

$$\begin{array}{ccccc}
 D & \xrightarrow{e} & \prod_{i \in J} F_i & \begin{array}{c} \xrightarrow{g} \\ \xrightarrow{f} \end{array} & \prod_{u:i \rightarrow k} F_k \\
 \downarrow h & \nearrow e' & \downarrow \pi_i & & \\
 C & \xrightarrow{\tau_i} & F_i & & 
 \end{array}$$