Among the causes of current economic problems in the European Monetary Union (EMU), the increasing differences in the competitiveness among the members of EMU play an important role. The real wages e.g. in Germany grew in the last years very slowly, significantly behind the growth of the labor productivity and consequently the competitiveness of Germany was rising stronger than in the other economies. Recent studies deal mostly with aggregated models and overlook structural changes behind this phenomenon. In this paper, we analyze the changes in labor productivity and wages, and the cost-push effects, in different countries of the European Union, based on World input-output tables and Price input-output model. Using the structural decomposition we identify the impact of changes in average hourly wage and in hourly labor productivity on the prices.