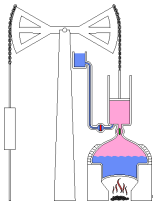


## MINI TEST (v. A6)

Check this figure.



Newcomen steam engine. Invented in 1712, based on earlier scientific research. Widely adopted in coal mines for pumping water

Why is this evidence used for supporting Bob Allen's view of the emergence of the Industrial Revolution? Can the forces in Oded Galor's model account for the concrete circumstances of the emergence of this technology?

The Newcomen steam engine was based on Science and technological experiments developed decades before in the Continent, not Great Britain. As such, it illustrates the main forces in Allen's theory on the Ind Rev. Given the high wages relative to the cost of capital, England had the incentive to mechanize production. Thus, it was demand, not supply, dictated the English early adoption of productivity-enhancing technology. Finally, the low energy costs meant that steam stimulated the industrial use of coal (although this in turn was not the main cause, but the outcome of higher labour productivity: 'sheep', 'ship', 'cheap' issue).

The forces in Galor model contribute to understand the emergence of labour-saving technology in societies that have a better "population composition" (or more prevalent "Quality" elements) and whose culture rewards "future-oriented" mindset and have the developed the right institutions. However, while institutions and culture in the Continent were similar and Science and Technology were more advanced (inventions with steam and vacuum are earlier), Galor cannot explain the "concrete circumstances" of the emergence of this innovation in 1712 England.