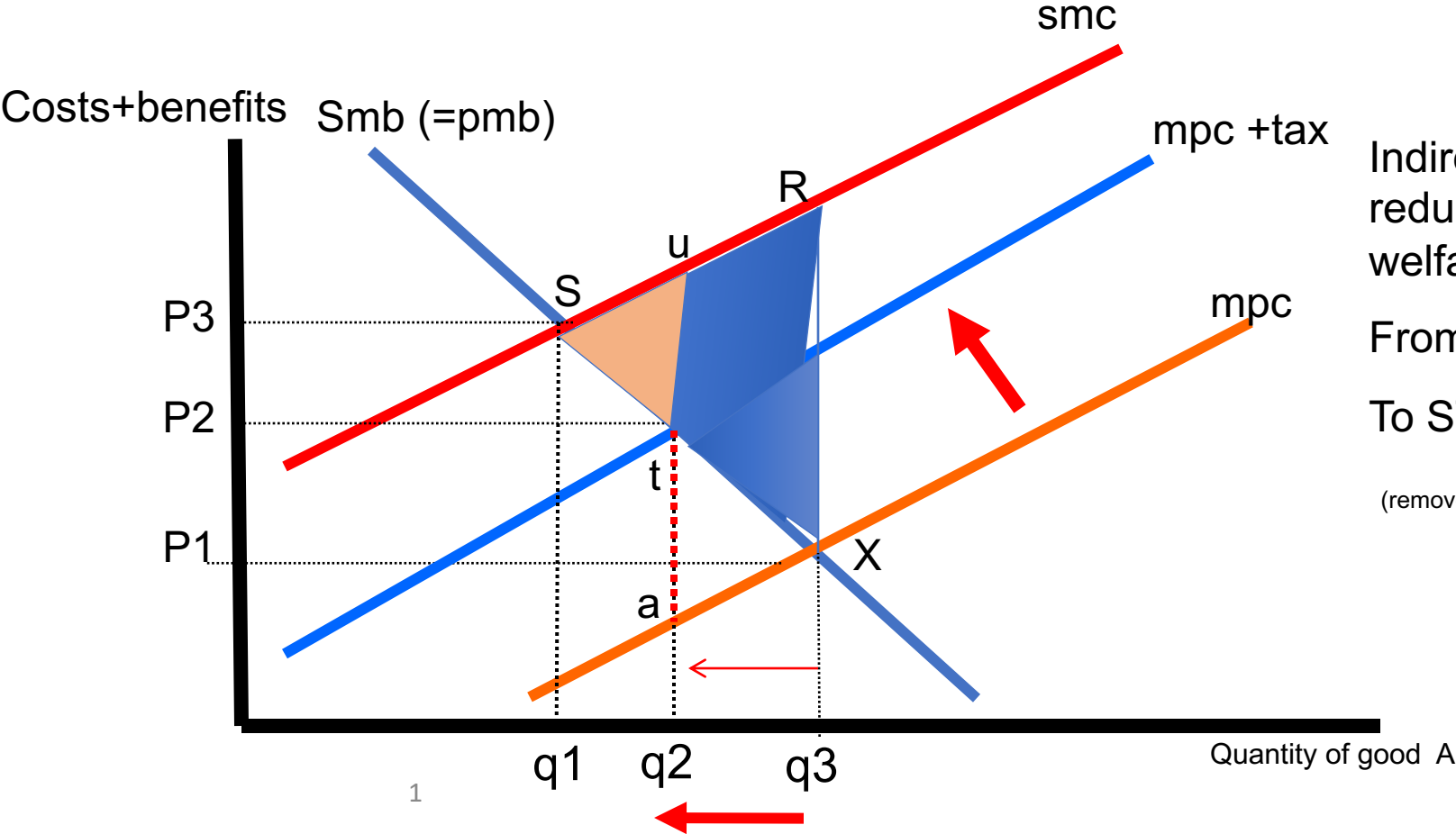**A**

Indirect Tax-solving over production

Analysis commences at S. Over production occurs at x and an indirect tax shifts supply to t and a lower quantity is produced at Q2. Welfare loss is reduced to STU.
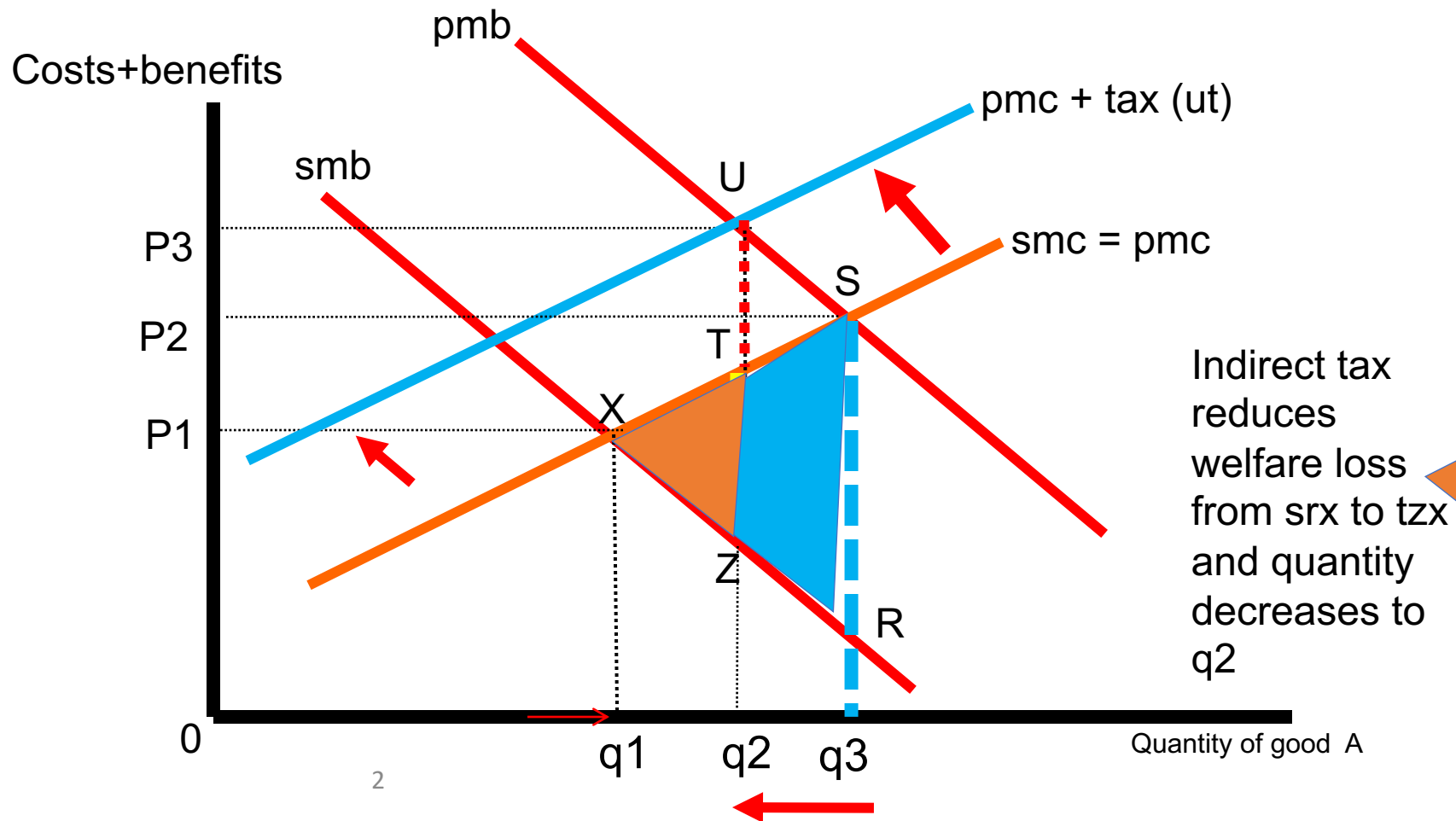
Costs+benefits

Smb (=pmb)

smc

mpc +tax

R

u

S

P3

P2

t

mpc

P1

a

X

Indirect Tax(ta) reduces welfare loss

From srx

To STU

(remove triangles)

q1   q2   q3

Quantity of good A

1

B

Indirect Tax-solving over consumption

Analysis commences at x. Over consumption occurs at s and an indirect tax shifts supply to U and a lower quantity is consumed at Q2. Welfare loss is reduced to TXZ.

Costs+benefits

pmb

smb

pmc + tax (ut)

smc = pmc

P3

P2

P1

U

S

T

X

Z

R

0   q1   q2   q3   Quantity of good A

Indirect tax reduces welfare loss from srx to tzx and quantity decreases to q2

2

Subsidy solving under production

C

Analysis commences at X where MSB = MSC. Under production occurs at S and subsidy shifts supply to t and a higher quantity is produced at Q2. Potential welfare loss is reduced to TXZ.

Costs+benefits

pmc

Smb (=pmb)

pmc + subsidy

Smc

Subsidy reduces potential welfare loss

From srx

To TZX

(remove triangles)

P3 — S

P2 — t

P1 — X

R — z

0

q1   q2   q3

Quantity of good A