SOME THOUGHTS ON GROWTH MODELS: A REPLY

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AMONG MR. BERNARD's innumerable *réflexions* on growth models there are several that are explicitly presented as criticism of points made in my paper "Mathematical Proofs of the Breakdown of Capitalism." I shall confine my answer strictly to such points.

In order to isolate and classify the issues, some preliminary remarks appear necessary. I trust that the reader has already realized that the main object of my paper is the mathematical analysis of the model (S)—for Sweezy—with a view of finding out whether the conclusions at which Bauer and Sweezy arrived are logically correct. This, I hope to have done in accordance with the scientific philosophy represented by this journal, which is: first, to describe the object of discussion in strictly analytical terms, and, then, to push the logical analysis of the model thus circumscribed as far as the author is capable of doing. The results of my endeavors along this line are presented in Sections 2—4. The observations contained in Section 1 represent a *by-product* of my struggle to set up an analytical model that would be consistent and still retain the fundamental assumptions adopted by Sweezy in Chapter X and the Appendix to Chapter X of his *Theory of Capitalist Development*. However, the fact that I included this by-product in my paper as a prefatory part, shows that I thought it to be interesting in itself. Mr. Bernard, by concentrating his criticism on the points of Section 1, in a way, shows that my judgment was correct.

It would thus be convenient to arrange my answers into two groups, the first referring to issues pertaining to Sections 2–4, and the second, to those pertaining to Section 1.

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After accepting the model (S) as a means "for probing more deeply [my] mathematical demonstrations" and after reproducing most of the relations derived in my paper, Mr. Bernard finds several faults with Theorems 1, 2, and 4.

To begin with, he asserts that Theorem 1 follows immediately from his relations (32) and claims that in this manner he has offered "a direct proof" of it. In connection with this direct proof, I would like first to point out that Mr. Bernard's relations contain an element not included in the assumptions of Theorem 1. Indeed, Theorem 1 refers only to capitalists' behavior and does not assume any relation between K and the total production of consumption goods. It would appear, therefore, that Mr. Bernard has offered a direct proof of an even stronger theorem than Theorem 1. However, it can