### COVID-19 vaccines may also reduce personal financial fragility - a field study in Israel.

## Abigail Hurwitz<sup>a</sup>, Eyal Lahav<sup>b</sup>

### **April 2021**

#### **ABSTRACT**

Covid-19 pandemic had strongly affected public health and financial status of individuals around the world. A year after Covid-19 outbreak, vaccination rates are increasing, with Israel being the first country to achieve high vaccination rates. Yet, unemployment rates are recovering very slowly in most countries, as uncertainty regarding the development of both the pandemic and economic circumstances remain high. The current paper investigates the impact of vaccination process on personal financial fragility, that is, the ability to meet an unexpected mid-size expense within a month (Clark et al., 2020<sup>1</sup>).

Israel was the first country in the world to execute an extensive vaccination procedure. In a period of only 2.5 months, more than 50% of the Israeli population was vaccinated. To examine the impact of being vaccinated on personal financial fragility, we developed and fielded two internet studies in Israel, approaching the same participants. The first study, fielded just before vaccines were offered to individuals aged 50 years old and under. The second study, about two months later, was fielded at a point in which it was possible for any Israeli adult to easily receive a vaccine. Using a within subject design, we find that financial fragility decreased significantly among vaccinated individuals, comparing to those not vaccinated. In addition, financial fragility decreased significantly more among people who estimate a decrease in their subjective probability of attracting the Covid-19 virus. We further find that our result is mostly derived from women. The result holds after controlling for various socio-demographics and attitudes.

We offer and test several potential explanations for our findings: changes in emotions (anger; anxiety; happiness); income; and health status. Specifically, we control for self-reported health status, showing that for the most part it does not significantly affect financial fragility. We also control for self-reported financial damage duo to the Covid-19 outbreak. We find that participant reporting higher financial damage also report significantly higher increase in personal financial fragility. Moreover, we find support in our data for the hypothesis that getting a vaccine affected emotions, mostly among women. Specifically, we find that among vaccinated women anxiety and

<sup>&</sup>lt;sup>a</sup> Environmental Economics and Management, Robert H. Smith Faculty of Agriculture, Food and Environment, The Hebrew University of Jerusalem Israel; Abigail.hurwitz@mail.huji.ac.il

<sup>&</sup>lt;sup>b</sup> Department of Management and Economics, the Open University of Israel, 1 University Road Raanana, Israel; <a href="mailto:eyalla@openu.ac.il">eyalla@openu.ac.il</a>

<sup>&</sup>lt;sup>1</sup> Clark, R. L., Lusardi, A., & Mitchell, O. S. (2020). Financial Fragility during the COVID-19 Pandemic (No. w28207). National Bureau of Economic Research.

anger decreased, while among non-vaccinated women anxiety and anger increased. We find no evidence for changes in happiness.

Medical literature provides evidence to the effectiveness of vaccines in preventing Covid-19 infections. Vast literature has demonstrated that from an economic point of view, Covid-19 damages the most vulnerable in society. We contribute to this literature by showing that vaccines additionally affect reported personal financial fragility, partly, by reducing anxiety and anger.

# **Keywords**

financial fragility; Covid-19; vaccination; emotions; gender; behavioral finance