We investigate a relation, called conservative extension between abstract structures $\mathfrak{A}$ and $\mathfrak{B}$, possibly with different signatures and $|\mathfrak{A}| \subseteq |\mathfrak{B}|$. We give a characterisation of this relation in terms of computably infinitary $\Sigma_n$ formulae and we show that in some sense it provides a finer complexity measure than the one given by degree spectra of structures. We show that the $n$-th jump of a structure and its Marker’s extension are conservative extensions of the original structure.