Over the last three decades income inequality has increased in most European countries (see e.g. OECD, 2011). In this paper we investigate the role of personal income taxes in inequality reduction, with a focus on the EU-15 and the evolution over the period 1998-2008. Progressivity of taxes is one of the major determinants of the equalizing capacity of taxes. In most of these countries the top tariffs, as well as the number of tax bands, have been reduced over the past decade. Hence, it is commonly thought that the progressivity of these taxes has been reduced. However, the effects on overall progressivity (and inequality reduction) are less obvious than they may appear at first sight (see e.g. also Wagstaff & Van Doorslaer, 2001). First, the tax calculation also includes exemptions, allowances deductions and credits, which may enhance or reduce progressivity. Moreover, changes in the underlying income distribution (due to socio-demographic and labour market changes) and fiscal drag may also play a role.

We study the following questions in this paper: 1) To what extent do personal income taxes reduce income inequality in the European Union? 2) What is the contribution of different components of personal income tax system to progressivity? 3) Have there been changes over the past decade (1998-2008) in the EU-15? With this last question we revisit an earlier study on this topic, namely Verbist (2004), which presented an international comparison of the redistributive effect of personal income taxes in the 15 countries of the EU in 1998, using the European tax-benefit model EUROMOD. Over the past ten years, many countries have introduced major tax reforms, which is another reason why we present outcomes for a more recent year.

As the different components of the personal income tax systems cannot be distinguished in survey data like EU-SILC (Survey of Income and Living Conditions), we use a tax-benefit microsimulation model to disentangle the various components of the tax calculation. The model used here is EUROMOD, which is specifically designed to facilitate international comparisons of tax-benefit systems in Europe (see e.g. Sutherland, 2007). We use a decomposition of Kakwani indices to study the contribution of the different components of the tax system to overall progressivity. As the equivalence scales used implicitly in personal income tax systems are in general different from the ones used in standard income inequality evaluations, we also investigate the role of equivalence scales in our outcomes.