

## Benchmarks for the assessment of wage developments

Assessing the implications of wage developments for the build-up and correction of macroeconomic imbalances is a key building block of a proper analytical underpinning of the EU Macroeconomic Imbalances Procedure (MIP). In particular, such an assessment would be part of the analysis contained in the In-Depth-Reviews (IDRs) of country situations carried out by the Commission staff.

Such an assessment requires answering to some non-trivial questions. Are wage developments consistent with standard responses to fundamentals? Is the growth in labour costs compatible with orderly developments in price competitiveness? In order to answer these questions, and to assess whether labour cost developments contributed to the correction or to the amplification of macroeconomic imbalances, one has to compare actual labour cost and wage developments to appropriate benchmarks. To this purpose, this paper presents alternative benchmarking frameworks.

The first approach is based on the comparison of actual wage growth to those predicted on the basis of a limited number of domestic macroeconomic fundamentals: changes in labour productivity, unemployment and inflation. This approach permits to assess if wage growth is broadly in line with equilibrium in the domestic labour market ("internal equilibrium"). The cross-country comparison of wage levels complements the assessment of wage growth, and permits to analyse the role of structural determinants that move wages over the longer term.

The second approach consists of comparing the actual wage growth with the wage growth that would have guaranteed a stable evolution in price competitiveness. In this case, the aim is that of identifying a benchmark suggestive of "external equilibrium", namely, wage growth consistent with orderly developments in the Real Effective Exchange Rate (REER). However, what is relevant for rebalancing is not only relative labour costs in the domestic economy as compared with foreign partners, but also relative labour costs between the tradable and the non-tradable sector. For this reason, the paper also analyses trends and determinants of wages in the tradable and non-tradable sector separately.

Such alternative wage benchmarks provide complementary information for the ex-post assessment of wage developments. In some cases, both benchmarks may reveal a relevant role of wages. In other cases, indications from different benchmarks may send conflicting messages. Although information on wage growth is relevant, it needs to be complemented with information on wage levels, as wage growth above or below benchmark may be linked with an adjustment process to pre-existing imbalances. Once wage levels are compared with benchmarks, some countries having followed recent paths of wage inflation or moderation appear to exhibit broadly balanced positions after 2009.

When repeating the benchmarking exercise for the tradable and non-tradable sectors the results reveal that wage developments in the non-tradable sector follow much closer the macroeconomic fundamentals than in the tradable sector, as wage dynamics in the tradable sector are partly linked to non-purely domestic factors. This underscores the relevance of analysing separately wage dynamics in the tradable and the non-tradable sector to assess the adjustment of relative wages during external rebalancing.

Needless to say, wage benchmarks have a limited role in identifying wage-related competitiveness challenges from a forward-looking perspective. For instance, the presence of indexation mechanisms in a given country could imply competitiveness losses when a trend towards rising prices of imported energy is foreseen. For this type of assessment, backward-looking wage benchmarks are of limited usefulness. Clear limitations are also linked to the use of nominal compensations per employee as an aggregate measure of wages, as changes in the composition of employment across labour types cannot be controlled for. For the above reasons, as well because of the underlying simplifying assumptions and robustness issues, results from the benchmarks discussed in this paper need to be interpreted with the necessary caution and not at face value. A proper assessment of wage developments should also ideally look at developments in wages at a disaggregate level, and at different notions of actual wages and wage floors, including minimum wages, negotiated wages, wage drift.