Our group recently reported a concise protocol to use sodium hydride (NaH) as a hydride donor by its solvothermal treatment with dissolving metal halides in THF, that enabled unprecedented reductive transformations such as hydrodecyanation of α-quaternary benzyl cyanides[1] and hydrodehalogenation of haloarenes[2]. Herein, we present controlled reduction of carboxamides to aldehydes, alcohols, or amines. Selective synthesis of aldehydes was achieved using the NaH-NaI system through single hydride reduction of carboxamides[3]. Double hydride reduction was established using combination of NaH and zinc halides (ZnX₂)[4], in which the selectivity for the formation of alcohols or amines is dictated by the halides on ZnX₂; the NaH-ZnI₂ system delivers alcohols and the NaH-ZnCl₂ system gives amines. The mechanistic investigation revealed that different zinc hydride species are formed and responsible for the observed selectivity.