

**Box 2: Quantitative assessment of the risk of higher whole-economy average wage**

Macroeconomic projections within an inflation targeting regime are a key element for the monetary policy decision-making process of the central bank. The efficiency of monetary policy in impacting economic activity is also conditional on the manner in which the central bank informs the general public about its own assessments and forecasts as well as on explaining the rationale behind the steps taken to attain the pre-announced target.

The quantitative or qualitative assessment of the impact of certain risk factors on the inflation projection in the baseline scenario is an absolute must within each forecasting cycle. For each forecasting round, the risk factors mentioned in the Inflation Report are selected from among those considered to have a reasonable likelihood of materialising in the coming period and whose evolution could diverge substantially from their coordinates envisaged by the baseline scenario. Such an approach is particularly required in the case of variables for which information is scarce or for which the intricacy of the transmission mechanism cannot be captured by the model. For reasons pertaining to the monetary policy decision-making process, every risk factor comes with at least one qualitative assessment regarding their likelihood to materialise and the direction of their impact on the relevant variables.

In the context of a persistent gap between the evolution of real average wage and that of productivity and on the back of public discussions regarding a higher whole-economy minimum wage, assessing pay rises *as a risk factor* is particularly relevant. The *direct* mechanism whereby wages come to influence consumer goods prices and other macroeconomic variables was already described in the current section. The description matches the relations transposing macroeconomic theory concepts into a mathematically formalised framework. Insofar as the temporary growth of some consumer prices lingers on – as was the case in the recent periods, it would bring about a broad-based phenomenon of stronger wage claims across the economy. The magnitude of *indirect* (second round) effects of higher wages on consumer prices – substantially stronger than those pertaining to the direct effects – is, however, difficult to appraise in terms of the formalised framework mentioned above.

The quantitative assessments set out in the table below should be viewed as the additional effects of supply-side shocks coming from higher wages. More precisely, they refer to the estimation of *direct* effects on inflation generated by further increases in the *whole-economy gross average wage*, apart from those already incorporated in the baseline scenario. Against this backdrop, given the above-mentioned difficulty in estimating *indirect* effects of a pay rise, the figures resulting from the simulations based on the macroeconomic model are indicative of the lowest effects possible, matching the macroeconomic relations that could be modelled explicitly. The impact on the annual inflation projection in the baseline scenario is shown in the table below, depending on the scale and the persistence of such a shock. *The scale of initial shocks on the rise in the average wage (the first column) is chosen for illustrative purposes and should not be interpreted as an NBR forecast for the projection horizon.*

<b>Additional annual increase in whole-economy gross average wage (in nominal terms)</b>	<b>Temporal distribution</b>	<b>Additional impact on CPI inflation at end-2008 (Dec./Dec.)</b>	<b>Additional impact on CPI inflation at end-2009 (Dec./Dec.)</b>
Differences in percentage points (pp)		Differences in percentage points (pp)	Differences in percentage points (pp)
+4 pp	flat in the next 4 quarters	+0.1 pp	+0.6 pp
+4 pp	flat in the next 2 quarters	+0.2 pp	+0.7 pp
+8 pp	flat in the next 4 quarters	+0.2 pp	+1.2 pp
+8 pp	flat in the next 2 quarters	+0.4 pp	+1.4 pp