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		21.8	0.9	37.3	7.4		18.6	24.7
2002	1.7	0.4	6.2	2.1	0.1		22.4	0.9	38.3	8.9	19.0	17.2	24.5
2003	1.8	0.3	7.2	2.4	0.2		20.6	1.5	40.4	10.9	18.2	19.3	24.7
2004	2.3	0.2	14.9	1.9	0.2		23.2	1.6	38.2	6.7	13.9	18.0	24.0
2005	2.4	0.2	11.4	1.8	0.2		16.8	1.4	37.3	7.3	14.9	14.5	24.6
2006	2.5	0.2	11.2	1.7	0.3		19.7	4.7	36.6	7.9	13.5	15.2	26.8
2007	2.1	0.2	10.4	1.5	0.3		20.1	4.8	34.7	8.7	12.6	15.7	28.0
2008	2.8		12.0	1.2	0.3		20.7	5.2	33.6	9.6	12.4	15.6	30.0
2009	4.8		13.0	1.4	0.4	0.4	21.9	5.3	34.7	8.6	12.8	16.6	36.2
2010	4.5		12.5	1.4	0.3	0.5	19.3	4.9	33.9	7.8	12.8	15.1	39.6
2011	5.0		11.6	1.4	0.3	0.5	17.9	4.9	33.9	19.5	11.8	15.4	40.9
2012	5.4		16.3	1.5	0.4	0.6	19.0	5.2	40.3	20.5	11.4	16.1	43.1
2013	5.6		16.6	1.5	0.4	0.5	21.5	5.8	44.2	19.7	10.6	16.9	43.8
2014	5.1	0.5	18.0	1.5	0.5	0.6	20.8	5.3	41.9	20.3	11.4	17.3	44.4
2015	4.8	0.4	17.3	1.4	0.5	0.6	21.4	5.6	36.4	18.2	11.3	17.4	42.0
2016	4.3	0.4	16.7	1.3	0.5	0.5	19.8	5.5	33.0	18.4	9.7	15.7	39.7

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

	AU	BE	CH	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		–2.8	–0.3		–13.6	–0.1	–39.2	–3.2		–5.2	–31.2
2002	–0.9	–0.4		–2.3	–0.3		–14.2	–0.1	–36.2	–2.6	–15.3	–5.4	–31.6
2003	–0.8	–0.2		–1.8	–0.1		–12.8	–0.1	–30.0	–1.9	–14.7	–5.0	–32.6
2004	–1.1	–0.2	–17.3	–1.7	–0.2		–14.3	–0.1	–29.5	–2.5	–14.7	–5.2	–32.1
2005	–1.4	–0.2	–10.2	–1.5	–0.2		–15.3	–0.1	–26.5	–1.7	–10.9	–8.5	–30.4
2006	–1.3	–0.2	–10.6	–1.4	–0.2		–17.2	–5.1	–27.8	–2.0	–9.4	–8.2	–29.9
2007	–1.4	–0.2	–9.9	–1.5	–0.2		–17.7	–4.9	–28.1	–2.2	–8.9	–7.8	–30.8
2008	–1.0	0.0	–8.8	–1.5	–0.2		–20.4	–5.3	–26.1	–2.0	–8.2	–8.0	–29.2
2009	–0.7	0.0	–5.5	–1.0	–0.6	–0.1	–20.3	–4.6	–24.0	–1.8	–7.0	–7.5	–27.2
2010	–0.6	0.0	–4.4	–0.9	–0.6	–0.1	–17.9	–4.5	–22.7	–1.7	–6.0	–8.2	–28.8
2011	–0.7	0.0	–3.9	–0.8	–0.6	–0.1	–17.0	–4.5	–21.0	–1.9	–6.7	–8.0	–27.5
2012	–0.8	0.0	–3.7	–0.8	–0.7	–0.1	–16.9	–4.8	–20.5	–1.6	–7.0	–8.0	–28.0
2013	–1.0	0.0	–3.7	–0.8	–0.7	–0.1	–17.6	–4.8	–19.0	–1.8	–6.7	–8.3	–28.2
2014	–0.9	–0.2	–3.9	–0.7	–0.8	–0.1	–18.1	–4.5	–18.9	–2.1	–5.5	–8.4	–30.4
2015	–0.8	–0.2	–4.2	–0.9	–1.1	–0.1	–18.3	–4.7	–18.9	–2.2	–5.1	–8.5	–32.0
2016	–0.9	–0.2	–4.8	–1.0	–0.9	–0.1	–19.3	–4.3	–20.0	–2.2	–4.9	–8.5	–34.2

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) Unemployment rate and involuntary part time

	1980–2017	*1980–2007*	*2008–2017*	*1980–2017*	*1980–2007*	*2008–2017*
Log W_{t-1}	.7346 (28.34)	.7263 (27.06)	.3257 (5.84)	.7125 (24.38)	.7049 (25.55)	.3199 (6.07)
Log U3$_t$	−.0312 (7.47)	−.0295 (6.62)	−.0377 (2.81)			
Log PTFER				−.0307 (8.21)	−.0309 (7.90)	−.0338 (4,15)
N	1938	1428	510	1938	1428	510
R^2 within	.9971	.9959	.9237	.9972	.9960	.9250
R^2 between	.9518	.9576	.5553	.9696	.9664	.6595
R^2 overall	.9927	.9898	.6412	.9941	.9908	.7077

b) Using alternative measure U6–U9

	2003–2017	*2003–2017*	*2003–2017*	*2003–2017*	*2008–2017*	*2008–2017*	*2008–2017*	*2008–2017*
Log W_{t-1}	.4701 (11.62)	.4638 (11.83)	.4641 (11.98)	.4632 (11.91)	.3107 (5.84)	.3036 (5.99)	.3031 (5.93)	.3010 (5.78)
Log U6$_t$	−.0490 (5.40)	−.0145 (0.90)			−.0550 (3.47)			
Log U7$_t$		−.0335 (2.94)	−.0435 (6.49)	−.0373 (5.08)		−.0478 (4.04)	−.0410 (3.32)	−.0427 (3.39)
Log U3$_t$				−.0113 (1.35)			−.0144 (1.03)	−.0165 (1.29)
Log U8$_t$				.0006 (0.34)				.0029 (1.88)
Log U9$_t$				.0030 (0.69)				.0014 (0.25)
N	765	765	765	765	510	510	510	510
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 wages and change in the home ownership rate, with robust standard errors

	1980–2017	*1980–2007*	*2008–2017*	*2003–2017*	*2008–2017*	*2008–2017*
Log W_{t-1}	.6513 (17.56)	.6011 (12.88)	.3212 (6.09)	.4670 (12.09)	.3105 (6.09)	.3108 (6.15)
Log U3$_t$	−.0086 (1.67)	−.0022 (0.36)	−.0255 (1.83)	−.0104 (1.15)	−.0157 (1.12)	
Log PTFER	−.0252 (5.24)	−.0236 (4.23)	−.0246 (2.96)			

Log U7$_t$				−.0363 (4.90)	−.0384 (3.17)	−.0457 (3.93)
Log Home$_t$–Log Home$_{t-1}$	.1270 (3.49)	.1002 (2.44)	.1724 (2.90)	.1314 (2.87)	.1759 (3.15)	.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 U9 is all marginally attached 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

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

      Source |       SS           df       MS       Number of obs   =  17014591
-------------+----------------------------------   F(35, 17014555) =  76634.68
       Model |  377615274           35  10789007.8  Prob > F        =    0.0000
    Residual |  2.3954e+09   17014555  140.784922   R-squared       =    0.1362
-------------+----------------------------------   Adj R-squared   =    0.1362
       Total |  2.7730e+09   17014590  162.978248   Root MSE        =    11.865


------------------------------------------------------------------------------
     hwusual |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         sex |  -6.111863   .0058159 -1050.89   0.000    -6.123262   -6.100464
         age |   1.021285   .0013863   736.67   0.000     1.018568    1.024002
       agesq |  -.0118742   .0000163  -730.51   0.000     -.011906   -.0118423
             |
       ieduc |
           L |   -1.59341   .0081365  -195.84   0.000    -1.609357   -1.577462
           M |  -.3053178   .0072921   -41.87   0.000    -.3196101   -.2910254
             |
     refyear |
        1999 |  -.1977689   .0264708    -7.47   0.000    -.2496507   -.1458871
        2000 |  -.3507154   .0263731   -13.30   0.000    -.4024057   -.2990251
        2001 |  -.4200781   .0258516   -16.25   0.000    -.4707464   -.3694098
        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     -.590502   -.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
             |
    icountry |
          BE |  -4.403054   .0186288  -236.36   0.000    -4.439566   -4.366542
          DK |  -3.744345   .0180689  -207.23   0.000    -3.779759    -3.70893
          ES |    .162434   .0156645    10.37   0.000     .1317322    .1931359
          FI |   .0424858    .021859     1.94   0.052    -.0003572    .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   0.000    -.6353416    -.585985
          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   0.000    -.9718449   -.9189896
             |
       _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
```

Figure A.1. Annual Growth in Weekly Earnings of Production and Nonsupervisory Workers and U7, 1965–2018