Chapitre 3 Incidence fiscale

$\sum_i \bar{u}_i$ maximale $\Leftarrow$ | $\bar{u}_i = \bar{u}$ $\forall i$

T_i taxe personnalisée forfaitaire

$\sum_i u_i < \sum_i \bar{u}_i$ pertes sociales

I Exemples

A- Choc sur la production

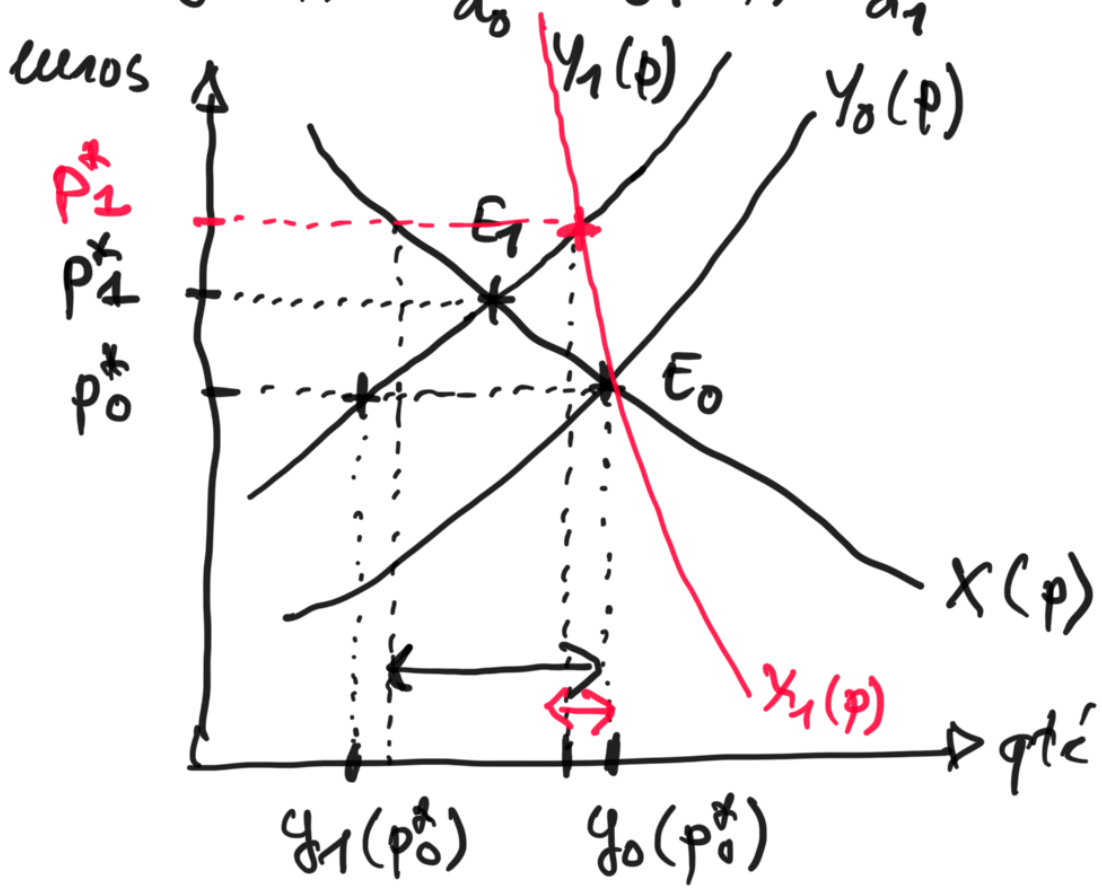
$$c(y) = \frac{1}{2} a y^2$$

$y(p)$ / $c'(y(p)) = p \Leftrightarrow a y(p) = p$

$$\Leftrightarrow y(p) = \frac{p}{a}$$

$$a = \begin{cases} a_0 \text{ initialement} \\ a_1 \text{ finalement} \quad a_1 > a_0 \end{cases}$$

$$y_0(p) = \frac{p}{a_0} > y_1(p) = \frac{p}{a_1}$$



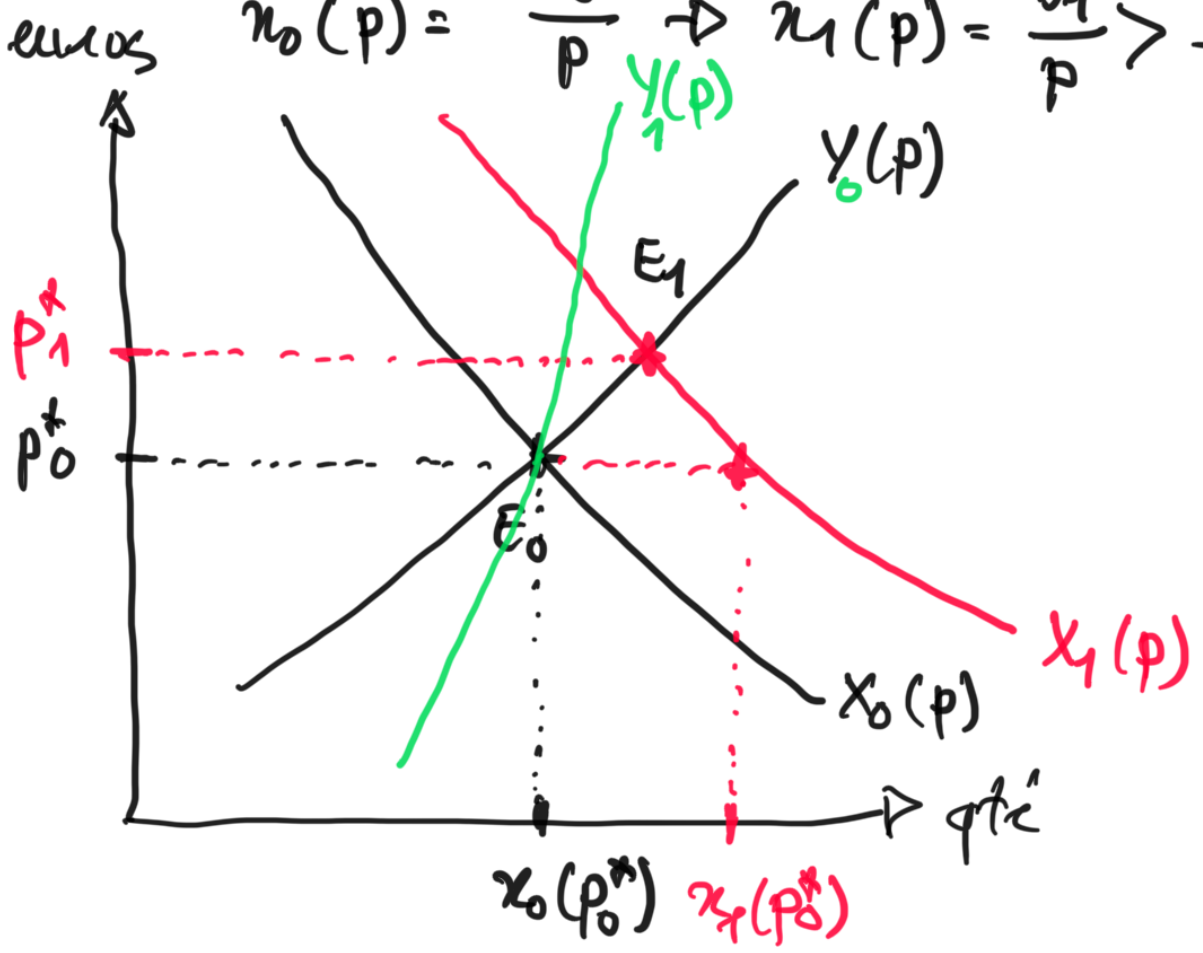
B. Choc sur la demande

$u(x) = b \ln x$ | b_0 ; $b_1 > b_0$

$x(p) \;/\; u'(x(p)) = p$

$$\frac{b}{x(p)} = p \iff x(p) = \frac{b}{p}$$

$$x_0(p) = \frac{b_0}{p} \rightarrow x_1(p) = \frac{b_1}{p} > \frac{b_0}{p}$$



$\| \frac{b_1}{p_0^*}$

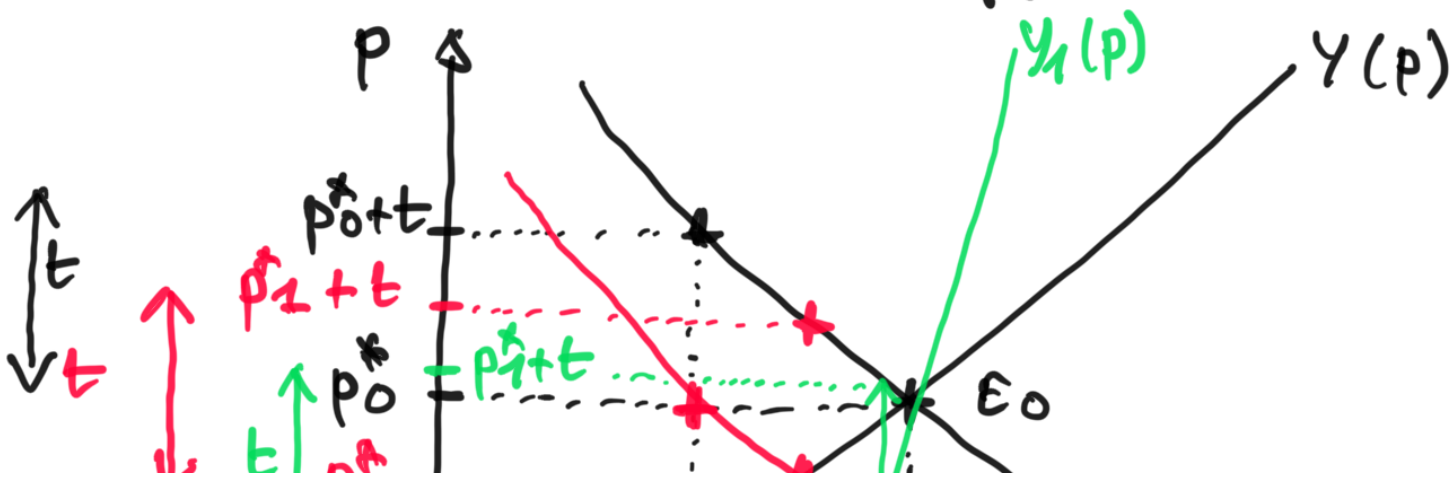
II Fiscalité sur la consommation

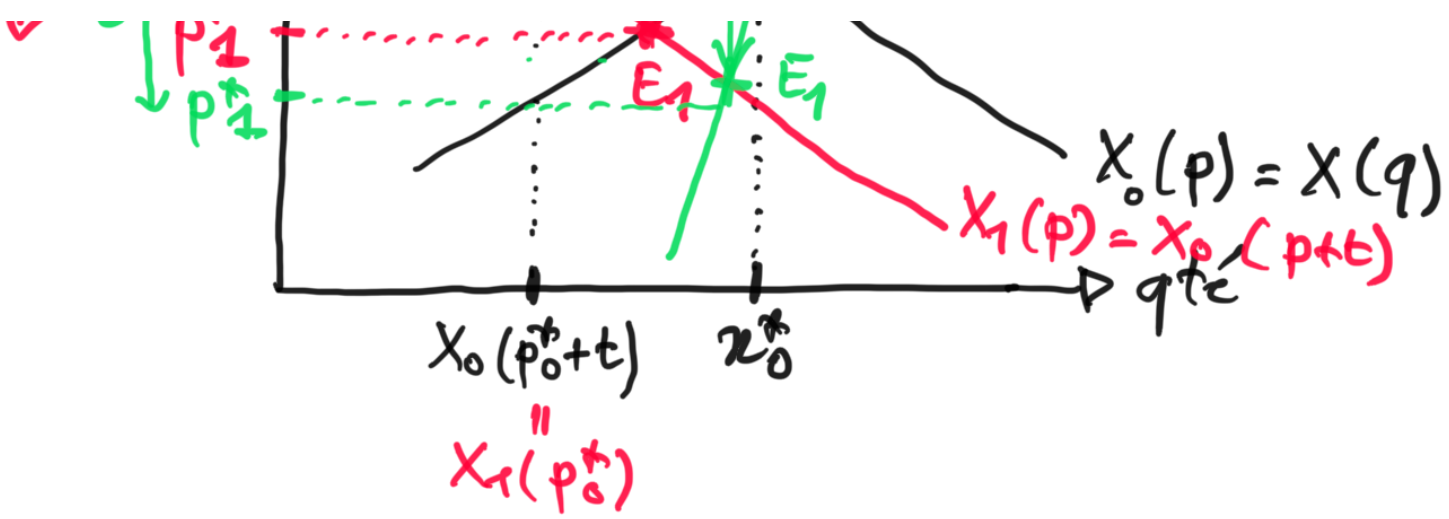
t accise (taxe)

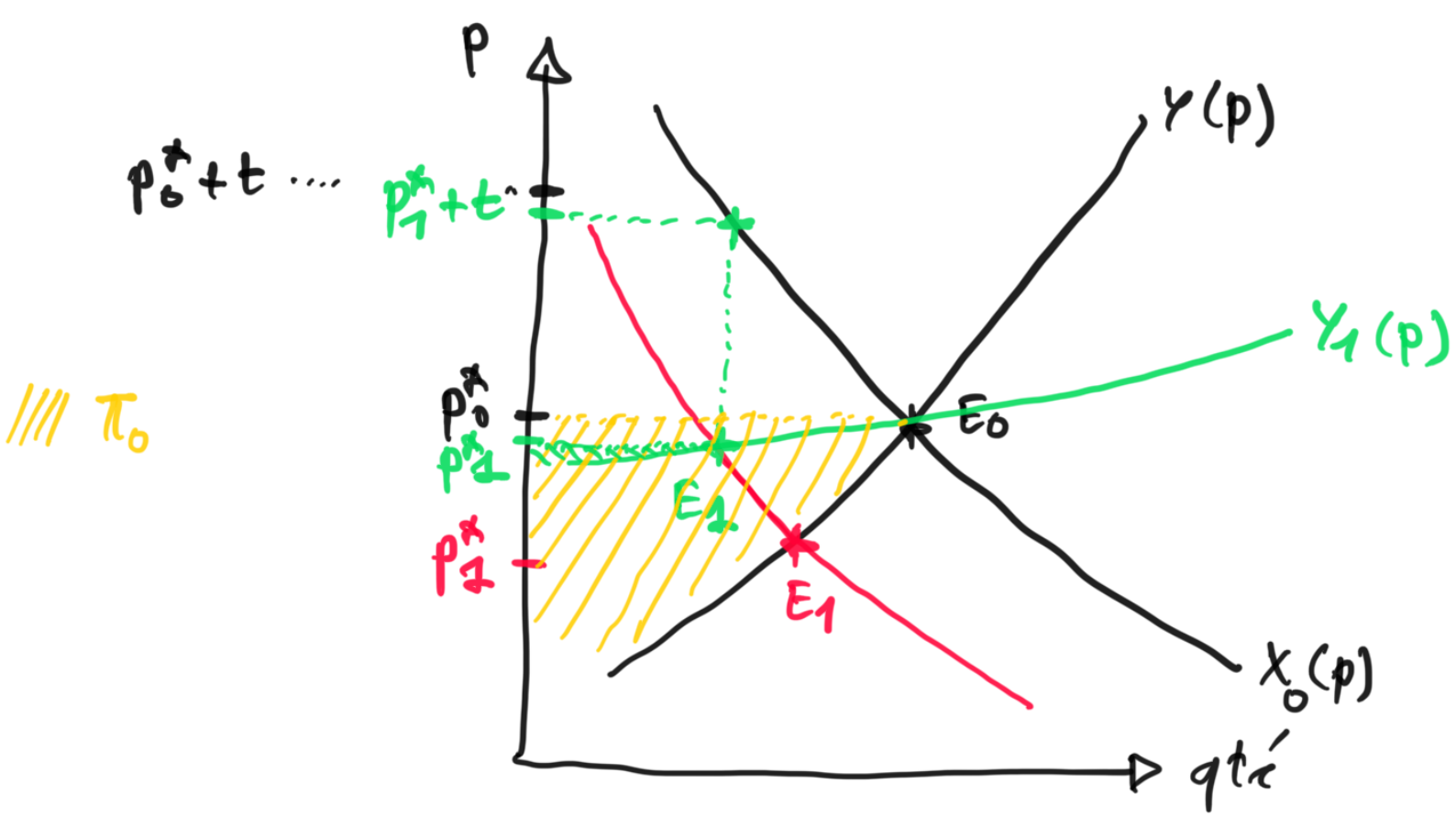
{ prix payé par les consommateurs $p+t=q$
{ prix reçu —— producteurs p

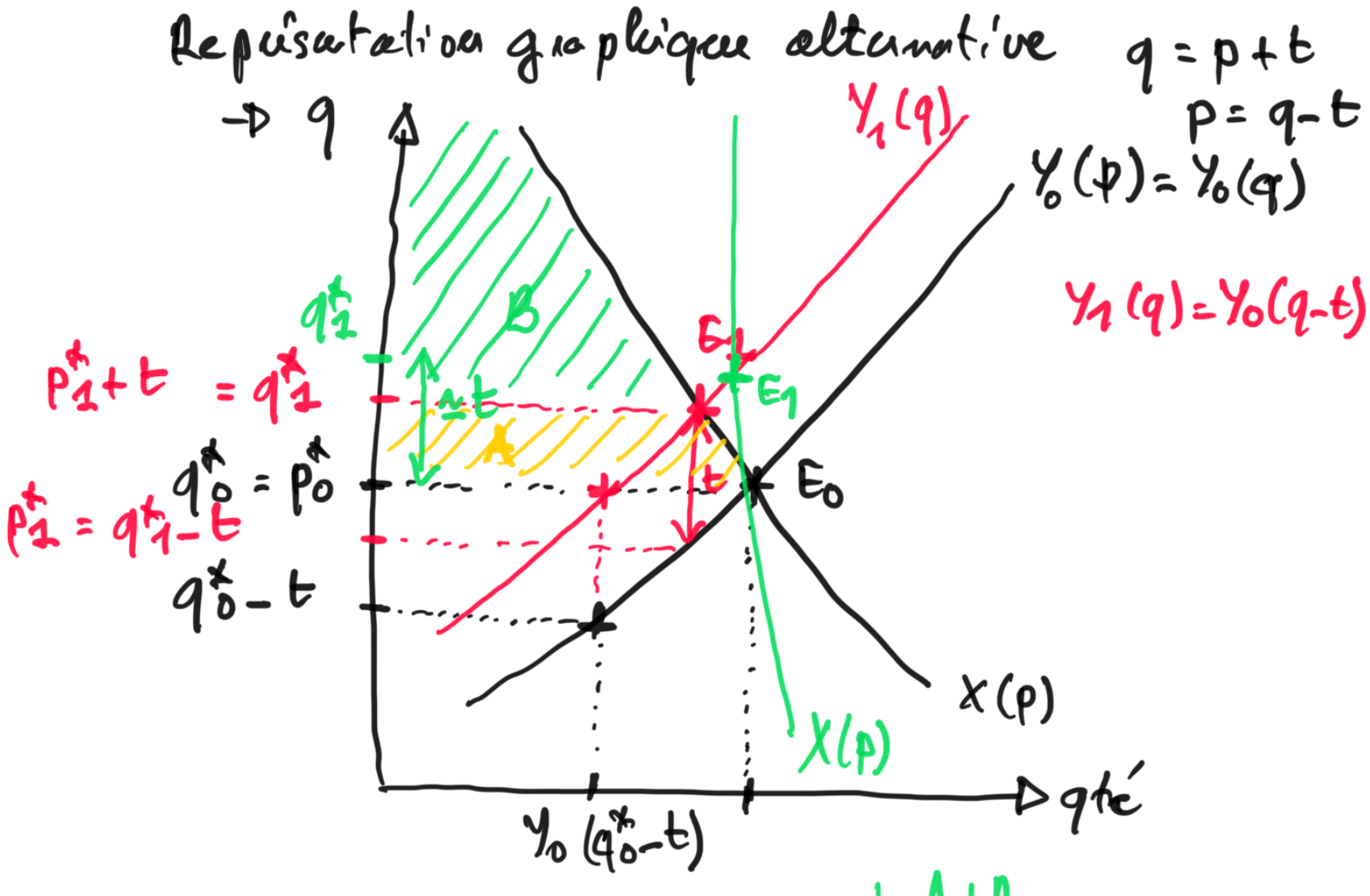
$p = 10 €$
$t = 1 €$
$\Big\} \; q = 10 + 1 = 11 €$

| initiale : $t=0$
| finale : $t>0$









Surplus consommateurs	A+B
	B

puis $(A+B)-B=A$

2) Approche analytique

p^* ($q^* = p^* + t$)

↳ $X(p^*+t) = Y(p^*)$

⇔ $X(p^*+t) - Y(p^*) = 0$ (1)

$t=0$

$t>0$ proche de 0 | $t-0 = dt = t$

→ dp^* changement du prix d'équilibre ?

$d[X(p^*+t) - Y(p^*)] = 0$ (2)

(*) $dX(p^*+t) \simeq X'(p^*+t)\Big|_{t=0} dt = X'(p^*)\, t$ $\quad t<0$

(*) $X'(p^*+t)\Big|_{t=0} dp^* - Y'(p^*)\, dp^*$

$= \underbrace{[X'(p^*) - Y'(p^*)]}_{(-)\quad(+)} dp^*$

$(-)$

Au final, dp^* est tel que :

$\underbrace{[X'(p^*) - Y'(p^*)]}_{(-)}\, dp^* + \underbrace{X'(p^*)\, t}_{(-)} = 0$

$(-)$ $(-)$ $(+)$

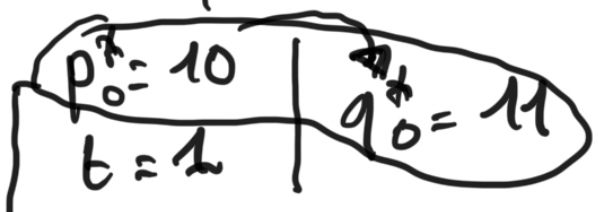
$$dp^* = -\frac{X'}{X'-Y'}\, t = -\frac{1}{1-Y'/X'}\, t$$

$$\Rightarrow \boxed{dp^* = \frac{1}{\frac{Y'}{X'} - 1}\, t}$$

Formule d'incidence fiscale

dp^* dépend de $Y'/X' < 0$

$\rightarrow \frac{Y'}{X'} \simeq 0 \Rightarrow dp^* \simeq -t$



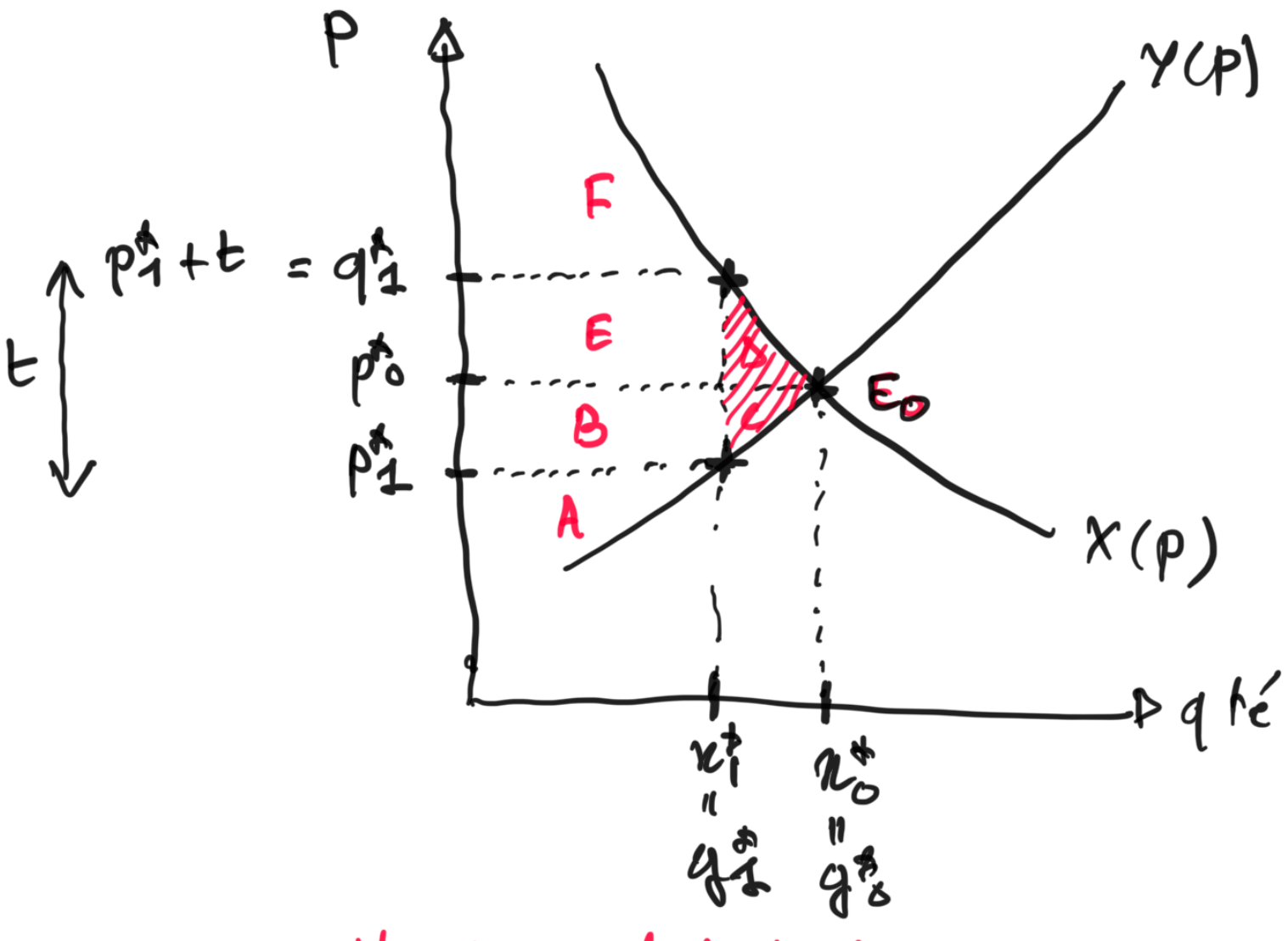
$\rightarrow p_1^* = 10 - 1 = 9$

$q_1^* = 10$

$\frac{Y'}{X'} \rightarrow -\infty \Rightarrow dp^* = 0 \quad dq^* = dp^* + t = t$

Y' grand / X' petit

III Pertes ~~sociales~~ de bien-être



situation initiale (E_0) $t = 0$

$$\begin{cases} SC_0 = D+E+F \\ \pi_0 = A+B+C \end{cases}$$

Société $= A+B+C + D+E+F$

Situation finale :

$$\begin{cases} SC_1 = F \\ \pi_1 = A \end{cases}$$

Taxe collectée $= t x_1^* = t y_1^*$

$= B+E$

Société $= F + A + (B+E)$

Fiscalité $\Rightarrow$ perte pour la société $= D+C > 0$