## R&D Offshoring: Development Dimension

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## **Debates**

Effects of R&D Offshoring

Determinants of R&D Offshoring

## MNC: North & South Markets

• Max 
$$\Pi = \Pi_N(R_N) + \Pi_S(R_S)$$
 
$$R_N, R_S$$
 subject to 
$$w_N R_N + w_S R_S = \overline{R}$$

• F.O.C. 
$$\frac{\Pi_{N}'}{W_{N}} = \frac{\Pi_{S}'}{W_{S}}$$

• Assume 
$$\Pi_N(R_N) = A_N \sqrt{R_N}$$
 and  $\Pi_S(R_S) = A_S \sqrt{R_S}$ 

• Optimal Ratio 
$$\frac{R_N}{R_S} = \left(\frac{w_S}{w_N}\right) \left(\frac{A_N}{A_S}\right)$$

## **Development Perspectives**

- Impact of Offshore R&D on Southern Economic Development
- Induced Changes in Southern Institutions
  - Intellectual Property Rights
  - Case of China & India
- Feedback on Northern Innovation
  - Expansion in  $\bar{R}$