As central banks expanded their role during the global financial crisis, demand for public scrutiny of their actions increased. While this revived the debate on which statutory setting works best to hold central banks accountable, empirical evidence on how current frameworks work is scarce. The aim of this work is to fill this gap. We focus on the parliamentary hearings of central banks, which are the most diffused arrangements to hold central banks accountable. Using text analysis techniques on the transcripts of the hearings, this work detects their key topics and the sentiments during the debates between the Bank of England, the European Central Bank, the Federal Reserve and their respective parliaments from 1999 to 2019. The analysis shows that, while the objectives of the central bank play a relevant role in determining the topic of discussion, higher rates of unemployment are associated with a decrease in the focus of the hearings on price stability. Second, the paper finds that sentiments in the hearings are more negative when there is higher economic uncertainty and when actual inflation is more distant from the central bank’s inflation aim. However, while the correlation between drifts from the inflation target and sentiments signal an effective scrutiny, the significance of this result is weaker than the one for uncertainty. Overall, these findings suggest that parliamentarians use hearings to scrutinise the performance of central banks in line with their objectives and economic developments, but also that uncertainty plays an important role in setting the tone of the debates.