The dissertation intends to provide a better understanding of minimum wage impacts on employment. The literature review considers both the theoretical models and empirical studies, as well as providing a detailed examination of their methodologies. Two empirical studies form the core of the dissertation. One study estimates the minimum wage impacts using state-level CPS data from 1979 to 2011 in a panel regression framework. The other study explores a natural experiment due to a legislated increase of the minimum wage in Missouri but not in Kansas. The analysis considers minimum wage effects at both the firm-level and individual-level for various groups of firm sizes and different earners. The analysis is performed on multiple selected broad industries. This dissertation finds that in general minimum wage reduces total employment. However, the impacts do vary substantially across industries and across groups. Firms with no more than 10 employees and new firms are more likely to experience increase in employment with the increase of minimum wages. In addition, due to substitution effects, people with wages above the minimum wages could get increased chance of being employed from this policy. In contrast, most of the estimates for people who work very few hours are insignificant. In the industries with higher proportions of low wage workers, that is, in retail trade and food industries, the probability of being employed is reduced. The major policy implication is that our empirical findings throw light on the importance of distinguishing between industries and between workers with different earnings.