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## Detecting Wage Under-reporting Using a Double Hurdle Model

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### Abstract:

We estimate a double hurdle (DH) model of the Hungarian wage distribution assuming censoring at the minimum wage and wage under-reporting (i.e. compensation consisting of the minimum wage, subject to taxation, and an unreported cash supplement). We estimate the probability of under-reporting for minimum wage earners, simulate their genuine earnings and classify them and their employers as 'cheaters' and 'non-cheaters'. In the possession of the classification we check how cheaters and non-cheaters reacted to the introduction of a minimum social security contribution base, equal to 200 per cent of the minimum wage, in 2007. The findings suggest that cheaters were more likely to raise the wages of their minimum wage earners to 200 per cent of the minimum wage thereby reducing the risk of tax audit. Cheating firms also experienced faster average wage growth and slower output growth. The results suggest that the DH model is able to identify the loci of wage under-reporting with some precision.

**Text:** See [Discussion Paper No. 6224](#)

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