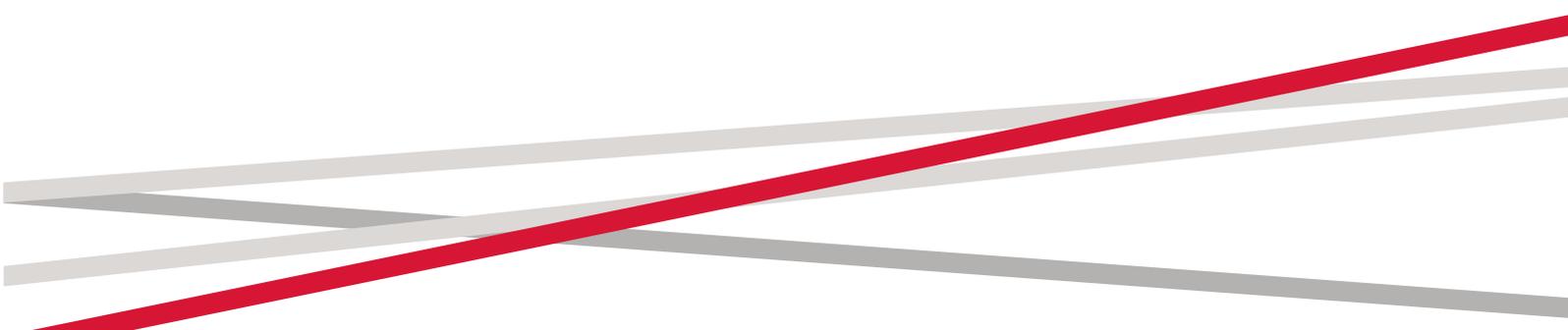


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# Gender Gaps in Wages and Wealth: Evidence from Estonia

This policy brief introduces two related papers examining two types of gender gaps in Estonia. First, it presents the work of Vahter and Masso (2019), who study the gender wage gap in foreign-owned firms and compare this gap with the situation in domestic ones. Then it summarizes a paper of Meriküll, Kukk, and Rõõm (2019), who focus on the gender wealth gap and highlight the role of entrepreneurship in this gap.



Gender inequality is not only a moral issue. An extensive literature has highlighted the cost of gender inequality in terms of economic (in)efficiency. Most of the academic work has, however, focused on either the US and Western Europe or developing countries. Research focusing on systematic gender disparities in Eastern Europe is rather scarce. Yet, there is much to be learned from this region. The purpose of the FROGEE (Forum for Research on Gender in Eastern Europe) project is to study several issues related to gender inequality in former socialist countries.

This policy brief summarizes two papers presented at the 2<sup>nd</sup> Baltic Economic Conference at the Stockholm School of Economics in Riga, on June 10-11, where a special session on gender economics was held with the support of the FROGEE project. The event, organized by the Baltic Economic Association (see [balticecon.org](http://balticecon.org)), gathered more than 85 researchers from the Baltics and all over the world. These two papers focus on Estonia, one of the most successful economies among the transition countries, where however the gender wage gap is among the largest in the European Union.

## Firm ownership and gender wage gap

An important source of wage inequality originates in firm-specific pay schemes (see for instance Card et al. 2016). Understanding the characteristics of firms associated with a gender pay gap is thus a necessary step to design relevant policy responses. In a paper entitled “The contribution of multinationals to wage inequality: foreign ownership and the gender pay gap”, Jaan Masso and Priit Vahter, both at the University of Tartu, compare the situation in foreign-owned firms with domestic ones. The fact that foreign-owned firms provide on average higher wages to their employees is well documented. However, the question of whether this premium differs between men and women remains largely overlooked.

A potential channel linking firm ownership and gender wage gap is the transfer of management practices from the home country of the investor to the affiliate. The great majority of FDI in Estonia originates from Finland and Sweden, two countries that regularly top international rankings on gender equality and that have set the fight against gender inequality as a top priority. Observing a lower level of gender wage gap in firms owned by Swedish and Finnish capital would suggest the existence of such a mechanism, even if there is evidence that Scandinavian countries do not stand out in a positive way when it comes to women in the top of the distribution (see for instance Boschini et al., 2018, and Bobilev et al., 2019).

On the other hand, Goldin (2014) has shown that a large part of the gender wage gap in the US can be explained by differences in job “commitment”: firms disproportionately reward workers willing to be available 24/7, more flexible regarding business trips, spending longer hours in the office, etc. Such workers happen to be more often men than women. Multinational firms may require such commitment and flexibility to a larger extent than domestic firms, due for instance to their higher exposure to international competition. This would imply a larger gender pay gap in foreign-owned firms compared to local firms.

To investigate this issue, Masso and Vahter (2019) rely on Estonian administrative data, providing information on the whole universe of workers and of firms in the country between 2006 and 2014. This matched employer-employee dataset allows to track the wage of individuals over the years, but also to compare wages both across and within firms. It thus becomes possible to estimate the gender wage gap at the firm level (controlling for relevant individual-level factors affecting wages, such as age and experience), and then to check whether this measure systematically differs between domestic and foreign-owned firms.

However, simply comparing the gender pay gap between these two types of firms could lead to spurious conclusions. Foreign-owned firms have



on average different characteristics than domestic ones: they do not operate in the same sectors, they do not have the same size nor the same productivity. To overcome this issue, the authors rely on a matching method: for each foreign-owned firms, they match a domestic firm with similar (observable) characteristics.

They find that in domestic firms, women are on average paid 19% less than men, even after accounting for many other factors associated with wage. In foreign-owned companies, both men and women are better paid. However, both genders do not benefit from the same premium: men are paid roughly 15% more in foreign-owned firms, whereas the premium for women is only 5.4%. This difference implies an even larger gender wage gap in multinational firms. To illustrate the economic significance of these results, for a man and a woman earning a monthly wage of 1146 euros (the average gross wage in Estonia in 2016), the premium for switching from a domestic to a foreign-owned firm is respectively 171 and 62 euros. Further, they provide some evidence that lower “commitment” is associated with a stronger wage penalty in foreign-owned firms. All in all, these results suggest that there is not necessarily a relationship between a multinational wage policy (especially in its gender wage-gap dimension) and the gender norms prevailing in its country of incorporation.

## Gender and wealth gap

The vast majority of academic papers studying gender inequality focuses on the wage gap. But gender inequality can affect other types of economic outcomes, such as labor force participation, unemployment duration, or wealth. The latter is of particular interest since wealth can greatly contribute to empowerment. Merike Kukk, Jaanika Meriküll and Tairi Rõõm, all at the Bank of Estonia, extend the literature with a paper entitled “What explains the Gender Gap in Wealth? Evidence from Administrative Data”. This paper is one of the first to study the gender wealth gap in a post-transition country. The literature on the

gender wealth gap is rather scarce because of a lack of suitable data: wealth measures are often computed at the household level, while individual-level data is necessary for such a study.

The main aim of this paper is to depict a precise portrait of this phenomenon in Estonia. In particular, the authors do not simply estimate the overall wealth gap but investigate the magnitude of the gap across the wealth distribution. In other words, is there a difference between the poorest men and the poorest women? Or on the other side of the distribution, are the richest men more wealthy than the richest women?

For this purpose, Kukk, Meriküll and Rõõm combine administrative individual-level data on wealth with survey results. The administrative data are generally considered of much better quality than the other, but they do not provide a lot of additional information on individuals. On the other hand, survey data provide a wealth of information about individual characteristics. Merging allows getting the best of both worlds. Regarding the methodology, the authors use unconditional quantile regression to track gender differences at different deciles of the wealth distribution. They further decompose this “raw” gender gap into two components: the “explained” part, i.e., the part of the gap resulting in differences in characteristics between men and women (demographics, education, etc.), and the “unexplained” part.

This study estimates the raw, unconditional gender wealth gap in Estonia to be 45%, which is of similar magnitude as in Germany. Interestingly, this difference is essentially driven by differences in the top of the distribution: there is a large gap between the richest men and the richest women. This “raw” difference is however explained by a single variable: self-employment, as men are much more likely to have business assets than women. Once controlling for the entrepreneurship status, the wealth difference between the richest Estonians becomes insignificant. This suggests the need to support policies encouraging female entrepreneurship and to remove barriers



particularly affecting women. For instance, the literature has previously pointed out that women have less access to external sources of capital than men (e.g., Aidis et al., 2007). Such distortions can ultimately result in a wealth gap at the top of the distribution, as documented by this paper.

In addition, the literature has proposed several mechanisms that could result in gender-specific patterns of wealth accumulation. The simplest channel is through the wage gap, as it can be seen as the accumulation of the wage gap over time (e.g. Blau and Kahn, 2000). The authors thus compare the gender gaps in wealth and income. They uncover a strong wage gap, with men earning significantly more than women starting at the 6<sup>th</sup> decile: the higher we go in the income distribution, the larger the wage gap. How to reconcile this finding with the absence of a wealth gap conditional on entrepreneurship status? A possible explanation suggested by the authors is that women simply accumulate wealth better than men do.

## Conclusion

These two papers illustrate two different mechanisms explaining gender-specific economic outcomes. The larger wage gap observed in multinational companies can be explained by a stronger commitment penalty for women, mostly because of childcare. This asks for two potential policy interventions. First, the development of childcare could facilitate the reduction in the “commitment gap” that disrupts women’s careers. Second, institutions could support a more flexible repartition of childcare responsibilities. Note however that Estonia already has the longest duration of leave at full pay (85 weeks), and that this leave can be freely split between parents. As for the wealth gap at the top of the wealth distribution, it can to a large extent be explained by the entrepreneurship status. This difference could partly be explained by differences in preferences and risk-aversion, which would

require long-run policies to be mitigated. But in the short run, there is room for specific policies supporting female entrepreneurship and removing barriers particularly affecting women, such as a tighter credit constraint.

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