1099-13-267   **Fatih Koksal*** (`fatih.koksal@ttu.edu`). *INJECTIVITY UNDER CO-BASE CHANGE.*

Let R and S be commutative Noetherian rings; assume S is an R-algebra. It is well-known that if N is an injective R-module, then $\mathrm{Hom}_R(S, N)$ is an injective S-module. The converse is not true, not even if R is local and regular, and $S = \widehat{R}$ is its completion. However, if S is faithfully flat, the projective dimension of every flat R-module is bounded by $d \geqslant 0$, and $\mathrm{Ext}_R^{>0}(S, N) = 0$, then the converse is true. (Received February 10, 2014)