Over the past decades a continuous trend of expansion has led to the emergence of massified higher education systems that have tried to accommodate a growing diversity of students and demands through diverse institutional profiles and program supply. Recent studies have also pointed out to a growing diversity in the transitions and integration of those expanded cohorts of graduates in the labour market. Hence, it is relevant to assess to what extent the growing institutional and programme diversification may be associated with different profiles of graduates and the multidimensional set of acquired competencies throughout higher education. In this paper are analysed graduates’ perceptions about the competencies acquired through HE vis-à-vis those required by the labour market and search for differences in those perceptions according to type of institution (public and private, university and vocational) and type of degree. The analysis is based on the Portuguese experience that combines high labour market benefits for graduates with a rapid process of massification.