## Calculating the impact of Disability on the turn towards Not in the Labor Force (NILF)

One striking result from Conway is the large size of the transition from unemployment to "not in the labor force" (NILF) with the beginning of the UI reform. One referee asked about the extent to which this transition is consistent with an individual's declaration of a health disability.

In the Current Population Survey, respondents indicate whether their declaration of NILF is in fact associated with a disability.

In my estimation of the period 2001q1 to 2019q4, 5 percent of the sample reported themselves unemployed. That group is the sample for this discussion. Of those in the US as a whole who reported themselves unemployed, 18.5 percent reported a transition to NILF in the following month. 57.7 percent reported remaining unemployed in the following month. 23.8 percent reported being employed in the following month.

Within the 18.5 percent, the majority was due to those committed to activities outside the labor force (e.g., unpaid childcare) or to discouraged workers (16.6 percent); disability was given as an explanation by 1.4 percent and retirement was given by 0.5 percent of these respondents.

		0.104			0.014		0.177		0.004	
	Mean	0.184			0.014		0.166		0.004	
		U_to_N			U-to-D		U-to-No		U-to-R	
		NC	US	///	NC	US	NC	US	NC	US
				///						
2012q3		-0.039	-0.018	///	-0.0002	0.0007	-0.035	-0.019	-0.003	0.0003
2012q4		-0.025	-0.007	///	0.0065	0.0007	-0.028	-0.008	-0.0028	0.0001
2013q1		0.065	-0.018	///	0.0179	-0.0008	0.04	-0.016	0.0075	-0.0006
2013q2		-0.024	-0.025	///	0.0045	0.0039	-0.024	-0.03	-0.0045	0.0018
2013q3		0.15	-0.012	///	-0.0135	0.0019	0.144	-0.015	0.0207	0.0013
2013q4		0.097	0.001	///	0.0008	0.0005	0.104	-0.004	-0.0072	0.0042
2014q1		0.029	-0.018	///	0.0421	0.0015	-0.009	-0.022	-0.0051	0.0024
2014q2		0.168	0	///	0.0309	0.0016	0.126	-0.002	0.0112	0.0015

Conway noted that the UI reform in North Carolina was associated with a significant increase in the percent of U individuals reporting a switch to NILF in 2013q3 and 2013q4. As Table A3 indicates, there was a significant increase in 2014q2 as well. To ascertain the source of this significant effect I decomposed the U\_to\_N variable into three parts associated with disability (U\_to\_D), retirement (U\_to\_R) and other reasons (U\_to\_No).

- The U\_to\_D transition was very stable in the rest of the US for the period 2012q3 to 2014q2. There was insignificant deviation of North Carolina behavior relative to that of the rest of the US in 2012 and 2013. In 2014q1 and 2014q2, there was a significant transition of the unemployed choice towards NILF due to disability.
- The U\_to\_R transition was very stable for the rest of the US during this period. In North Carolina, there was one significant uptick in this transition in 2013q3, consistent with the hypothesis that the UI reform pushed some of prime working-age into retirement..
- The U\_to\_No transition in the rest of the US was characterized by small negative

deviations from its mean. The deviation for North Carolina due to UI reform was by contrast very large, positive and significant in 2013q3, 2013q4 and 2014q2. In those three years the U\_to\_No transition represented 96, 107 and 75 percent of the total U\_to\_N transition.

In summary, there is significant evidence of exit from unemployment to NILF-disability reasons in 2014q1 and 2014q2. These do not explain the significant effects in 2013q3 and 2013q4 at the heart of the empirical work of Conway: those are due to respondents giving the NILF-other reasons answer. In 2014q2 the NILF-disability results reinforce the significant NILF-other reasons responses.