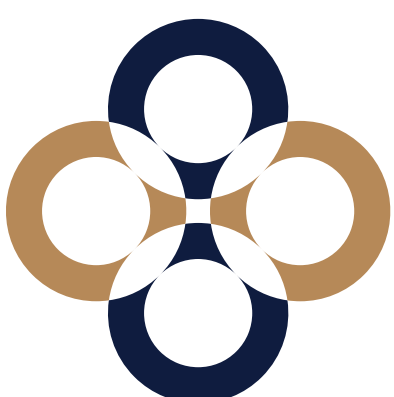
**Author(s):****Zoltán, HERMANN;** Gyöngyvér, MOLNÁR**Organisational unit:** Institute of Economics**Title:** Short- and long-term effects of COVID-related kindergarten and school closures on first- to eighth-grade students' school readiness skills and mathematics, reading and science learning**Publication data:** LEARNING AND INSTRUCTION, 2023**Journal ranking:** SJR 2022: D1, Alp 2021: 96**Abstract:**

Remote learning during the COVID pandemic has led to short- and long-term consequences for students' learning. So far, data on learning loss in early schooling have been limited. In this paper, we evaluate the effect of remote learning on 1st graders' school readiness skills and 2nd–8th graders' performance in mathematics, reading and science using rich data collected in Hungary before and during the pandemic ( $n \approx 55,000$ ). The results show that kindergarten children and 1st–4th-grade students were significantly negatively affected by COVID restrictions compared to their older peers. This difference was extremely large in schools with a high share of disadvantaged students. More specifically, 1st–4th-grade low-SES students made little or no progress while learning from home.

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