Horizontal FDI: export vs acquisition of a foreign firm

According to the OLI theory horizontal FDI are explained by the proximity to the final market. If a firm sets the production up in the foreign country would save selling and commercial cost. However, it has to bear the fixed cost of setting up the new plant in the foreign country.

Suppose that the operational profit form export are:

$$\pi_X = \gamma R(\sigma, D^*, \theta) - f_H - f_D - f_X \quad (1)$$

where $R(\sigma, D^*, \theta)$ are the revenues net of the variable cost. Revenues depend positively on firm market power which depends on:

- the elasticity of demand in the final market σ;
- the dimension of the final market D^*;
- the firm productivity θ.

The parameter $0 < \gamma < 1$ represents the reduction of revenues due to commercial cost; f_H and f_D represent respectively the fixed cost of setting up the headquarters and the production plant in the domestic country; f_X is the fixed cost of starting the export activity.

1. Write the profit function in case the firm decide to localize production also in the foreign country doing a FDI.
2. Write the condition according to which the firm prefers FDI to export.
3. Describe what are the crucial elements that determine FDI.