

The relationship between credit and suicide in Italy

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La relazione tra credito e suicidio in Italia

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WHAT IS ALREADY KNOWN

- Economic crises may cause negative mental health outcomes, namely increased suicides.
- This typically happens when the budget destined to social protection is cut.
- The use of unemployment rate as proxy of the business cycle led to some inconsistencies in literature.

WHAT THIS STUDY ADDS

- Access to credit is a major determinant of mental health in the male population.
- The rate of growth of the credit-to-GDP ratio is able to grasp the association between economy and mental health.
- Public unemployment spending moderates the negative mental health outcomes in periods with reduced access to credit.

	SUCIDE RATE MEN	SUCIDE RATE WOMEN
Constant	23.57 *** (5.91)	11.09 *** (2.21)
Time	-0.01 *** (0.003)	-0.01 *** (0.001)
Growth of the credit-to-GDP ratio	-1.26 *** (0.34)	-0.13 (0.15)
Δ national unemployment rate	0.02 (0.02)	0.01 (0.01)
Periods of mass job loss	-0.02 (0.04)	-0.03 (0.03)
Growth of the expenditure on active labour market programmes	0.19 (0.11)	0.02 (0.03)
Growth of the expenditure on public social expenditure	-0.05 (0.30)	0.25 (0.19)
Growth of the expenditure on public unemployment spending	-0.12 *** (0.04)	-0.08 (0.05)
LSDV R-squared	0.81	0.58
Effect of the rate of growth of the CTG ratio on the relative change in suicide rate	101%	36%

		SUICIDE RATE							
		15-24	25-34	35-44	45-54	55-64	65-74	75+	
CONSTANT									
MEN		31.78 *** (7.48)	31.17 *** (6.14)	24.05 (13.42)	12.16 (10.48)	56.11 *** (8.21)	91.05 *** (17.69)	170.91 *** (21.51)	
WOMEN		6.48 *** (1.99)	12.97 *** (2.73)	4.48 (4.27)	0.59 (3.97)	27.60 *** (2.66)	30.00 *** (6.37)	30.00 *** (6.37)	
TIME									
MEN		-0.02 *** (0.04)	-0.02 *** (0.003)	-0.01 (0.01)	-0.01 (0.01)	-0.01 *** (0.004)	-0.04 *** (0.01)	-0.08 *** (0.01)	
WOMEN		-0.003 *** (0.001)	-0.01 *** (0.001)	-0.002 (0.002)	0.00001 (0.02)	-0.01 *** (0.001)	-0.01 *** (0.003)	-0.03 *** (0.003)	
PERIODS OF MASS JOB LOSS									
MEN		0.02 (0.09)	-0.12 (0.20)	-0.07 (0.14)	0.05 (0.15)	0.06 (0.15)	0.16 (0.15)	-0.22 (0.24)	
WOMEN		0.01 (0.04)	-0.01 (0.05)	0.09 (0.07)	-0.15 (0.11)	-0.15 (0.08)	-0.04 (0.07)	-0.01 (0.07)	
GROWTH OF THE CREDIT-TO-GDP RATIO									
MEN		-1.18 ** (0.42)	-1.17 *** (0.49)	-2.25 ** (0.85)	0.01 (0.04)	-0.95 (1.05)	-1.07 (1.00)	-4.50 *** 1.52	
WOMEN		0.07 (0.21)	-0.31 (0.38)	-0.80 (0.56)	0.04 (0.30)	0.25 (0.71)	-0.25 (0.46)	0.12 (0.61)	
Δ NATIONAL UNEMPLOYMENT RATE									
MEN		-0.01 (0.02)	0.05 (0.03)	0.01 (0.03)	-2.34 (1.67)	0.07 (0.04)	0.002 (0.05)	-0.04 (0.11)	
WOMEN		0.02 (0.01)	-0.003 (0.01)	-0.03 (0.03)	0.03 (0.02)	0.04 ** (0.01)	0.01 (0.02)	0.03 (0.02)	
LSDV R-SQUARED									
MEN		0.33	0.32	0.44	0.46	0.53	0.51	0.51	
WOMEN		0.06	0.16	0.18	0.22	0.21	0.18	0.42	
EFFECT OF THE RATE OF GROWTH OF THE CTG RATIO ON THE RELATIVE CHANGE IN SUICIDE RATE									
MEN		174%	114%	197%	1%	59%	51%	124%	
WOMEN		44%	129%	235%	9%	48%	43%	18%	