The thesis studies the problem well-known in literature as the newsvendor problem. After summarizing the basic model we pay attention to two extensions of this problem and their combination in single model. The first extension concerns the possibility of the vendor to choose his selling price. The second extension is creation of market with several vendors. We describe both situations in the first chapter of the thesis. In the second chapter we study the combination of both extensions, which means the market with several vendors who can choose their selling prices. We touched several models of such market and we found that the problem is very complex. However we found the optimal reaction of one vendor on the strategy of the other vendor in case of special market with two vendors. That enabled us to create a programme that examines such market, mainly the dependence of the optimal decision of one vendor on the strategy of the second vendor and presence of the Nash equilibriums.