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Benjamin Antieau and Akhil Mathew^{*} (amathew@math.uchicago.edu), 5734 S University Ave, Department of Mathematics, University of Chicago, Chicago, IL 60637, and Matthew Morrow. *K-theory and perfectoid rings.*

A classical result of Hiller-Kratzer-Quillen states that for a perfect \mathbb{F}_p -algebra, the *p*-adic *K*-theory vanishes above degree zero. We prove a *p*-adic analog of this result. Given a perfectoid ring *R* over a perfectoid valuation ring, we show that the fiber of the map from the *p*-adic *K*-theory of *R* and R[1/p] is concentrated in degrees ≤ 0 . We also generalize a result of Nizioł which extends the statement to smooth algebras. Our observation is that the tilting correspondence reduces this result to characteristic *p*. (Received September 13, 2020)