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Should We Fear the Robot Revolution? (The Correct Answer is Yes)

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Should We Fear the Robot Revolution? (The Correct Answer is Yes)[☆]

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Abstract

Advances in artificial intelligence and robotics may be leading to a new industrial revolution. This paper presents a model with the minimum necessary features to analyze the implications for inequality and output. Two assumptions are key: "robot" capital is distinct from traditional capital in its degree of substitutability with human labor; and only capitalists and skilled workers save. We analyze a range of variants that reflect widely different views of how automation may transform the labor market. Our main results are surprisingly robust: automation is good for growth and bad for equality; in the benchmark model real wages fall in the short run and eventually rise, but "eventually" can easily take generations.

Keywords: Technological change, robots, artificial intelligence, growth, income distribution, inequality

JEL Codes: E23, E25, O30, O40

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