

Vorträge

- Gürbüz: CDPF - Ertragsgebirge – Höhenlinien – Isoquanten
- Horn/Jabs: [Übungsaufgabe 5](#)

Variable Prod.-faktoren V_A und V_K

The top graph plots output X against input V_A . A concave curve labeled 'CDPF' starts from the origin. A vertical line is drawn at $V_A = 1$. The bottom graph plots X against V_A with a horizontal line representing the real wage $\frac{W}{P}$. A convex curve represents the marginal cost of labor. The intersection of the horizontal line and the convex curve is marked with a green dot and labeled 'opt. Beschäftigung' (optimal employment).

$X = \alpha V_A^\alpha \cdot V_K^{1-\alpha}$
 \rightarrow Cobb-Douglas - PF
 \rightarrow für $V_K = \text{const}$
 Grenzprod. d. Arbeit
 $\frac{X}{V_A} \rightarrow \frac{X \cdot P}{V_A}$
 Wertprodukt

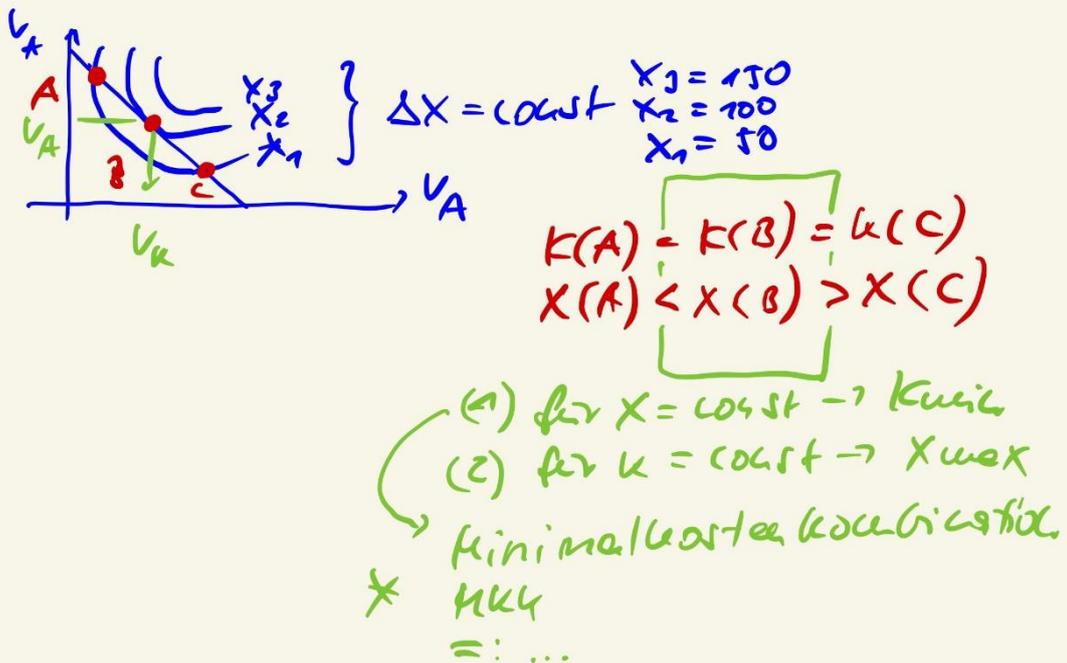
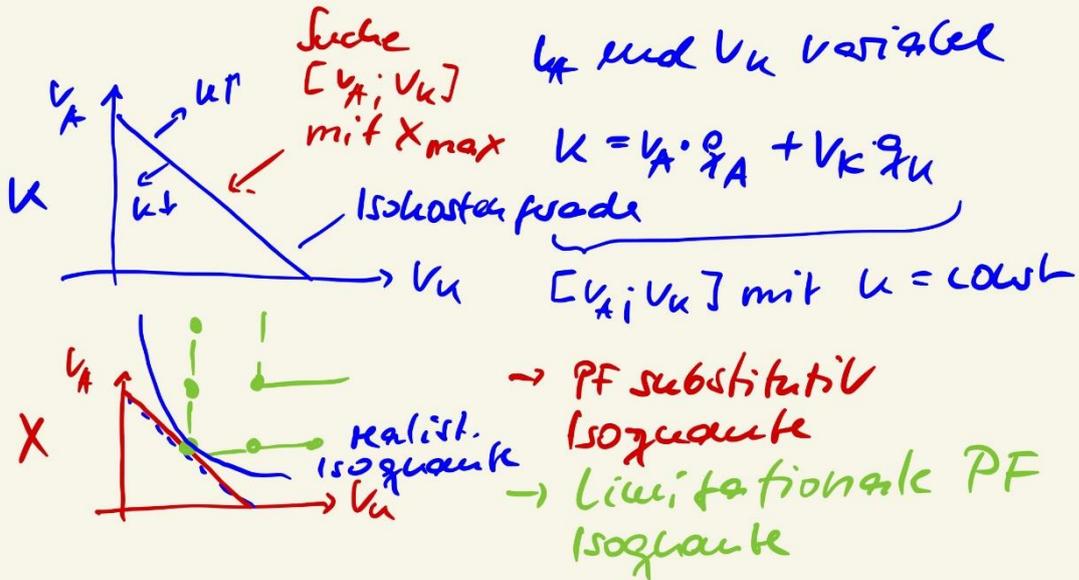
Kosten V_A

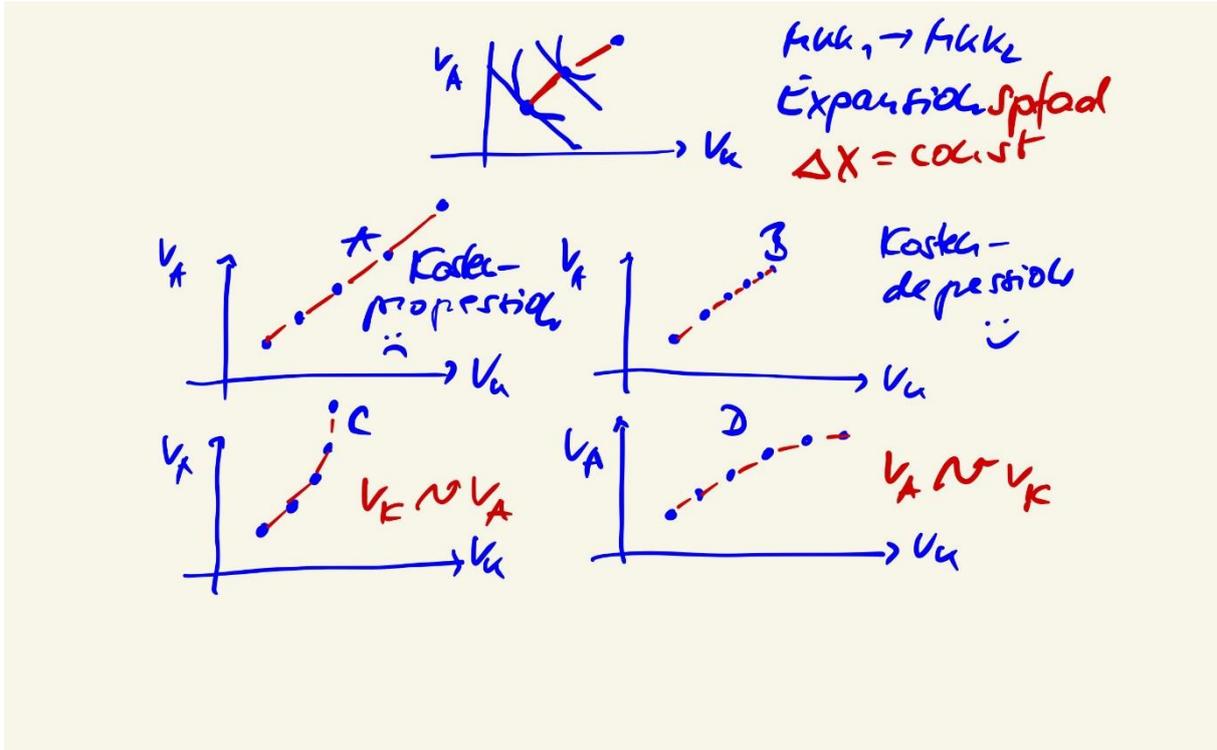
Bruttoertrag $\rightarrow \frac{W + LMK}{P}$

← staatl. LMK
 betriebliche LMK
 + tarifl. LMK

Bruttoertrag der Kosten
 $\frac{W}{P}$

$\hookrightarrow V_A^* \Leftrightarrow W/P = \frac{W}{P}^*$





Anwendung:
 Formel $f_{K|K}$

= Anstieg X

$x = \text{const}$
 $\Delta X = 0$

Anstieg K
 $K = v_A \cdot q_A + v_K \cdot q_K$
 $v_A \cdot q_A = K - v_K \cdot q_K$
 $v_A = \frac{K}{q_A} - \frac{q_K}{q_A} \cdot v_K$

$\Delta v_A \cdot GP_A + \Delta v_K \cdot GP_K = 0$
 $\Delta v_A \cdot GP_A = -\Delta v_K \cdot GP_K$
 $\Delta v_A = -\frac{GP_K}{GP_A} \cdot \Delta v_K$

$-\frac{q_K}{q_A} = -\frac{GP_K}{GP_A}$

$f_{K|K}$

$$\Delta V_A = - \frac{GP_K}{GP_A} \cdot \Delta V_K$$

$$\frac{\Delta V_A}{\Delta V_K} = - \frac{GP_K}{GP_A} \quad \text{„Job-Kill-U-Formel“}$$

π_{KK}

$$- \frac{q_K}{q_A} = - \frac{GP_K}{GP_A}$$

$$\uparrow GP_A \quad \vdots \quad GP_K$$

$$\uparrow \frac{GP_A}{q_A} = \frac{GP_K}{q_K}$$

Lohn $\uparrow \rightarrow q_A \uparrow$
 bei $GP_A \uparrow$
 prod.-orientierte
 Lohnpolitik

$$\frac{\Delta V_A}{\Delta V_K} = - \frac{GP_K}{GP_A} = - \frac{q_K}{q_A}$$

GRS, Austausch der
 Prod.-faktoren G:
 $X = const$:

$$\textcircled{5} \downarrow - \frac{q_K}{q_A} \neq - \frac{GP_K}{GP_A} \uparrow \textcircled{4}$$

$$\textcircled{1} \uparrow \frac{q_K}{q_A} = \frac{GP_K}{GP_A} \uparrow \textcircled{3}$$

- ① Arb.-Lohn \uparrow
- ② $A \neq$
- ③ $\uparrow GP_A$
 durch Invest.
- ④ $V_K \uparrow$ bei $X = const$
 $\rightarrow GP_K \downarrow$
- ⑤ $\uparrow \frac{q_K}{q_A}$ + Entlohnung

$$\frac{\Delta V_A}{\Delta V_K} = - \frac{G_{P_K}}{G_{P_A}}$$

V_A^1 100 Personen
 V_K^1 10 Maschinen
 X^1 1000 Stück

G_{P_A} 10 Stk. / V_A
 G_{P_K} 100 Stk. / V_K

$V_A^2 = 10$ Pers.
 $V_K^2 = 100$ Mach.
 $X^2 = 1000$ Stk.

$G_{P_A} = 100$ Stk. / V_A
 $G_{P_K} = 10$ Stk. / V_K