For a full Jacobian the dimension-dependent work comparison is nL versus mL. At $n = 1000, m = 1$, reverse mode needs one seed instead of 1000 forward seeds, a factor of 1000 in seed-sweep count under this model. This is not a measured runtime factor and does not include parallel scheduling or checkpoint overhead. For $n = m = 1$ the count is tied. Both methods must write mn entries when a dense full Jacobian is requested.