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Foreign-Owned Firms and Labor Tax Evasion in Latvia

It is well-documented that foreign-owned firms often pay higher wages than domestic firms. This phenomenon is usually explained by foreign firms being more productive. In this brief, we discuss another mechanism that drives the wage premium for employees of foreign-owned firms. By comparing income and expenditures of households led by employees of foreign-owned firms, domestic firms and public enterprises in Latvia, we show that employees of foreign-owned firms receive less undeclared cash payments than employees of domestic firms.

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Introduction

A vast economic literature documents a wage premium for employees of foreign-owned firms (e.g., Heyman et al., 2007; Hijzen et al., 2013). This can result from self-selection of foreign firms in highly productive sectors (Guadalupe et al., 2012) or from a productivity increase (Harding and Javorcik, 2012). In a recent paper (Gavoille and Zasova, 2021), we provide evidence of a third driver: foreign-owned firms are more (labor) tax compliant than domestic firms.

Envelope wage, i.e., an unreported cash-in-hand complement to the official wage, is a widespread phenomenon in transition and post-transition countries (e.g., Gorodnichenko et al., 2009 in Russia, Putninš and Sauka, 2015 in the Baltic States, Tonin, 2011 in Hungary). Employees are officially registered, but the income reported to tax authorities is only a fraction of the true income, the difference being paid in cash. If domestic firms are more likely to underreport wages than foreign-owned ones, the documented wage premium for employees of foreign-owned firms is overestimated.

Methodology and data

To compare the prevalence of income underreporting in foreign and domestic firms, we use an approach similar to Pissarides and Weber (1989). This approach is based on two main assumptions. First, even though households participating in an expenditure survey can have incentives to misreport their expenditures, they accurately report their expenditure on food.

The second assumption is that if all households would fully report their income, similar households would report a similar share of spending on food. If, however, a group of households is likely to underreport income, their fraction of income spent on food will systematically be higher than that of tax-compliant households. Using the propensity to food consumption of a group of households that cannot

evade payroll tax as a benchmark, we can identify groups of tax-evading households by comparing their food consumption with the reference group.

In this brief, we mainly focus on three household groups: households where the head is an (1) employee of a foreign-owned firm (reference group), (2) employee of a public sector enterprise, and (3) employee of a domestic firm. We introduce public sector employees as an additional comparison group, since they cannot collude with employers to underreport wages. Hence, our approach allows us to test whether households in the third group are more likely to receive undeclared payment than households in the first group, and additionally test if our reference group is systematically different from public sector employees.

We estimate Engel curve-type relationships for food consumption for different types of households, i.e., we estimate how households' food consumption varies with income depending on employment of the main breadwinner (employed in a foreign-owned firm, public sector enterprise, domestic firm or self-employed), controlling for various household characteristics (number of adults, size of household, place of residence, level of education of the main breadwinner, and other).

Our data comes from three sources. First, we use the 2020 round of the Latvian Household Budget Survey (HBS), which provides information on household consumption, income and characteristics in 2019. Second, we use an administrative matched employer-employee dataset providing information on reported wages for the whole population of employees in Latvia. We match the second database with HBS using (anonymized) individual IDs contained in both datasets. Finally, we use (anonymized) firm IDs contained in the second database to merge it with a third data source, which provides detailed information on firms' foreign-ownership status.



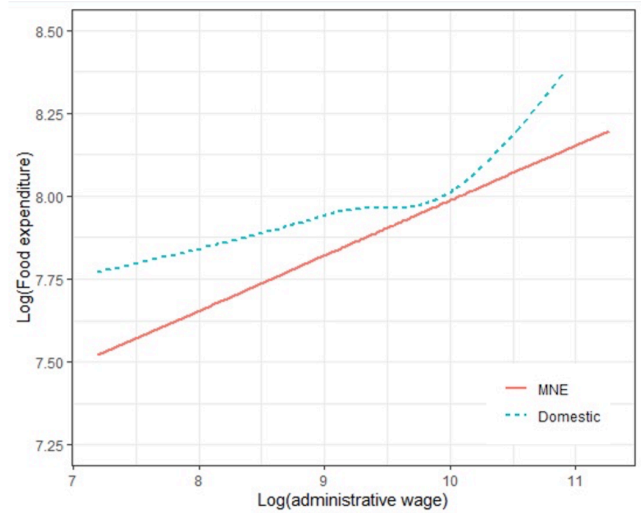
Results

For simplicity, in the rest of the brief we denote "household where the head is an employee of a foreign-owned firm" as simply "foreign-owned households". A similar simplification applies to other household groups.

Comparing domestic and foreign-owned households, domestic households spend a higher share of their income on food. Figure 1 plots a non-parametric Engel curve for the two groups. The two curves exhibit fairly similar behavior, but the Engel curve for domestic households always lies above the one for foreign-owned households: for a given income, domestic households always spend a larger fraction on food than foreign-owned ones.

Our model estimations provide two main results. First, we find that the net wage premium for employees of foreign firms is 13-35%, depending on the sample and the source of data on income. Second, we show that domestic households are more likely to underreport income than foreign-owned households. On average, domestic firm households are estimated to conceal 26% more income than foreign-owned ones. At the same time, public sector households do not exhibit a significantly different food consumption pattern than foreign-owned firm households. Assuming that public sector households cannot evade, foreign-owned firm households hence do not underreport. The estimated share of concealed income is even larger (about 40%) if we restrict our sample to households where the head is aged below 50 years and is full-time employed.

Figure 1. Engel curve



Source: authors' calculations.

Note: We follow Hurst et al. (2014). We regress (administrative) wage and food consumption separately on demographic controls to condition out these factors. We recenter the residuals at the unconditional averages for each group and use these residuals to estimate the Engel curve with a cubic spline.

Conclusions

In a context of widespread labor tax evasion, the observed wage premium for employees of foreign-owned firms can be driven by payroll tax compliance. How much of the wage premium can underreporting explain? Our results for Latvia suggest a net wage premium of 13% to 35% for the group of foreign-owned households. This roughly corresponds to the magnitude of the underreporting factor, indicating that nearly all of the wage premium can be explained by labor tax evasion. Even though the precise underreporting point estimates should be cautiously interpreted, and this 1-to-1 relation is anecdotal, this nevertheless highlights the potential importance of envelope wages in explaining the wage premium of employees of foreign-owned firms when labor tax evasion is prevalent.

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