

## Class Series on Grossman's Breakdown Model and Breakdown Theory

### Study Questions for 1<sup>st</sup> Class

Andrew Kliman, Sept. 12, 2023

1. Terminology. It will help a lot to have a firm grasp of what some key terms mean. So try to define *capital*, *constant capital*, *variable capital*, (*capital*) *accumulation*, *expanded reproduction*, *exogenous*, *endogenous*, *rate of profit*. (Hint: don't believe everything you read on the internet.)
  - a. How are accumulation and expanded reproduction related? What's the difference?
  - b. How are constant capital and means of production related? What's the difference? Why might they grow at different rates?
2. What role did the falling tendency of the rate of profit play in classical political economy (Smith, Ricardo, et al.)? In Marx's work? In Grossman's?
3. What is "absolute overaccumulation" of capital? What role did it play in Marx's crisis theory? In Grossman's?
4. The Breakdown Controversy. Consider the three final paragraphs of Chapter 32 of *Capital*, vol. 1. Do you think it is apt to characterize the process Marx discusses here as a *breakdown* (or *collapse* or *Zusammenbruch*)? Why or why not? Do you think it is apt to characterize it as purely economic? Why or why not?
5. For what purpose(s) did Otto Bauer develop his scheme of expanded reproduction? What assumptions does his scheme make? (You don't need to know all of them, just the key ones.) In what respects are his scheme's assumptions the same as or different from those of Marx's scheme of expanded reproduction?
6. What was Grossman's attitude to Bauer's scheme of reproduction? What role did Bauer's scheme play in Grossman's breakdown theory?
7. Grossman wrote, "Bauer makes the constancy of values a basic part of his reproduction schema ... even though ... the schema features the use of progressively better technology from year to year! Bauer does not notice that he has fallen into a manifest contradiction." [p. 319 of Kuhn ed. of Grossman's book; [alternative translation here](#), 1<sup>st</sup> para. of "The periodic devaluation of capital ..." section.]

Why did Grossman call this a "manifest contradiction"? What's wrong with it? And what problems does it cause?

8. A certain percentage of the total value of output represents used-up constant capital.
  - a. In the Bauer-Grossman reproduction scheme, what happens to that percentage as time proceeds? Why?
  - b. If this is happening, how must employment of means of production be growing in relation to total physical output?
  - c. Imagine that the value (or price) of the commodity is not constant, and that changes in its value affect the growth of constant capital. How will this affect the evolution, over time, of the percentage of the total value of output that represents used-up constant capital?
  
9. Grossman's breakdown condition. If continued capital accumulation at the current pace is no longer possible, what must be the case? How did Grossman express and explain this breakdown condition? What does it imply about physical relations in the economy?
  
10. Bonus trick question! Consider once more the percentage of the total value of output that represents used-up constant capital (see question 8). Imagine that this percentage increases and increases over time, and never stops increasing. Ultimately, how high will this percentage go?