# Appendix for CFL No. 338

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## Figure A1: Share of the labor force, by age

# Figure A2: Unemployment rate, by age



### Figure A3: Share of the labor force aged 25 years and older, by educational attainment



#### Figure A4: Unemployment rate, by educational attainment



#### Figure A5: Phillips curve regression results

	Coefficients
Unemployment gap	-0.230*** (0.066)
$\Delta$ log relative import prices	0.532 (0.482)
$\Delta$ log relative energy prices	0.004 (0.457)
Lagged inflation gap	0.701*** (0.118)
Constant	-0.131*** (0.010)
$R^2$	0.416
Adjustment = $-\alpha/\beta$	-0.570 (0.494)
p-value on adjustment	0.250

Standard errors in parentheses. \*\*\* p < 0.001

Notes: The equation estimated in the regression is  $\pi_t - \pi^e_{t-1} = \alpha + \beta(u_t - \widehat{u_t}) + \gamma \left[ \left( \Delta \ln \frac{p_t^m}{p_t^{GDP}} \right) * s_t^m \right] + \lambda \left[ \left( \Delta \ln \frac{p_t^e}{p_t^f} \right) * s_t^e \right] + \mu(\widehat{\pi}_{t-1} - \pi^e_{t-1}) + \lambda \left[ \left( \Delta \ln \frac{p_t^m}{p_t^f} \right) * s_t^e \right] + \mu(\widehat{\pi}_{t-1} - \pi^e_{t-1}) + \lambda \left[ \left( \Delta \ln \frac{p_t^m}{p_t^f} \right) * s_t^e \right] + \lambda \left[ \left( \Delta \ln \frac{p_t^m}{p_t^f} \right) * s_t^e \right] + \lambda \left[ \left( \Delta \ln \frac{p_t^m}{p_t^f} \right) * s_t^e \right] + \lambda \left[ \left( \Delta \ln \frac{p_t^m}{p_t^f} \right) * s_t^e \right] + \lambda \left[ \left( \Delta \ln \frac{p_t^m}{p_t^f} \right) * s_t^e \right] + \lambda \left[ \left( \Delta \ln \frac{p_t^m}{p_t^f} \right) * s_t^e \right] + \lambda \left[ \left( \Delta \ln \frac{p_t^m}{p_t^f} \right) * s_t^e \right] + \lambda \left[ \left( \Delta \ln \frac{p_t^m}{p_t^f} \right) * s_t^e \right] + \lambda \left[ \left( \Delta \ln \frac{p_t^m}{p_t^f} \right) * s_t^e \right] + \lambda \left[ \left( \Delta \ln \frac{p_t^m}{p_t^f} \right) * s_t^e \right] + \lambda \left[ \left( \Delta \ln \frac{p_t^m}{p_t^f} \right) * s_t^e \right] + \lambda \left[ \left( \Delta \ln \frac{p_t^m}{p_t^f} \right) * s_t^e \right] + \lambda \left[ \left( \Delta \ln \frac{p_t^m}{p_t^f} \right) * s_t^e \right] + \lambda \left[ \left( \Delta \ln \frac{p_t^m}{p_t^f} \right) * s_t^e \right] + \lambda \left[ \left( \Delta \ln \frac{p_t^m}{p_t^f} \right) * s_t^e \right] + \lambda \left[ \left( \Delta \ln \frac{p_t^m}{p_t^f} \right) * s_t^e \right] + \lambda \left[ \left( \Delta \ln \frac{p_t^m}{p_t^f} \right) * s_t^e \right] + \lambda \left[ \left( \Delta \ln \frac{p_t^m}{p_t^f} \right) * s_t^e \right] + \lambda \left[ \left( \Delta \ln \frac{p_t^m}{p_t^f} \right) * s_t^e \right] + \lambda \left[ \left( \Delta \ln \frac{p_t^m}{p_t^f} \right) * s_t^e \right] + \lambda \left[ \left( \Delta \ln \frac{p_t^m}{p_t^f} \right) * s_t^e \right] + \lambda \left[ \left( \Delta \ln \frac{p_t^m}{p_t^f} \right) * s_t^e \right] + \lambda \left[ \left( \Delta \ln \frac{p_t^m}{p_t^f} \right) * s_t^e \right] + \lambda \left[ \left( \Delta \ln \frac{p_t^m}{p_t^f} \right) * s_t^e \right] + \lambda \left[ \left( \Delta \ln \frac{p_t^m}{p_t^f} \right) * s_t^e \right] + \lambda \left[ \left( \Delta \ln \frac{p_t^m}{p_t^f} \right) * s_t^e \right] + \lambda \left[ \left( \Delta \ln \frac{p_t^m}{p_t^f} \right) + \lambda \left[ \left( \Delta \ln \frac{p_t^m}{p_t^m} \right) + \lambda \left[ \left( \Delta \ln \frac{p_t^m}{p_t^m} \right) + \lambda \left[ \left( \Delta \ln \frac{p_t^m}{p_$ 

 $e_t$ , where, for time period t,  $\pi$  is annualized quarterly change in core inflation as measured by the Price Index for Personal Consumption Expenditures (PCE);  $\pi^e$  is the FRB/US model's measure of inflation expectations as explained in note 18 of the main document;  $\hat{\pi}$  is a fourquarter moving average of  $\pi$ ; u is the unemployment rate calculated from the CPS;  $\hat{u}$  is our baseline natural rate; p is a price index from the BEA national income and product accounts of imports (m), gross domestic product (*GDP*), energy (e), or total final sales (f); and s is the share of imports or energy in the economy. The parameters  $\beta$ ,  $\gamma$ ,  $\lambda$ , and  $\mu$  are regression coefficients on the terms they precede, the parameter  $\alpha$  is the constant term, and e is an error term. The regression is run on data from 1982 through 2007. The adjustment factor  $-\alpha/\beta$  is added to our baseline natural rate path (figure 2, second row, of the main document) to get the alternative path described in the sixth row of figure 2.

Sources: Authors' calculations based on data from the U.S. Bureau of Economic Analysis (BEA) and U.S. Bureau of Labor Statistics, from Haver Analytics; U.S. Bureau of Labor Statistics, *Current Population Survey* (CPS); and Board of Governors of the Federal Reserve System, FRB/US model.