In many settings, benchmarks based on trade prices of an underlying asset are used to determine payments on derivative contracts. The volume of derivative contracts is often much larger than the volume of underlying trade used to construct benchmarks, so these markets may be vulnerable to manipulation: contract holders may trade the underlying asset in order to move the benchmark and influence contract payoffs. This paper quantifies manipulation incentives in derivative contract markets. Contract markets can be much larger than underlying markets without substantially distorting price benchmarks, as long as underlying markets are sufficiently competitive. The size of manipulation-induced benchmark distortions can be estimated using commonly observed market metrics. I apply my results study contract market competitiveness using the CFTC's Commitments of Traders reports, to measure the manipulability of the LBMA gold price, and to propose a less manipulable design for the CBOE VIX.