

Extended abstract

Title: The impact of the 2008 global financial crisis on the mental health of retirees in 15 European countries.

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Background

Problem statement

Previous research emphasises a negative effect of economic crises on mental health (Drydakis, 2016; Karanikolos et al., 2016). Since most studies focus on the working-age population, the mental health effects of economic crisis for retirees are understudied. Only a few studies investigated the mental health of retirees in the context of the 2008 global financial crises and found improved mental health for men, especially for blue-collar workers in regions severely affected by this economic crisis (Antonova et al., 2015; Belloni et al., 2016). However, those studies do not consider the general mechanisms between retirement and mental health.

Existing literature suggests a positive effect of retirement on mental health in Europe due to decreasing work-related strain and improved sleeping and exercise behaviour (Butterworth et al., 2006; Eibich, 2015; Mein, 2003; Oksanen et al., 2011). However, the transition into retirement increases poverty risks (Ebbinghaus, 2021; Kwan & Walsh, 2018), which can affect the mental health and wellbeing of retirees (Stolz et al., 2017; Walker, 2005). Both mechanisms may be accelerated in times of economic crises: on the one hand, the dropping out of the deprived labour market could have a relieving effect on mental health; on the other hand, increasing economic instability may result in distress and have negative mental health effects in times of economic crises.

This raises the assumption that economic security plays a crucial role in the relationship between economic crisis and the mental health of retirees, and may be influenced by two economic forces, namely welfare regimes, and intergenerational transfers. First, welfare transfers can alter the impact of economic crises on individual mental health, as – depending on the welfare regime in question – they can regulate citizens' financial dependence on the free market and offer immunity from the consequences of economic crises to varying degrees (cf. Esping-Andersen, 1998). As for the mental health effect of economic crises on retirees, welfare state-provided pensions can lead to financial security and less strain on mental health. Second, old-age support systems in Europe heavily rely on intergenerational transfers within families (cf. Lee et al., 2013), which may – depending on the family transfer culture – be monetary. This economic dependency of the parent generation from their children may result in distress as the elderly are indirectly threatened by the economic crisis.

Our considerations show that the mental health of retirees in times of economic crisis can be critically dependent on economic security, which in turn depends on the prevailing welfare state regimes and intergenerational support culture in the respective country. Moreover, there are large differences in how severely countries are affected by economic crises. All these aspects have not been sufficiently acknowledged in research on the mental health effects of economic crises on pensioners.

Old-age support systems in Europe

(1) Welfare regimes

Welfare regimes are government forms protecting and promoting the economic and social wellbeing of their citizens. Traditionally, Western countries were classified across three welfare regimes – social democratic, conservative, and liberal (Esping-Andersen, 1998) – yet, more recent approaches tend to differentiate between different conservative models in Central and Southern Europe (Conde-Sala et al., 2017; Hemerijck, 2002), and distinguish a welfare state typology of former socialist states in Eastern Europe (Deacon, 2000; Fenger, 2007). The different welfare regimes vary by their degree of de commodification, which describes how independent citizens are from the capitalistic market induced by their welfare state entitlements (Esping-Andersen, 1998).

Previous research found significant differences in the well-being of the elderly between different welfare regimes: for example, elderly in Northern European countries with social democratic welfare regimes had the highest quality of life, which remained stable across socioeconomic strata, while elderly in Mediterranean countries with considerably weaker welfare protection showed the lowest quality of life and particularly high rates of depression (Conde-Sala et al., 2017). Moreover, old-age poverty risks vary across different welfare regime-specific pension systems, for example, pensioners from Nordic countries with multi-pillar pension systems show very low poverty risks, while pensioners in the UK and Switzerland with Beveridge pension systems face increased poverty risks (Ebbinghaus, 2021). In line with these welfare regime differences, the extent to which pensioners were affected by the 2008 global financial crisis, for example, differed drastically across Europe (Whitehouse, 2009). Especially Mediterranean countries introduced pension reforms that have led to a reduction of pension rights for workers (Foster, 2014; Petmesidou & Guillén, 2015).

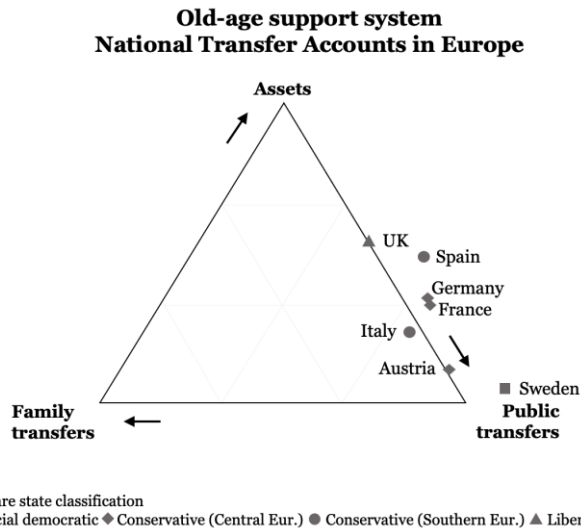
(2) Intergenerational transfers

Old-age support does not only rely on welfare state pension systems in Europe but also on intergenerational upward transfers within families (Lee et al., 2013). In general, the extent of intergenerational transfers differs between countries and is particularly strong in Mediterranean countries and comparably weak in Nordic countries (Albertini & Kohli, 2013; Albertini et al., 2007). Similarly, intergenerational upward-transfers, which are transfers from the younger to the older generation (Bonsang, 2007), are mostly present in Mediterranean countries as well as in Eastern European countries (Varvarigos, 2020).

Figure 1 shows the old-age support system of the UK, Spain, Germany, France, Italy, Austria, and Sweden retrieved from the National Transfer Accounts (Lee, 2020) stratified by their reliance on public transfers, family transfers, and assets. We could not retrieve information on further European countries; yet, based on research on the attitude towards family transfers from children to parents in Europe, we suggest that Greece and Eastern European countries show a clear tendency towards family transfers in their old-age support systems (Varvarigos, 2020). Since family transfer cultures do not always coincide with welfare state regimes

(Saraceno & Keck, 2010) but form an important source of financial provision for elderly in many countries, they may contribute in explaining the relationship between economic crisis and mental health in retirees.

Figure 1: Old-age support systems of selected European countries stratified by assets, public transfers, and family transfers (according to National Transfer Account (NTA) country profiles)



Note: Country profiles were retrieved from the National Transfer Accounts (Lee, 2020)

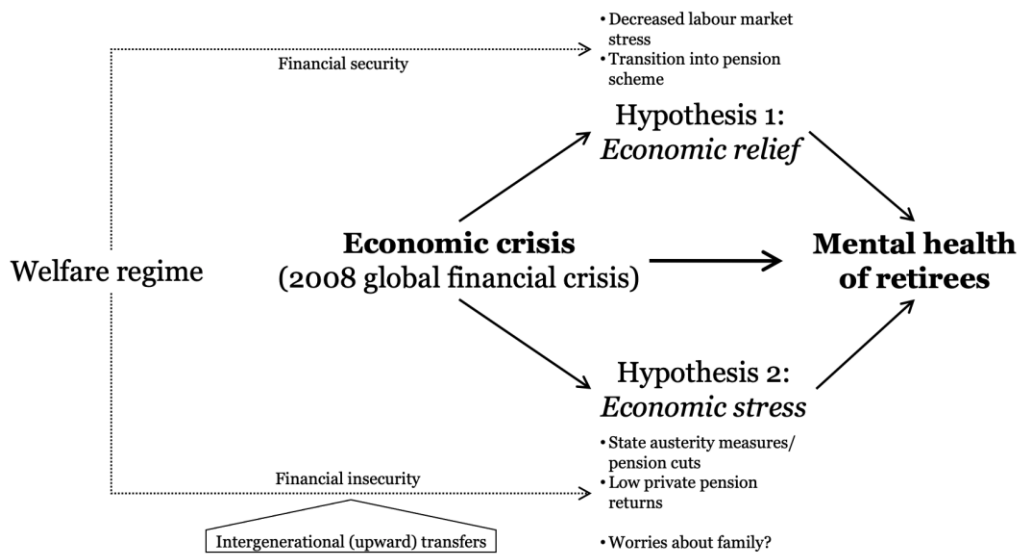
Objective and scientific relevance

Our objective is to investigate the effect of the 2008 global financial crisis on the mental health of retirees. We thereby aim to consider how different welfare regimes and intergenerational transfer cultures confound the effect of the economic crisis. By doing so, we address a relevant gap in the literature. Moreover, our results are also relevant outside the academic context since we explore a problem that is crucial for welfare state policy. Especially in transnational governance bodies such as the European Union, it is important to consider different welfare and family-transfer cultures to implement inclusive and effective socioeconomic protection policies that protect citizens from the negative mental health consequences of economic crises.

Theoretical model and hypotheses

Based on our literature research, we derived two hypotheses picturing the relationship between economic crises and the mental health of retirees (Figure 2). Both hypotheses strongly depend on respective welfare regimes and intergenerational transfer contexts. **Hypothesis 1**, the “economic relief” hypothesis, claims that the transition into retirement during times of economic crises has a relieving effect due to the drop out from the increasingly competitive and stressful labour market. This might especially apply to retirees from the low-income spectrum who are more affected by economic crises (Antonova et al., 2015). On the contrary, **Hypothesis 2**, the “economic stress” hypothesis, states that economic crises induce stress on retirees due to threats of state austerity measures resulting in pension cuts or weakened intergenerational upward-transfers within the family. Private assets (cf. Figure 1) play an important role in the mental health effect of economic crisis for retirees as well; yet, we will consider them at the individual level.

Figure 2: Hypotheses and theoretical model



Data and study population

We will use the Survey of Health, Ageing and Retirement in Europe (SHARE; waves 1 (2004-05)-7 (2016-17)) to retrieve information on Austria, Belgium, Switzerland, Germany, Denmark, Spain, France, Greece, Italy, Netherlands, Sweden, Czech Republic, Poland, and Ireland (Börsch-Supan et al., 2013); the *English Longitudinal Study of Ageing* (ELSA) (waves 1 (2002-03)-8 (2016-17)) for England (Step toe et al., 2013); and the *Irish Longitudinal Study on Ageing* (TILDA) (waves 1 (2010-11)-4 (2016-17)) (Kearney et al., 2011) for Ireland. All countries can be clustered within the common welfare regimes in Europe (Table 1) (Esping-Andersen, 1998).

Table 1: Countries analysed in the presented study classified by different welfare regimes and modifications

Welfare regimes				
Social democratic	Conservative		Liberal	Corporatist
	Central European	Southern European		
Denmark	Austria	Spain	Switzerland	Czech Republic
Sweden	Belgium	Greece	England	Poland
	Netherlands	Italy	Ireland	
	Germany			
	France			

Note: Welfare regime classification by Esping-Andersen (1998) in accordance with Fenger (2007), clustering of conservative regimes is based on Conde-Sala et al. (2017)

Our study population consists of individuals from Austria, Belgium, Switzerland, Germany, Denmark, Spain, France, Greece, Italy, Netherlands, Sweden, Czech Republic, Poland, Ireland, and England (Table 1) who reached the country-specific legal retirement age and were, therefore, eligible to retire before the onset of the 2008 global financial crisis.

Measures

Our dependent variable is mental health measured by the Euro-D scale to measure depressive symptoms (Guerra et al., 2015; Prince et al., 1999) before and after the onset of the 2008 global financial crisis. Our independent variables are (a) the welfare regime, and (b) the intergenerational transfer culture. We will control for the following additional variables that we believe might take a significant effect on the studied relationship (1) demographic characteristics (year of birth, sex), (2) family situation (marital status, number of children, intra-family transfers received), (3) retirement information (age at retirement, early

retirement compared to national practise), (4) socioeconomic status (wealth/private assets), (5) health (health status, lifestyle/smoking, exercise), (6) important life events (death of spouse/family member, residential relocation), and (7) regional-level indicators of the economic crisis (regional GDP data retrieved from the Cambridge Regional Database (2021)).

Analytical strategy

We apply fixed-effects regression analysis to investigate changes in the mental health of pre-2008 financial crisis retirees from 2004-2017.

Preliminary results and expected findings

First descriptive findings indicate significant increases in depressive symptoms in the retirement age population after the 2008 global financial crisis in Central European (Austria, Germany, Netherlands, France) and in Mediterranean countries (Greece, Spain, Italy). No significant increase was found in Nordic countries (Denmark, Sweden). These first findings are in line with the welfare state clusters determined by Conde-Sala et al. (2017). Based on further findings in the current literature (Figure 2), we expect to gain insights into how family support interacts with the mental health effects of economic crises.

References

- Albertini, M., & Kohli, M. (2013). The Generational Contract in the Family: An Analysis of Transfer Regimes in Europe. *European Sociological Review*, 29(4), 828–840. <https://doi.org/10.1093/esr/jcs061>
- Albertini, Marco, Kohli, M., & Vogel, C. (2007). Intergenerational transfers of time and money in European families: Common patterns – different regimes? *Journal of European Social Policy*, 17(4), 319–334. <https://doi.org/10.1177/0958928707081068>
- Antonova, L., Belloni, M., Meschi, E., & Pasini, G. (2015). The Effect on Mental Health of Retiring During the Economic Crisis. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2611865>
- Belloni, M., Meschi, E., & Pasini, G. (2016). The Effect on Mental Health of Retiring During the Economic Crisis: Mental Health and Retiring During the Crisis. *Health Economics*, 25, 126–140. <https://doi.org/10.1002/hec.3377>
- Bonsang, E. (2007). How do middle-aged children allocate time and money transfers to their older parents in Europe? *Empirica*, 34(2), 171–188. <https://doi.org/10.1007/s10663-007-9034-3>
- Börsch-Supan, A., Brandt, M., Hunkler, C., Kneip, T., Korbmacher, J., Malter, F., Schaan, B., Stuck, S., & Zuber, S. (2013). Data Resource Profile: The Survey of Health, Ageing and Retirement in Europe (SHARE). *International Journal of Epidemiology*, 42(4), 992–1001. <https://doi.org/10.1093/ije/dyt088>
- Butterworth, P., Gill, S. C., Rodgers, B., Anstey, K. J., Villamil, E., & Melzer, D. (2006). Retirement and mental health: Analysis of the Australian national survey of mental health and well-being. *Social Science & Medicine*, 62(5), 1179–1191. <https://doi.org/10.1016/j.socscimed.2005.07.013>
- Conde-Sala, J. L., Portellano-Ortiz, C., Calvó-Perxas, L., & Garre-Olmo, J. (2017). Quality of life in people aged 65+ in Europe: Associated factors and models of social welfare—analysis of data from the SHARE project (Wave 5). *Quality of Life Research*, 26(4), 1059–1070. <https://doi.org/10.1007/s11136-016-1436-x>

- Deacon, B. (2000). Eastern European welfare states: The impact of the politics of globalization. *Journal of European Social Policy*, 10(2), 146–161. <https://doi.org/10.1177/a012487>
- Drydak, N. (2016). *The relationship between recessions and health* (Discussion Paper No. 283; IZA World of Labor). Institute of Labor Economics (IZA). <https://EconPapers.repec.org/RePEc:iza:izawol:journl:y:2016:n:283>
- Ebbinghaus, B. (2021). Inequalities and poverty risks in old age across Europe: The double-edged income effect of pension systems. *Social Policy & Administration*, 55(3), 440–455. <https://doi.org/10.1111/spol.12683>
- Eibich, P. (2015). Understanding the effect of retirement on health: Mechanisms and heterogeneity. *Journal of Health Economics*, 43, 1–12. <https://doi.org/10.1016/j.jhealeco.2015.05.001>
- Esping-Andersen, G. (1998). *The three worlds of welfare capitalism*.
- Fenger, H. J. M. (2007). *Welfare regimes in Central and Eastern Europe: Incorporating post-communist countries in a welfare regime typology*. http://www.learneurope.eu/files/9913/7483/4204/Welfare_regimes_in_Central_and_Eastern_Europe.pdf
- Foster, L. (2014). Women's pensions in the European Union and the current economic crisis. *Policy & Politics*, 42(4), 565–580. <https://doi.org/10.1332/030557312X655774>
- Guerra, M., Ferri, C., Llibre, J., Prina, A. M., & Prince, M. (2015). Psychometric properties of EURO-D, a geriatric depression scale: A cross-cultural validation study. *BMC Psychiatry*, 15(1), 12. <https://doi.org/10.1186/s12888-015-0390-4>
- Hemerijck, A. (2002). The Self-Transformation of the European Social Model(s). In G. Esping-Andersen (Ed.), *Why We Need a New Welfare State* (pp. 173–214). Oxford University Press. <https://doi.org/10.1093/0199256438.003.0006>
- Karanikolos, M., Heino, P., McKee, M., Stuckler, D., & Legido-Quigley, H. (2016). Effects of the Global Financial Crisis on Health in High-Income Oecd Countries: A Narrative Review. *International Journal of Health Services*, 46(2), 208–240. <https://doi.org/10.1177/0020731416637160>
- Kearney, P. M., Cronin, H., O'Regan, C., Kamiya, Y., Savva, G. M., Whelan, B., & Kenny, R. (2011). Cohort Profile: The Irish Longitudinal Study on Ageing. *International Journal of Epidemiology*, 40(4), 877–884. <https://doi.org/10.1093/ije/dyr116>
- Kwan, C., & Walsh, C. A. (2018). Old age poverty: A scoping review of the literature. *Cogent Social Sciences*, 4(1), 1478479. <https://doi.org/10.1080/23311886.2018.1478479>
- Lee, R. (2020). Population aging and the historical development of intergenerational transfer systems. *Genus*, 76(1), 31. <https://doi.org/10.1186/s41118-020-00100-8>
- Lee, R. D., Mason, A., & International Development Research Centre (Canada). (2013). *Population Aging and the Generational Economy: A Global Perspective*. Edward Elgar Publishing, Incorporated. <https://www.deslibris.ca/ID/440246>
- Mein, G. (2003). Is retirement good or bad for mental and physical health functioning? Whitehall II longitudinal study of civil servants. *Journal of Epidemiology & Community Health*, 57(1), 46–49. <https://doi.org/10.1136/jech.57.1.46>
- Oksanen, T., Vahtera, J., Westerlund, H., Pentti, J., Sjösten, N., Virtanen, M., Kawachi, I., & Kivimäki, M. (2011). Is Retirement Beneficial for Mental Health?: Antidepressant Use Before and After Retirement. *Epidemiology*, 22(4), 553–559. <https://doi.org/10.1097/EDE.ob013e31821c41bd>
- Petmesidou, M., & Guillén, A. (2015). *Economic crisis and austerity in Southern Europe: Threat or opportunity for a sustainable welfare state*. Routledge.

- Prince, M. J., Reischies, F., Beekman, A. T. F., Fuhrer, R., Jonker, C., Kivela, S.-L., Lawlor, B. A., Lobo, A., Magnusson, H., Fichter, M., Van Oyen, H., Roelands, M., Skoog, I., Turrina, C., & Copeland, J. R. M. (1999). Development of the EURO-D scale – a European Union initiative to compare symptoms of depression in 14 European centres. *British Journal of Psychiatry*, 174(4), 330–338. <https://doi.org/10.1192/bjp.174.4.330>
- Saraceno, C., & Keck, W. (2010). CAN WE IDENTIFY INTERGENERATIONAL POLICY REGIMES IN EUROPE? *European Societies*, 12(5), 675–696. <https://doi.org/10.1080/14616696.2010.483006>
- Stephens, A., Breeze, E., Banks, J., & Nazroo, J. (2013). Cohort Profile: The English Longitudinal Study of Ageing. *International Journal of Epidemiology*, 42(6), 1640–1648. <https://doi.org/10.1093/ije/dys168>
- Stolz, E., Mayerl, H., Waxenegger, A., & Freidl, W. (2017). Explaining the impact of poverty on old-age frailty in Europe: Material, psychosocial and behavioural factors. *European Journal of Public Health*, 27(6), 1003–1009. <https://doi.org/10.1093/eurpub/ckx079>
- Varvarigos, D. (2020). *Upward-Flowing Intergenerational Transfers in Economic Development: The Role of Family Ties and their Cultural Transmission* (Working Paper No. 101002; MPRA Paper). Munich Personal RePEc Archive. https://mpra.ub.uni-muenchen.de/101002/1/MPRA_paper_101002.pdf
- Walker, A. (2005). A European perspective on quality of life in old age. *European Journal of Ageing*, 2(1), 2–12. <https://doi.org/10.1007/s10433-005-0500-0>
- Whitehouse, E. (2009). Pensions During the Crisis: Impact on Retirement Income Systems and Policy Responses. *The Geneva Papers on Risk and Insurance - Issues and Practice*, 34(4), 536–547. <https://doi.org/10.1057/gpp.2009.25>