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We verify an old conjecture predicting the vanishing of the algebraic  $K$ -theory of a scheme  $X$  in degrees less than  $-d$ ,  $d = \dim(X)$ , at least when  $X$  is essentially of finite type over a field of characteristic zero. To do this, we first establish a blow-up formula for cyclic homology, and use it to show that infinitesimal  $K$ -theory satisfies  $cdh$ -descent. The vanishing conjecture follows from this and some computations of the  $cdh$ -cohomology of the sheaf of regular functions. (Received August 10, 2005)