$$c\mathbb{E}((Y_T^n)^{1/2}) \le \mathbb{E}(\sup_{t_i \in D_n} |M_{t_i}|) \le C\mathbb{E}((Y_T^n)^{1/2})$$

$$\text{dom.} \quad \text{conv.} \quad \text{mon.} \quad \text{conv.} \quad \text{dom.} \quad \text{conv.}$$

$$c\mathbb{E}([M]_T^{1/2}) \qquad \mathbb{E}(M_T^*) \qquad C\mathbb{E}([M]_T^{1/2})$$