This study investigated whether tax ethics and social norms constitute true motivations for tax compliance, or whether they are mere rationalisations of self-interested behaviour. Cross-lagged panel analyses were applied to data from a two-wave survey with 1161 Australian citizens. First, results showed that tax ethics causally affected tax compliance and were affected by levels of compliance. Second, perceived social norms causally affected personally held tax ethics, but only for respondents who identified strongly with the respective group. At the same time, personal ethics were also projected onto the perceived normative beliefs of the social group. Third, perceived norms causally affected tax compliance, partly mediated by their effect on personal ethics. Conversely, tax compliance also affected the perception of norms. Overall, the study provides evidence for a complex role of individual ethics and social norms in taxpaying behaviour.