often lag behind. Failure to realize gains from equal opportunities ultimately leads to a misallocation of human and physical resources and thus to social welfare loss.

The answer to the question whether women make better leaders is trickier. A study by Martinsen and Glasø (2013) has concluded that female managers outperform their male counterparts in four out of five categories of leadership characteristics. Among about 3,000 managers, women were better at initiative and clear communication, openness and ability to innovate, sociability and supportiveness, and methodical management and goal-setting, while men were better at dealing with work-related stress and in maintaining higher levels of emotional stability.

In this regard, the question Gazanchyan, Hashimzade, Rodionova, and Vershinina (2017) attempted to answer is slightly different. If there is a positive effect of female leadership on business performance, could it be because women face higher hurdles than men, and those who succeeded in making it to the top are better than men in similar roles?

The approach to this question was to construct a theoretical model linking occupational choice in the presence of gender bias to business performance and to subject the assumptions and predictions of the-model to an empirical test. While the firm-level data set used in this study contained important details of firm characteristics contributing to business performance as well as the information on the gender of the firm owner and senior manager, it provided no information on the personality and characteristics of the owners and managers. Thus, the aim of the research was to compare the performance of firms owned and/or managed by women and those owned and/or managed by men, with all other observable characteristics being similar, or matched: if there is a gap, it can then be attributed to the gender effect. A potential hurdle explored in this work was access to finance in the credit markets for reasons discussed below.

GENDER, CULTURE AND INSTITUTIONS

The cultural and legislative context, both of which depend on the geographical location and political environment, are important determinants of the extent and perception of gender discrimination (Shaffer et al. 2000, Aidis et al. 2007). The data used by Gazanchyan et al. (2017) was from the fourth round (2008-09) of the Business Environment and Enterprise Performance Survey (BEEPS), a firm-level data set for countries in Eastern Europe and Central Asia. This choice was driven by the differences in institutions and regulations between the developed countries, where much of the previous research of similar issues had been conducted, and the developing countries of the former Soviet bloc.

Firstly, in these countries the market economy and private entrepreneurship were relatively recent phenomena, and in the absence of accumulated internal resources, external financing was, by and large, a necessary pre-condition for starting business. Secondly, these countries had a different history of gender attitudes and different patterns in gender discrimination from those experienced by the developed Western countries. The differences are even more striking in the attitudes to entrepreneurship and to the place of women in business (Smallbone and Welter 2001a,b, Estrin and Mickiewicz 2011). Thus, the effect of discrimination in the capital markets on occupational choice and business performance was expected to be espe-

cially pronounced in the transition economies, characterised by weaker entrepreneurial culture, weaker democratic institutions, and weaker anti-discrimination regulations.

GENDER AND ACCESS TO FINANCE IN THE TRANSITION ECONOMIES

There are a number of empirical studies on the extent to which women-owned businesses face discrimination in the credit markets. The findings are rather mixed for the developed countries (see, for example, Verheul and Thurik 2001, Fairley and Robb 2009, and Wu and Chua 2012). Similarly, mixed findings were reported in the research of post-Soviet era entrepreneurship in Russia and other countries of the former Soviet Union. A study by Babaeva and Chirikova (1996) shows that at the very beginning of perestroika in the early 1990s, the distribution of the responses of the directors of non-state enterprises on the question about the means for financing of a start-up in Russia did not demonstrate any strong evidence of discrimination against women. However, the authors claim that the results of the survey might have been biased due to the fact that it was commissioned by the John D. and Catherine T. MacArthur Foundation, and the respondents might have wanted to show an image of correctness, for which the study has been criticised. Arguably, the situation has worsened in recent years, as society in Russia underwent a reversal to "traditional", more patriarchal values, which has also affected the business sphere.

In the Ukraine, businesses run by men are often required to pay upfront, compared to businesses run by women (41 against 33 per cent), suggesting that female entrepreneurs are trusted more and thus might enjoy more favourable conditions for obtaining credits. At the same time, between a third and a half of female entrepreneurs admitted that they have not applied for credit because of the high interest rates, and almost one out of six female entrepreneurs admitted that present requirements for collateral were overly tight (Lavrinenko and Rudik, 2010).

Another study of the business environment in the Ukraine (Isakova et al., 2004) found that female entrepreneurs face a more acute problem of start-up capital: 51 per cent of women admitted that this was the major problem at the beginning, vis-á-vis 37 per cent of men. The problem with finances has persisted in recent years, and although it has moved in the rankings to third place, after taxes and regulations, it remains more acute for women than for men (23 against 8 per cent). It has been revealed that women are more wary of risks when borrowing externally: 38 per cent of women do not apply for credit for this only reason, against 20 per cent of men.

The Centre for Study of Public Opinion (2003) survey presented responses obtained from 684 female entrepreneurs in Uzbekistan. According to the survey, 58.5 per cent of the respondents believed that women did not have the same opportunities as men for entrepreneurial activity, 40.8 per cent disagreed and 0.7 per cent were undecided. The main obstacle to women in business in Uzbekistan was the gender stereotypes about the roles of women and men that persist in the society (Rahimova, 2006). A more recent study also showed that in Uzbekistan female entrepreneurs find it difficult to obtain credit because of the high interest rates and lack of required collateral to de-risk the investment (Sugarova, 2012). Moreover, in a comprehensive study using the 2002-05 waves of BEEPS, Muravyev et al. (2009) found empirical evidence of gender discrimination in the capital market in a wider set of post-Soviet countries, including Eastern Europe.

GENDER AND BUSINESS PERFORMANCE

Empirical evidence of the effect of an owner's gender upon business performance is also mixed. Some studies have shown that female ownership has a significantly negative impact on sales (Sabarwal and Terrell, 2008) and on profits (Robb and Wolken, 2002; Bosma et al., 2004). Other authors find no effect of the owner's gender on the firm's performance (Watson, 2002; Johnsen and McMahon, 2005; Kepler and Shane, 2007). Furthermore, Coleman (2007) finds that women-owned firms have significantly higher annual sales growth than firms owned by men, after controlling for industry and firm size. In a survey of 201 business owners, Powell and Eddleston (2008) found that firms owned by women performed better than firms owned by men (relative to competitors and as measured by sales). In a longitudinal study of over 4,000 new ventures started in the US from 2004, Robb and Watson (2012) show that there is no difference in performance between men-owned and women-owned firms, when using appropriate measures of performance (the authors used return-on-asset and the Sharpe ratio, among others) and controlling for demographic differences.

THEORETICAL MODEL OF DISCRIMINATION AND OCCUPATIONAL CHOICE

Gazanchyan et al. (2017) present a model economy populated by men and women who can choose occupations from among three options: a low-skill paid job (worker), a high-skill paid job (manager), and entrepreneurship (business owner). To start a business an individual must borrow from a credit market (for simplicity, internal resources are assumed not to exist), and the outcome of an investment project is uncertain. The probability of success, and thus, the probability that a loan will be repaid, is proportional to "entrepreneurial skill", known to an individual himself or herself but unobserved by a creditor. All individuals have different skills, and the distribution of skill is the same among men and women.

Now, let us assume that creditors are biased against female borrowers – potential entrepreneurs. In

other words, creditors believe that men are more likely to be successful, and, to compensate for perceived higher default rate by women, creditors charge them a higher interest rate. (Indeed, we find empirical evidence in support of this assumption.)

When choosing an occupation, each individual compares expected earnings from the three options. Skill and the cost of borrowing determine the choice: only individuals with skill (or probability of entrepreneurial success) above the threshold will choose to borrow and invest. Individuals without entrepreneurial skill (zero probability of success) become workers, and those with some entrepreneurial skill below the threshold become managers. Because women are faced with a higher cost of borrowing than men, the threshold for women is higher.

As a result of this self-selection, the distribution of skill among female and male business owners is different: on average, female owners have higher entrepreneurial skills than men. Moreover, the distribution of skills among female and male managers also has this feature: on average, female managers are more highly skilled than male managers.

Thus, discrimination in the capital market results in the distortion of occupational choice in the labour market. Furthermore, if entrepreneurial skill contributes to company performance, the model predicts that, other things being equal, firms owned or managed by women should perform better than firms owned or managed by men. This is exactly what Gazanchyan et al. (2017) find in the empirical part of their work.

EMPIRICAL EVIDENCE ON GENDER BIAS

The BEEPS wave of 2008-09 covers about 12 thousand enterprises in 29 countries in Eastern Europe and Central Asia: Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Georgia, Hungary, Kazakhstan, Kosovo, Kyrgyz Republic, Latvia, Lithuania, FYR of Macedonia, Moldova, Mongolia, Montenegro, Poland, Romania, Russia, Serbia, Slovak Republic, Slovenia, Tajikistan, Turkey, Ukraine and Uzbekistan. After dropping Turkey, the only non-post-Soviet country in the data set, from the sample (it is reasonable to assume that the socioeconomic, business, and cultural environment in Turkey in that period differed significantly from that in the countries in the post-Soviet space), it is reduced to about 7,700 enterprises. The survey includes questions on the business environment, such as the access to finance, performance measures, infrastructure, competition, corruption, and it also contains information on firm-specific characteristics such as sales, material and labour costs, fixed assets, the gender of the firm's owner (the largest owner for jointly owned firms) and of the senior manager, and the tenure (in years) of the senior manager in his or her sector.

On the question about the reason for not applying for a loan, more women than men chose "Interest rate is too high" and "Collateral is too high". Another question was about the access to finance as an obstacle to business, where the available choices were "Not an obstacle", "Moderate", "Major" and "Very severe obstacle". Female owners were more likely to view access to finance as an obstacle to doing business. For both questions the difference between men and women, however, was small albeit statistically significant. Female business owners had to put up, on average, a 4.6 percent larger collateral to obtain a loan, compared to male owners.

Sales were used as a measure of business performance, as is common in the literature. Without controlling for the access to external finance and for the firm-specific factors, on average, firms owned or managed by females have lower sales in the sample. However, when the gender effect of the owner was separated from that of the senior manager, a positive and strongly significant premium of female owners among the firms with male senior managers, and of female senior managers among the firms with male owners, without and with additional control variables, was found, ranging from 9.5 per cent to 57 per cent. Interestingly, the "joint" premium (both the owner and the senior manager are women) was weak, which can be interpreted either as some sort of "decreasing returns" to skill or as the positive effect of complementarity between female and male styles of leadership in running a business.

It is also interesting to look at the potential effect of the self-selection of workers in certain industries. In the industries with preferred female leadership, such as food, garments, hospitality, and other services, one would expect to see a lesser effect of skill difference because of the additional factor of selection, or self-selection, into the job. That is, to become a manager in a non-female dominated industry, a woman must demonstrate an even higher skill level than female managers in female-dominated industries. Indeed, the estimated effects are about 18 per cent, and are statistically significant.

Similar results were established using the propensity score matching technique: firms owned by men with either male or female senior managers were matched on all other characteristics contributing to business performance. The estimated effect of a female senior manager was as high as a 38 per cent premium in sales. A similar exercise for the firms owned by women did not show a significant gender effect of senior manager on sales, again suggesting decreasing returns to skill or the effect of complementarities in female and male leadership styles.

CONCLUSIONS

Gender gaps in the modern world are multifaceted and persistent. Curing the symptoms, or the measured indicator, does not necessarily address the causes of the problem. Many countries are moving towards a stricter legislated and monitored equalisation of pay, representation in leadership roles, and work-family balance for men and women. The speed of this process differs across countries, and there is still room for improvement of formal institutions in many places in the developed and developing world. However, the informal institutions are no less, and often even more important: biased perceptions of and unfavourable societal attitudes to the gender roles have real economic effects by distorting economic choices. The mechanisms by which failures of informal institutions work are not always obvious, and each manifestation of a gender gap requires careful investigation of its roots to ensure that it is eliminated successfully by dealing with causes and not the symptoms.

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