1016-14-182   **Donu Arapura** (`dvb@math.purdue.edu`), Department of Mathematics, Purdue University, West Lafayette, IN 47907-2067, and **Su-Jeong Kang*** (`sjkang@math.purdue.edu`), Department of Mathematics, Purdue University, West Lafayette, IN 47907-2067. *Coniveau and the Grothendieck group of varieties.*

We prove that if the generalized Hodge conjecture, or some weaker form of it, holds for a Calabi-Yau variety then it holds for any Calabi-Yau variety birationally equivalent to it. The key idea is to construct suitable homomorphisms between the Grothendieck group of varieties and the Grothendieck group of the exact category of filtered Hodge structures. This along with motivic integration yields the first statement. (Received February 13, 2006)