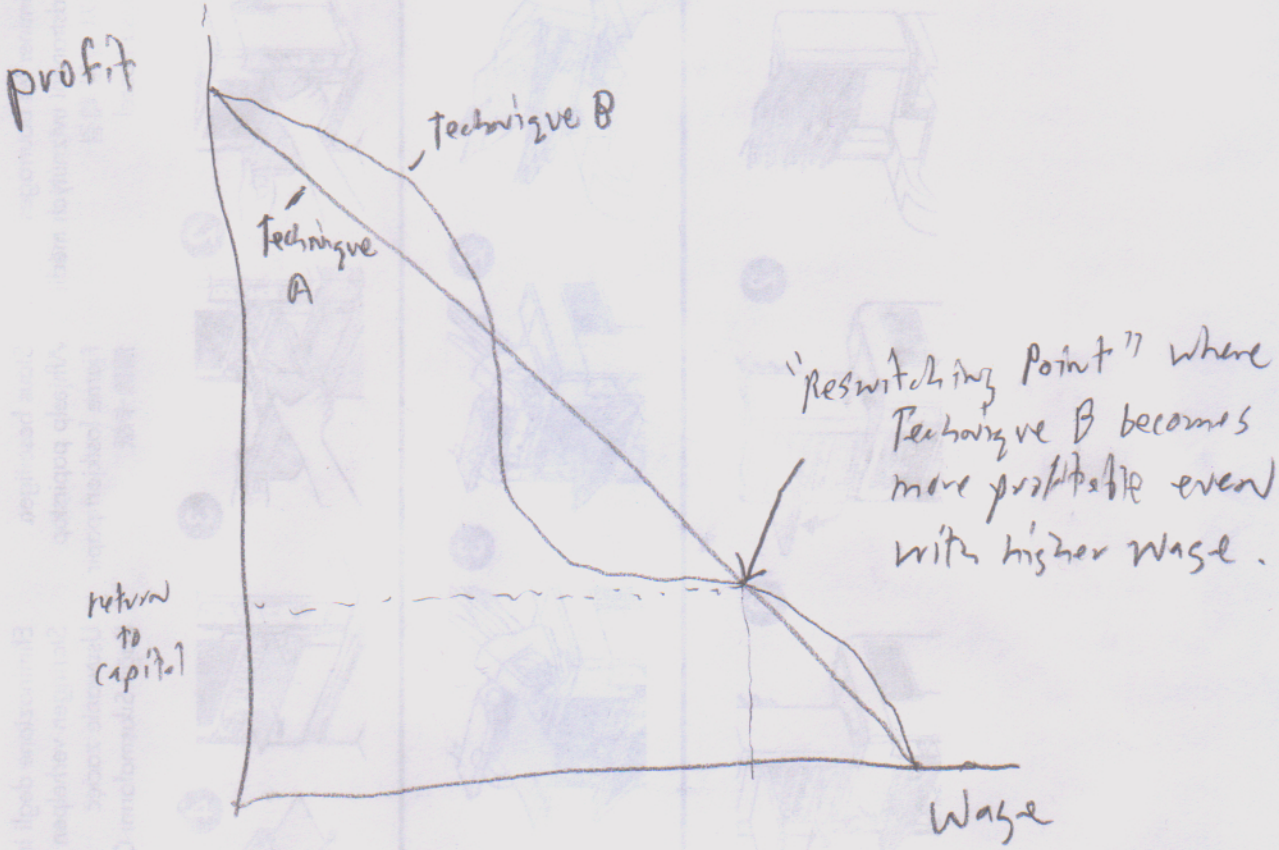
Overview of Cambridge Capital Controversy

In the 1960s there was a debate over the nature of capital as an input to production between Cambridge (UK) University and Cambridge (MA), MIT economists. The main protagonists were Joan Robinson and her school in the UK and Robert Solow at MIT. The main debate was whether or not capital can be seen as a completely mobile factor of production which can be moved from one production technique to another under the laws of the competitive market (and thusly capital was a 'financial *measure* of value'), which was the MIT theory, versus that of the UK school which said that economic techniques are defined, and chosen in advance, and thusly a decision-maker faces not mobile and competitive markets for factor inputs, but had to chose between predetermined techniques (capital was thusly an 'input *quantity* of value' for UK). Fuel to this intellectual debate was added by Piero Sraffa who said that there was a trade-off between wages and profits.[1]

The main rebuttal to the MIT description of capital as freely mobile seeking highest returns per each unit of labor input was Sraffa's 're-switching' argument. Given pre-determined techniques, based on inputs of quantities of capital and quantities of labor, a higher return to a technique can be achieved even with an increase in wage costs. In other words you can switch from one level of capital input to another one with an even higher wage costs and still get more output holding the level of capital constant. When this new technique was previously defined as giving less of an output at a lower wage, and previously a higher output given a higher wage, this is known as 'reswitching'. For Robinson and her school, this proved that capital does not always mean diminishing returns to labor inputs, something which was counter to the MIT view, which is based purely on diminishing returns to labor/capital inputs.

[1] It should be noted that both of this models are based on a trade-off between labor and capital inputs, and do not take into consideration the uncertain risks of entrepreneurial behavior. This view is exemplified by the Austrian School of economic which does not use an 'equilibrium' model in which to evaluate the economy. For the Austrians you cannot pre-determine techniques (the Sraffian, UK, approach) nor can you assume that, before hand, the productivity of capital can be assumed to gain certain productivity (the MIT approach). Capital, labor and entrepreneurial risk are all applied together towards producing for an uncertain market, therefore returns and decisions cannot be determined, nor modeled, before-hand into a choice framework. Under the Austrian School there is no wage-profit trade-off, both can increase or decrease together or separately based on the entrepreneurial decisions as played-out in the market after-the fact.

Wage-profit trade-off in Cambridge (UK) model



MIT model