18 The Interest Cost of a Buffer Stock is Not a Social Cost

John Spraos

18.1 INTRODUCTION

The stockpiling of a buffer stock scheme following a good harvest involves no resource cost. It is a gift of the gods and the incomes generated by buying the stock are matched by the producers’ transitory saving or reduced dissaving (relatively to the position without a buffer stock) so that there is no increased consumption to crowd-out anything else, even temporarily. If producers are credit-rationed, the buffer stock does generate increased consumption in the good harvest period but the producers gain from better intertemporal distribution of their consumption exceeds the interest cost of the buffer stock. The policy implications are explored.

If the proposition of my title is true, as I believe it is, it is likely to have interesting implications. This is my justification for focusing on buffer stocks despite the fact that international commodity agreements, which have sponsored most buffer stock schemes, are unfashionable right now. Only one survives with active market intervention capability – in rubber. (See Gilbert, 1996, for a recent survey, which he has called an ‘obituary notice’.)

The proposition of my title is entirely true for buffer stocks which compensate for supply shifts due to natural causes (weather, pests, diseases). I will confine myself to these. I will try to establish the validity of the proposition and will then consider its implications for policy and for the assessment of buffer stock schemes.

My methodological innovation is that I integrate an extra dimension in buffer stock analysis – the producers in their capacity as consumers – and this takes me into general equilibrium or macroeconomic territory. But do not fear – there will be no maths beyond the most trivial.
18.2 ASSUMPTIONS

I will assume that the buffer stock scheme is subject to two rules: it must break even over the cycle and it must liquidate fully in a lean production period the stocks it accumulates in a fat period.

For expostional convenience, imagine a two-sector world: a coffee sector and the Rest. \( R \)-goods are demanded by everybody but coffee-producers do not use coffee. (Weaker assumptions, such as constant or proportionate to output consumption of coffee by coffee-producers, would have served equally well.) The coffee crop is uniquely fixed each period by the weather and is price-invariant (vertical supply schedule). It is also perfectly predictable.

To exclude extraneous influences, adopt the usual *ceteris paribus* convention: nothing changes unless caused directly or indirectly by the coffee supply shift or by the operation of the buffer stock. The demand function for coffee is among the things that do not change over time (though not the quantity demanded, which responds to price).

The demand function is also known to everybody. Together with the assumption of coffee crop predictability, this means that next period’s as well as this period’s price, with or without a buffer stock, can be exactly calculated. (Uncertainty is hugely important but it does not concern me here.)

As I want to focus on the interest cost of the buffer stock, I assume, without loss of generality, that there are no other costs of carrying or managing the stock.

18.3 THREE CRITICAL POINTS

To establish the proposition of my title, I have to substantiate three basic points.

First, the extra output of coffee in a fat period is a gift of the gods, albeit a temporary one. To accumulate stocks of it is not an investment involving the withdrawal of resources from alternative uses at which they produce a yield commensurate (in a Pareto-efficient economy) with the rate of interest. There is, then, no opportunity cost to correspond to the interest paid on financing the stock accumulation. (I enunciated this blindingly obvious proposition some years ago (Spraos, 1989) but then tried to show that this led to a market failure in futures markets for commodities. This was partly, at least, wrong.)