Let $G$ be a graph, $\delta_G(v)$ the degree of a vertex $v$ in $G$, $k$ an integer and $n$ a positive integer. We establish a connection between the following three domination related concepts:

- Given a nonempty set $M \subseteq V(G)$ a vertex $v$ of $G$ is said to be $k$-controlled by $M$ if $\delta_M(v) \geq \frac{\delta_G(v)}{2} + k$. The set $M$ is called a $k$-monopoly for $G$ if it $k$-controls every vertex $v$ of $G$.

- A function $f : V(G) \to \{-1, 1\}$ is called a $n$-signed total dominating function for $G$ if $f(N(v)) = \sum_{v \in N(v)} f(v) \geq n$ for all $v \in V$.

- A nonempty set $S \subseteq V$ is a global (defensive and offensive) $k$-alliance in $G$ if $\delta_S(v) \geq \delta_V(G) - S(v) + k$ holds for every $v \in V(G)$.

In addition we show that 0-monopolies present an NP-complete problem and give a polynomial algorithm for trees. We also present some general bounds for $k$-monopolies and derive some exact values.

**Keywords**: $k$-monopolies, $k$-signed total domination, global defensive $k$-alliance, global offensive $k$-alliance.

**AMS Subject Classification**: 05C69, 05C07.