Supplemental Graphs and Discussion

Figure 6 plots the overall-UC cycle in employment (c_y, which includes adjustments to permanent shocks and movements due to transitory shocks), and movements in employment due to permanent shocks and demand shocks. Figure 7 plots the hours cycle, and the movements in the hours cycle due to permanent shocks and due to different transitory shocks. The left panels shows the decomposition for the first subsample and the right panel the decomposition for the second subsample. Comparing both the UC cycle and the cyclical part of employment allows me to disentangle the causes for each recession, and the drivers of the volatility of employment across the business cycle. As shown in the graphs below, and as discussed in the main body of the text and in Table 3, a large part in the overall movements in the level of employment can be attributed to permanent shocks and adjustments to permanent shocks (the UC-defined cycle is much more volatile than the cyclical part that is only affected by transitory shocks). However, there is no evidence that there is a complete loss of cyclicality and that transitory shocks do not matter for movements in employment. It is important to note that while the large spike in the UC cycle (the estimated c_e that includes adjustments to permanent movements) during the Great Recession and the increases during the 2001 and 1990 recessions may appear counter intuitive, they are perfectly consistent with a UC model where a recession is driven by a large permanent output shock. The large negative shock will temporarily increase the UC cycle because of the slow adjustment ($\lambda_{\tau_{y,e}} < 0$) to permanent shocks, but decreases the level of employment. Indeed, most of the increase in the UC cycle during the last three recessions can be attributed to adjustments to negative output shocks. Adjustment to labor trend shocks have a smaller contribution towards the overall volatility in employment. Prior to 1984, the overall impact of labor trend shocks was small and positive, and after 1984, the

overall impact of labor trend shocks is small but negative. Even though most of the movements in the UC cycle (and in the overall level of employment) are driven by permanent shocks, the purely transitory shocks still play an important role. In particular, as shown in the left-hand side panels, they explain a lot of the movement during the recovery stages in the post 1984 period, and negative demand shocks cause the cyclical part of employment to be negative for an extended period following the recession.

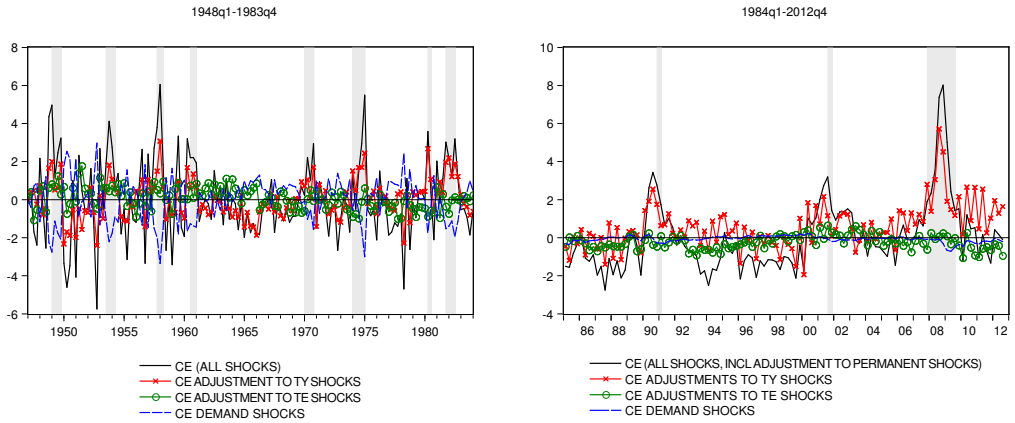

Figure 6: Decomposition of the Path of Employment: Permanent Shocks vs Transitory Shocks

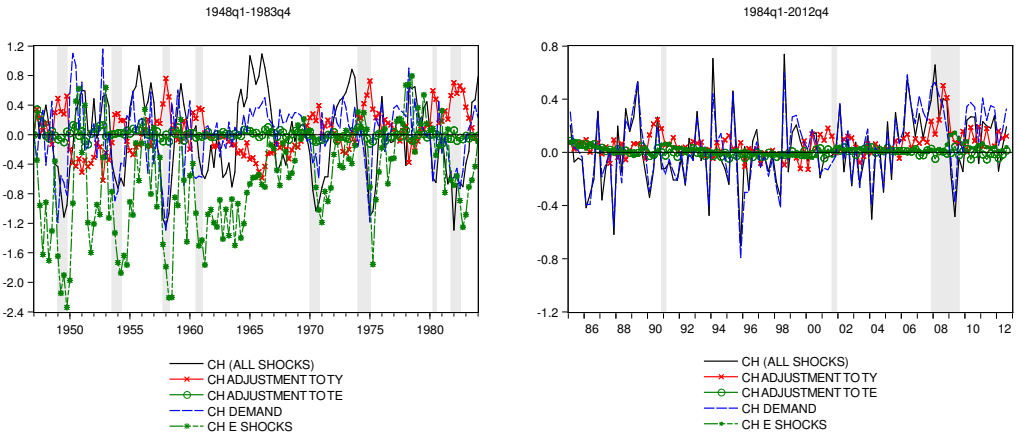

Figure 7: Decomposition of the Path of Hours: Permanent Shocks vs Transitory Shocks