

$$\begin{array}{ccc}
 \prod M & \overset{1-m}{\dashrightarrow} & \prod M \\
 \downarrow (p_k, p_{k+1}) & \searrow & \downarrow p_k \\
 M_k \oplus M_{k+1} & \xrightarrow{(\mathrm{id}_{M_k}, -m_{k+1})} & M_k
 \end{array}$$