

The CCR (CRS) and BCC (VRS) models are presented in the following table.

Tab. 2 - CCR and BCC Data Envelopment Analysis models

<p>(2.1a) CCR model (Constant Return to Scale) Output oriented</p> $\max \theta \sum_{r=1}^s u_r y_{ro}$ <p>subject to</p> $\sum_{r=1}^s u_r y_{ri} - \sum_{i=1}^m v_i x_{ij} \leq 0; j = 1, \dots, n$ $\sum_{i=1}^m v_i x_{io} = 1$ $u_{im} \geq 0; \forall r$ $v_i \geq 0; \forall i$	<p>(2.1b) BCC model (Variable Return to Scale) Output oriented</p> $\max \theta \sum_{r=1}^s u_r y_{ro} - u_0$ <p>subject to</p> $\sum_{r=1}^s u_r y_{ri} - \sum_{i=1}^m v_i x_{ij} - u \leq 0; j = 1, \dots, n$ $\sum_{i=1}^m v_i x_{io} = 1$ $v_i \geq \varepsilon; u_r \geq \varepsilon, u_0 \text{ free in sign}$
---	---

Source: Charnes *et al.*, 1978; Banker *et al.*, 1984.