

C_t^1 tends to 1. In fact, by a straightforward calculation one can show that if there exists an $\epsilon > 0$ such that $r_t \leq n - \epsilon$ for $t = 0, 1, 2, \dots$, then

$$\lim_{t \rightarrow \infty} C^2 = 0.$$

As a particular instance, this discussion applies to paths along which the rate of interest is always *zero*, which is what Lerner seems to advocate.

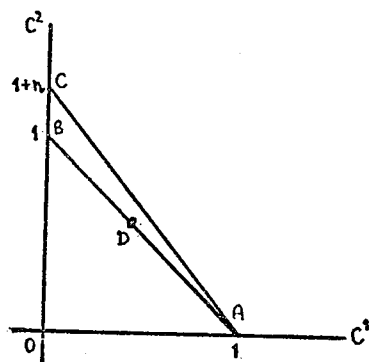


FIG. 2

VI. DURABLE OUTPUT

Now let us drop the assumption that output is completely perishable and substitute in its stead the assumption that output is completely durable.

The first thing to notice is that trades are still impossible. A member of generation t who wishes to give up a quantity of output at time t in return for a quantity of output at $t + 1$ can never find anyone who is offering to give up a quantity of output at time $t + 1$ in return for a quantity of output at time t . On the other hand, a technology is now available to a member of generation t with which he can transform output at time t into output at time $t + 1$, unit for unit.

Suppose that with this new regime we now require our economy to proceed in an entirely decentralized fashion, each individual acting on his own. The opportunity set available to each individual is now given by the triangle OAB in Figure 2. (Recall that, when output was nondurable, the individual's opportunity set consisted only of the line segment OA .) An individual of generation t will, therefore, pick his consumption plan (C_t^1, C_t^2) so as to maximize $U(C_t^1, C_t^2)$ subject to $C_t^1 + C_t^2 = 1$, which will lead him to a point, say D , on the boundary of his opportunity set. Clearly, D will not in general coincide with A ; that is, the individual will in general choose to consume positive amounts in both periods. Not also that the point D will be optimal for individuals of *all* generations (since we are assuming a common utility function for all) so that decentralized behavior leads, once again, to a stationary path.

Now let us look at distribution schemes which are not necessarily decentralized. Obviously, any scheme which was feasible under the assumption that output is nondurable is also feasible under the as-