

# Robbing banks: Crime doesn't always pay, econometrics study shows

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Contrary to images of unimaginable wealth in the movies, the takings from the average bank robbery are small, according to a report published today in *Significance*, the magazine of the Royal Statistical Society and the American Statistical Association. Indeed, they often appear to be lower than the cost of installing some security devices designed to deter them.

With unique access to a set of data from the British Bankers' Association, today's *Significance* paper presents an [economic model](#) of the bank heist, balancing the robber's efforts against his gains or [losses](#) and concluding that it is often a poorly paid career path.

The average proceeds from a [bank robbery](#) in the UK are £20,331, with one third of robberies yielding nothing at all. The average takings per person per successful raid are a modest £12,706.60, equivalent to less than six months' average wage in the UK. In the USA the average raid yields considerably less at \$4,330. If a robber carries out multiple raids to boost his sub-average income, probability says that after four raids he will be inside for some time and unable to earn at all.

The authors, leading economists from the Universities of Sussex and Surrey, highlight factors influencing the success of bank raids. These included the number involved in the raid (labour input), and whether firearms were displayed (capital input). The presence of firearms increased the rewards across all bank raids to an average return per person of £10,300.50. There was a clear connection between the number

of raiders and total takings - the bigger the gang, the greater the success, with every extra gang member raising the take on average by £9,033.20. Even so, with extra gang members to share the proceeds, the haul per person decreases.

Deterrent factors working against the raiders such as bank security measures, activated alarms, and the number of bank staff and customers present were also examined for their effectiveness. Of these, fast-rising security screens, which are present in only 12% of UK banks and in even fewer banks in the USA, were most significant, reducing the probability of a successful raid by one third. Even so, the financial losses to banks through raids are reasonably low compared to the cost of installing additional fast-rising screens, which might explain their low prevalence. The authors acknowledge that bank robberies involve other costs (such as social and psychological ones) and that these may increase the social gain available from such measures. They also note that additional data would allow valuable follow-up research.

"Although bank robberies will take place for a number of 'impulse-related' reasons, our evidence suggests that the takings they generate appear to be consistent with economic theory," said Professor Rickman of the University of Surrey. "This is useful information if we are thinking about how such activity may be combatted in the future."

**More information:** Barry Reilly, Neil Rickman and Robert Witt; Robbing banks: Crime does pay – but not very much. *Significance* (2012); [DOI: 10.1111/j.1740-9713.2012.00570.x](https://doi.org/10.1111/j.1740-9713.2012.00570.x)

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