

**Example** For  $n = 2$ ,

- $\Omega = \tilde{X}_1 \cup \tilde{X}_2$
- $A_0 = \tilde{X}_1^c \cap \tilde{X}_2^c = \emptyset$
- $\mathcal{A} = \{\tilde{X}_1 \cap \tilde{X}_2, \tilde{X}_1^c \cap \tilde{X}_2, \tilde{X}_1 \cap \tilde{X}_2^c\}$
- $|\mathcal{A}| = 2^2 - 1 = 3$
- A signed measure  $\mu$  on  $\mathcal{F}_2$  is completely specified by the values of  $\mu$  on the atoms of  $\mathcal{A}$ , i.e.,

$$\mu(\tilde{X}_1 \cap \tilde{X}_2), \quad \mu(\tilde{X}_1^c \cap \tilde{X}_2), \quad \mu(\tilde{X}_1 \cap \tilde{X}_2^c)$$