Study explores how risk tolerance changes around payday

October 9 2023

Credit: Pixabay/CC0 Public Domain

People living in poverty often struggle from payday to payday. Those who receive government assistance, such as welfare or pensions, must manage scarce resources to make ends meet until the next payment.

Researchers from Kobe University, the Max Planck Institute for Demographic Research, Toyo University, and Simon Fraser University have studied how people's willingness to take risks changes before and after payday.

Social security benefits and pensions are paid at regular intervals. "Decisions that were seen as optimal before payday may turn out to be no longer optimal afterwards," explains Peter Eibich, associate researcher at the Max Planck Institute for Demographic Research. "In our study, we examined how regular and thus expected payments affect risk-taking of the poor."

For the study, published in the *American Economic Journal: Applied Economics*, researchers analyzed data on U.S. Social Security payday cycles from the Health and Retirement Study as well as data on pension payments to the elderly in Japan.

Analysis of the Health and Retirement Study showed that people with very low incomes are significantly more risk tolerant just before payday than after. Such a pattern is not evident among people who do not rely on social assistance. Analysis of data from Japan also confirm this finding, although the two countries have very different baseline risk preferences.

In the U.S., risk-taking is generally higher, while in Japan there is a strong reluctance to do so. In the US, Social Security benefits are paid on the 3rd of the month, while pensioners in Japan receive their benefits on the 15th of every other month. The results show that people in Japan are also more risk tolerant before payday than after.

Financial pressure leads to stress

"Towards the end of the payout period, financial pressure increases. This creates stress. The subjective feeling of being disadvantaged leads the poor to take more risks as they strive to catch up to their comparison standards. And that has a negative impact on their ability to make decisions," Eibich explains.

The results of the study give reason to rethink the rhythm of payments. "Pensions and social benefits could be paid out at shorter intervals. This would allow beneficiaries to better manage their tight budgets. Psychological stress would be reduced," says Eibich.

However, the researchers stress that more research is needed in this area. "Many countries have very different payment intervals. It needs to be investigated whether our results also hold in these other environments or whether there are different results," concludes Eibich.

More information: Mika Akesaka et al, Temporal Instability of Risk Preference among the Poor: Evidence from Payday Cycles, *American Economic Journal: Applied Economics* (2023). DOI: 10.1257/app.20220073

Provided by Max Planck Society