Constructing a demand curve for cobia in the Caribbean

Cobia Production and Value

Cobia (*Rachycentron canadum*) is a large (max length of 200 cm) marine fish found around the world in tropical and subtropical waters. Cobia are found in a variety of habitats, both nearshore and pelagic, and feed on crabs, fishes, and squids. Cobia production has grown significantly over the last several decades, increasing from 1,210 MT in 1980, all from wild fisheries, to 55,393 MT in 2013, with aquaculture accounting for 75% of the total (Figure 1). Despite the increase in cobia production, the cobia market is almost entirely a local market, with only a small fraction (4,555 MT;8.2284765%) of global production in 2012. Furthermore, export production has thus far been very volatile, rising from just five MT in 2011, to 4,558 MT in 2012 before falling to 374 MT in 2013 (Figure 1).

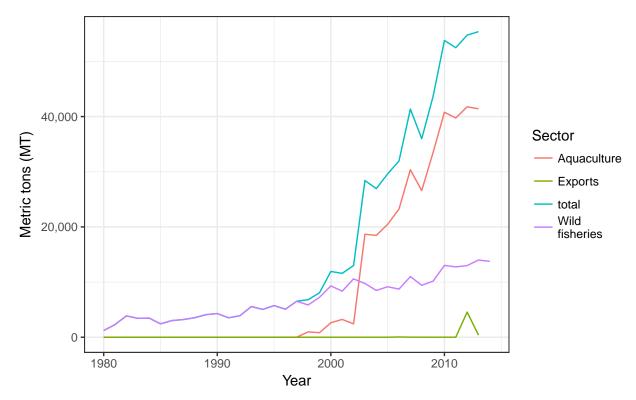


Figure 1: Global production and total exports of cobia by the wild fishery and aquaculture sectors

The global market for cobia is currently very small, with just 8.3235939% (4558 MT) of total production exported in 2012. The export price of cobia is declining and approaching the global median export price of its commodity category, *Miscellaneous pelagic fisheries* (Figure 2).

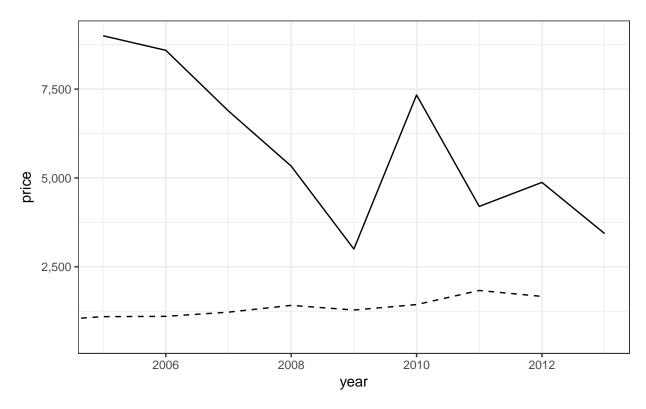


Figure 2: Global median export prices (\$US/MT) for cobia and the ISSCAAP species group that it belongs to, Miscellaneous pelagic fishes

$$Price(p_{t+1}) = p_t - b(\sum x_t)$$

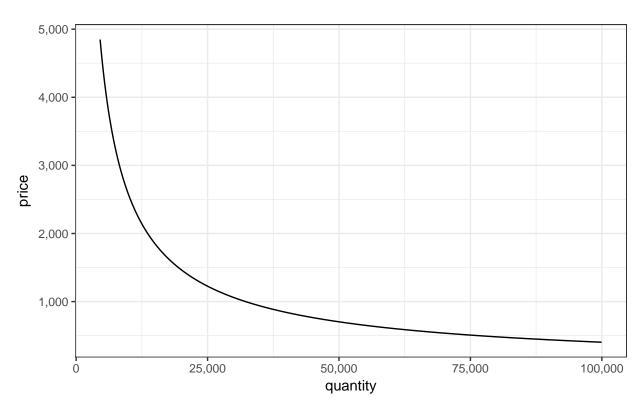


Figure 3: Global demand curve for cobia $\,$