Abstract. Let $X$ be a compact Hausdorff space. In this paper, we give an example to show that there is $u \in C(X) \otimes M_n$ with $\det(u(x)) = 1$ for all $x \in X$ and $u \sim_h 1$ such that the $C^*$ exponential length of $u$ (denoted by $cel(u)$) can not be controlled by $\pi$. Moreover, in simple inductive limit $C^*$-algebras, similar examples also exist.