Using molecular-dynamics simulation, we determine the magnitude and anisotropy of the kinetic coefficient $\mu$ for the crystal growth from the melt for the hard-sphere system through an analysis of equilibrium capillary fluctuation in interfacial height. We find $\mu_{100}$ = 1.44(7), $\mu_{110}$ = 1.10(5) and $\mu_{111}$ = 0.64(3) in units of $\sqrt{k_{B/(mT_m}}$ , where $k_B$ is Boltzmann's constant, *m* is the particle mass, and $T_m$ is the melting temperature. These Values are shown to be consistent, with some exceptions, with those obtained in recent simulation results a variety of fcc metals, when expressed in hard-sphere units. This suggests that the kinetic coefficient for fcc metals can be roughly estimated from $C\sqrt{R/(MT_m}$ , where *R* is the gas constant, *M* is the molar mass, and C is a constant that varies with interfacial orientation.