

Lecture 4

Integration & its Alternatives

Technical efficiency:

occurs if the firm is using least cost production techniques

Agency efficiency:

the extent to which the exchange of goods & services in the vertical chain has been organized to minimize coordination, agency, & transaction costs

Using the market improves *technical efficiency* [least cost production]

Vertical integration improves *agency efficiency* [coordination, agency & transaction costs]

ΔT = the difference in technical efficiency of market over vertical integration

I.e. minimum cost of production under vertical integration, minus the minimum cost of production under arm's length market exchange

The technical efficiency differential is *dependent on the nature of assets involved*

ΔA = The difference in exchange costs when the item is produced internally compared to purchased from the market

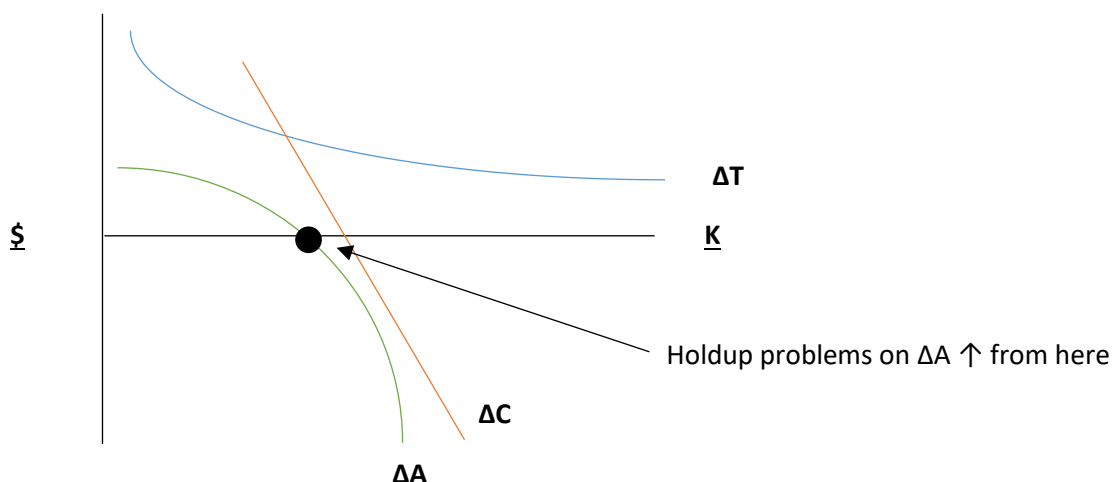
The agency differential is equal to the transaction costs when production is *vertically integrated*, minus the transaction costs when it is organized through an *arm's length market exchange*

At low levels of asset specificity:

differential agency efficiency is likely to be positive

At high levels of asset specificity:

the costs from vertical integration are less than the costs from market exchange



K = degree of asset specificity

$\$$ = cost differences

ΔT = technical efficiency differential

ΔA = agency efficiency differential

ΔC = efficiency differential = overall cost difference between vertical & market