

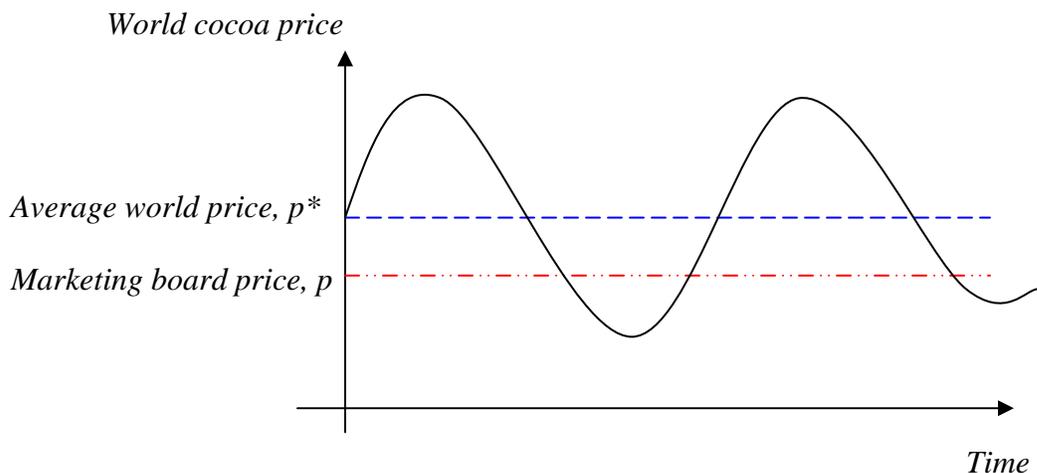
**Econ 172: Issues in African Economic Development**  
**Problem Set 3 (Due in class Thursday April 26, 2007)**

**1. Institutional Continuities in Africa [5 points]**

In at most 1.5 pages (double-spaced), discuss two types of institutional, political, or social continuities from the pre-colonial period into the colonial period in Africa. In your view, which of these (if any) is likely to have had the most lasting impact on African economic performance? (Hint: refer to Herbst 2000.)

**2. Agricultural Marketing Board Pricing Policies [5 points]**

Consider the following figure, which depicts government pricing policies for a particular export crop, say cocoa in Ghana:



Imagine that the utility of cocoa farmers increases with the price they receive for their crop, and that they are risk-averse (technically, at each level of consumption, they dislike a drop in consumption of amount  $\Delta c$  more than they like a gain in consumption of the same amount). Another way to think about this is that people prefer a stable outcome over a variable outcome that gives them the same expected (average) consumption. (A utility function that fits this description is  $U = \ln(p)$ , for example.)

(a) What marketing board price  $p$  maximizes farmer expected utility? (Assume that the marketing board price has to be budget balancing, i.e., the government can not systematically borrow money in order to pay cocoa farmers.) (1 point)

(b) Imagine that the marketing board price  $p$  is less than  $p^*$ , as depicted in the figure above. Does this policy increase or decrease farmer utility relative to the case of no marketing board? (In the case of no marketing board, assume farmers simply receive the world market price in all periods.) Or is there no general answer? Explain your reasoning. (2 points)

(c) In the early 1990s, the agricultural marketing board in Ghana, the Cocobod, lost its monopoly power to purchase cocoa, and 18 other private companies can now purchase cocoa. Has this policy change benefited cocoa farmers in Ghana overall? Relate your argument to the above figure. Also discuss any other factors affecting Ghanaian cocoa farmers that are not captured in the above model. (2 points)