Supplemental Online Appendix

Underemployment in the United States and Europe

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Description of U3–U9

The various labor market underutilization variables are explained below. The numbers refer to seasonally adjusted data for July 2018. Numbers in thousands as follows: labor force = 162,245; employment = 155,965; unemployment = 6,280; PTFER = 4,567; discouraged workers = 512, and marginally attached (which includes discouraged workers) = 1,498.

U3 = Total unemployed, as a percentage of the civilian labor force (official unemployment rate) = 6.280/(162.245) = 3.9%.

U4 = Total unemployed plus discouraged workers, as a percentage of the civilian labor force plus discouraged workers = (6,280 + 512)/(162,245 + 512) = 4.2%.

U5 = Total unemployed, plus discouraged workers, plus all other persons marginally attached to the labor force, as a percentage of the civilian labor force, plus all persons marginally attached to the labor force = (6.280 + 1.498)/(162.245 + 1.498) = 4.8%.

U6 = Total unemployed, plus all persons marginally attached to the labor force, plus total employed part time for economic reasons, as a percentage of the civilian labor force, plus all persons marginally attached to the labor force = (6,280 + 1,498 + 4,567)/(162,245 + 1,498) = 7.5%.

U7 = PTFR/Employed = 4,567/155,965 = 2.9%.

U8 = Discouraged/(labor force + discouraged) = 512/(162,245 + 512) = 0.3%.

U9 = Marginally attached–discouraged/(labor force + marginally attached minus discouraged) = 1,498-512/(162,295+1,498-512) = 0.9%.

Persons marginally attached to the labor force are those who currently are neither working nor looking for work but indicate that they want and are available for a job and have looked for work sometime in the past 12 months. Discouraged workers, a subset of the marginally attached, have given a job—market—related reason for not currently looking for work. Persons employed part time for economic reasons are those who want and are available for full-time work but have had to settle for a part-time schedule. See https://www.bls.gov/news.release/empsit.t15.htm.

Table A.1. Increase in Weekly Hours Desired by Those Who Want More Hours (Millions)

	AU	BE	CH	CY	DE	DK	EE	ES	FI	FR	GR	HR	HU
2001	2.6	2.9	7.5	0.6		2.1	1.4	40.2	9.2		8.1		10.0
2002	1.2	2.5	8.5	0.7		1.2	1.1	33.8	8.8		8.3	3.0	8.1
2003	1.2	2.8	7.7	0.8		2.2	1.1	45.5	9.2	53.7	8.2	3.2	10.2
2004	2.2	2.9	7.7	0.9		2.5	0.9	39.1	8.2	58.7	8.0	2.0	9.5
2005	8.3	3.5	7.5	0.7	34.8	1.9	0.6	24.8	7.0	61.0	8.0	1.8	8.7
2006	8.9	3.7	7.6	0.7	41.9	2.8	0.6	24.0	9.2	68.1	8.5	1.8	8.3
2007	9.5	4.0	8.8	0.7	39.2	6.9	0.5	23.2	7.5	73.0	8.8	1.6	8.7
2008	9.6	3.8	8.3	0.9	91.8	7.1	0.7	28.1	7.4	73.1	9.7	1.3	7.2
2009	11.1	3.9	8.8	1.1	99.8	6.8	1.3	33.8	7.7	73.3	11.1	1.4	7.1
2010	10.8	3.9	7.1	1.0	90.3	6.2	1.0	33.3	7.2	69.7	9.8	1.7	7.0
2011	10.3	4.6	7.3	1.1	82.3	5.9	0.9	35.7	7.0	67.9	10.3	1.9	8.3
2012	11.0	4.9	7.7	1.2	78.0	6.0	1.1	41.7	7.5	69.2	11.5	1.7	10.8
2013	11.0	5.0	7.7	1.6	75.0	6.2	1.2	43.4	7.6	85.3	11.7	2.0	12.3
2014	11.3	4.8	8.5	1.8	70.4	6.1	1.3	41.2	7.9	83.8	12.5	2.2	12.3
2015	12.0	4.8	8.4	1.7	66.9	5.7	1.3	36.8	8.0	82.2	13.0	2.7	11.8
2016	12.3	4.7	8.2	1.5	63.4	8.2	1.1	33.4	7.7	77.8	12.7	1.9	9.9
	IE	IS	IT	LT	LU	MT	NL	NO	PL	PT	RO	SE	UK
2001	1.3	0.4		2.3	0.1	MT	21.8	0.9	37.3	7.4	RO	18.6	24.7
2001 2002			IT 6.2			MT		0.9 0.9			RO 19.0		24.7 24.5
	1.3 1.7 1.8	0.4 0.4 0.3	6.2 7.2	2.3 2.1 2.4	0.1 0.1 0.2	MT	21.8 22.4 20.6	0.9 0.9 1.5	37.3 38.3 40.4	7.4 8.9 10.9	19.0 18.2	18.6 17.2 19.3	24.7 24.5 24.7
2002	1.3 1.7	0.4 0.4	6.2	2.3 2.1	0.1 0.1	МТ	21.8 22.4	0.9 0.9	37.3 38.3	7.4 8.9	19.0	18.6 17.2	24.7 24.5
2002 2003	1.3 1.7 1.8 2.3 2.4	0.4 0.4 0.3	6.2 7.2 14.9 11.4	2.3 2.1 2.4	0.1 0.1 0.2 0.2 0.2	MT	21.8 22.4 20.6	0.9 0.9 1.5	37.3 38.3 40.4	7.4 8.9 10.9	19.0 18.2	18.6 17.2 19.3	24.7 24.5 24.7 24.0 24.6
2002 2003 2004	1.3 1.7 1.8 2.3	0.4 0.4 0.3 0.2	6.2 7.2 14.9	2.3 2.1 2.4 1.9	0.1 0.1 0.2 0.2	MT	21.8 22.4 20.6 23.2	0.9 0.9 1.5 1.6	37.3 38.3 40.4 38.2	7.4 8.9 10.9 6.7	19.0 18.2 13.9	18.6 17.2 19.3 18.0	24.7 24.5 24.7 24.0
2002 2003 2004 2005	1.3 1.7 1.8 2.3 2.4 2.5 2.1	0.4 0.4 0.3 0.2 0.2	6.2 7.2 14.9 11.4	2.3 2.1 2.4 1.9 1.8	0.1 0.1 0.2 0.2 0.2	MT	21.8 22.4 20.6 23.2 16.8	0.9 0.9 1.5 1.6 1.4	37.3 38.3 40.4 38.2 37.3	7.4 8.9 10.9 6.7 7.3	19.0 18.2 13.9 14.9	18.6 17.2 19.3 18.0 14.5	24.7 24.5 24.7 24.0 24.6
2002 2003 2004 2005 2006	1.3 1.7 1.8 2.3 2.4 2.5	0.4 0.4 0.3 0.2 0.2	6.2 7.2 14.9 11.4 11.2	2.3 2.1 2.4 1.9 1.8 1.7	0.1 0.1 0.2 0.2 0.2 0.3	MT	21.8 22.4 20.6 23.2 16.8 19.7	0.9 0.9 1.5 1.6 1.4 4.7	37.3 38.3 40.4 38.2 37.3 36.6	7.4 8.9 10.9 6.7 7.3 7.9	19.0 18.2 13.9 14.9 13.5	18.6 17.2 19.3 18.0 14.5 15.2	24.7 24.5 24.7 24.0 24.6 26.8 28.0 30.0
2002 2003 2004 2005 2006 2007	1.3 1.7 1.8 2.3 2.4 2.5 2.1	0.4 0.4 0.3 0.2 0.2	6.2 7.2 14.9 11.4 11.2 10.4	2.3 2.1 2.4 1.9 1.8 1.7	0.1 0.2 0.2 0.2 0.2 0.3 0.3	MT	21.8 22.4 20.6 23.2 16.8 19.7 20.1	0.9 0.9 1.5 1.6 1.4 4.7 4.8	37.3 38.3 40.4 38.2 37.3 36.6 34.7	7.4 8.9 10.9 6.7 7.3 7.9 8.7	19.0 18.2 13.9 14.9 13.5 12.6	18.6 17.2 19.3 18.0 14.5 15.2	24.7 24.5 24.7 24.0 24.6 26.8 28.0
2002 2003 2004 2005 2006 2007 2008	1.3 1.7 1.8 2.3 2.4 2.5 2.1 2.8	0.4 0.4 0.3 0.2 0.2	6.2 7.2 14.9 11.4 11.2 10.4 12.0	2.3 2.1 2.4 1.9 1.8 1.7 1.5	0.1 0.1 0.2 0.2 0.2 0.3 0.3		21.8 22.4 20.6 23.2 16.8 19.7 20.1 20.7	0.9 0.9 1.5 1.6 1.4 4.7 4.8 5.2	37.3 38.3 40.4 38.2 37.3 36.6 34.7 33.6	7.4 8.9 10.9 6.7 7.3 7.9 8.7 9.6	19.0 18.2 13.9 14.9 13.5 12.6 12.4	18.6 17.2 19.3 18.0 14.5 15.2 15.7 15.6	24.7 24.5 24.7 24.0 24.6 26.8 28.0 30.0
2002 2003 2004 2005 2006 2007 2008 2009	1.3 1.7 1.8 2.3 2.4 2.5 2.1 2.8 4.8	0.4 0.4 0.3 0.2 0.2	6.2 7.2 14.9 11.4 11.2 10.4 12.0 13.0	2.3 2.1 2.4 1.9 1.8 1.7 1.5 1.2	0.1 0.1 0.2 0.2 0.2 0.3 0.3 0.3	0.4	21.8 22.4 20.6 23.2 16.8 19.7 20.1 20.7 21.9	0.9 0.9 1.5 1.6 1.4 4.7 4.8 5.2 5.3	37.3 38.3 40.4 38.2 37.3 36.6 34.7 33.6 34.7	7.4 8.9 10.9 6.7 7.3 7.9 8.7 9.6 8.6	19.0 18.2 13.9 14.9 13.5 12.6 12.4 12.8	18.6 17.2 19.3 18.0 14.5 15.2 15.7 15.6 16.6	24.7 24.5 24.7 24.0 24.6 26.8 28.0 30.0 36.2
2002 2003 2004 2005 2006 2007 2008 2009 2010	1.3 1.7 1.8 2.3 2.4 2.5 2.1 2.8 4.8 4.5	0.4 0.4 0.3 0.2 0.2	6.2 7.2 14.9 11.4 11.2 10.4 12.0 13.0 12.5	2.3 2.1 2.4 1.9 1.8 1.7 1.5 1.2 1.4	0.1 0.1 0.2 0.2 0.2 0.3 0.3 0.3 0.4 0.3	0.4 0.5	21.8 22.4 20.6 23.2 16.8 19.7 20.1 20.7 21.9 19.3	0.9 0.9 1.5 1.6 1.4 4.7 4.8 5.2 5.3 4.9	37.3 38.3 40.4 38.2 37.3 36.6 34.7 33.6 34.7 33.9	7.4 8.9 10.9 6.7 7.3 7.9 8.7 9.6 8.6 7.8	19.0 18.2 13.9 14.9 13.5 12.6 12.4 12.8 12.8	18.6 17.2 19.3 18.0 14.5 15.2 15.7 15.6 16.6 15.1	24.7 24.5 24.7 24.0 24.6 26.8 28.0 30.0 36.2 39.6
2002 2003 2004 2005 2006 2007 2008 2009 2010 2011	1.3 1.7 1.8 2.3 2.4 2.5 2.1 2.8 4.8 4.5 5.0	0.4 0.4 0.3 0.2 0.2	6.2 7.2 14.9 11.4 11.2 10.4 12.0 13.0 12.5 11.6	2.3 2.1 2.4 1.9 1.8 1.7 1.5 1.2 1.4 1.4	0.1 0.2 0.2 0.2 0.3 0.3 0.3 0.4 0.3 0.3	0.4 0.5 0.5	21.8 22.4 20.6 23.2 16.8 19.7 20.1 20.7 21.9 19.3 17.9	0.9 0.9 1.5 1.6 1.4 4.7 4.8 5.2 5.3 4.9	37.3 38.3 40.4 38.2 37.3 36.6 34.7 33.6 34.7 33.9 33.9	7.4 8.9 10.9 6.7 7.3 7.9 8.7 9.6 8.6 7.8 19.5	19.0 18.2 13.9 14.9 13.5 12.6 12.4 12.8 12.8 11.8	18.6 17.2 19.3 18.0 14.5 15.2 15.7 15.6 16.6 15.1 15.4	24.7 24.5 24.7 24.0 24.6 26.8 28.0 30.0 36.2 39.6 40.9
2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012	1.3 1.7 1.8 2.3 2.4 2.5 2.1 2.8 4.8 4.5 5.0 5.4	0.4 0.4 0.3 0.2 0.2	6.2 7.2 14.9 11.4 11.2 10.4 12.0 13.0 12.5 11.6 16.3	2.3 2.1 2.4 1.9 1.8 1.7 1.5 1.2 1.4 1.4 1.5	0.1 0.2 0.2 0.2 0.3 0.3 0.4 0.3 0.3 0.4	0.4 0.5 0.5 0.6	21.8 22.4 20.6 23.2 16.8 19.7 20.1 20.7 21.9 19.3 17.9 19.0	0.9 0.9 1.5 1.6 1.4 4.7 4.8 5.2 5.3 4.9 4.9 5.2	37.3 38.3 40.4 38.2 37.3 36.6 34.7 33.6 34.7 33.9 33.9 40.3	7.4 8.9 10.9 6.7 7.3 7.9 8.7 9.6 8.6 7.8 19.5 20.5	19.0 18.2 13.9 14.9 13.5 12.6 12.4 12.8 12.8 11.8	18.6 17.2 19.3 18.0 14.5 15.2 15.7 15.6 16.6 15.1 15.4 16.1	24.7 24.5 24.7 24.0 24.6 26.8 28.0 30.0 36.2 39.6 40.9 43.1
2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013	1.3 1.7 1.8 2.3 2.4 2.5 2.1 2.8 4.8 4.5 5.0 5.4 5.6	0.4 0.4 0.3 0.2 0.2 0.2 0.2	6.2 7.2 14.9 11.4 11.2 10.4 12.0 13.0 12.5 11.6 16.3 16.6	2.3 2.1 2.4 1.9 1.8 1.7 1.5 1.2 1.4 1.4 1.5 1.5	0.1 0.2 0.2 0.2 0.3 0.3 0.4 0.3 0.4 0.4	0.4 0.5 0.5 0.6 0.5	21.8 22.4 20.6 23.2 16.8 19.7 20.1 20.7 21.9 19.3 17.9 19.0 21.5	0.9 0.9 1.5 1.6 1.4 4.7 4.8 5.2 5.3 4.9 4.9 5.2 5.8	37.3 38.3 40.4 38.2 37.3 36.6 34.7 33.6 34.7 33.9 40.3 44.2	7.4 8.9 10.9 6.7 7.3 7.9 8.7 9.6 8.6 7.8 19.5 20.5	19.0 18.2 13.9 14.9 13.5 12.6 12.4 12.8 12.8 11.8 11.4 10.6	18.6 17.2 19.3 18.0 14.5 15.2 15.7 15.6 16.6 15.1 15.4 16.1	24.7 24.5 24.7 24.0 24.6 26.8 28.0 30.0 36.2 39.6 40.9 43.1 43.8

Table A.2. Reduction in Weekly Hours Desired by Those Who Want Fewer Hours (Millions)

	AU	BE	СН	CY	DE	DK	EE	ES	FI	FR	GR	HR	HU
2001	-4.4	-0.5	-15.6	-0.7		-0.4	-1.2	-3.2	-6.1		-10.3		-4.7
2002	-1.7	-0.5	-14.7	-0.8		-0.1	-1.0	-1.5	-6.7		-11.2	-0.3	-4.8
2003	-1.5	-0.2	-15.2	-0.9		-0.4	-1.0	-1.6	-6.1	-15.4	-11.2	-0.5	-4.7
2004	0.0	-0.4	-15.3	-1.0		-0.4	-1.0	-4.3	-6.4	-15.4	-11.9	0.0	-5.4
2005	-8.7	-0.2	-15.2	-0.9	-3.4	-0.5	-0.8	-16.3	-6.6	-13.4	-10.3	0.0	-4.0
2006	-8.8	-0.2	-15.6	-0.8	-1.4	-0.5	-0.9	-19.2	-6.3	-15.3	-9.9	0.0	-3.4
2007	-8.8	-0.1	-15.8	-0.8	-1.0	-6.8	-0.8	-18.5	-6.7	-15.6	-9.3	0.0	-3.4
2008	-8.6	-0.1	-16.5	-0.4	-53.2	-6.5	-0.6	-13.7	-5.6	-15.4	-8.9	0.0	-3.3
2009	-8.0	-0.1	-15.7	-0.4	-42.9	-5.4	-0.5	-9.5	-4.6	-14.9	-8.6	0.0	-2.8
2010	-8.6	-0.1	-18.6	-0.4	-41.7	-4.9	-0.7	-9.0	-4.5	-15.7	-8.2	0.0	-2.8
2011	-8.6	-0.1	-18.7	-0.3	-39.8	-5.0	-0.7	-8.3	-4.9	-15.8	-7.1	0.0	-2.5
2012	-8.3	-0.1	-18.0	-0.3	-38.5	-4.7	-0.7	-7.1	-4.8	-13.7	-6.4	0.0	-2.1
2013	-8.1	-0.1	-19.0	-0.3	-36.7	-4.7	-0.7	-6.9	-4.8	-16.4	-6.4	0.0	-2.1
2014	-8.0	-0.1	-18.9	-0.3	-36.5	-4.4	-0.7	-6.2	-4.6	-16.8	-6.3	0.0	-2.1
2015	-7.7	-0.1	-19.4	-0.3	-35.4	-4.3	-0.7	-6.4	-4.3	-15.9	-6.5	0.0	-2.2
2016	-8.3	0.0	-20.1	-0.3	-37.4	-7.8	-0.9	-7.2	-5.0	-17.4	-6.6	0.0	-2.7
	IE	IS	IT	LT	LU	MT	NL	NO	PL	PT	RO	SE	UK
2001	-0.6	-0.4	IT	-2.8	-0.3	MT	-13.6	-0.1	-39.2	-3.2		-5.2	-31.2
2002	-0.6 -0.9	$-0.4 \\ -0.4$	IT	-2.8 -2.3	-0.3 -0.3	MT	-13.6 -14.2	-0.1 -0.1	-39.2 -36.2	-3.2 -2.6	-15.3	-5.2 -5.4	−31.2 −31.6
2002 2003	$-0.6 \\ -0.9 \\ -0.8$	-0.4 -0.4 -0.2		-2.8 -2.3 -1.8	-0.3 -0.3 -0.1	MT	-13.6 -14.2 -12.8	-0.1 -0.1 -0.1	-39.2 -36.2 -30.0	-3.2 -2.6 -1.9	-15.3 -14.7	-5.2 -5.4 -5.0	-31.2 -31.6 -32.6
2002 2003 2004	-0.6 -0.9 -0.8 -1.1	-0.4 -0.4 -0.2 -0.2	-17.3	-2.8 -2.3 -1.8 -1.7	-0.3 -0.3 -0.1 -0.2	MT	-13.6 -14.2 -12.8 -14.3	-0.1 -0.1 -0.1 -0.1	-39.2 -36.2 -30.0 -29.5	-3.2 -2.6 -1.9 -2.5	-15.3 -14.7 -14.7	-5.2 -5.4 -5.0 -5.2	-31.2 -31.6 -32.6 -32.1
2002 2003 2004 2005	-0.6 -0.9 -0.8 -1.1 -1.4	-0.4 -0.4 -0.2 -0.2 -0.2	-17.3 -10.2	-2.8 -2.3 -1.8 -1.7 -1.5	-0.3 -0.3 -0.1 -0.2 -0.2	MT	-13.6 -14.2 -12.8 -14.3 -15.3	$ -0.1 \\ -0.1 \\ -0.1 \\ -0.1 \\ -0.1 $	-39.2 -36.2 -30.0 -29.5 -26.5	-3.2 -2.6 -1.9 -2.5 -1.7	-15.3 -14.7 -14.7 -10.9	-5.2 -5.4 -5.0 -5.2 -8.5	-31.2 -31.6 -32.6 -32.1 -30.4
2002 2003 2004 2005 2006	-0.6 -0.9 -0.8 -1.1 -1.4 -1.3	-0.4 -0.4 -0.2 -0.2 -0.2 -0.2	-17.3 -10.2 -10.6	-2.8 -2.3 -1.8 -1.7 -1.5 -1.4	-0.3 -0.3 -0.1 -0.2 -0.2 -0.2	MT	-13.6 -14.2 -12.8 -14.3 -15.3 -17.2	$ -0.1 \\ -0.1 \\ -0.1 \\ -0.1 \\ -0.1 \\ -0.1 \\ -0.1 $	-39.2 -36.2 -30.0 -29.5 -26.5 -27.8	-3.2 -2.6 -1.9 -2.5 -1.7 -2.0	-15.3 -14.7 -14.7 -10.9 -9.4	-5.2 -5.4 -5.0 -5.2 -8.5 -8.2	-31.2 -31.6 -32.6 -32.1 -30.4 -29.9
2002 2003 2004 2005	-0.6 -0.9 -0.8 -1.1 -1.4 -1.3 -1.4	-0.4 -0.4 -0.2 -0.2 -0.2	-17.3 -10.2 -10.6 -9.9	-2.8 -2.3 -1.8 -1.7 -1.5 -1.4 -1.5	-0.3 -0.3 -0.1 -0.2 -0.2 -0.2 -0.2	MT	-13.6 -14.2 -12.8 -14.3 -15.3 -17.2 -17.7	-0.1 -0.1 -0.1 -0.1 -0.1 -5.1 -4.9	-39.2 -36.2 -30.0 -29.5 -26.5	-3.2 -2.6 -1.9 -2.5 -1.7 -2.0 -2.2	-15.3 -14.7 -14.7 -10.9 -9.4 -8.9	-5.2 -5.4 -5.0 -5.2 -8.5	-31.2 -31.6 -32.6 -32.1 -30.4
2002 2003 2004 2005 2006	-0.6 -0.9 -0.8 -1.1 -1.4 -1.3 -1.4 -1.0	-0.4 -0.4 -0.2 -0.2 -0.2 -0.2	-17.3 -10.2 -10.6 -9.9 -8.8	-2.8 -2.3 -1.8 -1.7 -1.5 -1.4 -1.5 -1.5	-0.3 -0.3 -0.1 -0.2 -0.2 -0.2	MT	-13.6 -14.2 -12.8 -14.3 -15.3 -17.2 -17.7 -20.4	-0.1 -0.1 -0.1 -0.1 -0.1 -5.1 -4.9 -5.3	-39.2 -36.2 -30.0 -29.5 -26.5 -27.8 -28.1 -26.1	-3.2 -2.6 -1.9 -2.5 -1.7 -2.0 -2.2 -2.0	-15.3 -14.7 -14.7 -10.9 -9.4	-5.2 -5.4 -5.0 -5.2 -8.5 -8.2	-31.2 -31.6 -32.6 -32.1 -30.4 -29.9
2002 2003 2004 2005 2006 2007	-0.6 -0.9 -0.8 -1.1 -1.4 -1.3 -1.4	-0.4 -0.4 -0.2 -0.2 -0.2 -0.2 -0.2	-17.3 -10.2 -10.6 -9.9	-2.8 -2.3 -1.8 -1.7 -1.5 -1.4 -1.5	-0.3 -0.3 -0.1 -0.2 -0.2 -0.2 -0.2	MT −0.1	-13.6 -14.2 -12.8 -14.3 -15.3 -17.2 -17.7	-0.1 -0.1 -0.1 -0.1 -0.1 -5.1 -4.9	-39.2 -36.2 -30.0 -29.5 -26.5 -27.8 -28.1	-3.2 -2.6 -1.9 -2.5 -1.7 -2.0 -2.2 -2.0 -1.8	-15.3 -14.7 -14.7 -10.9 -9.4 -8.9 -8.2 -7.0	-5.2 -5.4 -5.0 -5.2 -8.5 -8.2 -7.8	-31.2 -31.6 -32.6 -32.1 -30.4 -29.9 -30.8 -29.2 -27.2
2002 2003 2004 2005 2006 2007 2008	-0.6 -0.9 -0.8 -1.1 -1.4 -1.3 -1.4 -1.0	-0.4 -0.4 -0.2 -0.2 -0.2 -0.2 -0.2 0.0	-17.3 -10.2 -10.6 -9.9 -8.8	-2.8 -2.3 -1.8 -1.7 -1.5 -1.4 -1.5 -1.5	-0.3 -0.3 -0.1 -0.2 -0.2 -0.2 -0.2 -0.2		-13.6 -14.2 -12.8 -14.3 -15.3 -17.2 -17.7 -20.4	-0.1 -0.1 -0.1 -0.1 -0.1 -5.1 -4.9 -5.3	-39.2 -36.2 -30.0 -29.5 -26.5 -27.8 -28.1 -26.1	-3.2 -2.6 -1.9 -2.5 -1.7 -2.0 -2.2 -2.0	-15.3 -14.7 -14.7 -10.9 -9.4 -8.9 -8.2	-5.2 -5.4 -5.0 -5.2 -8.5 -8.2 -7.8 -8.0	-31.2 -31.6 -32.6 -32.1 -30.4 -29.9 -30.8 -29.2
2002 2003 2004 2005 2006 2007 2008 2009	-0.6 -0.9 -0.8 -1.1 -1.4 -1.3 -1.4 -1.0 -0.7	-0.4 -0.4 -0.2 -0.2 -0.2 -0.2 -0.2 0.0 0.0	-17.3 -10.2 -10.6 -9.9 -8.8 -5.5	-2.8 -2.3 -1.8 -1.7 -1.5 -1.4 -1.5 -1.5 -1.0	-0.3 -0.3 -0.1 -0.2 -0.2 -0.2 -0.2 -0.2 -0.6	-0.1	-13.6 -14.2 -12.8 -14.3 -15.3 -17.2 -17.7 -20.4 -20.3	-0.1 -0.1 -0.1 -0.1 -0.1 -5.1 -4.9 -5.3 -4.6	-39.2 -36.2 -30.0 -29.5 -26.5 -27.8 -28.1 -26.1 -24.0 -22.7 -21.0	-3.2 -2.6 -1.9 -2.5 -1.7 -2.0 -2.2 -2.0 -1.8	-15.3 -14.7 -14.7 -10.9 -9.4 -8.9 -8.2 -7.0	-5.2 -5.4 -5.0 -5.2 -8.5 -8.2 -7.8 -8.0 -7.5	-31.2 -31.6 -32.6 -32.1 -30.4 -29.9 -30.8 -29.2 -27.2 -28.8 -27.5
2002 2003 2004 2005 2006 2007 2008 2009 2010	-0.6 -0.9 -0.8 -1.1 -1.4 -1.3 -1.4 -1.0 -0.7 -0.6	-0.4 -0.4 -0.2 -0.2 -0.2 -0.2 -0.2 0.0 0.0	-17.3 -10.2 -10.6 -9.9 -8.8 -5.5 -4.4 -3.9 -3.7	-2.8 -2.3 -1.8 -1.7 -1.5 -1.4 -1.5 -1.5 -1.0 -0.9	-0.3 -0.3 -0.1 -0.2 -0.2 -0.2 -0.2 -0.2 -0.6 -0.6	-0.1 -0.1	-13.6 -14.2 -12.8 -14.3 -15.3 -17.2 -17.7 -20.4 -20.3 -17.9	-0.1 -0.1 -0.1 -0.1 -0.1 -5.1 -4.9 -5.3 -4.6 -4.5	-39.2 -36.2 -30.0 -29.5 -26.5 -27.8 -28.1 -26.1 -24.0 -22.7 -21.0 -20.5	-3.2 -2.6 -1.9 -2.5 -1.7 -2.0 -2.2 -2.0 -1.8 -1.7	-15.3 -14.7 -14.7 -10.9 -9.4 -8.9 -8.2 -7.0 -6.0	-5.2 -5.4 -5.0 -5.2 -8.5 -8.2 -7.8 -8.0 -7.5 -8.2	-31.2 -31.6 -32.6 -32.1 -30.4 -29.9 -30.8 -29.2 -27.2 -28.8 -27.5 -28.0
2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013	-0.6 -0.9 -0.8 -1.1 -1.4 -1.3 -1.4 -1.0 -0.7 -0.6 -0.7 -0.8 -1.0	-0.4 -0.4 -0.2 -0.2 -0.2 -0.2 -0.2 0.0 0.0 0.0 0.0 0.0	-17.3 -10.2 -10.6 -9.9 -8.8 -5.5 -4.4 -3.9 -3.7 -3.7	-2.8 -2.3 -1.8 -1.7 -1.5 -1.4 -1.5 -1.5 -1.0 -0.9 -0.8 -0.8	-0.3 -0.3 -0.1 -0.2 -0.2 -0.2 -0.2 -0.6 -0.6 -0.6 -0.7 -0.7	-0.1 -0.1 -0.1	-13.6 -14.2 -12.8 -14.3 -15.3 -17.2 -17.7 -20.4 -20.3 -17.9 -17.0 -16.9 -17.6	-0.1 -0.1 -0.1 -0.1 -0.1 -5.1 -4.9 -5.3 -4.6 -4.5 -4.5 -4.8	-39.2 -36.2 -30.0 -29.5 -26.5 -27.8 -28.1 -26.1 -24.0 -22.7 -21.0 -20.5 -19.0	-3.2 -2.6 -1.9 -2.5 -1.7 -2.0 -2.2 -2.0 -1.8 -1.7 -1.9 -1.6 -1.8	-15.3 -14.7 -14.7 -10.9 -9.4 -8.9 -8.2 -7.0 -6.0 -6.7 -7.0 -6.7	-5.2 -5.4 -5.0 -5.2 -8.5 -8.2 -7.8 -8.0 -7.5 -8.2 -8.0 -8.0 -8.3	-31.2 -31.6 -32.6 -32.1 -30.4 -29.9 -30.8 -29.2 -27.2 -28.8 -27.5 -28.0 -28.2
2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012	-0.6 -0.9 -0.8 -1.1 -1.4 -1.3 -1.4 -1.0 -0.7 -0.6 -0.7 -0.8	-0.4 -0.4 -0.2 -0.2 -0.2 -0.2 -0.2 0.0 0.0 0.0 0.0	-17.3 -10.2 -10.6 -9.9 -8.8 -5.5 -4.4 -3.9 -3.7 -3.7	-2.8 -2.3 -1.8 -1.7 -1.5 -1.4 -1.5 -1.5 -1.0 -0.9 -0.8 -0.8	-0.3 -0.3 -0.1 -0.2 -0.2 -0.2 -0.2 -0.6 -0.6 -0.6 -0.7	-0.1 -0.1 -0.1 -0.1	-13.6 -14.2 -12.8 -14.3 -15.3 -17.2 -17.7 -20.4 -20.3 -17.9 -17.0 -16.9 -17.6 -18.1	-0.1 -0.1 -0.1 -0.1 -0.1 -5.1 -4.9 -5.3 -4.6 -4.5 -4.5 -4.8	-39.2 -36.2 -30.0 -29.5 -26.5 -27.8 -28.1 -26.1 -24.0 -22.7 -21.0 -20.5 -19.0 -18.9	-3.2 -2.6 -1.9 -2.5 -1.7 -2.0 -2.2 -2.0 -1.8 -1.7 -1.9 -1.6 -1.8 -2.1	-15.3 -14.7 -14.7 -10.9 -9.4 -8.9 -8.2 -7.0 -6.0 -6.7 -7.0	-5.2 -5.4 -5.0 -5.2 -8.5 -8.2 -7.8 -8.0 -7.5 -8.2 -8.0 -8.0	-31.2 -31.6 -32.6 -32.1 -30.4 -29.9 -30.8 -29.2 -27.2 -28.8 -27.5 -28.0
2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015	-0.6 -0.9 -0.8 -1.1 -1.4 -1.3 -1.4 -1.0 -0.7 -0.6 -0.7 -0.8 -1.0 -0.9 -0.8	-0.4 -0.4 -0.2 -0.2 -0.2 -0.2 -0.2 0.0 0.0 0.0 0.0 0.0 -0.2 -0.2	-17.3 -10.2 -10.6 -9.9 -8.8 -5.5 -4.4 -3.9 -3.7 -3.7 -3.9 -4.2	-2.8 -2.3 -1.8 -1.7 -1.5 -1.4 -1.5 -1.5 -1.0 -0.9 -0.8 -0.8	-0.3 -0.3 -0.1 -0.2 -0.2 -0.2 -0.2 -0.6 -0.6 -0.6 -0.7 -0.7 -0.8 -1.1	-0.1 -0.1 -0.1 -0.1 -0.1	-13.6 -14.2 -12.8 -14.3 -15.3 -17.2 -17.7 -20.4 -20.3 -17.9 -17.0 -16.9 -17.6 -18.1 -18.3	-0.1 -0.1 -0.1 -0.1 -0.1 -5.1 -4.9 -5.3 -4.6 -4.5 -4.5 -4.8 -4.8 -4.5 -4.7	-39.2 -36.2 -30.0 -29.5 -26.5 -27.8 -28.1 -26.1 -24.0 -22.7 -21.0 -20.5 -19.0 -18.9 -18.9	-3.2 -2.6 -1.9 -2.5 -1.7 -2.0 -2.2 -2.0 -1.8 -1.7 -1.9 -1.6 -1.8 -2.1 -2.2	-15.3 -14.7 -14.7 -10.9 -9.4 -8.9 -8.2 -7.0 -6.0 -6.7 -7.0 -6.7 -5.5 -5.1	-5.2 -5.4 -5.0 -5.2 -8.5 -8.2 -7.8 -8.0 -7.5 -8.2 -8.0 -8.3 -8.4 -8.5	-31.2 -31.6 -32.6 -32.1 -30.4 -29.9 -30.8 -29.2 -27.2 -28.8 -27.5 -28.0 -28.2 -30.4 -32.0
2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014	-0.6 -0.9 -0.8 -1.1 -1.4 -1.3 -1.4 -1.0 -0.7 -0.6 -0.7 -0.8 -1.0 -0.9	-0.4 -0.4 -0.2 -0.2 -0.2 -0.2 -0.2 0.0 0.0 0.0 0.0 0.0 -0.2	-17.3 -10.2 -10.6 -9.9 -8.8 -5.5 -4.4 -3.9 -3.7 -3.7	-2.8 -2.3 -1.8 -1.7 -1.5 -1.4 -1.5 -1.5 -1.0 -0.9 -0.8 -0.8 -0.8	-0.3 -0.3 -0.1 -0.2 -0.2 -0.2 -0.2 -0.6 -0.6 -0.6 -0.7 -0.7 -0.8	-0.1 -0.1 -0.1 -0.1 -0.1 -0.1	-13.6 -14.2 -12.8 -14.3 -15.3 -17.2 -17.7 -20.4 -20.3 -17.9 -17.0 -16.9 -17.6 -18.1	-0.1 -0.1 -0.1 -0.1 -0.1 -5.1 -4.9 -5.3 -4.6 -4.5 -4.5 -4.8 -4.8 -4.5	-39.2 -36.2 -30.0 -29.5 -26.5 -27.8 -28.1 -26.1 -24.0 -22.7 -21.0 -20.5 -19.0 -18.9	-3.2 -2.6 -1.9 -2.5 -1.7 -2.0 -2.2 -2.0 -1.8 -1.7 -1.9 -1.6 -1.8 -2.1	-15.3 -14.7 -14.7 -10.9 -9.4 -8.9 -8.2 -7.0 -6.0 -6.7 -7.0 -6.7 -5.5	-5.2 -5.4 -5.0 -5.2 -8.5 -8.2 -7.8 -8.0 -7.5 -8.2 -8.0 -8.0 -8.3 -8.4	-31.2 -31.6 -32.6 -32.1 -30.4 -29.9 -30.8 -29.2 -27.2 -28.8 -27.5 -28.0 -28.2 -30.4

Notes: Key to Country Codes: AU = Austria; BE = Belgium, CH = Switzerland, CY = Cyprus, DE = Germany, DK = Denmark, EE = Estonia, ES = Spain, FI = Finland, FR = France, GR = Greece, HR = Croatia, HU = Hungary, IE = Ireland, IS = Iceland, IT = Italy, LT = Latvia, LU = Luxembourg, MT = Malta, NL = Netherlands, NO = Norway, PL = Poland, PT = Portugal, RO = Romania, SE = Sweden, UK = United Kingdom.

Table A.3. ILO Unemployment Rates

GEO/TIME	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Austria	4.0	4.9	4.8	5.8	5.6	5.3	4.9	4.1	5.3	4.8	4.6	4.9	5.4	5.6	5.7	6.0	5.5
Belgium	6.2	6.9	7.7	7.4	8.5	8.3	7.5	7.0	7.9	8.3	7.2	7.6	8.4	8.5	8.5	7.8	7.1
Switzerland	2.5	2.9	4.1	4.3	4.5	4.0	3.7	3.4	4.1	4.8	4.4	4.5	4.8	4.9	4.8	5.0	4.8
Cyprus	4.0	3.3	4.2	4.4	5.3	4.6	3.9	3.7	5.4	6.3	7.9	11.9	15.9	16.1	15.0	13.0	11.1
Germany	7.8	8.5	9.8	10.7	11.2	10.3	8.7	7.5	7.8	7.0	5.8	5.4	5.2	5.0	4.6	4.1	3.8
Denmark	4.2	4.3	5.4	5.2	4.8	3.9	3.8	3.4	6.0	7.5	7.6	7.5	7.0	6.6	6.2	6.2	5.7
Estonia	13.1	10.0	11.3	10.2	8.0	5.9	4.6	5.5	13.5	16.7	12.3	10.0	8.6	7.4	6.2	6.8	5.8
Spain	10.4	11.2	11.3	11.1	9.2	8.5	8.2	11.3	17.9	19.9	21.4	24.8	26.1	24.5	22.1	19.6	17.2
Finland	10.3	10.4	10.5	10.4	8.4	7.7	6.9	6.4	8.2	8.4	7.8	7.7	8.2	8.7	9.4	8.8	8.6
France	8.6	8.7	8.3	8.9	8.5	8.5	7.7	7.1	8.7	8.9	8.8	9.4	9.9	10.3	10.4	10.1	9.4
Greece	10.5	10.0	9.4	10.3	10.0	9.0	8.4	7.8	9.6	12.7	17.9	24.5	27.5	26.5	24.9	23.6	21.5
Croatia		15.1	14.0	13.7	12.7	11.2	9.9	8.6	9.2	11.7	13.7	16.0	17.3	17.3	16.2	13.1	11.2
Hungary	5.7	5.6	5.8	5.8	7.2	7.5	7.4	7.8	10.0	11.2	11.0	11.0	10.2	7.7	6.8	5.1	4.2
Ireland	3.7	4.2	4.5	4.5	4.4	4.4	5.0	6.8	12.6	14.6	15.4	15.5	13.8	11.9	9.9	8.4	6.7
Iceland	1.9	3.0	4.0	4.0	2.5	2.8	2.3	2.9	7.2	7.6	7.0	6.0	5.4	4.9	4.0	3.0	2.7
Italy	9.6	9.2	8.9	7.9	7.7	6.8	6.1	6.7	7.8	8.4	8.4	10.7	12.2	12.7	11.9	11.7	11.2
Latvia	13.9	13.8	12.1	11.7	10.0	7.0	6.1	7.7	17.5	19.5	16.2	15.0	11.9	10.8	9.9	9.6	8.7
Lithuania	1.8	2.6	3.7	5.1	4.5	4.7	4.1	5.1	5.1	4.4	4.9	5.1	5.9	5.9	6.7	6.3	5.5
Malta	7.1	6.9	7.5	7.3	6.9	6.8	6.5	6.0	6.9	6.9	6.4	6.3	6.4	5.8	5.4	4.7	4.0
Netherlands	2.1	2.6	3.6	4.7	4.7	3.9	3.2	2.8	3.4	4.5	5.0	5.8	7.3	7.4	6.9	6.0	4.9
Norway	3.7	4.0	4.2	4.3	4.4	3.4	2.5	2.5	3.1	3.5	3.2	3.1	3.4	3.5	4.3	4.7	4.2
Poland	18.4	20.0	19.4	19.1	17.8	13.9	9.6	7.1	8.2	9.7	9.7	10.1	10.3	9.0	7.5	6.2	4.9
Portugal	3.9	4.6	6.2	6.4	7.7	7.8	8.1	7.7	9.6	11.0	12.9	15.8	16.4	14.1	12.6	11.2	9.0
Romania	6.7	8.3	6.9	7.7	7.2	7.3	6.4	5.8	6.9	7.0	7.2	6.8	7.1	6.8	6.8	5.9	4.9
Sweden	4.7	5.0	5.6	6.7	7.8	7.1	6.2	6.2	8.4	8.6	7.8	8.0	8.1	8.0	7.4	7.0	6.7
UK	4.7	5.0	4.8	4.6	4.8	5.4	5.3	5.6	7.6	7.8	8.1	7.9	7.5	6.1	5.3	4.8	4.4

Source: Eurostat, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Unemployment statistics.

Table A.4. State Level Weekly Wage Equations with Various Measures of Labor Market Slack, 1980–2017, with Robust Standard Errors

a) Unemploy	yment rate and in	woluntary nar	time						
a) Offeniploy	1980–	• 1	1980–2007	2008–2017	1980–	2017	1980–2007	2008–20)17
$\text{Log }W_{t-1}$			263 (27.06)	.3257 (5.84)	.7125 (24		7049 (25.55)	.3199 (6.0	
$Log U3_t$	0312	` /	295 (6.62)	0377 (2.81)		/	()		, ,
Log PTFER		,	,	,	0307 (8.	21)	0309 (7.90)	0338 (4,1	15)
N	1938		1428	510	1938	•	1428	510	Í
R^2 within	.9971	.9	959	.9237	.9972	•.	9960	.9250	
R^2 between	.9518	.9	576	.5553	.9696	•.	9664	.6595	
R^2 overall	.9927	.9	898	.6412	.9941	•	9908	.7077	
b) Using alte	ernative measure		2002 2017	2002 2017	2000 2017	2000	2017 2000	2017 2000	2017
T 117	2003–2017	2003–2017	2003–2017	2003–2017	2008–2017				-2017
$Log W_{t-1}$	` /	` ′	.4641 (11.98)	.4632 (11.91)	` ′	`	.99) .3031 (5.93) .3010	(5.78)
$Log U6_t$	0490 (5.40)	` /	0435 (6.49)		0550 (3.47)		.04)0410 (3	2 2 2) 0 / 2 7	(2.20)
$Log U7_t$ $Log U3_t$		0333 (2.94)	0433 (0.49)	0373 (3.08) 0113 (1.35)		04/6 (4	,	1.03)0427 1.03)0165	` /
$Log US_t$ $Log U8_t$				0006 (0.34)			0144 ((1.29) (1.88)
$Log U0_t$ $Log U9_t$.0030 (0.69)					(0.25)
Log On				.0030 (0.07)				.0011	(0.23)
N	765	765	765	765	510	510	510	51	0
R^2 within	.9710	.9714	.9714	.9714	.9255	.9264	.9267	.9270	
R^2 between	.8791	.9014	.9071	.8971	.5594	.6587	.5986	.6037	
R^2 overall	.9135	.9249	.9280	.9927	.6403	.7069	.6684	.6716	
c) Weekly w	ages and change					2017	2000 201	7 2006	2017
I W		80–2017	1980–2007	2008–20		03-2017	2008–201		3–2017
$Log W_{t-1}$		513 (17.56)	.6011 (12.88)	•	*) (12.09) 1 (1.15)	.3105 (6.09	/	(6.15)
$Log U3_t$)86 (1.67) 152 (5.24)	0022 (0.36)	`	,	1 (1.15)	0157 (1.12)	
Log PTFER	02	252 (5.24)	0236 (4.23)	0246 (2.9	U)				

Log U7 _t Log Home _t –Log Ho	ome _{t-1} .1270 (3.49)	.1002 (2.44)	.1724 (2.90)	0363 (4.90) .1314 (2.87)	0384 (3.17) .1759 (3.15)	0457 (3.93) .1728 (3.01)
N	1,683	1,173	510	765	510	510
R^2 within	.9960	.9939	.9276	.9718	.9283	.9280
R^2 between	.9578	.9504	.5382	.9001	.5824	.6485
R^2 overall	.9894	.9810	.6288	.9245	.6579	.7005

Notes: All equations include a full set of year and state effects plus 21 personal controls—15 education variables, age, gender, and four race variables. U3 is the unemployment rate. PTFER is part time for economic reasons as a percentage of employment calculated from the MORG files (weighted using variable = weight). U7 is involuntary PT as a percentage of the civilian labor force. U8 is discouraged workers as a percentage of the civilian labor force.

Table A.5. Additional Information Required to Justify the Assumption that the Unemployed Would Work the Same Hours on Average as the Currently Employed

. regress hwusual sex age agesq i.ieduc i.refyear i.icountry if age > 16 & ilostat == 1 & ieduc != 9

Model	Source	SS	df	MS			= 17014591 = 76634.68
Total 2.7730e+09					.8 Prob 22 <i>R</i> -sq	> F	= 0.0000 = 0.1362
Sex	Total	2.7730e+09	17014590	162.9782		_	
agesq 1.021285	hwusual	Coef.	Std. Err.	t	P> t	[95% Conf	. Interval]
agesq 1.021285	sex	-6.111863	.0058159	-1050.89	0.000	-6.123262	-6.100464
agesq							
L -1.59341	_						
L -1.59341	ieduc I						
refyear 1999		-1.59341	.0081365	-195.84	0.000	-1.609357	-1.577462
refyear 1999 1977689							
1999	1.1	.5055170	.0072321	41.07	0.000	.3190101	.2910254
2000 3507154 .0263731 -13.30 0.000 4024057 2990251 2001 4200781 .0258516 -16.25 0.000 4707464 3684098 2002 4890754 .0257804 -18.97 0.000 5396042 4385467 2003 .2434503 .0263354 9.24 0.000 .1918339 .2950668 2004 .0076015 .0261762 0.29 0.772 043703 .0589059 2005 4284576 .0209761 -20.43 0.000 46957 3873453 2006 3226952 .0217842 -14.81 0.000 3653914 2799989 2007 3196307 .0217277 -14.71 0.000 3622163 2770451 2008 1346552 .0217341 -6.20 0.000 1772532 0920571 2009 3237646 .0217788 -14.87 0.000 3664503 2810788 2010 4821226 .0216578 -22.26 0.000 5245711 4396742 2011 5479243 .0217237 -25.22 0.000 599502 5053466 2012 6462469 .0218482 -29.58 0.000 6890686 6034252 2013 7024571 .0219505 -32.00 0.000 7454793 6594349 2014 7653292 .0219525 -34.86 0.000 8083554 722303 2015 7817403 .0219754 -35.57 0.000 8248112 7386693 2016 6445245 .0219963 -29.30 0.000 6876365 6014126 .6445245 .0219963 -29.30 0.000 -4.439566 -4.366542 .6445245 .0219963 -29.30 0.000 -3779759 -3.70893 ES .162434 .0156645 10.37 0.000 .1317322 .1931359 FI .0424858 .021859 1.94 0.052 0003572 0.853287 FR -1.032941 .0130195 -79.34 0.000 -1.058458 -1.007423 GR 4.549584 .0146877 309.76 0.000 -6.6353416 585985 NL -7.101879 .0156424 -454.01 0.000 -7.3525655 2.31959 RO -4.472456 .0146439 -305.42 0.000 -4.501158 -4.443755 SE .9454173 .0134838 -70.12 0.000 -9.9718449 -9.9189896 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .00000 .00000 .00000 .00000 .00000 .00000 .00000 .000000 .00000000	refyear						
2001 4200781	1999	1977689	.0264708	-7.47	0.000	2496507	1458871
2002 4890754	2000	3507154	.0263731	-13.30	0.000	4024057	2990251
2003 .2434503 .0263354 9.24 0.000 .1918339 .2950668 2004 .0076015 .0261762 0.29 0.772 043703 .0589059 2005 4284576 .0209761 -20.43 0.000 46957 3873453 2006 3226952 .0217842 -14.81 0.000 3653914 2799989 2007 3196307 .0217277 -14.71 0.000 3622163 2770451 2008 1346552 .0217341 -6.20 0.000 1772532 0920571 2009 3237646 .0217788 -14.87 0.000 3664503 2810788 2010 4821226 .0216578 -22.26 0.000 5245711 4396742 2011 5479243 .0217237 -25.22 0.000 590502 5053466 2012 6462469 .0216578 -22.26 0.000 7454793 6594349 2014 7653292 .0219525 -34.86 0.000 8083554 722303 2015 7817403 .0219754 -35.57 0.000 8083554 72303 2015 6445245 .0219963 -29.30 0.000 6876365 6014126	2001	4200781	.0258516	-16.25	0.000	4707464	3694098
2004 .0076015	2002	4890754	.0257804	-18.97	0.000	5396042	4385467
2005 4284576	2003	.2434503	.0263354	9.24	0.000	.1918339	.2950668
2006 3226952	2004	.0076015	.0261762	0.29	0.772	043703	.0589059
2007 3196307	2005	4284576	.0209761	-20.43	0.000		3873453
2008 1346552	2006	3226952	.0217842	-14.81	0.000	3653914	2799989
2008 1346552			.0217277	-14.71		3622163	2770451
2009 3237646		1346552	.0217341			1772532	0920571
2010 4821226		3237646	.0217788			3664503	2810788
2011 5479243		4821226	.0216578	-22.26			4396742
2012 6462469	2011	5479243	.0217237	-25.22		590502	5053466
2013 7024571	2012	6462469		-29.58		6890686	6034252
2014 7653292	2013	7024571	.0219505	-32.00		7454793	6594349
2015 7817403	2014	7653292	.0219525	-34.86		8083554	722303
2016 6445245		7817403	.0219754		0.000	8248112	
BE -4.403054		6445245				6876365	
BE -4.403054	i acumt m						
DK -3.744345	_	1 102051	0106200	226 26	0 000	1 120566	1 266512
ES .162434 .0156645 10.37 0.000 .1317322 .1931359 FI .0424858 .021859 1.94 0.0520003572 .0853287 FR -1.032941 .0130195 -79.34 0.000 -1.058458 -1.007423 GR 4.549584 .0146877 309.76 0.000 4.520797 4.578371 IT 6106633 .0125912 -48.50 0.0006353416585985 NL -7.101879 .0156424 -454.01 0.000 -7.132538 -7.071221 NO -3.529512 .0238674 -147.88 0.000 -3.576292 -3.482733 PT 2.287623 .0163103 140.26 0.000 2.255655 2.31959 RO -4.472456 .0146439 -305.42 0.000 -4.501158 -4.443755 SE 9454173 .0134838 -70.12 0.00097184499189896							
FI .0424858							
FR -1.032941							
GR 4.549584 .0146877 309.76 0.000 4.520797 4.578371 IT 6106633 .0125912 -48.50 0.0006353416585985 NL -7.101879 .0156424 -454.01 0.000 -7.132538 -7.071221 NO -3.529512 .0238674 -147.88 0.000 -3.576292 -3.482733 PT 2.287623 .0163103 140.26 0.000 2.255655 2.31959 RO -4.472456 .0146439 -305.42 0.000 -4.501158 -4.443755 SE 9454173 .0134838 -70.12 0.00097184499189896							
IT 6106633							
NL -7.101879							
NO -3.529512							
PT 2.287623 .0163103 140.26 0.000 2.255655 2.31959 RO -4.472456 .0146439 -305.42 0.000 -4.501158 -4.443755 SE 9454173 .0134838 -70.12 0.00097184499189896							
RO -4.472456 .0146439 -305.42 0.000 -4.501158 -4.443755 SE 9454173 .0134838 -70.12 0.00097184499189896							
SE 9454173 .0134838 -70.12 0.00097184499189896							
_cons 27.4283 .0367086 747.19 0.000 27.35635 27.50025	2E	,54041/3 	.0134038	- 10.12	0.000	9/10449	5109090
	_cons	27.4283	.0367086	747.19	0.000	27.35635	27.50025

Hours of the unemployed calculated from the predicted values equals 36.06

predict hours_unemp if ilostat == 2
(option xb assumed; fitted values)
(49,348,771 missing values generated)

. sum hours_unemp, det

Fitted values							
	Percentiles	Smallest					
1%	24.66239	.1434651					
5%	27.73668	.341234					
10%	30.06632	.6011819	Obs	1,648,475			
25%	33.00655	6.255328	Sum of Wgt.	1,648,475			
50%	35.97066		Mean	36.06221			
		Largest	Std. Dev.	4.691073			
75%	39.68262	48.05743					
90%	41.61391	48.05743	Variance	22.00616			
95%	43.42683	48.05743	Skewness	2106698			
99%	46.36205	48.05743	Kurtosis	2.940897			

Usual hours of current workers = 36.16

. sum hwusual, det

HWUSUAL								
	Percentiles	Smallest						
1%	0	0						
5%	8	0						
10%	18	0	Obs	22,030,676				
25%	34	0	Sum of Wgt.	22030676				
50%	40		Mean	36.16291				
		Largest	Std. Dev.	13.11152				
75%	40	80						
90%	50	80	Variance	171.9119				
95%	55	80	Skewness	5141681				
99%	70	80	Kurtosis	4.778626				

