for the following reason:

Given a global section of $H^0(M, \underline{Ext}^1_{\mathcal{O}}(\mathcal{G}, \mathcal{F}))$, choose a sufficiently fine covering $\underline{\mathcal{U}} = \{U_\alpha\}$ and corresponding local extensions

$$(\mathcal{E}_\alpha) \qquad 0 \longrightarrow \mathcal{F}|U_\alpha \longrightarrow \mathcal{E}_\alpha \longrightarrow \mathcal{G}|U_\alpha \longrightarrow 0.$$

In $U_\alpha \cap U_\beta$ there will be a commutative diagram

$$\begin{tikzcd}
0 \arrow[r] & \mathcal{F}|_{U_\alpha \cap U_\beta} \arrow[r] \arrow[d, equal] & \mathcal{E}_\alpha|_{U_\alpha \cap U_\beta} \arrow[r] \arrow[d, "\varphi_{\alpha\beta}"] & \mathcal{G}|_{U_\alpha \cap U_\beta} \arrow[r] \arrow[d, equal] & 0 \\
0 \arrow[r] & \mathcal{F}|_{U_\alpha \cap U_\beta} \arrow[r] & \mathcal{E}_\beta|_{U_\alpha \cap U_\beta} \arrow[r] & \mathcal{G}|_{U_\alpha \cap U_\beta} \arrow[r] & 0,
\end{tikzcd}$$

but it need not be the case that in $U_\alpha \cap U_\beta \cap U_\gamma$ the triangle

$$\begin{tikzcd}
& \mathcal{E}_\alpha \arrow[dl, "\varphi_{\alpha\beta}"'] \arrow[dr, "\varphi_{\alpha\gamma}"] & \\
\mathcal{E}_\beta \arrow[rr, "\varphi_{\beta\gamma}"'] & & \mathcal{E}_\gamma
\end{tikzcd}$$

is commutative — i.e., the "transition functions" for gluing the local extensions $(\mathcal{E}_\alpha)$ may not satisfy the cocycle rule, and thus may not patch together to give a global extension.

☞ "Definition of Sheaf of $\mathcal{O}$-modules".