Kevin O'Rourke. 2000. Tariffs and Growth in the Late 19th Century. The Economic Journal vol. 110 (April), pp. 456-83.

Single sector models suggested by most growth literature to correlate growth and protection-openness are inadequate if one considers the possibility that a change in relative prices may have an effect in sectoral shifting of resources, and the possibility that such re-allocation of resources affects growth.

How can protection favour growth?

1) Protection in the form of tariffs increases government revenue (forced savings) and restricts consumption. Thus, protection may increase **savings**.
2) If protection penalises final consumer goods more than capital goods (in particular equipment and machinery), it **improves the costs of capital** relative to consumer goods.
3) Given 1) and 2), **investment** is very likely to increase, because savings increase and the costs of productive goods relative to final consumer goods falls.
4) As investment increases and (protected) markets expand, **economies of scale** are developed and **technological learning** takes place. These two processes impact strongly and directly on labour and capital productivity and on lowering of production costs.
5) Finally, if protection is biased towards industry, it helps to **shift labour** from agriculture to industry. Assuming that labour productivity in the industrial sector is higher, this process of shifting labour increases the aggregate economic productivity. The longer this process takes (for example, because of the need to train labour, learning-by-doing, etc) the more protection is required.

PROTECTION

$\uparrow$ Savings
$\downarrow$ Relative costs of K

Shifts L to $\uparrow$Q/L sectors
$\uparrow$ market for local firms

$\uparrow$ I
Learning

Economies of scale
$\uparrow$ Q/L, K/L

GROWTH