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RIVISTA ITALIANA DI ECONOMIA DEMOGRAFIA E STATISTICA

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VOLUME FUORI COMMERCIO – DISTRIBUITO GRATUITAMENTE AI SOCI

INDICE

"SAREBBE MEGLIO LA PENA DI MORTE" INDAGINE SUI TEMI DI ILLEGALITÀ, GIUSTIZIA, DIRITTI E DETENZIONE TRA GLI ADOLESCENTI UDINESI

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1. Premessa

Le indagini sulla relazione tra opinione pubblica, criminalità e giustizia prendono avvio in Italia alla fine degli anni '70. È del 1998 una ricerca che esplora il concetto di legalità, di reato e di punizione da cui emerge, tra l'altro, che una elevata percentuale di persone si dichiara favorevole alla pena di morte (43,5%) (Correra, Martucci, Putignano, 1998). Anche in tempi più recenti molti giovani manifestano il desiderio di eliminare fisicamente chi commette un reato (Calvanese, 2005), mentre nel 5° Rapporto di ricerca sui giovani (Osservatorio generazione Proteo, 2017) le quota di favorevoli alla pena di morte raggiunge il 31,7%.

L'esperienza qui presentata pone le sue basi negli studi appena citati e si colloca all'interno del progetto "Il piacere della legalità? Mondi a confronto. Legami di responsabilità", volto a promuovere la cultura della legalità e della responsabilità individuale e civica, proposto nel 2019 agli studenti delle classi terze, quarte e quinte di una rete di 8 scuole secondarie di secondo grado di Udine, con l'auspicio di riuscire a diminuire lo stigma associato all'esperienza della detenzione con la stessa efficacia ottenuta nel progetto svolto dagli studenti di un liceo di Bergamo (Bellini, Mastini, la 4b del liceo scientifico Lorenzo Mascheroni di Bergamo 2016).

L'approccio con cui si struttura la ricerca tiene conto di un modello che si basa sulla promozione della salute, individuando la scuola come campo privilegiato per educare alla cittadinanza attiva (Bonino, Cattelino, 2008).

2. Obiettivi, strumento e metodo

L'obiettivo della ricerca è quello di comprendere la percezione, il pensiero e l'emotività suscitate dal tema della detenzione in un campione di età compresa tra 16 e 19 anni, con lo scopo ultimo di fornire agli insegnanti elementi utili per riorientare gli interventi in aula, propedeutici ad una visita al carcere degli studenti maggiorenni. A tal fine è stato predisposto un questionario articolato in 26 item e le ipotesi di lavoro che ne hanno guidato la strutturazione intendono verificare se ci siano differenze di genere, di età e di indirizzo di studi nell'approccio alle tematiche

affrontate. Il questionario prevede sia domande aperte che chiuse di natura qualitativa, a parte la variabile età, nonché variabili testuali generate da domande aperte. Dopo gli iniziali dati fattuali (genere, età e tipologia di scuola frequentata) sono collocati i quesiti che trattano i temi della libertà, del rispetto delle regole e dei diritti umani. Seguono domande sul tema della giustizia sociale e dell'emotività verso chi commette un reato e sugli atteggiamenti verso i comportamenti illeciti, la punizione e la detenzione.

Per la compilazione del questionario è stata utilizzata la tecnica CAWI: è stato impostato su Google moduli e autocompilato. La piattaforma ha permesso di mantenere l'anonimato e di rielaborare i dati in forma aggregata nel pieno rispetto della privacy secondo il GDPR (2016/679) e D. Lgs 101/2018[1]. La somministrazione è avvenuta tra il 6 febbraio 2020 e il 22 febbraio 2020 e ha visto coinvolti 8 istituti scolastici e 737 studenti.

Date le modalità di selezione del campione, non si è in presenza di un campione probabilistico, pertanto i risultati della ricerca non possono essere oggetto di inferenza, ma forniscono egualmente interessanti spunti di riflessione sul rapporto dei giovani con le tematiche in oggetto.

3. Analisi dei dati e verifica d'ipotesi

3.1 Descrizione del campione

Il campione è risultato formato per il 57,1%[2] da studenti che si riconoscono nel genere femminile e dal 39,9% che si riconoscono in quello maschile[3]; l'1,5% (11 persone) dichiara "altro" e l'1,5% si è rifiutato di rispondere. Il range anagrafico delle età dei ragazzi è compreso tra i 16 e i 19 anni e l'età media del campione è di 17 anni e 4 mesi; le scuole di provenienza sono state classificate secondo la dicotomia liceo (52,2%) e non-liceo (47,8%).

Poiché nell'analisi dei dati per ogni domanda sono state verificate eventuali differenze di genere, sono stati considerati solo i soggetti che si riconoscono nel

[1] Prima di somministrare il questionario, è stato prodotto un documento di presentazione della ricerca, protocollato dal Dipartimento di Area Medica dell'Università degli Studi di Udine, indirizzato alla Dirigente del Liceo referente della rete di scuole, ed è stato inoltre prodotto un modulo informativo indirizzato ai genitori degli studenti, contenente la richiesta di consenso dei genitori degli alunni minorenni facenti parte del campione.

[2] In tutto il lavoro, le percentuali sono state calcolate solo sui dati validi, al netto dei "non so" o di risposte non codificabili.

[3] Nella domanda si è chiesto "In quale genere ti riconosci?" al fine di poter cogliere non l'identificazione biologica ma quella psicologica, e quindi comportamentale dei ragazzi (Ruspini, 2009).

genere maschile o femminile, mentre gli "altri" non sono stati inclusi data la loro esiguità numerica, pertanto il campione analizzato fa riferimento a 715 soggetti.

Infine, si segnala che il 61,5% delle femmine frequenta un liceo e il 61,2% dei maschi frequenta un non-liceo[4] e questa asimmetria fa sì che in tutti i confronti a cui sono stati sottoposti i dati risulta che le risposte dei "licei" sono allineate con le opinioni delle femmine e le risposte dei maschi con quelle dei "non-licei". Pertanto nella presentazione dei risultati del test utilizzato si riporteranno solo i dati riferiti al genere, ed implicitamente saranno estensibili alle scuole frequentate.

3.2 Sistema valoriale del campione

Il sistema valoriale dei ragazzi è stato esplorato attraverso una serie di affermazioni che riguardano le regole e il loro significato. Potendo scegliere solo una opzione, la maggioranza sostiene che le regole permettono la convivenza tra gli individui (50,1%), mentre una stretta minoranza attribuisce alle regole la funzione di limitare la cattiveria dell'individuo (3,2%) (tab.1). Con riferimento al genere si notano differenze significative[5]: ritengono che le regole permettano la convivenza tra gli individui di più le femmine (55,3%) rispetto ai maschi (42,5%). Inversamente, i maschi (26,2%) più delle femmine (18,1%) sono dell'opinione che le regole garantiscono ordine e decoro[6]. Non vi è differenza per età.

Tabella 1 – *Funzione delle regole, per genere ed età (valori in percentuale)*

	M	F	16-17	18-19	Totale
Permettono la convivenza tra gli individui	42,5	55,3	49,8	50,5	50,1
Garantiscono ordine e decoro tra gli individui	26,2	18,1	20,5	22,5	21,4
Rappresentano una forma di mediazione tra le diverse necessità degli individui	17,3	19,7	17,8	19,9	18,7
Sono una forma di controllo sugli individui	9,5	4,5	7,9	4,8	6,6
Limitano la cattiveria dell'individuo	4,4	2,4	4,0	2,3	3,2
Totale	100,0	100,0	100,0	100,0	100,0

Anche il tema della libertà è stato esplorato attraverso una serie di affermazioni, tra le quali la più condivisa è che la libertà "è la capacità di scegliere il proprio

[4] Il test del χ^2alla tabella "genere per tipologia di istituto", con 1 grado di libertà e valore critico pari a 3,841, è pari a 35,889 (per i test del χ^2 si rinvia a Ian Diamond e Julie Jefferies, 2006).

[5] Nel prosieguo del lavoro, quando si parla di "differenze significative" si intende "differenze statisticamente significative", verificate applicando il test del chi quadrato a tutte le distribuzioni di frequenza, incrociando i dati per genere, età e tipologia di scuola frequentata. Nel testo sono riportati solo i confronti risultati statisticamente significativi.

[6] È stato applicato il test del χ^2 con $\alpha = 0,05$ e 4 gradi di libertà, con valore critico pari a 9,488 e valore del test pari a 20,431.

destino" (55,2%) (tab. 2). Tra maschi e femmine si registrano differenze significative[7]: le femmine (60,6%) più dei maschi (47,6%) pensano che la libertà sia poter scegliere il proprio destino, viceversa sono i maschi (25,9%) più delle femmine (20,0%), a ritenere che essere liberi significhi poter agire senza essere ostacolati dal potere. L'età non influisce sulle opinioni dei ragazzi.

Tabella 2 – *Opinioni sulla libertà, per genere ed età (valori in percentuale)*

	M	F	16-17	18-19	Totale
È la capacità di scegliere il proprio destino	47,6	60,6	56,4	53,7	55,2
È la possibilità di agire senza essere ostacolati dal potere	25,9	20,0	24,3	19,9	22,4
È ascoltare la ragione, senza farsi influenzare da istinti, passioni, desideri o interessi	16,3	13,5	12,6	17,4	14,7
È la capacità di obbedire alle leggi che l'individuo stesso ha ideato per sé	10,2	5,9	6,7	9,0	7,7
Totale	100,0	100,0	100,0	100,0	100,0

L'ultima domanda che contribuisce alla descrizione del sistema valoriale degli studenti, riguarda il concetto di diritto. Più che negli altri casi si registra una forte convergenza di opinioni sul fatto che i diritti sono uguali per tutti (76,5%) (tab. 3), ma non va trascurato il restante 23,5% per cui la mancanza di rispetto del diritto di qualcuno può mettere in crisi anche i propri diritti (12,9%), o che qualcuno "è più uguale degli altri" (5,4%) o che i diritti bisogna guadagnarseli (5,2%).

Tabella 3 – *Opinioni sui diritti, per genere ed età (valori in percentuale)*

	M	F	16-17	18-19	Totale
I diritti sono uguali per tutti, nessuno escluso	73,8	78,4	79,5	72,7	76,5
Se un diritto di qualcuno non viene rispettato, allora anche il mio è messo in crisi	11,2	14,0	8,9	18,0	12,9
I diritti sono uguali per tutti, ma alcuni esseri umani sono più uguali degli altri	6,8	4,5	6,4	4,2	5,4
I diritti umani vanno guadagnati, altrimenti non vale la pena averli	8,2	3,1	5,2	5,1	5,2
Totale	100,0	100,0	100,0	100,0	100,0

Non si registrano differenze di genere, mentre l'età sembra influire sulle opinioni dei ragazzi[8]: i più giovani sono i più convinti che i diritti siano "uguali per tutti" (79,5%) mentre i più grandi pensano che i propri diritti possano essere messi in crisi se quelli degli altri non vengono rispettati (18,0% contro l'8,9%).

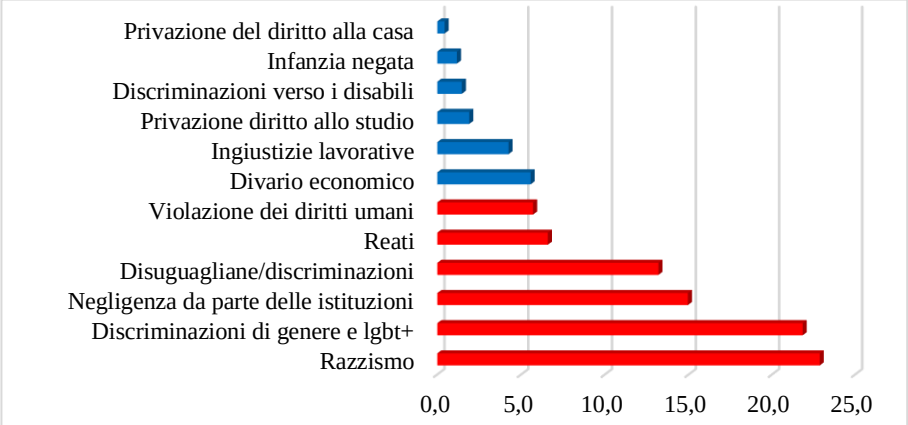
[7] Test del $\chi^2 = 8{,}863$; il valore critico, con $\alpha = 0{,}05$, g.l. =3, è pari a 7,815.

[8] Sono state accorpati i soggetti con 16 e 17 anni da un lato, e 18 e 19 dall'altro. Il test del $\chi^2 = 13{,}995$; il valore critico, con $\alpha = 0{,}05$, g.l. =3, è pari a 7,815.

3.3 Giustizia sociale

Al tema della giustizia sociale sono state dedicate 4 domande. La prima propone una riflessione sull'articolo 3 della Costituzione e secondo il 68,9% dei ragazzi[9] esso rappresenta un'indicazione su come dovrebbe essere il nostro Paese. Per molti il dettato della Costituzione resta un'utopia (20,6%) e pochi credono che rispecchi la realtà del nostro Paese (8,7%). Queste opinioni sono condivise in egual misura da tutti i ragazzi, indipendentemente dal genere, dalla scuola frequentata o dall'età. Il tema dell'ingiustizia sociale è stato esplorato attraverso una domanda aperta, con possibilità di fornire una risposta unica, per far emergere quelle che sono le priorità più sentite dai giovani, successivamente elaborata attraverso l'analisi del contenuto[10], applicando la manifest analysis (Downe-Wambolt, 1992). Attraverso la scansione manuale delle risposte e l'individuazione delle co-occorrenze sono state individuate 12 categorie semantiche, omogenee al loro interno ma eterogenee tra di loro, in modo da far sì che ogni risposta trovasse collocazione in una sola categoria (Krippendorff, 2004). Per descrivere le categorie, si sono inoltre utilizzate il più possibile le stesse parole espresse dagli intervistati, in modo da restare fedeli agli originali (Burnard, 1991).

Figura 1 – *Ingiustizie sociali (valori in percentuale)*



Dall'analisi dei dati è emersa una sorta di dicotomia: da un lato le ingiustizie riferite a valori e principi, indicate dall'85,2% dei ragazzi (evidenziate in rosso nella figura 1), che vede al primo posto il razzismo (22,9%) seguito a breve distanza dalle

[9] Le % sono state calcolate su 710 risposte codificabili.
[10] Nel calcolo delle percentuali sono state escluse alcune risposte non codificabili e le mancate risposte.

discriminazioni di genere e lgbt+11 (21,8%) per arrivare al 5,7% di violazione dei diritti umani, dall'altro le ingiustizie legate maggiormente a situazioni concrete di vita quotidiana, che assommano al 14,8% (evidenziate in blu nella figura 1), quali il divario economico (5,6%), le ingiustizie lavorative (4,3%), per arrivare alla privazione del diritto alla casa, segnalata da 3 ragazze (0,4%) (fig. 1). Solo tra i generi si evidenziano punti di vista diversi[12] e i divari maggiori riguardano l'ingiustizia nei confronti delle discriminazioni di genere e lgbt+ (femmine 25,8% e maschi 16,0%) e la negligenza da parte delle istituzioni (maschi 20,0% e femmine 11,5%), mentre solo le femmine segnalano come ingiustizia la privazione al diritto allo studio (13 ragazze) e la privazione al diritto alla casa (3 ragazze).

3.4 Diritti umani

Il tema dei diritti umani è stato affrontato ponendo alcune domande aperte, in cui era concessa una risposta unica, sottoposte all'analisi del contenuto, applicando il metodo descritto in precedenza. Le risposte dei ragazzi, riguardanti il diritto a cui si sentono più legati, sono riconducibili a due macro-categorie: quella dei principi e quella riferita all'esperienza "reale". Alla prima (totale 92,5%) fanno riferimento il diritto di espressione (40,8%) seguito dal diritto alla libertà (16,5%), diritto allo studio (13,1%), diritto alla vita (10,6%), all'uguaglianza (5,9%) e all'autodeterminazione (5,6%). Diritti più ancorati all'esperienza personale e "reale" (secondo 37 ragazzi, pari al 5,4%) sono il diritto alla salute, alla privacy, ad avere una famiglia, lavoro, cittadinanza, parità di genere, giustizia (questi ultimi due espressi solo da ragazze). L'1,2% non si riconosce in nessun diritto e lo 0,9% "in tutti".

Sul fronte dei diritti ai quali i ragazzi non potrebbero accedere, si segnala che il 9,1% percepisce una disparità tra se stessi e i propri coetanei, ma dall'analisi delle risposte aperte emerge che di fatto i ragazzi del campione non sappiano cosa siano i diritti e, di conseguenza, neanche quali siano i propri. Il diritto che, secondo loro è il meno rispettato nella società attuale è il diritto all'uguaglianza (29,2%) seguito dalla mancanza di libertà di espressione (17,2%) e dalla libertà individuale (7,9%)[13].

[11] Lgbt+ = lesbiche, gay, bisex, transgender e altri.
[12] Test del χ^2con correzione di Yates = 23,469; il valore critico, con $\alpha = 0{,}05$, g.l. =11, è pari a 19,675.
[13] Le percentuali sono state calcolate su 633 risposte valide, al netto di un 11,5% che non sa rispondere o ha fornito risposte non codificabili.

3.5 *Emotività verso il reo*

Per verificare l'approccio emotivo con chi ha compiuto un illecito, si è chiesto di indicare il sentimento che più di ogni altro rappresenterebbe la reazione emotiva nel momento in cui si venisse a sapere che un amico, o un estraneo, hanno compiuto azioni illecite. Ne emerge un quadro in cui le emozioni più ricorrenti sono delusione, fastidio, indifferenza e rabbia. In particolare, l'intervistato ritiene più grave ed è più coinvolto emotivamente se il reo è un amico a differenza di quando è uno sconosciuto, come già emerso nella ricerca di Giannini e Sgalla (2011).

3.6 *La punizione*

Per esplorare le opinioni degli adolescenti riguardo il tema della punizione si è scelta la via dell'immedesimazione, ovvero si è chiesto ai ragazzi di mettersi nei panni di tre figure diverse, per esprimere quale sarebbe stato il loro comportamento nelle tre diverse circostanze: 1) dal punto di vista di un osservatore che vede che i genitori puniscono il proprio figlio minorenne che rientra a casa di notte dopo l'orario pattuito e per di più ubriaco; 2) dal punto di vista del ragazzo che ha trasgredito e viene punito; 3) dal punto di vista del genitore che deve decidere come comportarsi di fronte al proprio figlio. Le risposte alla prima e alla terza domanda sono state ricondotte a tre categorie, corrispondenti a quattro stili educativi: permissivo/trascurante, autorevole e autoritario (Baumrind, 1968). Nel primo caso, il giudizio prevalente fornito dai ragazzi è riconducibile ad uno stile autoritario (69,0%), per cui si esprime un chiaro e delineato consenso per la punizione, un richiamo all'importanza imprescindibile delle regole e dell'ascolto indiscusso dell'adulto. Ne è un emblema la frase: "Penso che i genitori abbiano fatto bene, perché punire è il miglior modo per farsi ascoltare e far capire le cose. Sono invece il 26,7% i ragazzi che avrebbero adottato uno stile autorevole, per cui alla punizione sarebbero da preferire il dialogo e la mediazione[14], e di gran lunga meno numerosi sono i sostenitori di un comportamento permissivo/trascurante (4,3%), che non danno importanza all'ubriacatura e propongono soluzioni che non affrontano il problema. Non ci sono distinzioni tra le opinioni con riferimento a genere ed età.

Se si cambia prospettiva, e si chiede di mettersi nei panni del ragazzo che rientra tardi ed è ubriaco e per punizione non può uscire la domenica pomeriggio con gli amici che non vedeva da tempo, emerge che tra i *feedback* degli studenti il 51,8% si richiama all'autorità genitoriale, al fatto che sia giusto provare un senso di colpa nei

[14] Ad esempio: "...può darsi che Marco avesse poca possibilità di parlare con i genitori … e abbia trovato quella trasgressione come un modo per attirare su di sé l'attenzione…"

confronti di se stessi e del genitore, in quanto condizione necessaria per redimersi dall'errore compiuto[15]. Nella seconda categoria rientrano le idee del 25,6% che pensa, invece, che la punizione non sia efficace oppure chi si sente troppo grande per essere guidato dal genitore[16]. Nella categoria "in parte" (22,6%) rientrano quelle risposte che argomentano il fatto che un adolescente è una persona che si sta avvicinando al diventare adulto e quindi non ha bisogno del supporto dell'adulto, ma che, allo stesso tempo, dicono che trovano giusta la punizione[17]. Anche in questa prospettiva non ci sono distinzioni tra le opinioni con riferimento a genere ed età.

Infine uno sguardo alla situazione dalla prospettiva del genitore che assegna la punizione. Anche in questo caso prevale un approccio autoritario alla punizione per il 56,1% dei ragazzi che reclamano la punizione come strumento per far comprendere all'adolescente il senso del limite e le conseguenze a gesti pericolosi, però questo processo di assunzione di responsabilità dovrebbe avvenire in autonomia da parte del ragazzo, senza supporto dall'adulto. In diversi casi le risposte propongono di ricorrere alla violenza. Il 39,0% invoca uno stile autorevole, in cui è richiesto dialogo e scambio col figlio e in cui si discute per giungere ad una soluzione condivisa. Infine il 4,9% adotterebbe un comportamento permissivo nei confronti del figlio che rientra ubriaco, non considerandolo un problema. Significativa è la differenza tra i generi[18] per un atteggiamento maggiormente permissivo da parte dei maschi (8,5%) rispetto a quello delle femmine (2,5%); nessun distinguo con riferimento all'età.

Le diverse risposte alle tre situazioni prospettate trovano una sintesi nella domanda diretta: "In generale pensi che punire un comportamento che abbia trasgredito una norma sia efficace?". Il 76,2% del campione pensa che la punizione sia efficace, il 23,8% degli studenti crede, invece, che non lo sia. Le opinioni non variano tra maschi e femmine ma per età, laddove la punizione è ritenuta uno strumento efficace dall'82,6% dei ragazzi di 18-19 anni, contro il 71,3% dei più giovani[19]in sintonia con quella che è indicata come "l'era del castigo", sviluppatasi nell'ultimo decennio, in cui si estende il campo della repressione e si appesantisce il regime delle sanzioni (Fassin, 2018, p.15).

[15] Ad esempio: "Sì sono completamente d'accordo, io so di averli delusi e per questo so che devo rimettermi in riga e riconquistarmi la loro fiducia ed approvazione"

[16] Ad esempio: "…ritengo fondamentale che dei genitori aiutino un figlio cercando di capire il motivo della sua azione e di risolvere il problema. Voglio ricordare che tutti abbiamo avuto 16 anni, anche i nostri genitori. A maggior ragione dovrebbero capirci meglio."

[17] Ad esempio: "Non voglio essere punito, ma dentro di me so che era la cosa giusta da fare".

[18] Test del $\chi^2 = 12{,}833$; il valore critico, con $\alpha = 0{,}05$, g.l. =2, è pari a 5,991.

[19] Test del $\chi^2 = 12{,}490$; il valore critico, con $\alpha = 0{,}05$, g.l. =1, è pari a 3,841.

3.7 *La detenzione*

La riflessione sul senso della norma e della punizione si completa con una domanda diretta sulla funzione della detenzione. Ne emerge che il 69,4% degli adolescenti crede che il carcere abbia un obiettivo sia punitivo che rieducativo, ma diversi hanno specificato che questo secondo fine non sempre si realizza. Per il 15,2% il carcere ha solo una funzione punitiva e per il 12,3% serve per proteggere la società da soggetti pericolosi. Non ci sono differenze per genere ed età.

Infine una domanda sulla severità della pena: "Spesso si sente dire "per quell'uomo bisognerebbe buttare via la chiave!". Con questa frase si intende dire che quella persona meriterebbe di passare tutto il resto della sua vita in carcere, senza uscire mai più. Sei d'accordo?" La maggioranza dei ragazzi (54,4%) si dichiara d'accordo con l'applicazione di una pena detentiva senza fine per chi ha commesso reati molto gravi e il 13,0% sostiene che in tali casi "sarebbe meglio la pena di morte" e in particolare, ci sono più femmine a non condividere l'opportunità dell'ergastolo (34,7% contro il 29,6% dei maschi) mentre ci sono più maschi (19,4% contro l'8,5% delle femmine) ad essere favorevoli alla pena di morte[20] (tab. 4).

Tabella 4 – *Favore nei confronti dell'ergastolo per genere ed età (valori in percentuale)*

	M	F	16-17	18-19	Totale
Sì	51,0	56,8	56,9	51,1	54,4
No	29,6	34,7	30,9	34,7	32,6
Sarebbe meglio la pena di morte	19,4	8,5	12,2	14,2	13,0
Totale	100,0	100,0	100,0	100,0	100,0

4. Conclusioni

Questo studio ha cercato di individuare relazioni di significato tra l'opinione che gli studenti hanno sui temi della punizione, dei diritti, dell'illegalità, il genere in cui si riconoscono e l'età. È emerso che la maggior parte del campione pensa che le regole, la libertà e i diritti siano valori positivi che devono essere preservati per permettere la convivenza tra gli individui e far sì che ognuno possa autodeterminarsi, con alcune differenze statisticamente significative riconducibili al genere e all'età. Sul tema dei diritti sembra esserci molta confusione tra i ragazzi: non li conoscono bene e, di conseguenza, risulta per loro complesso definire il proprio status di cittadini. In generale, i diritti a cui gli studenti e le studentesse delle scuole coinvolte si sentono più vicini sono quelli del diritto all'espressione, alla libertà e allo studio, con una preponderanza di liceali per l'ultima opzione.

[20] Test del $\chi^2 = 18{,}056$; il valore critico, con $\alpha = 0{,}05$, g.l. =2, è pari a 5,991.

Il tema della punizione, invece, è molto sentito ed emerge come gli studenti in generale siano favorevoli alla punizione, anche se con delle riserve. Credono che sia giusto per un senso morale, ma che non sia funzionale a modificare un comportamento. Al tema della punizione è collegato quello della pena e più in particolare della reclusione: il 54,4% del campione pensa che sia giusto che una persona passi il resto della propria vita in carcere, il 13,0% pensa che sarebbe meglio la pena di morte e solo il 32,6% non crede che sia etico applicare l'ergastolo. La percentuale di favorevoli alla pena di morte è inferiore al dato del 2017, tuttavia occorre interrogarsi sul motivo per cui ci sono ragazzi che sostengono tale pena estrema (Guerra, 2010). Il risultato emerso rispecchia l'attuale quadro sociale in cui coloro che chiedono maggiormente ordine e disciplina sono proprio i soggetti più a rischio devianza (nella nostra indagine i maschi frequentanti un non-liceo), questo nonostante abbiano maturato in parte una consapevolezza dell'inefficacia delle pratiche punitive. Una possibile spiegazione può essere trovata sia dalla ricerca svolta da Bonino, Cattelino e Ciairano (2003) sia da quella effettuata da Giannini e Sgalla (2011) in cui si evidenzia che l'implicazione dei comportamenti a rischio aumenta con l'aumentare dell'età, per i ragazzi più che per le ragazze. In particolare, la prima sottolinea che la variabile della tipologia di scuola frequentata incide sul rischio devianza, maggiormente per chi frequenta un non-liceo.

È importante quindi portare avanti una riflessione che non si limiti a interventi educativi di prevenzione in cui l'adolescente è coinvolto quasi esclusivamente come beneficiario. Domandiamo ai ragazzi stessi cosa possa essere efficace per fare in modo che un adolescente non metta in atto comportamenti a rischio e riesca a rispondere ai compiti di sviluppo che la società gli richiede con competenza etica (Daffi, 2008).

È dunque importante promuovere la riflessione sull'utilità delle regole e sul tema dei diritti fin dall'inizio delle scuole superiori, concependo la scuola come una palestra in cui esercitarsi per essere pronti ad affrontare le dinamiche più complesse della società. Una possibile ipotesi è quindi quella di lavorare in modo mirato sul significato delle regole, condividendo in modo democratico con gli studenti quali di queste applicare responsabilizzando ognuno a quella che Gardner (2007) definisce intelligenza etica.

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SUMMARY

Study on crime, justice, rights and punishment among teenagers in Udine

The investigation aimed to identify the opinions of a non-probabilistic sample of young teenagers on the issues related to crime, rights, justice, punishment. There were 737 students from eight high schools in Udine, Italy interviewed by means of a semi-structured questionnaire and the open questions were analyzed by content analysis.

Based on the collected data it has been possible to explore the value systems of the teenagers, their concept of social justice and human rights, their opinion on illicit behaviors and views on punishment. The data was then related by gender and age. Rules, freedom and rights are considered positive values by the majority of the teenagers, who nevertheless showed some difficulties in identifying their own rights.

The issue of punishment is strongly felt by teenagers and they appear to be in favor of punishment with some reservations. They find punishment fair in a moral sense, but they consider it ineffective if aiming to modify behavior. Penalty entails the concept of punishment. Data show that 54.4% of the sample consider it fair that a person will spend the rest of his/her life in jail, in case of life sentence; 13.0 % consider that for certain crimes death penalty would be preferable to life sentence, only 32.6% do not reckon life sentence as ethical.

Teachers involved in the education project that originated this research may be recommended to promote reflection on the issues of rights and rules and their usefulness / benefits, seeing school as a training ground to get ready to tackle the more complex dynamics of society. It is thus recommended to encourage the active involvement of teenagers, asking directly to them what might be more effective to sustain a teenager in avoiding risk-taking behaviors, addressing these issues in the classroom, as suggested by students themselves in many questionnaires.

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SOCIAL POLICIES EXPENDITURE IN CALABRIA ACCORDING TO TERRITORIAL PUBLIC ACCOUNTS

Pietro Iaquinta, Elita Anna Sabella, Francesco Sassone

1. Introduction

Europe 2020 Strategy (European Commission, 2010; European Council, 2007 and 2010) relies on the following three mutually reinforcing priorities: *smart growth*, developing an economy based on knowledge and innovation; *sustainable growth*, promoting a more resource efficient, greener and more competitive economy; and *inclusive growth*, fostering a high-employment economy, delivering economic, social and territorial cohesion (European Commission, 2010, p. 10). For the purpose of reaching these priorities, European Commission proposes to fulfil by 2020 some targets relating to five thematic areas: employment, education, poverty and social exclusion, R&D and innovation, and climate change and energy. Unemployment and poverty are major issues in most EU countries, and as concerns this, EU aims to have three quarters of the population aged 20-64 have jobs and to lift at least 20 million people out of the risk of poverty or social exclusion by 2020 as compared with the year 2008 (European Commission, 2010). Proceeding from this perspective, EU targets have been translated into national targets. Focusing on the employment target, Italy is still about a 4 percentage point below its national target on employment. In particular, in 2019, the lowest employment rates in the EU were observed in southern Italy too: less than 50% of the working-age population was employed in Sicilia (44.5%), Campania (45.2%) and Calabria (45.3%). With regard to the target related to poverty, the number of people at risk of poverty and social exclusion has increased between 2008 and 2018, and is still too high in Italy (Table 1); thus, the highest rates of risk of poverty or social exclusion were recorded in the above-mentioned regions: Campania (53.6%), Sicilia (51.6%) and Calabria (44.5%) (Eurostat 2019a; 2019b).

Table 1 – *National Europe 2020 indicators. Italy: most recent data and targets.*

Topic	Headline indicator	Data	Year	Target
Employment	Employment rate age group 20-64, total (% of population aged 20-64)	63.5	2019	67
Poverty and social exclusion	People at risk of poverty or social exclusion (cumulative difference from 2008 in thousand)	1,360	2018	-2,200

Source: Europe 2020 headline indicators from Eurostat.

The new policy framework is also the basis on which Cohesion Policy has been developed for the 2014-2020 programming period. The overarching objective of cohesion policy has been to reduce "disparities between the various regions and the backwardness of the least-favored regions" through "actions leading to the strengthening of its economic and social cohesion" (European Regulation, 1987), and Lisbon Treaty (2007) and Europe 2020 Strategy (European Commission, 2010) introduced the territorial cohesion. The Partnership Agreement (European Regulation, 2013) is the national programming instrument for the European Structural and Investment Funds allocated to Italy for the 2014-2020 programming period (European Commission, 2014; 2016).

Hence, a solid information tool concerning the territorial distribution of government expenditure and revenue in the individual regional territories is crucial for the implantation of cohesion policy. It is the Territorial Public Accounts (TPA) system (AA.VV., 2007) that performs this function: it provides information referring to the universe of Public Administration and the Extended Public Sector monitoring public financial resources flowing into each territory. In this way, the information required by the principle of additionality of Community resources in relation to National resources is guaranteed by ensuring that the Structural Funds really bring added value.

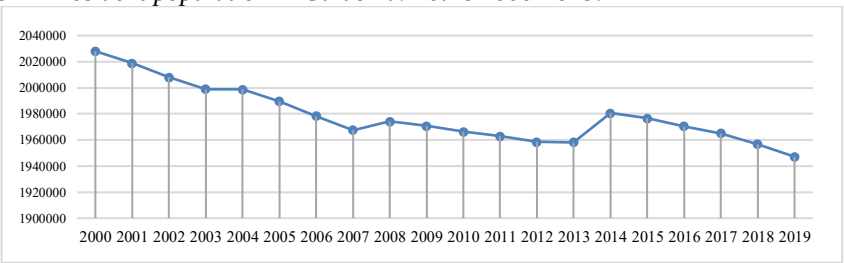
This paper focuses on Calabria, one of the most disadvantageous Italian regions as regards employment and poverty and social inclusion, which is the recipient of European structural and investment fund (Ifel-Fondazione Anci, 2020). Specifically, following a general demographic, economic and social analysis, this study focuses on the regional expenditure on social policies, using the TPA as data source.

2. The regional reference framework

The total population in Calabria is 1,947,131 (1 January 2019, provisional data), equal to 3.2% of the Italian population. Population trends between 2000 and 2019 are shown in Figure 1: except for the period 2013-2014, there was mainly a decreasing trend. In 2019 there is a total growth rate equal to -10‰. This results from a low birth rate (7.5‰ in 2019) and a high mortality rate (10.4‰) – explained by the gradual ageing of the population (old age index 163.3% in 2019) – that cause a natural decrease of its population (-2.9‰), and by a lack of attractiveness of the territory expressed by a negative net migration (-7.1‰). The latter point is reflected in a series of critical points that characterize the region in social and economic areas.

In 2018, with 16.98 thousand Euros – slightly above 16.91 thousand Euros in 2017 – Calabria was the region with the lowest per capita GDP in Italy. GDP in volume at regional level decreased by -0.81%, showing the most significant decline in the entire national territory.

Figure 1 – *Resident population in Calabria. Years 2000-2019.*



Source: own elaborations based on data obtained from ISTAT.

Household final consumption expenditure per inhabitant was 14.19 thousand Euros, marking thus only a modest increase of +0.41%. Calabria was also the last region of Italy in the ranking by disposable income per inhabitant with 12.74 thousand Euros, with a positive change of +1.33% (Table 2). Moreover, in 2017 (the last year with regard to which information is available) Calabria was the region with the highest weight of the informal and illegal economy (21.8% of added value), in particular, because of irregular work inputs (9.4% of added value) (ISTAT, 2020).

Table 2 – *Main indicators of territorial economic accounts in Calabria. Year 2018 (in thousand EUR and % changes on 2017).*

Regional gross domestic product per inhabitant (in thousand EUR)	16.98
Household final consumption expenditure per inhabitant (in thousand EUR)	14.19
Household disposable income per inhabitant (in thousand EUR)	12.74
GDP growth rate – volume (%)	-0.81
Household final consumption expenditure growth rate – volume (%)	+0.41
Change in household disposable income – growth rate in value (%)	+1.33

Source: Indicators of territorial economic accounts obtained from ISTAT database.

Indeed, the structural limits of the Calabria labor market remain facing up to unemployment and precarious work. Table 3 shows a set of indicators related to employment (2019): Calabria is the third last region in Italy for employment rate and the first one in unemployment rate (in descending order). Even the situation of youth employment is not reassuring. Besides, Calabria has the highest work irregularity rate in Italy (2012). Table 4 shows a set of indicators related to poverty and social exclusion. In 2018, almost one in every two people was at risk of poverty or social exclusion in Calabria, in line with the average of Southern Italy (45.0%), and about 17 points higher than the Italian average. This indicator, while still remaining strong, declined, as compared with the previous year (46.3%) because a lower incidence of poverty (36.4% in 2017). 14.2% (considerably down from 22.4% in 2017) lived in households with very low work intensity (ISTAT, 2019).

Table 3 – *Main territorial indicators of employment. Calabria-Italy. Most recent data (%).*

	Year	Calabria	Italy
Unemployment rate (15 years and over)	2019	21.0	10.0
Youth unemployment rate (15-24 years)	2019	48.6	29.2
Employment rate (20-64 years)	2019	45.3	63.5
Youth employment rate (15-29 years)	2019	21.4	31.8
Incidence of long-term unemployment	2019	64.1	57.1
Irregularity rate	2012	28.9	12.0

Source: Territorial indicators for development policies obtained from ISTAT database.

Table 4 – *Poverty and social exclusion indicators. Calabria-Italy. Year 2018 (%).*

	Calabria	Italy
People at risk of poverty or social exclusion	44.5	27.3
At risk of poverty rate	32.7	20.3
Severe material deprivation rate	15.3	8.5
People living in households with very low work intensity	14.2	11.3

Source: EU-SILC (Statistics on Income and Living Conditions) obtained from ISTAT database.

3. Social policies expenditure in Calabria according to Territorial Public Accounts (TPA)

3.1. Territorial Public Accounts system

Territorial Public Accounts (TPA) system is responsible for measuring and analyzing – at regional level – the incoming and outgoing financial flows of public administrations, as well as of the entities relating to the extended component of the public sector. The Extended Public Sector (EPS) consists of the Public Administration and the Extra PA. TPA system is part of the National Statistical System (SISTAN). It is currently subordinate to the Territorial Cohesion Agency, and consists of a Central Technical Unit, and of 21 local units operating in each Region. The construction of TPA is carried out according to a sector-based classification with 29 items attributable to ten macro sectors: general administration (general administration); general services (defense, public security, justice, non-recoverable charges); knowledge, culture and research (education, training, R&D, culture and recreational services); integrated water cycle (integrated water service); environment and land management (environment, waste disposal, other hygiene and health measures); health (health); social policies (social security and wage subsidies, employment, measures in the social field); productive activities and public works (agriculture, sea fishing and aquaculture, industry and handicrafts, trade, tourism, other public works, other economic, housing and town planning); mobility (road network, other transport); infrastructure networks (telecommunications, energy). Information from TPA database is now widely used for both analysis and assessment

of policy choices. In fact, TPA system data provides useful guidance for the government policy and the consequent operational choices, which are used by institutions at national and international level (Bank of Italy, SVIMEZ, EU, Court of Auditors, OECD, etc.) (AA.VV., 2007; CPT-Agenzia per la Coesione Territoriale, 2019; Agenzia per la Coesione Territoriale-CPT, 2019; 2020).

3.2. Consolidated public expenditure in the extended public sector in Calabria

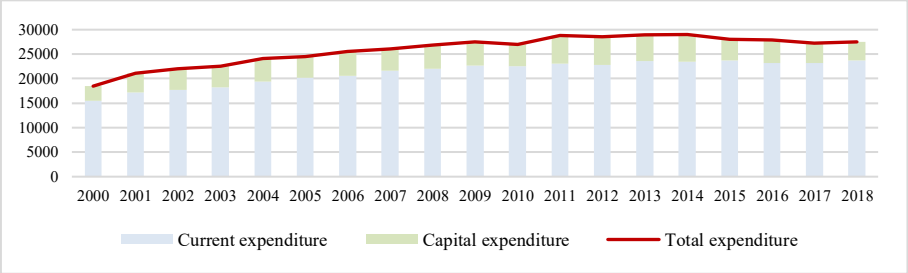
In 2018, the consolidated public expenditure of the EPS in Calabria amounted to 27,461.76 million Euros (Table 5). There was a slight increase of 0.95%, as compared to the previous year, because of the two expenditure constituents: the increasing current expenditure (+2.67%), and the capital expenditure that went through contraction, as compared to 2017 (-8.88%) (Figure 2). Moreover, the percentage composition of total expenditure by economic category shows that it was averagely composed of 82.19% by current expenditure, and of 17.81% by capital expenditure (years 2000-2018).

Table 5 – EPS-*Consolidated expenditure in Calabria by economic category. Year 2018 (in million EUR at current prices and %).*

	Million EUR	(%)
Current expenditure	23,771.49	86.56
Capital expenditure	3,690.26	13.44
Total expenditure	27,461.76	100.00

Source: own elaborations based on data obtained from TPA.

Figure 2 – EPS-*Consolidated expenditure in Calabria by economic category. Years 2000-2018 (in million EUR at current prices).*



Source: own elaborations based on data obtained from TPA.

The examination of expenditure by government level (Table 6) shows that Central Governments have had an average of almost 60%, and the remaining part has been divided up among the regional governments, therefore, the national public enterprises, the local governments, and the local public enterprises.

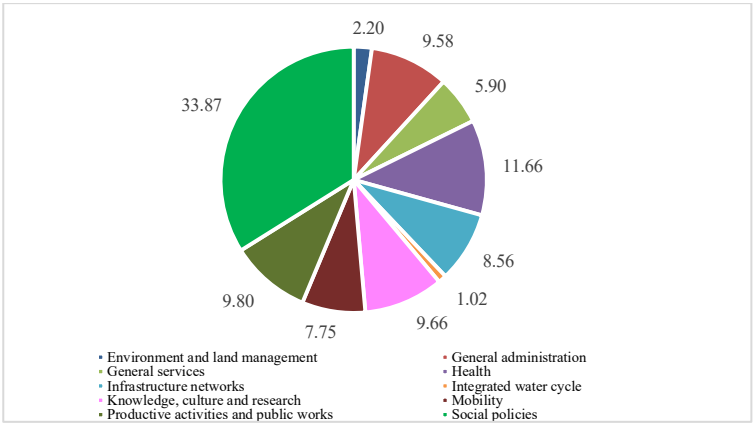
Table 6 – *EPS-Consolidated expenditure in Calabria by government level. Year 2018 and mean years 2000-2018 (%).*

	2018 (%)	Mean 2000-2018 (%)
Central governments	62.57	59.18
Local governments	7.06	8.80
Regional governments	13.29	14.86
Local public enterprises	4.76	2.46
National public enterprises	12.33	14.69
Total	100.00	100.00

Source: own elaborations based on data obtained from TPA.

Figure 3 shows the average expenditure of the EPS by macro sector. It should be noted that the distribution reveals the concentration of a great part of EPS financial flows in social policies.

Figure 3 – *EPS-Consolidated expenditure in Calabria by macro sector. Mean years 2000-2018 (%).*



Source: own elaborations based on data obtained from TPA.

In particular, in 2018, the social policies macro sector recorded significant outgoing financial flows of public administrations and of the entities relating to the extended part of the public sector, equal to 11,007.20 million Euros, namely, to 40.08% of the total regional consolidated expenditure. The next to come are health (11.58%) and general administration (9.65%) (Table 7).

3.3. Social policies expenditure

Social policies expenditure includes outgoing financial flow in administration, operation and support relating to three sectors: social security and wage subsidies,

employment and measures in the social field. Some examples of social policies expenditure are provided below: social protection measures (sickness and invalidity pensions, old age and survivors, measures to assist families, employment, housing, social exclusion), and the provision of benefits in cash and in kind, financed either by contributions paid or by general taxation; the promotion of employment for young people, women and disadvantaged groups; fight against discrimination in the working field; labor market observatories; rest homes and other residential facilities (AA.VV., 2007, pp. 83-84).

Table 7 – *EPS-Consolidated expenditure in Calabria by macro sector. Year 2018 (in million EUR at current prices and %).*

	Million EUR	(%)
Social policies	11,007.20	40.08
Health	3,179.30	11.58
General administration	2,649.01	9.65
Knowledge, culture and research	2,335.32	8.50
Infrastructure networks	2,187.11	7.96
Productive activities and public works	2,100.80	7.65
General services	1,934.15	7.04
Mobility	1,228.18	4.47
Environment and land management	601.98	2.19
Integrated water cycle	238.70	0.87
Total	27,461.76	100.00

Source: own elaborations based on data obtained from TPA.

In Calabria, the macro sector of social policies accounts for most of the expenditure of the extended public sector, because of the numerous interventions of the various levels of government in the social field, in the social security, and in the wage subsidies. This predominance has largely been due to the expenditure for social security and wage subsidies which commits a large part of the expenditure of the EPS through the payment of pensions. The value of expenditure in the social policies of the EPS in 2018 amounted to about 11 billion Euros, of which 9 billion Euros were allocated to social protection (Table 8). In 2018, Calabria spent 5,354.83 Euros per capita on social policies (constant 2015 euro per capita).

Figure 4 shows the evolution of total consolidated expenditure in social policies in Calabria between 2000 and 2018. The value of expenditure in the social policies of the EPS in the last year of which data are available was 5 billion higher than in 2000 (5,990,977.39 thousand Euros). The temporal trend shows the prevalence of an annual growth trend, even if with some exceptions to its linearity: from 2010 until 2015, there was an alternation between periods of decrease and periods in which expenditure instead returned to growth, and then resumed until 2018 an increasing trend. This trend could be explained by the needs arising from the evolution of

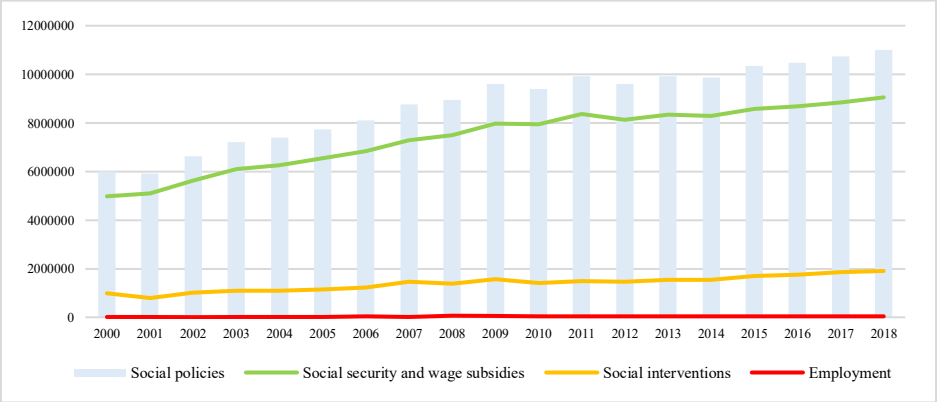
variables such as the financial crisis, which has exacerbated the levels of poverty of the population and tested the labor market, as well as the ageing of the population, seem to have given a boost to the increase in expenditure.

Table 8 – *EPS-Social policies expenditure in Calabria by sector. Year 2018 (in thousand EUR at current prices and %) and mean years 2000-2018 (%).*

	2018 Thousand EUR	(%)	Mean 2000-2018 (%)
Social security and wage subsidies	9,049,612.14	82.22	83.93
Social interventions	1,906,371.30	17.32	15.69
Employment	51,219.72	0.47	0.38
Total	11,007,203.16	100.00	100.00

Source: own elaborations based on data obtained from TPA.

Figure 4 – *EPS-Social policies expenditure in Calabria by sector. Years 2000-2018 (in thousand EUR at current prices).*



Source: own elaborations based on data obtained from TPA.

The examination by government level of social policies expenditure shows that in Calabria the management of the macro sector is mainly a matter of central responsibility: thus, about 98% of expenditure goes directly through central government funds, and in particular, about 95% through provident societies (Table 9).

Highlighting the subdivision of the EPS expenditure between current and capital expenditure, in the period 2000-2018, we note that in Calabria, averagely speaking, the first aggregate accounts for 90.29%, while the second accounts for 9.71%. Current expenditure, in absolute terms, has tended to increase.

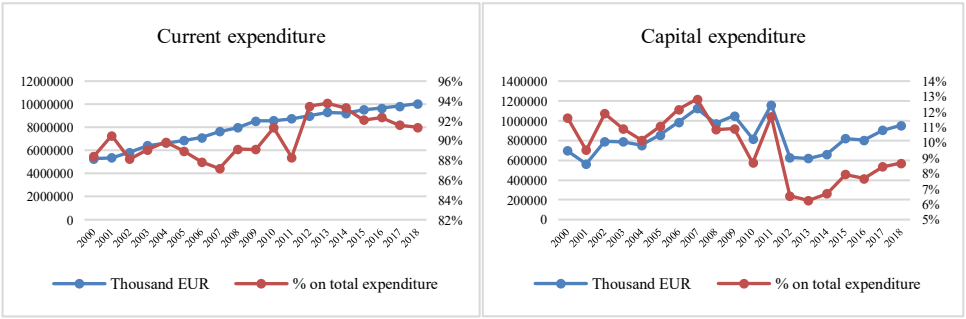
Table 9 – *EPS-Social policies expenditure in Calabria by government level and type of entity. Year 2018 (in thousand EUR at current prices and %) and mean years 2000-2018 (%).*

	2018		Mean 2000-2018
	Thousand EUR	(%)	(%)
Central governments	*10,822,886.99*	*98.33*	*98.16*
State	366,894.41	3.33	2.45
Provident societies	10,455,992.58	94.99	95.71
Local governments	*107,359.78*	*0.98*	*1.19*
Municipalities	102,473.19	0.93	0.98
Provinces and metropolitan cities	4,874.64	0.04	0.19
Mountain communities and various unions	11.95	0.00	0.01
Regional governments	*50,464.93*	*0.46*	*0.57*
Regional government	50,464.93	0.46	0.57
Local public enterprises	*24,658.74*	*0.22*	*0.06*
Companies and institutions	24,285.24	0.22	0.06
Participating companies and foundations	373.50	0.00	0.00
National public enterprises	*1,832.72*	*0.02*	*0.02*
Italia Lavoro	1,832.72	0.02	0.02
Total	11,007,203.16	100.00	100.00

Source: own elaborations based on data obtained from TPA.

Capital expenditure has developed non-linearly: after a considerable reduction recorded between 2011 and 2013, it increased again both in absolute terms, and as a percentage of total expenditure (Figure 5).

Figure 5 – EPS-*Current and capital expenditure for social policies in Calabria. Years 2000-2018 (in thousand EUR at current prices and % on total expenditure).*



Source: own elaborations based on data obtained from TPA.

Specifically, in 2018, the main items of expenditure were current account transfers to households and social institutions, which alone accounted for almost all current expenditure, and for about 85% of total expenditure. Also, there are the

shareholdings and contributions and the granting of loans, which constituted almost all of capital expenditure (Table 10).

Table 10 – *EPS-Social policies expenditure in Calabria by economic category. Year 2018 (in thousand EUR at current prices and %) and mean years 2000-2018 (%).*

	2018		Mean 2000-2018
	Thousand EUR	(%)	(%)
Staff costs	131,981.71	1.20	1.70
Purchase goods and services	90,510.08	0.82	0.74
Current account transfers to households and social institutions	9,356,887.28	85.01	84.50
Current transfers to private enterprises	11,633.43	0.11	0.21
Interest expense	4,497.08	0.04	0.13
Corrective and compensatory revenue items	336,917.12	3.06	2.25
Current account not attributable	121,909.45	1.11	0.77
Current expenditure	*10,054,336.15*	*91.34*	*90.29*
Real estate assets and works	17,312.57	0.16	0.30
Movable property, machinery, etc.	15,623.70	0.14	0.13
Capital transfers to households and social institutions	4,444.64	0.04	0.08
Capital transfers to private undertakings	434.70	0.00	0.02
Shareholdings and contributions	660,560.70	6.00	6.34
Granting of credit, etc.	254,231.69	2.31	2.83
Non-attributable capital amounts	259.01	0.00	0.00
Capital expenditure	*952,867.01*	*8.66*	*9.71*
Total	11,007,203.16	100.00	100.00

Source: own elaborations based on data obtained from TPA.

4. Conclusions

According to the Territorial Public Accounts, in Calabria, the macro sector of social policies accounts for most of the expenditure of the extended public sector. The upward trend of social policies recorded in the last years could be explained by the needs arising from the financial crisis which has exacerbated the levels of poverty of the population and tested the labor market, as well as the ageing of the population. Current expenditure accounts for a large part of total expenditure in the macro sector of interest although the percentage weight of capital expenditure has increased in recent years. Investment is the key to economic and social growth, and from this perspective, this analysis stresses the importance of investment programs to support a region particularly afflicted by financial and social problems, mobilizing, for example, substantial resources to make capital investments useful for boosting growth, thus contributing to the objectives of cohesion policy. Moreover, the economic assistance is not sufficient on its own to counter poverty or social exclusion, so the integration of income must be accompanied by active measures

aimed at the inclusion of people and at the autonomy. Finally, integration between Community, National and Regional funds and programs should be encouraged as a means of implementation.

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SUMMARY

Social Policies Expenditure in Calabria According to Territorial Public Accounts

Europe 2020 Strategy puts forward three mutually reinforcing priorities: smart growth, sustainable and inclusive growth, and with this in view proposes to fulfil by 2020 some targets relating to five thematic areas: employment, education, poverty and social exclusion, R&D and innovation, and climate change and energy. Unemployment and poverty are major issues in most EU countries, and Italy, especially its southern regions, still lag behind in terms of achievements of objectives. This paper focuses on Calabria, one of the most disadvantageous Italian regions with regard to employment and poverty and social inclusion. Specifically, following a general demographic, economic, and social analysis, this study focuses on the regional expenditure of the extended public sector (EPS) on the macro sector of social policies – it includes three sectors: social security and wage subsidies, employment and measures in the social field – using Territorial Public Accounts (TPA) as data source. The expenditure analysis is based on the TPA 2000-2018 time series. In 2018, the consolidated public expenditure of the EPS on social policies in Calabria amounts to 11,007.20 million Euros. In Calabria, the macro sector of social policies accounts for most of the total expenditure of the EPS because of the numerous interventions in the social field, especially in the social security and in the wage subsidies. Social policies management is mainly a matter of central responsibility. Current expenditure accounts for a large part of total expenditure in the macro sector of interest, in particular the current account transfers to households and social institutions. This analysis stresses the importance of investment programmers to support a region particularly afflicted by financial and social problems, mobilizing, for example, substantial resources to make capital investments useful for boosting growth.

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THE HUMAN DEVELOPMENT INDEX: A CRITICAL EVALUATION AND A NEW PROPOSAL

Vincenzo Marinello, Chiara Di Puma

1. Introduction

The Human Development Index (HDI) was introduced in 1990 as a complementary index to GDP, to consider socio-economic aspects in the evaluation of countries development. The mission of the HDI was to initiate a measurement that considered not only the economic aspect, but also the quality of life and social progress.

The HDI is a composite index; it consists of the geometric mean of three different dimensions: health level, educational level and living standard. However, in the 21st century, climate change and new ecological policies show several gaps in HDI; in this perspective, HDI does not consider any environmental dimension. The climate change has caused criticism to this indicator, because a complete determination of human development requires, also, a full comprehensive measure related to the ecological dimension, which are not analysed in the HDI. This deficit was highlited also by Biggeri and Chiappero Martinetti (2010) which proposed the integration of this index with environmental indicators by the introduction of CO2 emissions.

In its first introduction, the HDI proposes a development model that is empirically incompatible with sustainable development. Analysing development in a perspective of sustainability require a combination of different aspects, such as environment and economy, green economy and economic growth and the relationship between environment and social objectives (UNEP, 2011). According to Gupta and Vegelin (2016) is important to identify the factors that strengthen the relationship between social factors and human development.

The integration of environmental, economic, social and political variables can be essential to identify which dimension needs to be strengthened to increase human development.Due to its specific characteristics, human development can be considered a multi-dimensional and multi-perspective concept that requires both theoretical and empirical study.

In the first part of the paper is introduced the theoretical debate on the HDI's multidimensionality, highlighting the criticism made to it. In the second part of the paper we propose a possible integration between the HDI and some environmental indicators; in this study CO2 emissions are interpreted as an explanatory variable, fossil fuel energy consumption and renewable energy consumption as a proxy.

2. Literature review

From the 2000s, the concept of development has been conceived as consequence of economic growth. Cornia (2004) shows an analysis of well-being in relation to growth.The author highlights the high rates of poverty in the presence of economic growth. His aim is to interpret development by focusing on citizens and their needs. In this perspective it is determined the environmental dimension, where individuals can satisfy their desires, allowing them to live a healthy life (Biggeri and Chiappero Martinetti, 2010). According to Biggeri and Chiappero Manetti the aim is to evaluate relationship between the individual, institutional, natural and social environment. In order to reach a high level of well-being it is necessary to intervene on cultural, geographical, institutional and historical aspects. In addition, Davies (2009) highlights three deficits in the Human Development Index. First, it is a mistaken understanding of the concept of human development; another gap, according to this author, is the wrong equation of the calculation. Finally, the HDI is calculated with inaccurate data.

Sen (1999) says that to start an innovative and relevant research, related to human development, it is necessary to carry out an analysis at micro-meso-macro level. The reinforcement of human development has a strong influence on environmental and social sustainability (Biggeri and Chiappero Martinetti, 2010). Neumayer (2001) argues that there is a narrow relationship between sustainability and human development. Doyle (2018) emphasizes that HDI does not consider global warming, underestimate an important issue.Deneulin and Shahani (2009) argues that development is based on four pillars: equity, productivity, empowerment and sustainability. The authors with the term "sustainability" refer to environmental and social resources and their fair distribution to the population. Schattan et al (2008) argues that human development should be an issue to be considered by policy makers in order to promote human development initiatives.All these contributions can be considered the basis of the numerous initiatives in support of environmental sustainability.

In the perspective of reconciling the environmental dimension in the HDI, O'Neill et al (2018) have integrated the Human Development Index with the ecological impact variable;according to authors the study of human development is

focused only on the distribution of wealth and not on the ecological dimension (Ranis and Stewart, 2012, Neumayer, 2001; Ranis et al. 2006; Biggeriand Mauro, 2018; Hirai, 2017).

From the literature review on the Human Development Index emerges a series of both technical and substantial criticisms (Dervis and Klugman, 2011; Herrero et al., 2012; Morse 2014; Neumayer, 2011; Kovacevic, 2010; Togtokh and Gaffney, 2010; Ranis and Stewart, 2012; Chowdhury and Squire, 2006). The first aspect concerns a technical problem related to calculation. Specifically, it refers to the geometric mean. If the number of variables increases and if one or more elements are close to zero, the index is zero (Klugman et al., 2011). This limit will cause problems in the interpretation of the data obtained. The second criticism about HDI concerns the absence of variables regarding environmental and social sustainability dimension (De la Vega et al. 2001; Togtokh, 2011; Pelenc et al., 2013). Development and environment are not independent dimensions, but there is a relationship between the two aspects. Several studies have introduced the environmental dimension to integrate the Human Development Index (De la Vega et al., 2001; Neumayer, 2001; Morse, 2003). Therefore, the main thesis in the literature is that the HDI is too limited to measure human development with its three existing dimensions (Anand and Sen, 2000; Hirai, 2017). According to Hirai (2017) the HDI does not include, in fact, all the dimensions that indicate the real situation of human progress. In this perspective, Togtokh and Gaffney (2010) introduced a new index, the Sustainable Human Development Index (HSDI). HSDI is an alternative and most complete index to HDI. HSDI takes corrective action to overcome HDI deficits. However, although it is one of the most comprehensive indices, it is still not sufficient because the indicators used are not adequate to show a complete overview of the environmental dimensions and political freedom. The latter aspect is one of the major criticalities that does not allow its use for the study of human development.

3. A statistical study of possible integration on HDI

For the main causes discussed in paragraph 2, we try to strengthen the validity of the HDI considering the environmental dimension. The variables introduce were: fossil fuel energy consumption (% of total energy consumption), renewable energy consumption (% of total final energy consumption) and carbon dioxide emission (KG per 2010 US$ of GDP). For the sample it was decided to consider only the data relating to the main European countries. This choice depends on the desire to have homogeneous and comparable reference benchmarks and a territorial and cultural similarity. The 13 countries considered also have the same legislation

and similar levels of development also following accession, or the next accession, to the European Union.

Table 1 –*Performers on the human development index;fossil fuel energy consumption (% of total energy consumption); renewable energy consumption (% of total final energy consumption) and carbon dioxide emissions (KG per 2010 US$ of GDP).*

ID	COUNTRY	HDI	FOSSIL FUEL ENERGY CONSUMPTION (% of total energy consumption)	RENEWABLE ENERGY CONSUMPTION (% of total final energy consumption)	CARBON DIOXIDE EMISSIONS (KG per 2010 US$ of GDP)
1	ALBANIA	0.789	61.4	38.6	0.12
2	BELGIUM	0.919	75.9	9.2	0.20
3	BOSNIA AND HERZEGOVINA	0.769	77.5	40.8	0.58
4	CROATIA	0.835	70.7	33.1	0.19
5	CYPRUS	0.871	92.9	9.9	0.24
6	FRANCE	0.89	46.5	13.5	0.12
7	GREECE	0.871	82.6	17.2	0.25
8	ITALY	0.881	79.9	16.5	0.16
9	GERMANY	0.939	78.9	14.2	0.21
10	MALTA	0.883	97.8	5.4	0.09
11	UNITED KINGDOM	0.920	80.4	8.7	0.15
12	PORTUGAL	0.848	77.0	27.2	0.17
13	SPAIN	0.893	73.0	16.3	0.16

Source:Data from United Nations Development Programme – 2018 own elaboration.

In this paragraph the correlation between human development, energy consumption and carbon dioxide emissions is studied.

As is possible to see in Table 1, the correlation analysis shows a negative dependence for all three variables, in detail the data highlight a value equal to -

0.129; -0.2884; -0.3752, respectively to fossil fuel energy consumption, renewable energy consumption and carbon dioxide emission. We primary consider the environmental dimension, and its relation to HDI, by the aggregation of these three indicators. From the data shown in the table, the correlation values suggest that an increase in the environmental variable tends not to have a decisive impact on the HDI.

Statistical analysis data show that environmental dimension does not have a strong impact on the Human Development Index. There are countries that register a high level of HDI while maintaining a high consumption of fossil fuel energy and a high level of CO2 (Belgium, Germany and England). All p-values are greater of 0.05. So, the null hypothesis that there is no significant correlation between the level of HDI and environmental variables, has been accepted with a high level of significance.

Table 2–*Descriptive statistics.*

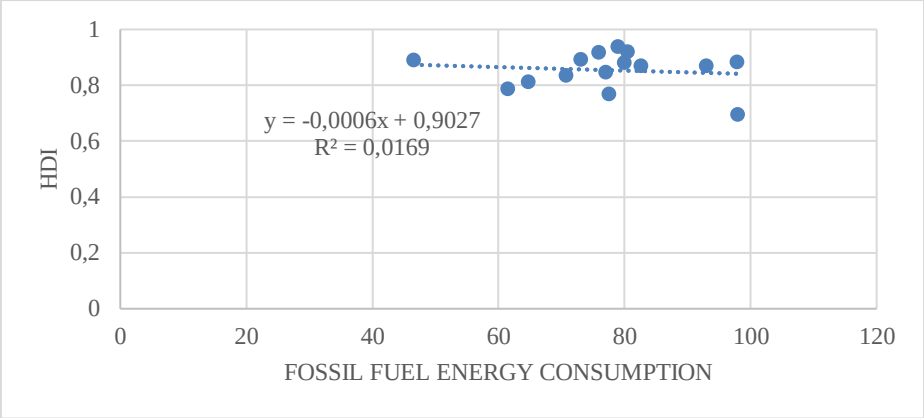
Variables	**FOSSIL FUEL ENERGY CONSUMPTION**	**RENEWABLE ENERGY CONSUMPTION**	**CARBON DIOXIDE EMISSIONS**
R multiple	0,129952525	0,288430471	0,375217964
R squared	0,016887659	0,083192137	0,140788521
Adjusted R squared	-0,058736368	0,012668455	0,07469533
Standard Error	0,066943705	0,064646845	0,062583263
Coefficient	-0,000625364	-0,001519975	-0,215068746
Standard Error	0,001323361	0,001399467	0,14735743
Stat t	-0,472557678	-1,086109596	-1,459503912
P-Value	0,644363749	0,297160031	0,168165615
Observations	13	13	13

Source: own elaboration

The calculation of the R squared has been executed to know the explicative power of the variables. The value of R-squared equal to 0.0168; 0.0831 and 0.1407 represents as respectively 1.168%; 8.319% and 14.078%. CO2 emissions is an

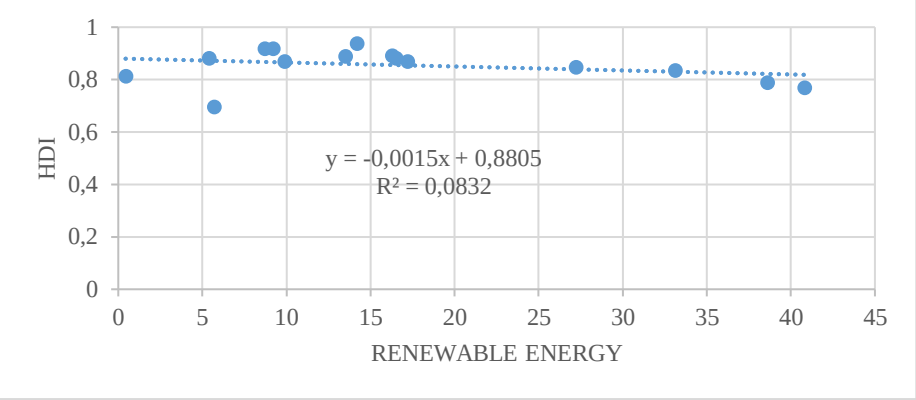
explanatory variable even if it does not have a strong impact on HDI. Fossil fuel energy consumption and renewable energy consumption as a proxy.Weak negative correlations confirm that high levels of HDI correspond to high dioxide carbon emissions.Figures 1, 2,3 show a straight line with decreasing trend; this means that as fossil energy consumption and CO2 emissions increase the HDI value increases.

Figure 1 – *Scatterplot of HDI and fossil fuel energy consumption.*



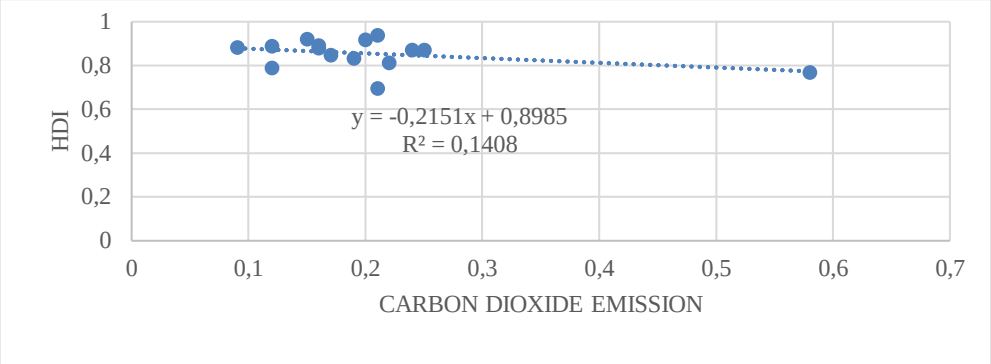
Source: own elaboration.

Figure 2 - *Scatterplot of HDI and renewable energy consumption.*



Source: own elaboration.

Figure 3 – *Scatterplot of HDI and Carbon Dioxide Emissions.*



Source: own elaboration.

4. Conclusion

This paper try to presents a critical assessment of the concepts of human development and weakness in the measurement phase. The current challenges facing human progress underline the need to improve measuring instruments.However, the HDI represents one of the main human development measures adopted.

Currently, the HDI is calculated through the geometric average of three indicators: life expectancy index (HDI), education index (EI) and income index (II). It is argued that the fragility of this index is due to the absence of variables referring to the environmental dimension, but also the absence of variables that explain how a population actually contributes to progress according to development prospects.

Moreover, the combined action of environmental, economic and social perspectives could represent a starting point for policy makers, who will be able to monitor and evaluate the results of their strategies and define new improvement measures.

Although the HDI is the starting point for measuring the degree of development of a country, it should be complemented by indicators that reflect the environmental reality in a sustainable development perspective.

Sustainable development is associated with the ecological dimension. For this consideration, we tried to integrate the HDI considering the three variables as an expression of the environmental aspect.

In this work, from the analysis carried out it can be deduced that the variables taken into account in this study do not have a decisive impact on the HDI, so it may be appropriate to include, also, other environmental variables. There is no

significant correlation between fossil energy consumption, renewable energy and CO2 emissions. Statistical analysis shows that high human development can also be achieved with high energy consumption from fossil fuels and CO2 emissions. Therefore, the reduction of CO2 emissions does not appear to contribute significantly to human development.This consideration assumes that environmental varibials should be further extended in order to determine what impact environmental quality has on human development.

Therefore, it would be opportune a better analysis both from the point of view of the data and the size of the sample examined in order to be able to decisively support the scientific debate on HDI and produce a direct contribution to the estimation and measurement of Human Development also in relation to the environmental aspect.

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SUMMARY

THE HUMAN DEVELOPMENT INDEX: A CRITICAL EVALUATION AND A NEW PROPOSAL

The Human Development Index is used as an alternative indicator to GDP to measure development. This index shows a theoretical and empirical revolution. It representsone of the most popular composite indices for socio-economic analysis and measurement of development. Nervertheless, the climate change has highlighted one of the main limitations of this index, i.e the absence of variable related to environmental sustainability.

The introduction of the environmental dimension significantly increases the potential of HDI. This paper tries to propose an extension of the HDI, including an environmental aspect in the evaluation. However, it is a synthetic and systematic indicator, so that studies show limitations and gaps in terms of measurement related to the environmental dimension, but also the absence of variables that explain how a population concretely contributes to progress according to development prospects.

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HOW FRAGMENTED IS THE WORLD ECONOMY: EVIDENCES FROM THE EORA DATABASE

Giuseppe Ricciardo Lamonica

Introduction

The reduction (or elimination) of trade barriers, development of technology, differences in factor prices and factor productivities between countries, have strongly grown the international trade and thus contributed to delocalization of production process to countries where costs are relatively low and more efficient, boosting international trade (e.g. Krugman and Venables, 1995; Feenstra, 1998; Jones and Kierzkowski, 2001).

Consequently, world economy has been increasingly characterized by a strong economic interdependence among countries, so that the production of a finished good involves the participation of many countries specialised in different stages of production. Indeed, a country imports goods from other countries, uses them as inputs in the production of its own good, which is then exported to the countries specialised in the next stage of production. This sequence continues until the good reaches its final consumers

In literature this phenomenon is known as "vertical specialization", "slicing the value chain", "production fragmentation" or "outsourcing". Now the phenomena of vertical specialization is considered a fundamental factor that contributes to explain the organization of world production, the degree of globalization of economic systems, being a key issue for international and national policies governing markets and promoting development.

The production fragmentation has been extensively studied in literature and there is an increasing empirical documentation of the rising role of vertical specialization of the country economies. See for example but not limited to: Athukorala and Yamashita (2006), Bridgman (2012), Dean and Lovely (2010), Dixit and Grossman (1982), Feenstra (1998); Feenstra and Hanson (1997), Goh and Henry (2005), Leung (2016), López (2014), Jones and Kierzkowski (2001), Hogan *et al.* (2005), Sanyal (1983), Yücer *et al.* (2014), Vechiu and Makhlouf (2014).

There are three standard methods to measure vertical specialization (Feenstra, 1998). While the first one uses firm surveys, the second approach adopts a fine industrial classification of trade, as in Athukorala and Yamashita (2006). The third and most traditional method uses National Input-Output Tables (NIOT), according

with e.g. Ishii and Yi (1997) and Hummels *et al*. (1998, 2001). Limiting the attetention to this last approach, two different measures of outsourcing based on NIOT have been proposed. The first measure focuses on the foreign content of domestic production and estimates the share of imported intermediate inputs in either production or total input. This measure, originally due to Feenstra and Hanson (1997), has been used to assess to what extent workers at home have been substituted by workers abroad. In other words, this approach evaluates the elasticity of substitution of domestic value-added with respect to imported intermediate inputs. This measure captures the essence of international outsourcing, i.e. the firm's decision to substitute domestic value-added by foreign production (Los *et al*., 2015). The second measure based on NIOT concentrates on the direct and indirect import content of exports and was originally formulated by Hummels *et al*. (1998, 2001). In these papers the authors discussed two ways in which a country can participate in vertical specialization. A first way it use imported intermediate inputs to produce exports. A second way it can export intermediate goods that are used as inputs in goods exported by another country.

As previously stated, the fundamental element of this approach is the use of NIOT to identify the value of the imported intermediate inputs used in the production of each sector. Indeed, the value of imported intermediates is properly accounted in the NIOT, where classification is based on the use of the good and not on its characteristics. Moreover, the NIOT approach allows for a sectorial breakdown of the vertical specialization measure and respect the use of trade data has the advantage of not considering the phenomenon of double recording in trade statistics. Indeed, goods in process can cross multiple national borders before getting embodies in the final product. For example, consider the case of car windshield produced in country A and exported to country B for assembly process, would be counted again as B's exports, although there is no production transformation on that product. High prevalence of cross border shipping of the same product makes this problem worse. Moreover, the use of NIOT allows to avoid another problem related to the use of imported inputs. When import of a particular intermediate input takes place, it is not clear of the use of this product, whether it would be used directly by consumer as a replacement for broken product, or used by a producer for further production process.

This paper, by means of the World Input-Output Table (WIOT) derived from the EORA database, furnishes an analysis of the fragmentation degree of the world's economies applying an alternative measure in the spirit of the Hummels *et al*. (2001) approach, that will be introduced in the next section.

The EORA-WIOT (https://worldmrio.com/) is a multi-region input-output table and is built in current U.S. dollars with a classification for 26 industries (sectors). The database used in this analysis is the simplified EORA26 model that covers 139

countries for the period from 1990 to 2015. In this paper, we limit the analysis only the years 1995 and 2015.

The main results of this analysis show that the production chain of the countries has become increasingly fragmented since 1995. However, the degree of international fragmentation vary considerably across the countries and economic sectors.

Methodology

Considering the following simplified pattern, in block matrix notation, of a NIOT:

Figure 1 – *Pattern of a NIOT*

Z	**f**	**e**	**x**
M			
v′			
x′			

Where:

- **Z** is a *n*x*n* matrix whose entries (z_{ij}) are the flows for intermediate use from the i-th sector to the j-th sector;
- **f** is a *n*x*1* vector whose entries are the flows from the i-th sector to the final sector;
- **e** is a *n*x*1* vector whose entries are the exportations of the i-th sector;
- **M** is a *n*x*n* matrix whose entries (m_{ij}) are the imported flows, for intermediate use, from the i-th foreign sector to the j-th domestic sector;
- **v′** is *1*x*n* vector whose entries are the added value of the i-th sector (′ is the transposition symbol);
- **x** is a *n*x*1* vector whose entries (x_j) are the total production (gross output) of the j-th domestic sector;

As proposed by Hummels *et al.* (2001) a measure of the vertical specialization of an economic sector of a country R is the value of directly imported intermediates embodied in goods that are exported. Formally:

$$DVS_{Rj}=a_{M.j}e_j\left(\mathbf{i}'\mathbf{e}\right)^{-1} \text{ and } a_{M.j}=\sum_{i=1}^{k} a_{Mij} \quad (1)$$

where, **i** is a vector of 1's, $a_{Mij} = m_{ij}/x_j$ is the generic entry of the $\mathbf{A}_M$ matrix of the direct imported coefficients. Thus, a_{Mij} is the total amount of i-th product imported and used as input for the production of one monetary unit of industry j's output.

For the economic system of a country, vertical specialization is simply the sum of DVS_j across all j. In matrix notation:

$$DVS_R=\mathbf{i}'\mathbf{A}_M\mathbf{e}(\mathbf{i}'\mathbf{e})^{-1} \quad (2)$$

The DVS index is a weighted average of the direct import coefficients using the sectorial exports as weights.

A more detailed index of a sector's vertical specialization is the following (3). Indeed, an intermediate good can be initially imported as input of one domestic sector and then used as an intermediate good in a second domestic sector and so on, until the imported product is finally embodied in a good that is exported:

$$VS_{Rj}=A'_{Mj}\mathbf{L}_j\frac{e_j}{\mathbf{i}'\mathbf{e}} \quad (3)$$

Where A'_{Mj} is the j-th column of the A_M matrix and $\mathbf{L}_j$ the j-th column of the Leontief inverse matrix $\mathbf{L}=(\mathbf{I}-\mathbf{A}_Z)^{-1}$. This last index includes both the directly and indirectly imported input content in exports of a sector. Indeed, equation (3) gives the total amount of imports that is directly and indirectly required to satisfy one unit (1$) of the j-th product exported. The vertical specialization of the economic system of a country is:

$$VS_R=\mathbf{i}'\mathbf{A}_M\mathbf{L}\mathbf{e}(\mathbf{i}'\mathbf{e})^{-1} \quad (4)$$

The VS_R index, similarly to the DVS_R, is a weighted average of the import multipliers, with the sectorial exports as weights. A high value of the VS_R index indicates that imported intermediate goods make up a large proportion of the value of an economic sector (or country) exports and consequently indicate a country's greater degree of involvement in global production chains.

In this paper rather than using the index (4) it was decided, accord with De Backer and Yamano (2008), to use the following index (5) which considers the directly and indirectly imported input content in the total production of a country.

$$VS\_OUT_R=\mathbf{i}'\mathbf{A}_M\mathbf{L}\mathbf{x}(\mathbf{i}'\mathbf{x})^{-1} \quad (5)$$

I the other words, index (5) measure the direct and indirect contribution of foreign industries to the national production process. Therefore, similarly to the index (4) it provides a measure of the degree of production fragmentation of a country economy.

Results and discussion

In this section, the production fragmentation of the world economy in the year 1995 and 2015 is examined by means of the VS_OUT_R index.

Table 1 depicts same descriptive statistics of the $VS1\_OUT_R$ index for the two years considered. The detailed values are available from the author upon request.

Table 1 – *$VS1\_OUT_R$ descriptive statistics for the years 1995 and 2015.*

	1995	2015
Mean	0.175	0.174
Standard Deviation	0.260	0.125
Max value	0.954	1.000
Min value	0	0.001
First quartile (Q1)	0.005	0.095
Median (Q2)	0.033	0.152
Thirth quartile (Q3)	0.243	0.207

The $VS1\_OUT_R$ index varies widely across countries. An average degree of outsourcing by 0.175$ was observed in 1995 and one half of the units presented a value not exceeding 0.033$. The lowest values is recorded for Moldova, Samoa and Ruanda (i.e. $VS1\_OUT_R=0$) and the highest values for Germany, Mexico and Greece (i.e. $VS1\_OUT_R>0.89$\$).

The mean value remained unchanged in 2015 and Myanmar, Sudan and South-Sudan are the countries with the lowest values (i.e. $VS1\_OUT_R<0.005$\$), while Hong Kong, Belarus and Moldova the countries with the highest values (i.e. $VS1\_OUT_R>0.61$\$).

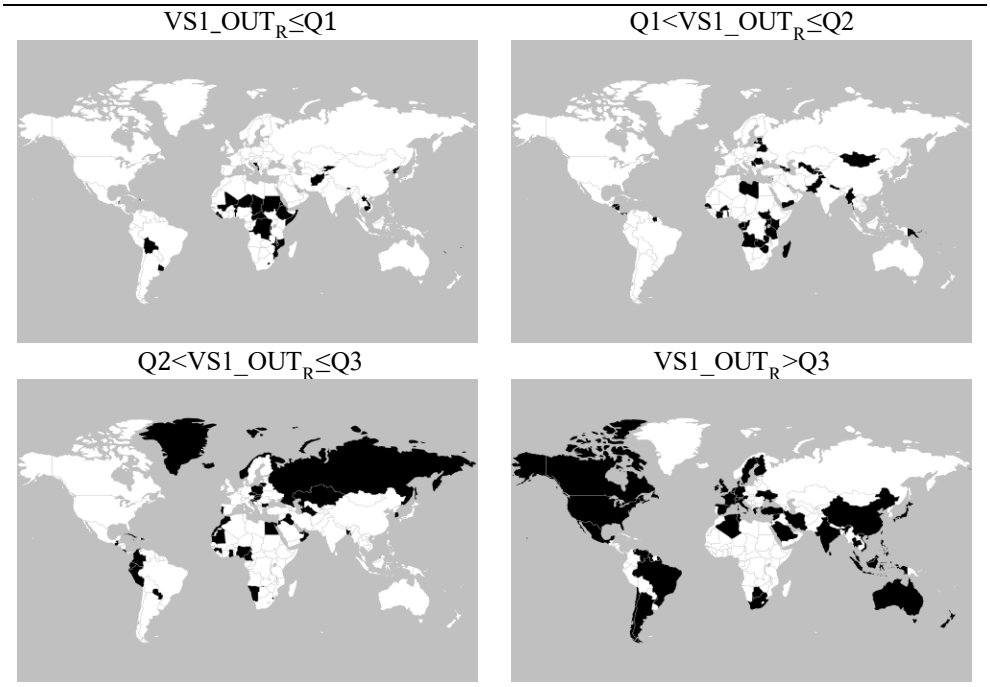
Although the average level of the phenomenon considered remains unchanged between 1995 and 2015, it is possible to note that, the first quartile grows from 0.005$ to 0.095$. The median changes from 0.033$ to 0.152$ and the third quartile from 0.243$ to 0.207$. Therefore, we can assert that the degree of fragmentation has increased in the world economy.

Figure 1 depict a classification of countries respect the quartile values. As is possible to note the countries with the lowest degree of fragmentation are particularly concentrated in the African continent and Eastern Europe. On the contrary, the countries with the highest degree of fragmentation are located in the American, Asian and European continents.

A typical observation that comes out from these international comparisons is that smaller countries have a larger international orientation than larger countries. It is not surprising because smaller countries are typically more dependent on imported inputs for their production than larger countries, which are more self-supporting.

Countries such as Belgium, Hungary, Ireland, Luxemburg, Slovak Republic and Singapore are clear examples of this, while their higher international dependency is also partially due to the large presence of multinational enterprises in these countries.

Figure 1 – *Countries classification by quartile values. Year 1995.*



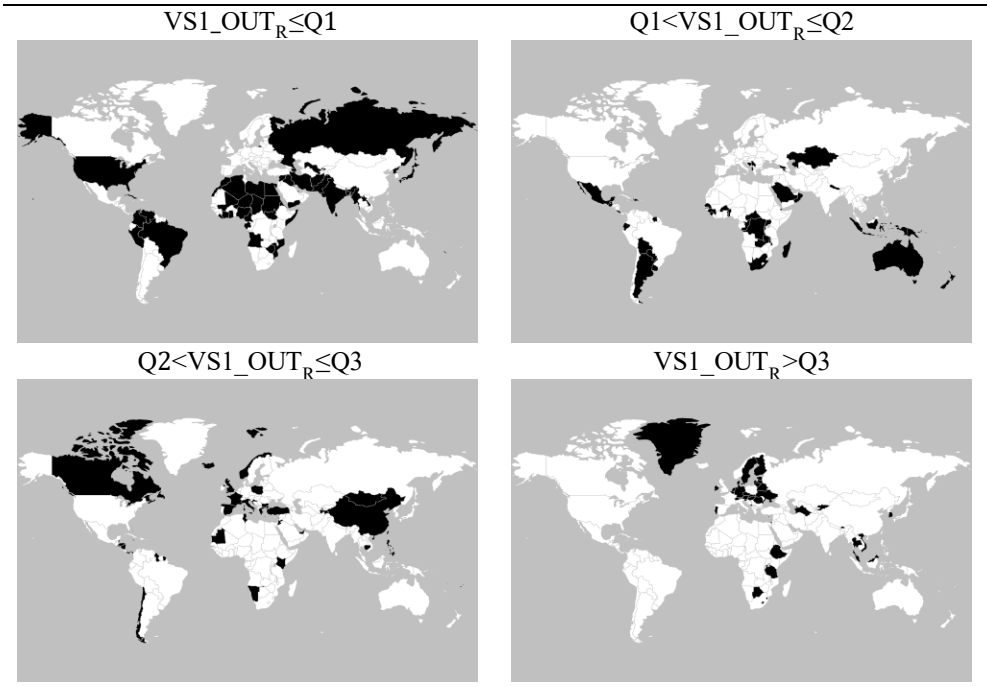
The situation photographed in 2015 (Figure 2) is quite different from that of 1995. Although small countries continue to record the highest degrees of fragmentation and the countries less fragmented still concentrated in the African continent, it is possible to note how larger countries (USA, Australia and Russia) suffers a contraction in the phenomenon under consideration. Also in 2015 the countries with the highest embodied imports are generally located in Europa and Asia.

In larger countries, national production depend relatively less on the imports of intermediates sourced abroad. The increase in vertical specialisation becomes clearest in countries with a high multinational presence like Ireland, Hungary, the Czech Republic and Belgium, as the international sourcing of intermediates within multinational networks drives the development of global value chains.

Within the group of emerging countries, China and Indonesia demonstrate a larger dependence on imported intermediates. The results for China illustrate the

increasing international production sharing within ICT industries, in which the more labour-intensive manufacturing activities are carried out in emerging countries while the more skill-intensive activities remain clustered in developed countries

Figure 2 – *Countries classification by quartile values. Year 2015.*



Finally, the following Figure 3 depict a classification of countries respect to growth rate recorded between the two years considered. In grey, there are the countries with a negative growth rate of the embodied imports in the national total production and in black those with a positive growth rate.

In general, the sourcing of intermediates abroad is increased in 68.78% of the countries, with, in some countries, very significant increases clearly illustrating growing interdependence of the economic linkage between the countries.

Countries with low level of fragmentation present relatively higher growth figures. Generally, those countries are localised in the African continent and Eastern Europe.

However, the magnitude of the increase in the degree of vertical integration can be explained by the low initial values in these countries.

Figura 3 – *Countries classification by the $VS1\_OUT_R$ growth rate between 1995 and 2011.*

4. Conclusions

With the global economic systems becoming more integrated, production processes, previously carried out in one site, are now split up into stages (or fragments), each to be performed in a different location and often beyond national boundaries.

These changes have been extensively studied under different names, such as "disintegration of production", "vertical specialization", "fragmentation", "outsourcing", "offshoring", among others. Thus, one important feature of the new international and globalized economy is the significant increase of intermediate goods trade, crossing several borders along the supply chains.

Using a modified originally measure proposed by Hummels *et al*. (2001), this study has analysed the degree of vertical specialization of the world between the 1995 and 2015.

Our main data source has been the EORA Database, which covers 189 countries with a classification for 26 economic sectors.

Empirical results highlights a growth of foreign intermediate goods content of production in most of all economies particularly concentrates in the African continent and Eastern Europe

The degree of specialization is greatly diversified across countries and those smaller have a larger international orientation than larger countries.

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SUMMARY

How fragmented is the world economy: evidences from the EORA database

Fragmentation of vertically integrated production processes (known also as vertical specialization) implies that production blocks are located in different countries and geographical areas across the world countries. This study using a modified originally measure proposed by Hummels *et al*. (2001), has analysed the degree of the production fragmentation of the world economy between the 1995 and 2015.

Our main data source has been the EORA Database, which covers 189 countries with a classification for 26 economic sectors.

Empirical results highlights a growth of foreign intermediate goods content of production in most of all economies particularly concentrates in the African continent and Eastern Europe.

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GENDER DIFFERENCES IN THE SUBJECTIVE PERCEPTION OF PARENTING TIME

Marina Zannella, Alessandra De Rose

1. Introduction

The rise of dual-earner couples together with the emergence of more time demanding jobs are among the factors that have contributed to squeeze individuals' and families' time. Nevertheless, existing studies have shown that today's parents are devoting more time to children than what they did decades ago (Gauthier *et al*., 2004). The upward trend in childcare time has been accompanied by a cultural shift towards more time-intensive and child-centered parenting (Craig *et al*., 2014). Busier parents have adapted to the changing rhythms of family life by becoming increasingly multitasking to preserve their time with children (Bianchi *et al*., 2006).

The significant change in the context and meaning of parenting that has taken place in recent decades has called the attention of scholars on aspects related to mothers' and fathers' wellbeing. While flourishing literature has shown lower levels of subjective wellbeing among parents compared to childless people (e.g. Aassve *et al.*, 2012), fewer studies have analyzed the relation between childcare time and parents' wellbeing. For instance, Connelly and Kimmel (2015) report evidence of both American mothers and fathers enjoying their time spent on child caregiving; however, fathers enjoy parenting time more than mothers reporting higher stress and tiredness. Similarly, Musick and colleagues (2016), using microdata from the American Time Use Survey, found that parents consistently report greater subjective wellbeing in activities with children than without. Mothers, however, report less happiness, more stress, and greater fatigue in time with children than fathers do. These gender differences in the subjective perception of parents' time with children are likely to be explained by the existence of similar differences in nature, in addition to the quantity, of parenting time. For instance, prior research suggests that multitasking is a relevant source of gender inequality: mothers multitask more housework and childcare than fathers, contributing to enlarge the gender gap in time-use patterns. For mothers, multitasking is more likely to be associated with negative emotional experiences and work-family conflict (Offer and Schneider, 2011). Mothers and fathers also differ with regard to the proportion of childcare done in company of other adults: mothers are usually alone when performing childcare while

a large proportion of fathers' care time is shared with other adults and, especially, with mothers (Fuligni and Brooks-Gunn, 2004; Craig and Mullan, 2011). As a consequence, in most cases fathers' care time does not substitute for mothers' time (Craig, 2006). Furthermore, experiencing the childcare activities alone may be a source of stress: many studies enlighten the positive role of sharing tasks and responsibilities with the partner and/or other adults as a source of social capital (Logan and Spitze, 1996; Philipov *et al.*, 2006).

To date, most studies on parents' wellbeing in childcare time have focused on the US (e.g. Meier *et al.*, 2018), while European research is still rare. This study contributes to the existing literature by analyzing gender differences in Italian parents' enjoyment of childcare time and by measuring if and to what extent being in sole charge of children and performing housework as a parallel activity affects mothers' and fathers' subjective perception of parenting time. To this end, we rely on micro-data from the latest Time Use Survey (TUS) available for Italy (year 2013/4) and focus on a sub-sample of 5,148 parents of children aged up to 14 years who performed 31,309 childcare episodes. We use the information on the presence of a parallel activity and the information "with whom" to identify, respectively, multitasking and solo childcare episodes. Finally, we rely on episodes' enjoyment-scores to study mothers' and fathers' subjective wellbeing in child caregiving. We expect levels of parents' wellbeing associated with childcare to decline when the activity is performed together with housework and when the individual is alone while caring for the children. Moreover, we expect these effects to differ between men and women, that is gender interacts with the above conditions.

2. Data and methods

The study builds on micro-data from the Italian TUS for the year 2013/4 to evaluate fathers' and mothers' subjective perception of childcare time. TUS includes an individual file and a daily diary. The individual file provides information about the socio-demographic characteristics of the individual, the characteristics of the household, background information and information on the wellbeing of the respondents in different life domains. The daily diary consists of time data collected through the diary technique, i.e. respondents are asked to fill in the daily diary every 10-minutes reporting the following information: description of the main activity carried out, the possible presence of a parallel secondary activity, the location where the activity was performed, the level of enjoyment experienced and, if applicable, the presence of another person.

Our target population consists of 5,148 individuals aged between 25 and 54 years that are parents of children aged up to 14 years. In the individual questionnaire

parents are asked to assess their level of satisfaction with the quantity of time spent with their children. In a first step, we analyse the descriptive statistics based on this general question. Then, we use information from the enjoyment-scores associated by parents to childcare episodes to develop a more in-depth analysis of the wellbeing of mothers and fathers in child caregiving. The scores range from -3 to 3 and answer to the following question: *How pleasant was the moment?*[1] We follow a common approach adopted by literature in the field and develop a dichotomous Unpleasantness index or U-index (see Kahneman and Krueger, 2006). Similarly to Musick and colleagues (2016), we code an episode as unpleasant for the respondent (U-index=1) if its enjoyment-score is equal or below to the lowest 25th percentile of the scores recorded for the corresponding activity (differently, the U-index is assigned a value of 0). We use the U-index as dependent variable in a logistic model. More specifically, our dependent variable is the probability of parents to experience an unpleasant childcare episode (U-index=1). Our explicative variables are multitasking (i.e. childcare is the main activity and housework is the secondary activity) and the presence of another adult (i.e. whether the person was alone with the child/children while performing the activity or not), for which we add gender interactive effects. The control variables include: individual characteristics (age, education, employment status, life satisfaction, the number of daily hours spent on childcare), household characteristics (single parent/two parents household, number of children, age of the youngest child), characteristics of the episode (the episode starting hour, the duration of the episode) as well as characteristics of the diary (day of the week, survey's quarter).

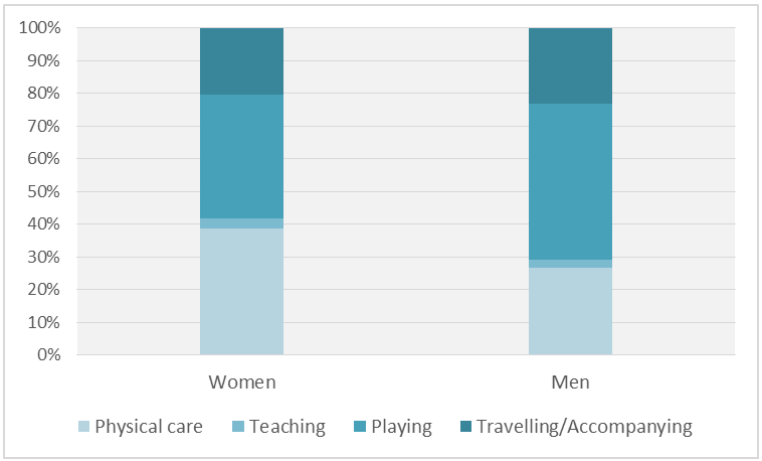
3. Results

On average, mothers spend 21h and fathers 12h per week caring for their children. We observe considerable gender differences not only in the levels but also in the composition of childcare time, with mothers spending more time on routine tasks than fathers. Indeed, physical care represents about 39% of the total childcare time for women compared to 27% for men (Figure 1). The great majority of parents' childcare episodes are single-tasking with no remarkable differences between genders (about 70% of childcare time for both mothers and fathers). However, looking at the composition of the multitasking episodes in Figure 2 the picture changes: while leisure is the most frequent activity among both multitasking parents, in line with previous studies (Offer and Schneider 2011), we find that childcare is

[1] The sample distribution of childcare episodes enjoyment scores is shown in Table A1 in the Appendix.

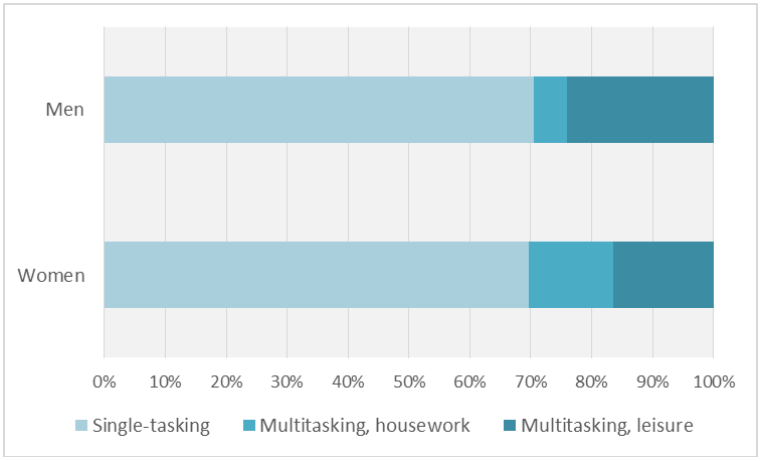
performed simultaneously with housework more often by mothers than by fathers (about 14% and 5% of total childcare episodes, respectively).

Figure 1 – *Percentage composition of childcare time by detailed activities*



Source: Authors' calculations based on micro-data from the Italian Time Use Survey (2013/4)

Figure 2 – *Share of multitasking episodes by type of parallel activity*

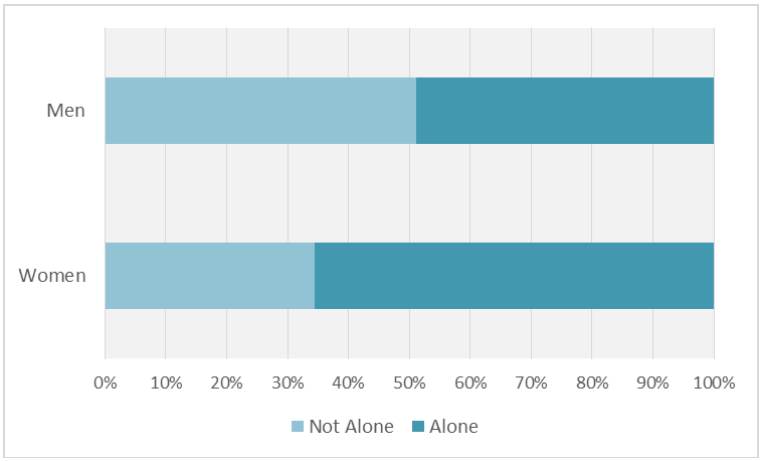


Source: Authors' calculations based on micro-data from the Italian Time Use Survey (2013/4)

Differences in the nature of parenting time of mothers and fathers are evident also with regard to the quantity of time spent doing childcare alone (i.e. the number of episodes in which the parent is the only adult present and, therefore, is fully responsible for the child). Our sample estimates show that during the majority of

childcare episodes (51%) fathers were not alone with their children, while the opposite is true for women for which only 34% of the childcare episodes were spent in company of other adults (Figure 3).

Figure 3 – *Share of childcare episodes by presence of at least another adult*



Source: Authors' calculations based on micro-data from the Italian Time Use Survey (2013/4)

About 67% of mothers declared to be satisfied with their parenting time compared to 44.4% of fathers (Table 1). The majority of men (54%) declared to spend too little time with their children, the figure lowers to 31% for women while only a very small proportion of parents (the difference to 100%) said that the time is too much (2.2% of mothers and 1.5% of fathers). Childcare time shows a declining trend with age for women while the opposite is not true for men; nevertheless, the share of satisfaction is higher at youngest ages for both mothers (74.2%) and fathers (51.1%).

Table 1 –*Parents' satisfaction with the amount of time devoted to children (weighted sample estimates)*

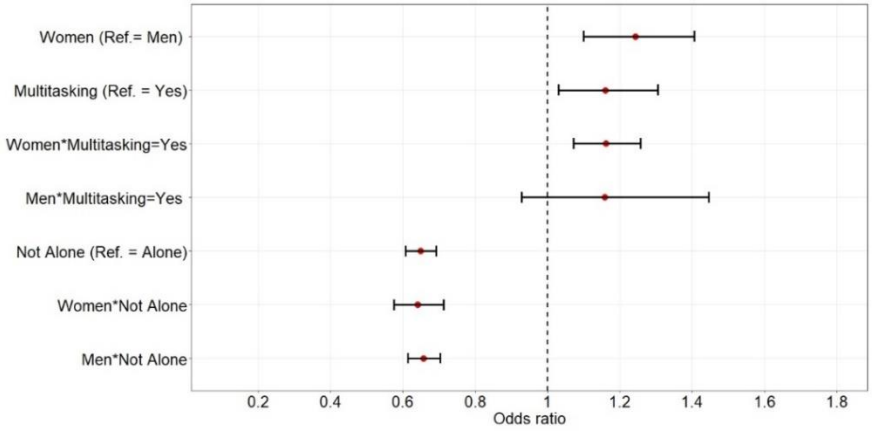
	MEN						WOMEN					
	Childcare weekly hours		Share of (dis)satisfaction				Childcare weekly hours		Share of (dis)satisfaction			
			Yes, satisfied		No, too little time				Yes, satisfied		No, too little time	
	Mean	SE	%	SE	%	SE	Mean	SE	%	SE	%	SE
Overall	12	1.9	44.4	0.9	54.1	0.9	21	2.2	67.1	0.8	30.7	0.8
Age group												
25-34	12	4.8	51.1	2.5	48.0	2.5	24	4.6	74.2	1.5	24.6	1.5
35-44	13	2.7	43.2	1.3	55.4	1.3	21	3.0	65.2	1.1	32.7	1.1
45-54	11	3.4	43.5	1.5	54.7	1.5	15	3.7	63.3	1.7	33.1	1.6
Household type												
Couple	12	1.9	44.4	0.9	54.0	0.9	20	2.3	68.4	0.8	29.5	0.8
Single-parent	17	13.2	41.9	7.3	58.1	7.3	23	6.1	58.9	2.3	38.7	2.2
Education												
High	13	5.1	34.2	2.1	64.6	2.1	22	4.8	62.8	1.8	36.1	1.7
Medium	13	3.1	42.6	1.4	56.2	1.4	21	3.1	62.0	1.2	34.7	1.2
Low	11	2.7	50.2	1.4	47.9	1.4	20	4.0	76.7	1.3	21.8	1.2
Employment												
Employed	12	2.0	41.5	0.9	57.3	0.9	19	2.6	52.4	1.1	46.1	1.1
Unemployed	14	6.3	71.6	2.6	24.8	2.5	23	3.6	85.3	0.9	11.6	0.8
N. of dep. childr.												
One	12	2.5	46.2	1.2	52.3	1.2	20	2.9	68.0	1.0	29.4	1.0
Two and more	13	3.0	42.0	1.4	56.6	1.4	22	3.3	65.8	1.2	32.6	1.2
Age of the youngest child												
Less than 6 years	13	3.7	44.4	1.3	54.6	1.3	25	4.6	68.0	1.2	30.9	1.1
From 6 to 14 years	10	3.3	44.5	1.3	53.6	1.3	15	3.8	66.3	1.1	30.5	1.1
Week day												
Mon-Fry	11	2.7	42.7	1.5	55.9	1.5	21	3.5	67.0	1.3	30.8	1.3
Sat-Sun	16	3.0	48.5	1.1	49.7	1.1	19	2.9	67.4	1.0	30.4	1.0
Geographic area												
North	13	2.9	43.7	1.3	55.4	1.3	22	3.5	64.6	1.2	34.1	1.2
Centre	13	4.5	37.2	2.2	61.0	2.2	21	5.1	65.8	1.9	33.1	1.9
South	11	3.1	49.2	1.5	48.6	1.5	20	3.3	71.1	1.2	24.9	1.2

Source: Authors' calculations based on micro-data from the Italian Time Use Survey (2013/4)

Despite spending more time on average with their children, single parents report lower satisfaction with the amount of parenting time compared to those living in a couple: the relation is particularly evident for mothers for which the share of satisfaction drops from 68.4% to 58.4%. Similarly, the share of dissatisfaction is higher for parents with higher education although they spend, on average, longer hours with their children than those with lower education. Being employed considerably reduces the satisfaction with parenting time for both men and women; on the other side, living in the South, where unemployment is more widespread, increases the share of satisfaction among parents. Childcare time only slightly increases for parents of two (or more) children compared to those with one child, which explains the higher share of dissatisfaction among the former. On the other side, the higher amount of time devoted to childcare by parents (and especially mothers) of pre-school children compared to those of children in school ages is accompanied by higher shares of satisfaction.

The survey's question on individuals' satisfaction with parenting time offers a partial picture of gender differences in subjective wellbeing in childcare giving based on parents' evaluation of the quantity rather than the quality of time with children. Moreover, previous studies have highlighted as momentary assessments of wellbeing tend to be more reliable than global assessments being less sensitive to the tendency of people to adjust their responses (Kahneman and Krueger, 2006; Musick *et al.*, 2015). Thus, episodes' enjoyment-scores can be very useful to obtain a broader understanding of men and women's subjective perception of child caregiving.

Figure 4 – *Model estimates of the probability of experiencing an unpleasant childcare episode*



Source: Authors' calculations based on micro-data from the Italian Time Use Survey (2013/4)

Our results for the probability of mothers and fathers to experiment an unpleasant episode highlight the existence of statistically significant gender differences in subjective wellbeing during overall childcare time with mothers showing higher values of the U-index than fathers (Figure 4) [2].

Looking at the simple effects of multitasking, we find that performing childcare together with domestic chores reduces the wellbeing of parents. However, results from the interaction between gender and multitasking reveal an increase in the probability of experiencing an unpleasant episode in the presence of parallel unpaid work for mothers but not that of fathers. By contrast, the presence of another adult significantly reduces the probability of parents to perceive the time spent on childcare as unpleasant. The interaction with gender reveals that the effect holds for both mothers and fathers.

4. Concluding remarks

In this article we used micro-data from the latest Italian time use survey available for 2013/4 to study differences between men' and women' subjective perception of parenting time, paying specific attention to the role of multitasking and the co-presence of other adults in affecting self-reported wellbeing during childcare activities. Based on episodes-enjoyment scores, we built a dichotomous indicator of unpleasantness. Our findings indicate mothers to spend on average 21h in child caregiving per week, 9h more than fathers. In line with previous literature, our results indicate that compared to fathering, mothering involves not only more overall time commitment but also more multitasking and more time alone with children (Craig, 2006).

Similarly to Milkie and colleagues (2004), we find that most fathers want to spend more time with their children. On the other side, the majority of mothers are satisfied with their amount of parenting time. Consistently with previous studies, we observe parents enjoying childcare but with important gender differences: looking at the overall childcare time, mothers are more likely to experience less pleasant moments. Contrary to our expectations, the model estimates show multitasking to reduce the enjoyment of childcare time only for mothers. Being alone while performing childcare considerably reduces the subjective wellbeing of both parents. In this perspective, men benefit from a greater advantage compared to women: only in 34% of the childcare episodes mothers were not alone with their children, while the share increases to 51% for fathers. According to Sullivan (1997), the larger the share of time in which unpaid work is undertaken in the presence of other adults, the

[2]. Full model estimates are reported in the Appendix (Table A2 and A3).

more participation in it can be regarded as auxiliary. Put in different words, fathers are likely to play a less demanding role of "helper" while mothers bear the greater responsibility for children and to feel more stressed or under pressure deriving less enjoyment from childcare time (Craig, 2006).

Time use literature has highlighted the existence of large gender differences in the division of childcare tasks (e.g. Craig and Powell, 2011) and our estimates confirmed those findings, showing mothers to do more routine work than fathers. Some childcare activities, especially those involving high levels of interaction with children, are likely to be perceived as more pleasant and/or to be more highly valued by parents than others. Future steps of this research will, therefore, go in the direction of measuring gender differences in the subjective perception of parenting time in relation to detailed activities.

Appendix

Table A1 – *Sample distribution of childcare episodes enjoyment scores*

Score	Men			Women		
	N	%	Cumulative %	N	%	Cumulative %
-3	25	0.3	0.3	174	0.8	0.8
-2	55	0.6	0.9	160	0.7	1.5
-1	139	1.5	2.4	484	2.2	3.7
0	1,120	12.5	14.9	3,655	16.4	20.0
1	1,501	16.7	31.6	4,214	18.9	38.9
2	2,315	25.8	57.4	5,823	26.1	65.0
3	3,819	42.6	100.0	7,825	35.0	100.0
Total	8,974	100.0		22,335	100.0	

Table A2 – *Parameter estimates*

Variable	Parameter estimate	Standard Error	Prob> Chi Square
Intercept	-0.2766	0.0404	<.0001
Gender (Ref=Men)	0.1089	0.0314	0.0005
Multitasking (Ref=Not)	0.0742	0.0301	0.0138
Episode duration (Ref=more than 60 min.)			
less than 20 min	0.1209	0.0214	<.0001
20'-39' min	0.1334	0.0234	<.0001
40'-59' min	-0.1428	0.0346	<.0001
Presence of an adult (Ref=not)	-0.2166	0.0164	<.0001
Daily childcare time (Ref=more than 240 min.)			
up to 90 min.	0.0593	0.0247	0.0164
91'-150' min.	-0.0475	0.0232	0.0402
151'-240' min.	-0.1066	0.0218	<.0001

Table A2 (*continued*) – *Parameter estimates*

Age group (Ref=45-54 years)			
25-34	-0.0701	0.0240	0.0035
35-44	-0.0568	0.0181	0.0017
Household type (Ref=single parent)	-0.0033	0.0211	0.8765
Number of children (Ref=two or more)	-0.1907	0.0134	<.0001
Age of the youngest child (Ref=11-14 years)			
0-2 years	-0.1876	0.0250	<.0001
3-5 years	-0.2238	0.0237	<.0001
6-10 years	0.0954	0.0229	<.0001
Educational level (Ref=low)			
High	0.0990	0.0209	<.0001
Medium	-0.0757	0.0172	<.0001
Employment status (Ref=unemployed)	-0.0530	0.0151	0.0005
Life satisfaction (Ref=Satisfied)			
Dissatisfied	0.1576	0.0201	<.0001
Neither satisfied nor dissatisfied	-0.0028	0.0198	0.8898
Survey's month (Ref=August-October)			
November-January	-0.0172	0.0213	0.4187
February-April	-0.0638	0.0216	0.0032
May-July	-0.0354	0.0228	0.1212
Week day (Ref=Monday-Friday)	0.0037	0.0151	0.8075
Episode hour of start (Ref= h16-24)			
h 00-8	0.3885	0.0239	<.0001
h 9-16	-0.0924	0.0186	<.0001
Gender*Multitasking (Ref =Men, Not)	0.0007	0.0300	0.9801
Gender*Alone (Ref =Men, Not)	0.0062	0.0161	0.6993

Table A3 – *Model effects' estimates*

Effect	Estimate	Standard error	Prob> Chi Square
Women vs Men	1.243	0.078	<.0001
Multitasking Yes vs Not	1.160	0.070	0.014
Multitasking Yes vs Not in gender=Women	1.162	0.047	<.0001
Multitasking Yes vs Not in gender=Men	1.158	0.131	0.195
Women vs men in multitasking =Yes	1.245	0.146	0.061
Women vs men in multitasking =Not	1.241	0.046	<.0001
Not alone vs alone	0.648	0.021	<.0001
Not alone vs alone in Gender= Men	0.640	0.035	<.0001
Not alone vs alone in Gender = Women	0.657	0.023	<.0001
Women vs Men – Alone	1.228	0.081	0.002
Women vs Men - Not alone	1.259	0.095	0.002

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SUMMARY

Gender differences in the subjective perception of parenting time

We use data from the latest edition of the Italian Time Use Survey (2013-2014) and select a subsample of mothers and fathers of children aged up to 14 years to measure gender differences in parents' subjective perception of childcare time. Based on childcare episodes' enjoyment scores, we build a dichotomous indicator of unpleasantness and use it as dependent variable in a logistic model. Our explicative variables are gender, multitasking (i.e. presence of housework as parallel activity) and the presence of another adult. Our results indicate the existence of considerable gender differences in the quantity and nature of parenting time: not only mothers devote more time to childcare, but they are also more likely to multitask and to spend time alone with children than fathers. These differences are reflected in the subjective experience of parenting time. Our descriptive results indicate that the majority of fathers want to spend more time with their children. Additionally, model estimates show that fathers are more likely to report higher levels of wellbeing in childcare time than mothers. Multitasking housework and childcare negatively affect the subjective perception of parenting time for mothers but not for fathers, while being alone considerably reduces levels of childcare enjoyment for both parents. Future developments of this research will focus on estimating gender differences in the subjective perception of parenting time in relation to detailed childcare activities.

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MIGRATION OF ALBANIANS IN THE LAST TEN YEARS THE EVOLUTION AND CHANGES OF IMMIGRATION PATH

Arjeta Veshi, Giovanna Da Molin

1. Introduction

The migration of Albanians abroad is not a new phenomenon. It is documented at least since the fifteenth and sixteenth centuries with the departure of a large number of inhabitants from Albanian territories. It still remains active and gives its significant impacts on both the demographic as well as the social and economic aspects of the country.

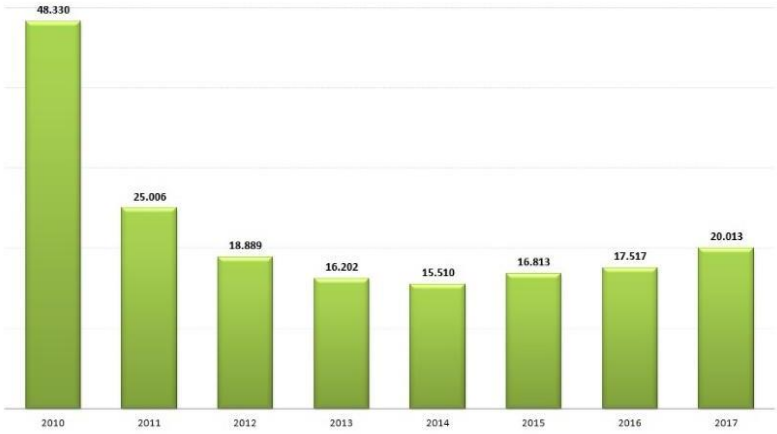
Albania has been significantly affected by the phenomenon of emigration since the early 1990s. A prevailing trend has been that of Albanian emigrants to the most developed countries in Europe, but also in America and Australia. For a long time, emigration from Albania has been largely irregular. For decades, the opportunities for regular emigration have been limited. With visa liberalization in 2010, the patterns and trends of emigration from Albania have changed. Its citizens can move within the Schengen area for 90 days in 6 months.

In 2010, Albania ranked fourth among the countries with the most access to Italy. With 48,330 entries, Albania was preceded only by Morocco, China and Ukraine. Between 2011 and 2012, the total number of entries was significantly reduced. The decrease also affected Albanians, whose inflows decreased until 2014, when they reached the minimum value of recent years, with the figure 15,510. Minimal is said in the context, because in any case it was about a consistent number of Albanian emigrants who received a residence permit in Italy. The turnaround started in 2015 with 16,813 entries, until 2017 when the quota of twenty thousand entries to Italy was exceeded. Therefore, the arrivals from Albania have never stopped. On the contrary, there has been a resumption recently. This trend is also confirmed by official Albanian statistical data. INSTAT noticed in early 2018 a population decline and positive net migration.

2. Albania in numbers: the last ten years

During these years, family motives have been the most common reason for entry into Italy. In 2010, the number of Albanians who came to Italy for family reasons and the number of those for work reasons did not change much. The gap between the two motives has widened over the years: the rise of family motives and the decline of job entrances. From 2010 to 2017 (Rando, 2018, pp. 218-228), it was increased from 49.6% to 69.8% of entries for family motives and it was decreased from 44.3% to 6.3% of entries for work motives. The significant increase of the first category and the decrease of the second are related to the economic performance and the decrease of the regular flows for work motives, already limited only for seasonal work (Figure 1).

Figure 1 - *New entries of Albanians in Italy, years from 2010 to 2017*



Source: INSTAT. For graphic processing Rondo Devole (2018).

To better understand the circumstances and factors that lead to the increase in the number of people leaving the country en masse, an in-depth socio-political and economic analysis should be done. However, in our opinion, the change of these factors does not happen from one year to the next. But even if it did, this change would not be so obvious.

Conditional circumstances we believe vary by generations and decades. For example, the factors that prompted immigration in the '90s were very different from the factors and circumstances that prompted immigration in 1997, or the factors that prompted immigration over the last 3-4 years. In the early 1990s, immigration was seen as the green light missing for decades due to the communist regime, and land across borders was an enigma that aroused curiosity and hope, mainly for the poor

people. The post-war period 1997 meant unconditional emigration and against any compromise, not only for the poor, but also for a considerable part of the intellectuals, considering leaving the country as the only way of survival. What remains troubling, in our opinion, has to do with the fact that today, after so many years, circumstances seem to have deteriorated and the tendency to leave has become not only a trend but also a focus for every social category.

Moving to neighbouring countries has historically been seen as the quickest and safest solution to economic problems, for low-income families and insufficient educational level to survive in the labour market. On the other hand, emigration has been seen and continues to be seen as a long-term investment, for those families who want to provide not only a basic income for a living wage or guarantee a normal life, but also for the future of their children, grandchildren and great-grandchildren. Migration is an expression of people's aspirations for dignity, security and a better future[1].

3. Albanian emigration in Europe

Before starting the analysis on Albanian migration to Germany (and the European Union), we must keep in mind that Albania has historically been an emigrant country. Albanians are Europeans, considering that Tirana is geographically closer to Berlin or Paris than with Athens or Sofia (Albania artificially looks far away from Europe because of its modern history and specifically 45 years of communist self-isolation. Currently 38% of Albanians born in Albania live abroad, which means that from a population of three million inhabitants, there are approximately one million Albanian citizens living abroad, mostly in Europe. Therefore, leaving abroad (and returning) are historically delineated traces of Albanians.

In recent decades, Albania is probably the only country in Europe that has been under constant pressure from high emigration. In addition to emigration, it remains evident that Albania tops the world list for high emigration potentials. A study by Professors I. Gëdeshi and Russell King (2018), recently published on behalf of the United Nations Development Program (UNDP), showed that Albania ranks among the 15 countries for high emigration of educated people with scientific degrees.

[1] Former UN Secretary General Ban Ki-moon defined migration as "an expression of the human aspiration for dignity, safety and a better future. It is part of the social fabric, part of our very make-up as a human family", https://www.un.org/sg/en/content/sg/statement/2013-10-03/secretary-generals-remarks-high-level-dialogue-international.

In 2010 and 2011, it was found that about 31.3%[2] of the Albanian population with higher education was in emigration. The exodus of people with higher education is an internal problem of countries where economies of scale are lacking and the labour market presents no potential. According to OECD data, the emigration of educated Albanians in 2010 and 2011 increased by 223% compared to 2000 and 2001. This increase was greater than the emigration of other parts of the population with secondary and lower education.

The migration wave of 2014 and 2015 is notable for its "normality" (Cooperation and Development Institute, 2017). If in the previous waves of migration, leaving Albania and seeking asylum abroad was very dangerous, today this effort is planned almost as a "normal" trip. The costs are at least 10 times lower than before, and the preparation time varies on average from two to three days. The nature of the incentive to leave the country is difficult to determine accurately: it is a combination of factors, where most of them have to do with socio-economic conditions (and surprisingly with physical security). But the fundamental reason remains the provision of more suitable conditions, which would offer opportunities for a better future for them and their children.

Germany was selected because of its dominant advantages in attractive factors: an organized host system as well as generous cash benefits while the asylum application is in process. An even more interesting feature is the reputation of being a place that offers better living opportunities, which is a serious and structured country for this goal. Italy and Greece were relatively "easier" to reach, but they did not offer the kind of "future" that Germany enables. The effect of the 2008 financial crisis served as the impetus for the decision to emigrate. Common motivating factors (economic issues, poverty, housing and unemployment) form the basis of the tendency to seek a better life. Moreover, the decline in remittances, the slowdown in economic activity, and the return of the majority of emigrants from Greece and Italy, helped the migratory pressure to reach a turning point.

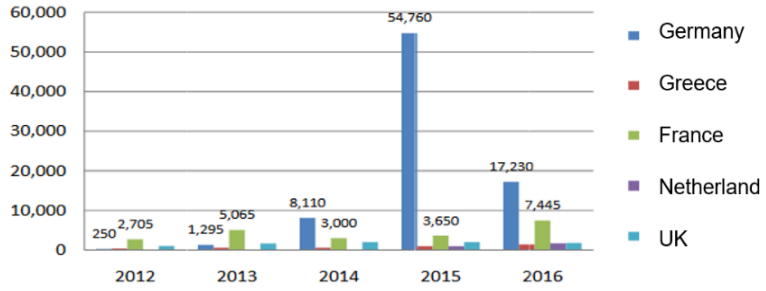
The year 2014 and the beginning of 2015, marked the peak of the number of Albanian migrants and asylum seekers in Germany. In particular, the number of young people in this outflow was high. EUROSTAT data show that 53,805 Albanians applied for asylum in Germany in 2015, of which 24,390 or about 45% belonged to the age group 18-34 years, 3.130 or 5.8% were 14-17 years old and 32,410 (60%) were male (EUROSTAT, 2016). Following the inclusion of Albania in the list of safe countries of origin, in Germany in 2015, and the increase of repatriation and forced return, the implementation of major information campaigns, as well as the increased efforts of the Albanian authorities to prevent departure from Albania, the movement calmed down somewhat. Out of 23,300 final decisions taken

[2] https://www.monitor.al/shqiperise-ka-ikur-truri-2/

by the German authorities for Albanian asylum seekers in 2015, only 55 decisions were positive. After the refusal, about 16,000 asylum seekers returned to Albania in 2015, following the removal order (EUROSTAT, 2016) and many more returned during 2016. The data are incomplete due to the difficulties encountered by the Albanian authorities in registering all forced returnees.

Referring to the Figure 2, there is a significant decrease of Albanians seeking asylum in EU countries, mainly in Germany. The phenomenon of Albanian migration to Germany during 2014-2016 (Hackaj, Shehaj, Zeneli, 2016), is characterized by influential parameters that are newly identified and / or previously unobserved. Albanian emigrants misunderstood and underestimated their chances of staying in Germany through the asylum procedure. EUROSTAT data shows that despite 53,805 asylum applications in 2017 and 34,000 by October 2017, only 65 applications have received positive responses from the German authorities. No individual work permit has been issued.

Figure 2 – *Albanian citizen who has sought asylum in the 5 main countries, years 2012 - 2016*



Source: General Directorate of Border and Migration, Tirana, 2017(Data from EUROSTAT, processed).

Analysing these data, we came to the conclusion that this phenomenon was a disorderly migratory wave and not a departure caused by political persecution. The main factor explaining the disproportion in the magnitude of applications and admissions was misinformation about: (i) the employment opportunities that Germany was supposed to offer and, (ii) the probability of Albanians obtaining a work permit through the asylum application procedure.

In this paper, we have ascertained the strong presence of a phenomenon that has had an effect on the profile and intensity of the Albanian migratory flow in Germany, during 2014-2016, and we have named it "*the connectivity or linking factor"* (European Commission, 2017). It can be explained as a situation where neither the market nor the state offer the individual the opportunity to express his / her value, or

to achieve his / her life goals. For example, someone may be qualified and able to have a successful career in Albania, however he / she is convinced that he / she is not given the opportunity by the state or the market to try it. In this case, the citizen feels *"disconnected"* from the system. Thus connectivity can be defined by: (i) one's perceived ability to achieve life goals, whether economic, social or simply personal success (including those of his / her family); and (ii) the decision to be made on the most appropriate country where these life goals can be achieved: either in his / her country of birth or by migrating to another country.

Migration is a phenomenon that affects the entire Balkans Western. The region is being emptied of young people, intellectuals, professionals and the middle class in general. This phenomenon has been seen since the departure of doctors from Albania, becoming an important point of the so-called phenomenon *"brain drain"*. For this reason, the Albanian governments have acted in different ways to solve the shortcomings that exist in our system. During the years 2006 - 2011, under the program for *"brain recovery"*, 62 people with scientific degrees returned to Albania, however some of them left again.

3.1. Emigration of Albanian doctors to Germany

The migration of doctors and other health workers, internationally, is not a new phenomenon, but nevertheless, it has attracted more attention in recent years, due to concerns that it could lead to the collapse of the situation of lack of qualified health care staff in certain countries, especially in some developing countries that are currently suffering from critical labour shortages. Based on the data obtained from the Order of Doctors, it turns out that there is an increase in the number of doctors who are seeking the *"Certificate of good behaviour"*. This Certificate is issued by the Order / Chamber or the Association of Doctors of his/her country, where it is confirmed that the doctor is registered, exercises the profession and that during the exercise of the profession there is no disciplinary measure against him / her.

The data show that in the last five years, the number of doctors who have requested this Certificate is increasing, respectively from 2013 - 2017:

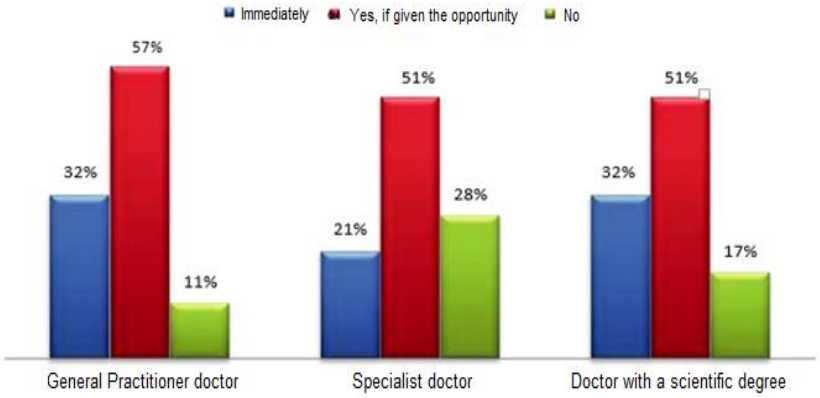
- In 2013, 76 general practitioners were provided with this Certificate
- In 2014, 128 general practitioners were provided with this Certificate
- In 2015, 124 general practitioners and 19 specialized doctors (a total of 143 doctors) were provided with this Certificate;
- In 2016, 165 general practitioners and 43 specialist doctors (in total 208 doctors) were provided with this Certificate;

- In 2017, 175 general practitioners and 32 specialist doctors (in total 207 doctors) were provided with this Certificate.

This Certificate is issued only for abroad (Canameti, 2017 e 2018). The data show that the number of doctors seeking a certificate to leave Albania each year is the same (or greater) than the number of doctors who graduate each year from the Medical University, which is 150. Number of Albanian doctors graduated in Albanian universities and currently working in Germany, according to the German Chamber of Doctors, is 5214. Such a number indicates the high percentage of Albanian doctors who aspire to Germany and their need to have a structured commitment (Figure 3).

As a result of mass migration and other factors, Albania has the lowest doctor coverage rate for the population, at 1.2 doctors per 1,000 inhabitants. On the other hand, such a thing will strongly affect the performance of the academic level in Albania, but also the quality of the health care system. Albania, not only now, but for years is paying a high price for emigration. Many people, especially in rural areas, have a lot of difficulties due to the lack of health service in their areas. However, the lack of health specialists in recent years has also affected regional hospitals and university canters.

Figure 3 – *Doctors leaving Albania, according to the profiling level, years 2013-2016.*



Source: President of the Order of Doctors, 2017

3.2. Students to Germany

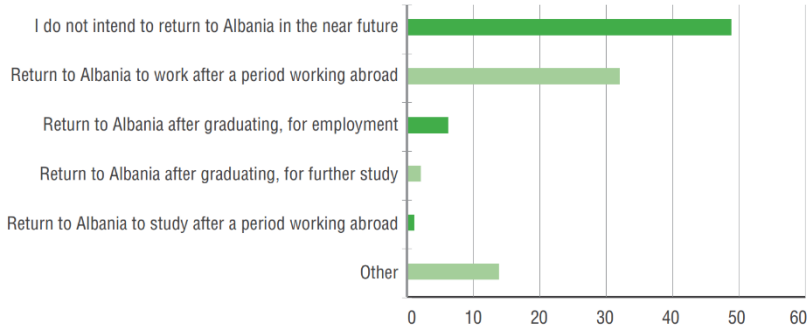
According to Gëdeshi and King (2018), the second hypothesis they put forward is \ EU university, it would be easier for Albanian students to find a job and integrate

into the host country. The survey conducted with 303 Albanian students abroad, mainly in Italy, Germany, France, Netherlands and United Kingdom, showed that 70% considered university studies as the first step to living abroad and 24.4% answered "maybe". Only 5.6%[3] confirmed that they had started studying abroad not as an opportunity to live there.

According to this study, every year, the youth and financial elite of Albania, leave the country irreversibly and the costs they leave behind are millions of euros. According to recent studies, countries attracting graduates from poor countries are supplied with educated human resources for free. This form of migration has become a major concern for the future of Albania.

The trend of Albanian students choosing to study abroad has been increasing recently. Most of them are addressed to European universities. Data published by EUROSTAT showed that European Union countries have issued 2360 new residence permits for Albanian students. Compared to a year ago this number has increased by 17%. The number of students seeking to study abroad has increased year after year. In 2014, the European Union granted students 1,627 residence permits issued for the first time. Since then their number has been increasing, especially in the last two years. In 2017 the number of permits issued to Albanian students was 2025. As for employees, Germany is the main destination for Albanians emigrating for study. During 2018, 781 residence permits were issued, about 46% more than a year ago. A year ago, 535 residence permits were issued for this reason. After Germany, Italy has the highest number of residence permits for educational reasons. According to EUROSTAT figures, 526 permits have been issued to Albanians, compared to 337 issued a year ago (Figure 4).

Figure 4 – *Intention of Albanian students to return to Albania after graduation, by %.*



Source: CESS - Centre for Economic and Social Studies, 2017.

[3] https://www.monitor.al/shqiperise-ka-ikur-truri-2/

Will the students return? Their removal affects both the demographic composition by accelerating the aging of the population in the country, as well as the removal of the "brain", as they represent the potential for a skilled workforce in the country.

4. Conclusions

Based on the analysis of different countries, we conclude that the reasons for labour migration are different from one country to another, but what should be emphasized is that the economic, professional, political and personal factors are almost the same for all countries that have gone through or are going through the brain drain phenomenon. In conclusion, the phenomenon of immigration has long been a matter of concern. We think that deep preventive measures should be taken through the policies that the Albanian government should take urgently. Social policies should promote employment in the country in order to increase living standards, and the quality of public services, especially employment, education, health and other important sectors. If political commitments remain at these negligible levels, emigration will not only continue, but will have dangerous dimensions for the demographic situation in the country, also worrying in the disintegration of the family nucleus and social destabilization in the country from leaving of intellectuals, specialists and the workforce in general, pointing to the negative impacts in recent years.

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SUMMARY

Migration of Albanians in the Last Ten Years
The Evolution and Changes of Immigration Path

Emigration is a term known in Albania for centuries. However, the emigration of Albanians, since the '90s, when a significant part of Albanian citizens emigrated, despite education, is experiencing a large increase in recent years.

Migration is a phenomenon that has affected almost all Albanians. Statistics show that most Albanians want to leave Albania in order to create a better life abroad. In the last 5 years we have seen a large increase in the departure of academics, for example mainly doctors and nurses. Lack of job satisfaction, opportunities for further professional education, career development, poor working conditions, political pressure, exposure to verbal and physical violence, are factors that have simulated the departure of people from Albania. This paper uses a scientific approach to understand the challenges and unresolved issues of migration in Albania, presenting a vivid picture of the situation in the past and present.

In the first part of this paper, we will explain the phenomenon of migration of Albanians from 2010 until today. In the second part, we will explain the phenomenon of the departure of the elite of society or as it has been defined differently by many researchers, the "brain of society". In the synthesis of this analysis, we will reach the conclusions on what are the

factors that push Albanians to leave their country and migrate to the most developed countries in the world. The methodology used gives us the opportunity to have a deeper understanding of the current situation, in terms of reasoning, perceptions, attitudes and behaviours of people, as key actors. This paper aims to provide an analysis of the reasons that lead Albanian citizens to leave their country and migrate to others.

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SOCIAL MOBILITY AND MORTALITY IN SOUTHERN SWEDEN (1813-1910)

Paolo Emilio Cardone

1. Introduction

Aim of this research project is to seek the influence of intergenerational social mobility on mortality in Sweden, covering the transition from preindustrial to a breakthrough industrial society. According to previous studies (see, e.g. Bengtsson and Van Poppel, 2011; Bengtsson and Dribe, 2011; Dribe *et al*., 2012), Social Economical Status (SES) did not affect substantially life expectancy of Swedish population in the XIXth century. Instead of this, other variables could be key factors. Thus, a new question emerges for us: could it be possible that other socio-economic factors, such as the intergenerational social mobility, may have affected life expectancy? This issue is important not only for our understanding of present-day health and mortality patterns, but also for our knowledge about living conditions in the past. The long-term development of social mobility has been a major research issue for a long time within both demography and economics. A key interest revolved around the extent to which social mobility regimes differed between countries at different levels of development or with a different institutional structure, and whether these patterns changed during and after industrialization (see, e.g. Bourdieu *et al*., 2009; Lipset and Bendix, 1959; Van Leeuwen and Maas, 2010), but few studies have examined this issue from a longitudinal perspective, covering the entire period from a preindustrial to an industrial society. The aim of this article is to contribute to this line of research by studying socioeconomic differences in adult mortality in a long term historical perspective, starting early in the demographic transition (1813) and going up to 1910, thereby covering the transformation from a pre-industrial society to the first part of the breakthrough of industrialization.

Industrialization brought about overwhelming changes in the structure of the labour market, with a massive growth in occupations within both the manufacturing and service sectors (Schön, 2000). However, while changing employment from the agricultural to the industrial sector implies occupational mobility, the transformation of an unskilled farm worker into an unskilled industrial worker cannot automatically be considered as class mobility (Dribe *et al*., 2012).

The study is based on a unique longitudinal dataset covering the entire period from 1813 to 1910, using information on occupation to identify socioeconomic status. According to historical criterion, we divide the study into three periods: 1813–1869, 1870–1894 and 1895–1910. The first period was characterized by agricultural transformation, early industrialization and the first phase of the demographic transition with declining infant and child mortality. Scania community changed from being a typical rural area dominated by freeholders and tenants on crown land into a small industrial town characterized by food and textile industries (Dribe *et al.*, 2012).

The second period (1870-1894) saw the real breakthrough of industrialization in Sweden and declining adult mortality. It showed the first signs of industrialization where there was an early industrialization in textiles (Schön, 2000).

In the third period, industrialization continued at a more rapid footstep with an accompanying relative decline of the rural sector (see, e.g. Schön, 2000; Bengtsson and Dribe, 2011). New positions are being generated throughout the western world in the XIXth century and others have disappeared as consequence of the growing importance of the industrial sector and of the decline of agriculture. In this way the process of industrialization implied a considerable degree of occupational mobility with new work positions (Lipset and Bendix, 1959), being clearly associated with increasing class mobility.

As Dribe *et al*. (2012) display, the initial phases of industrialization were associated with a downward intergenerational mobility, as during the initial stages of industrialization individuals had to abandon higher class positions in agriculture. On the other hand, the mature industrial society has experienced an important upward social mobility as a "new" middle class has emerged.

2. Data and methods

We use a longitudinal individual-level data in a confined geographic area of Sweden. In detail, we choose a dataset from the Scanian Economic-Demographic Database (SEDD)[1] comprised by 80.966 observations of 3.385 individuals both men and women registered between 1813 and 1910. The database is a longitudinal economic and demographic dataset, based on family reconstitutions and local population registers[2] (which typically consist of records of the baptisms, marriages

[1] The data is maintained by the Scanian Economic Demographic Database, which is a collaborative project between the Regional Archives in Lund and the Centre for Economic Demography, Lund University (Sweden). The source material is described in *Reuterswärd and Olsson* (1993), and the quality of data is analysed in *Bengtsson and Lundh* (1991). For more details: https://www.ed.lu.se/databases/sedd

[2] The parish register material is of high quality and shows no gaps for births, deaths, or marriages. Migration records are less plentiful, but a continuous series exists from the latter part of the eighteenth

and burials in a community), containing information about individuals who were living in five rural coast parishes (Hög, Kävlinge, Halmstad, Sireköpinge, and Kågeröd) located in western Scania, the southernmost county of Sweden.

Scania, called the "granary of Sweden", was almost exclusively a rural economy and conditions were similar throughout the province in years of low real wages (Alter *et al*. 2004). The local environment is quite homogenous since it only encompasses rural locations. Industrial activities start, however, to develop in one of the parishes after 1860, also in some neighboring areas. While the mortality rate for both men and women in working ages declined throughout this period, no social differences are found, neither during the preindustrial nor during the industrialization period (Bengtsson and Van Poppel 2011).

The research is based on a comparison of socioeconomic and class attainment across two generations, typically from parent to son/daughter. More specifically, we are looking at the impact of the parent class on their offspring's attainment and, if the change has occurred, what consequences produced on the life expectancy of the second generation.

In this study, we measure socioeconomic status by occupation of the family head using socioeconomic codification SOCPO: a classification scheme designed to capture the economic as well as cultural status of an occupation (Van de Putte and Miles, 2005). Practically, social mobility is defined as the chances of an individual, at age 35, have or not the same SES of her/his father, according to SOCPO.

However, although the employment change from the agricultural to the industrial sector implies professional mobility, the transformation of an unskilled agricultural worker into an unskilled industrial worker cannot automatically be considered as class mobility. Specifically, the social class of the son is measured using the SOCPO observation occurring at age 35, whereas that of the father is obtained taking in account the SOCPO at son's birth.

The SOCPO sorts individuals by occupational information using a comparable social class system. The occupation of individuals is classified according to a recently developed coding scheme, the *Historical International Standard Classification of Occupations*, called HISCO (Van Leeuwen *et al*. 2002). HISCO translates occupational descriptions covering a long historical time, from various languages and countries into a common code, compatible with the International Labour Organisation's International Standard Classification of Occupations

century. Information concerning farm size and property rights, in addition to various kinds of information from poll-tax records, land registers, and household examination records, are linked to family reconstitutions based on the parish records of marriages, births, and deaths. Taken together, we have rich information on the household size and structure as well as socio-economic conditions (Bengtsson and Broström, 2010).

(ISCO68) scheme[3]. These HISCO-codes are classified according to a social class scheme, the HISCLASS-scheme, developed by Van Leeuwen and Maas (2005)[4]. The main reason for using it is that while it focuses on social power, it is also highly correlated with education and income, as well as this classification can be used both for rural and industrial societies. SOCPO is a 5-category classification scheme (Van de Putte and Miles, 2005) based on skill level, degree of supervision and whether self-employed or not, as well as on pure status (Table 1). The five classes are: the elite class (SP-level 5, including large agricultural proprietors), the middle class (SP-level 4, including self-sufficient farmers), skilled workers (SP-level 3), semi-skilled workers (SP-level 2, including smallholders and crofters), and unskilled workers (SP-level 1, including farm workers).

Table 1 – *Socioeconomic classification (SOCPO).*

Social power level	Commanders (authority)	Self-employed (business/property owners)	Skill	Pure status
5	High commander: executive, general policy tasks	Large-scale self-employed	Non-manual superskilled	Nobility
4	Medium commander: supervisor of skilled workers	Medium-scale self-employed: local businessmen and farmers	Manual superskilled/ non-manual skil.	
3	Low commander: supervision of semi- and unskilled workers		Manual skilled	
2		Small-scale self-employed	Semi-skilled	
1			Unskilled	

Source: Van de Putte and Miles (2005).

[3] Recently, progress has been made in solving comparability problems (in terms of time periods or geographical areas) for historical occupational information with the development of a historical version of the ISCO68 classification of occupations. ISCO68 is a coding grid for occupational information drawn up by the International Labour Organization (ILO) and used by statistical agencies across the world. After many rounds of consultations with leading historians and experts on historical databases, ISCO68 has been converted into HISCO, a tool that can be used to code occupational information as found in historical censuses and vital registers in a comparable way (van Leeuwen and Maas, 2010). Coding of occupational titles worldwide is ongoing; the progress so far can be seen on the History of Work Website of the International Institute of Social History: https://historyofwork.iisg.nl.

[4] The HISCLASS-scheme is based on a social class categorization of which the distinction between manual and non-manual labour, the level of skill, hierarchy and economic sector are the dimensions. HISCLASS distinguishes between 12 social classes. In view of the small number of cases, these have in various studies been grouped into a more limited number of categories. An experiment in which historians directly classified HISCO groups into the classes distinguished in the HISCLASS schema suggested that the results are basically the same (Van Leeuwen and Maas 2010).

3. Cox model

Consistent with expectations, the period under study was associated with increasing absolute mobility, dominated by downward moves (39,2 vs 23,9%). Moreover, gender doesn't play an important role: social mobility is equally distributed upon men and women in both experienced changes (upward and downward) and in case of any change (no mobility).

Social mobility is also fairly balanced with regard to marital status (Table 2).

Table 2 – *Mobility and marital status (% values).*

Social mobility	Not Married	Married	Total
Upward	25,2	23,3	23,9
No mobility	35,5	37,5	36,9
Downward	39,3	39,2	39,2
Total	100	100	100

Source: own elaboration on SEDD data.

As shown in Table 3, the second period (1870-1894) was characterized by greater downward mobility due to the transition from agricultural to industrial society (downward 43,6%) but in the third one (1895-1910) the benefits are evident with a sharp drop in downward mobility (35,2%) and a strong increase in upward mobility (29,2%).

Table 3 – *Mobility and historical periods (% values).*

Social mobility	1813-1869	1870-1894	1895-1910	Total
Upward	22,5	22,6	29,2	23,9
No mobility	41,9	33,7	35,6	36,9
Downward	35,6	43,6	35,2	39,2
Total	100,0	100,0	100,0	100,0

Source: own elaboration on SEDD data.

As regards the social position at birth, the three lower classes (skilled, semi-skilled and unskilled workers) have experienced an important upward social mobility. There is also a significant drop in elite class, with 66% of downward social mobility, confirming the emergence of a "new" middle class (table 4). Finally, those who belong to a large family (with more than 30 components members) tends to have an absolute high downward social mobility (56,2%).

Table 4 - *Mobility and social status (% values).*

Social mobility	Unskilled	Semi-skilled	Skilled	Middle class	Elite	Total
Upward	53,9	35,9	27,0	4,7	---	23,9
No mobility	46,1	27,1	25,9	42,4	33,8	36,9
Downward	---	37,0	47,1	52,9	66,2	39,2
Total	100,0	100,0	100,0	100,0	100,0	100,0

Source: own elaboration on SEDD data.

To estimate the influence of social mobility and other possible mortality determinants, we estimate a *Cox proportional hazards model* (Cox, 1972).

We assume that the relative effect on mortality of any covariate is constant over age. The model allows time-varying covariates. The time-varying covariates are treated by right-censoring and left-truncating the spells every time a covariate changes. It is very important to check the underlying assumptions behind this model, especially the proportionality assumption.

Since after age 55 social mobility does not respect the hazard proportionality assumption, the study must be focused on prior ages, from age 35 to 55.

Therefore, we estimate a *Cox proportional hazards model*:

$$ln\, h_i(a|X_i) = ln\, h_0(a) + X_i\, \boldsymbol{\beta}$$

where $h_i(a)$ is the hazard of death for an individual *i* at duration (age) *a*, $h_0(a)$ is the baseline hazard, i.e. the hazard function for an individual having the value zero on all covariates, and β is the vector of parameters for the individual covariates (x_i)[5].

Concretely, in the study analyzed variables are:

- Social mobility (*mobility*). Categorical. Three possible status: upward (positive change from SOCPO at birth to SOCPO at age 35c.), no mobility (equal position in both moments, reference cat.) and downward (a negative change).
- Social status at birth (*birthsocpo*). Categorical. It's corresponds to the father SES. Five Social Power Levels. These levels are labelled: 'elite' (SOCPO 5), 'middle class' (SOCPO 4), 'skilled workers' (SOCPO 3), 'semiskilled workers' (SOCPO 2) and 'unskilled workers' (SOCPO 1, reference cat.).
- Historical periods (*period*). Categorical. Three values: From 1813 to 1869 (1, reference cat.), between 1870 and 1894 (2) and above this period (3).
- Individual household size (*HouseholdSizeCat*). Categorical. Four possible status according to a quartile distribution: Household composed by less than

[5] The estimations were made using the '*stcox*' command in Stata (https://www.stata.com).

5 members (1, reference cat.), between 6 and 10 (2), from 11 to 30 (3) and more than 31 (4).

- If the individual is an immigrant or not (*migration*). Categorical. Dummy variable: No migrant (0, Swedesh born), Migrant from abroad (1, reference cat.).
- Marital Status (*married*). Categorical. Dummy variable: Not married (0), Married (1, reference cat.).
- Gender (*Sex*). Categorical. Dummy variable: Female (reference cat.), Male.

Thus, we start by estimating a full model which, in addition to social mobility status, includes all the others above mentioned variables:

$$\ln h_i(a) = \ln h_0(a) + \beta_1 mobility_i + \beta_2 gender_i + \beta_3 marital\ status_i + \beta_4 period_i + \beta_5 inmigrant_i + \beta_6 SOCPO\ at\ birth_i + \beta_7 household\ size_i$$

Table 5 – *Cox proportional hazards model.*

Variables		Haz. Ratio	Sign.
• Mobility (ref. No change)	No change (ref.)	1	
	Upward	**0,663****	0,011
	Downward	0,868	0,312
• Sex (ref. Female)	Female (ref.)	1	
	Male	0,961	0,729
• Marital status (ref. Unmarried)	Unmarried (ref.)	1	
	Married	**0,780****	0,038
• Period (ref.1813-1869)	1813-1869 (ref.)	1	
	1870-1894	0,829	0,156
	1895-1910	**0,753****	0,044
• Migration (ref. Migrant)	Migrant (ref.)	1	
	Not migrant	1.493	0,690
• Birth SOCPO (ref. Unskilled worker)	Unskilled worker (ref.)	1	
	Semiskilledworker	0,856	0,372
	Skilled worker	**0,493****	0,025
	Middle class	0,764	0,149
	Elite	0,507	0,160
• Household size (ref. Less than 6 members)	Less than 6 members (ref.)	1	
	From 6 to 10	1.136	0,336
	From 10 to 30	1.124	0,540
	More than 30	1.407	0,156

N. observations = 53.083; LR chi2 (14) = 23,26; Prob> chi2 = 0,0562
Please note that the number of observations is less due to the narrowing of the age range.
Source: own elaboration on SEDD data.

Table 5 shows hazard ratio and significativity (*p* value) for each covariate. The fitted model shows that upward intergenerational social mobility affects mortality, reducing it in the studied period. Taking as a reference category '*no mobility*', hazard ratio is 0,66 (less than 1) and therefore an upward social change sharply reduces mortality. However, only upward mobility is statistically significant since downward hazard ratio is 0,87 but the associated *p* value is 0,312 which is not significant.

Moreover other key variables emerge in the model, such as marital status (who is married has less chances to die than individuals who are not); father's social position (only when is skilled worker with unskilled worker as reference cat.); and the historical period because the breakthrough of industrialization plays an important role (hazard ratio is 0,75 with preindustrial period as reference cat.). All these covariates are statistically significant. In nineteenth-century Europe excess female mortality, especially from late childhood through childbearing ages, has frequently been observed and connected to adverse conditions for women mainly due to childbearing and work load according to the household size (see, e.g. Alter *et al.*, 2004; Humphries, 1991; Johansson, 1984; Kennedy, 1973, chapter 3; Klasen, 1998; Stolnitz, 1956). This is why we include the covariate *household size* in the model even though is not significant.

Table 6 - *Tests of Proportional-Hazards Assumption.*

	rho	chi2	df	Prob>chi2
Upward	0,02082	0,13	1	0,7180
Downward	-0,05538	0,97	1	0,3236
Male	0,05585	0,93	1	0,3344
Married	-0,08890	2,51	1	0,1132
1870-1894	0,04642	0,64	1	0,4226
1895-1910	0,04069	0,50	1	0,4806
Not migrant	0,00173	0,00	1	0,9758
Semiskilledworker	-0,03618	0,38	1	0,5393
Skilled worker	-0,02001	0,12	1	0,7248
Middle class	-0,03663	0,44	1	0,5069
Elite	-0,01848	0,10	1	0,7462
From 6 to 10	0,11128	4,08	1	0,0433
From 10 to 30	0,12037	4,43	1	0,0353
More than 30	0,04698	0,66	1	0,4170
global test		13,39	14	0,4961

Source: own elaboration on SEDD data.

As shown in table 6, tests of the proportional hazards assumption (Cleves *et al*., 2010), based on scaled Schoenfeld residuals[6], reveal no serious violations for the above model.

4. Summary and discussion

This study contributes to one of the most classical debates in the social stratification literature about the link between industrialization and changing mechanisms of intergenerational social mobility and class attainment. In particular, it analyzes the influence of intergenerational social mobility on mortality in southern Sweden, covering the transition from preindustrial to a breakthrough industrial society (1813-1910). Using longitudinal individual-level data in Scania community we test the hypothesis linking changing social mobility and mortality due to the industrialization process.

One principal finding of such an analysis is that who experienced an upward social change have had a mortality reduction (hazard ratio = 0,66). Thus, the model results could indicate that intergenerational upward mobility have a positive impact in terms of mortality reduction. Secondly, other variables, as marital status, father's social position (skilled worker) and historical period (1895-1910, the breakthrough of industrialization) are significantly associated with reduced mortality.

Consistent with expectations, the initial phases of industrialization (second period, 1870-1894) were associated with a predominance of downward intergenerational mobility (43,6%). As a result of the higher growth of lower class positions, it illustrates a situation where structural labour market changes during the initial stages of industrialization forced individuals to abandon higher class positions in agriculture. During the later stages of industrialization (third period, 1895-1910), a pronounced increase in upward mobility could be observed (29,2%), which indicates a growth in higher status occupation.

Overall, the industrialization process was clearly associated with increasing class mobility. Industrialization fundamentally changed the mechanisms of attainment and intergenerational mobility. While the intergenerational transmission of status became less important over time, it became easier for people from low-class origin to enter the non-agricultural middle class.

If a consistent causal link between social economical status and mortality is open to serious doubt, is less so between social mobility and mortality.

Thus, future studies should consider the importance of social mobility on mortality since a greater knowledge about the historical process producing social inequalities can improve our understanding of contemporary mortality differentials.

[6] The proportionality test was made using the '*estat phtest*' command in Stata.

Our initial hypothesis should be confirmed in further analysis, controlling by other socio economic variables as well as redefining the idea of social mobility in a more fitted concept. Promising paths of future research in explaining the mobility transition may be the changing roles of geographic mobility and education. Although where possible, some authors used literacy as a crude indicator of educational level as well, but until the late nineteenth century, information about the level of education is rather hard to obtain and the large majority had only primary education.

In conclusion, while we have mainly charted the trends and patterns of social attainment and mobility in the period industrialization, much remains in terms of explaining the detailed patterns of mobility and how they changed over twentieth century.

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SUMMARY

Social mobility and mortality in Southern Sweden (1813-1910)

Aim of this paper is to see how intra-social group mobility affected mortality patterns in southern Sweden covering the transition from preindustrial to a breakthrough industrial society, a period of deep transformation and increasing life expectancy. According to previous studies, Social Economical Status did not affect substantially life expectancy of Swedish population in the nineteenth century. Could it be possible that other socio-economic factors, such as the intergenerational social mobility, may have affected life expectancy? We use longitudinal micro-level data between 1813 and 1910 from the Scanian Economic-Demographic Database with information on demographic events and socioeconomic status. Intra-social mobility is defined as the chances of an individual between at age 35 to experience a change of her/his Social Economical Status with respect to her/his father according to social power codification. The main reason for using it is that it is highly correlated with education and income. In addition, this classification can be used for both rural and industrial societies. A Cox proportional hazard model was applied to estimate the influence of social mobility, controlling for age and other possible determinant variables. The main finding is a significant and positive relationship between social economic mobility and mortality reduction.

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LA POPOLAZIONE DELL'EUROPA E DEI PAESI DEL MEDITERRANEO: UNA LUNGA PROSPETTIVA, 1500-2100

Marco Breschi, Alessio Fornasin

1. Introduzione

Fernand Braudel pensava al mondo mediterraneo come ad una grande entità territoriale con al centro il mare. I confini di questo universo erano dati dalle montagne che gli facevano da corona. Sempre per lo storico delle «Annales» (Braudel 1986), però, anche il resto dell'Europa aveva stretti rapporti e intratteneva ogni sorta di scambi con il mare interno e, in ultima istanza, ne dipendeva.

Se si supera il perimetro dato dalle montagne raffiguriamo però un altro mondo. Proseguendo a nord delle Alpi e attraversato il continente giungiamo alle grandi e gelide distese dell'Europa settentrionale. Se invece rivolgiamo lo sguardo a sud e superiamo la catena dell'Atlante ci affacciamo sul deserto del Sahara. Ampliati così i nostri orizzonti ridisegniamo una grande area che comprende, oltre al mondo mediterraneo, tutto il continente europeo. Questo nuovo universo non risulta più chiuso dalle catene montuose, ma rimane circondato da grandi ambienti poco o per nulla popolati.

Rispetto ai secoli trattati dal grande storico francese, oggi, questo mondo o economia-mondo, per usare la terminologia di Immanuel Wallerstein (1986), si è notevolmente trasformato sotto numerosi punti di vista. I legami con il resto del pianeta sono assai più facili, veloci e praticati. Gli spazi desertici o poco popolati, sebbene in larga misura siano ancora tali, sono attraversati da autostrade, ferrovie e rotte aeree. Ogni anno sono percorsi da centinaia di milioni di persone. Lo scambio e la circolazione di uomini e merci non trova, di fatto, più ostacoli.

Sotto altri punti di vista, però, possiamo parlare di continuità o di caratteristiche che, in qualche modo, si sono perpetuate nel tempo. Da questa prospettiva, l'aspetto geografico, quello almeno imposto dalle larghe panoramiche e dalle lunghe distanze, non è mutato, e le grandi trasformazioni climatiche spesso evocate non hanno ancora inciso in maniera evidente sugli assetti più generali di questi territori. Certo, anche guardando – retoricamente – la terra dallo spazio, pur dalla distanza di migliaia di chilometri l'espandersi delle città è un fenomeno che risalta in tutta la sua evidenza, ma, in panoramica notturna, la stretta maglia dei punti luminosi, a volte delle vere e proprie 'macchie' che costellano la superficie delle terre che circondano il

Mediterraneo, si dirada e le luci quasi spariscono proprio ai confini del territorio disegnato da Braudel.

Se da questo punto di vista le nostre impressioni possono assegnare alla distribuzione della popolazione una continuità nel tempo o, meglio, una sorta di progressione uniforme a livello territoriale, c'è da chiedersi se rispetto allo scenario affrescato dal grande storico francese e, in particolare, negli ultimi decenni non si siano verificate, invece, delle trasformazioni nell'ambito dei fenomeni demografici che siano andate in direzioni diverse da quelle che ai nostri occhi possono sembrare scontate.

2. La popolazione dell'Europa e del Mediterraneo, 1500-2100

Riguardo ai secoli passati, dal punto di vista demografico le nostre conoscenze sull'Europa e il mondo mediterraneo sono assai diseguali. Abbiamo una buona cognizione di quale fosse il numero di abitanti e delle scansioni cronologiche che hanno contraddistinto la storia del popolamento dell'Europa occidentale e meridionale. Sappiamo invece poco sulla popolazione dell'Europa orientale e balcanica. Altrettanto incerte sono le nostre conoscenze sull'Anatolia e sulla sponda Asiatica del Mediterraneo. Quasi nulle, infine, con la parziale eccezione dell'Egitto, sono quelle sull'Africa settentrionale.

Per sapere quanti erano, nel complesso, gli abitanti di questo immenso territorio, quindi, ci si deve da una parte appoggiare a ricostruzioni e stime che non si muovono sempre nella stessa direzione e non godono del consenso generale degli studiosi[1]. Per i periodi più recenti le cose naturalmente cambiano e i dati sono assi più affidabili. Si sono, inoltre, contemplati i dati attesi al 2100 secondo le previsioni demografiche della Population Division delle Nazioni Unite. Questi dati, riportati in corsivo, ci consentono di allargare, seppure con un certo grado di incertezza, lo sguardo al più immediato futuro.

Fatte le debite premesse, l'entità della popolazione europea e mediterranea dall'inizio dell'età moderna viene sinteticamente riassunta nella tabella 1. Nel corso dei primi tre secoli coperti dall'indagine la popolazione dell'area considerata risulta più che raddoppiata. Essa passò dai circa 87 milioni del 1500 ai quasi 200 del 1800. Il ritmo della crescita, già più accentuato nel XVIII secolo, conosce una sensibile accelerazione nel secolo successivo, in cui il numero di abitanti raddoppia ancora,

[1] Per maggiori informazioni riguardo ai criteri che hanno portato alle diverse stime della popolazione si rimanda a Breschi, Fornasin (2009). Si segnala qui solamente che la popolazione dei diversi territori ai diversi momenti è stata ottenuta a partire dalla ricostruzione del numero di abitanti dei singoli stati riferiti ai confini attuali. Il testo di riferimento principale è McEvedy, Jones (1978). Per il 2000 e il 2100 si è fatto ricorso ai dati pubblicati dalla Population Division delle Nazioni Unite versione 2017 (http://esa.un.org/unpp/index.asp).

toccando quasi i 430 milioni. La popolazione cresce quasi allo stesso ritmo nel secolo seguente e arriva così, all'abbrivio del nuovo millennio, a 930 milioni.

Tabella 1 – *Popolazione in milioni dell'area euro-mediterranea (1500-2100).*

Territorio	1500	1600	1700	1800	1900	2000	2100
Europa settentrionale	1,5	2,0	3,2	5,2	12,3	24,2	*34,9*
Europa occidentale	30,8	41,9	46,8	70,9	143,2	247,3	*282,1*
Europa meridionale	15,0	21,9	22,4	33,5	57,1	105,7	*91,2*
Europa orientale	17,4	22,6	32,3	53,5	141,3	230,7	*178,9*
Balcani	7,6	11,0	12,4	16,2	37,6	84,9	*45,2*
Asia mediterranea	5,6	7,8	8,1	9,2	15,8	93,4	*179,2*
Africa settentrionale	8,2	9,4	9,7	9,6	22,3	144,3	*325,9*
Totale	86,1	116,6	134,8	198,0	429,6	930,4	*1137,2*

Tabella 2 – *Numero di abitanti per km^2 nell'area euro-mediterranea (1500-2100).*

Territorio	1500	1600	1700	1800	1900	2000	2100
Europa settentrionale	1,2	1,6	2,6	4,2	10,0	19,7	*28,3*
Europa occidentale	21,9	29,8	33,3	50,4	101,9	175,9	*200,7*
Europa meridionale	16,7	24,4	24,9	37,3	63,6	117,8	*101,6*
Europa orientale	3,2	4,2	5,9	9,9	26,0	42,5	*32,9*
Balcani	8,7	12,5	14,1	18,5	42,9	96,8	*53,0*
Asia mediterranea	5,3	7,4	7,6	8,7	15,0	88,5	*166,2*
Africa settentrionale	1,4	1,6	1,6	1,6	3,7	24,0	*54,2*
Totale	5,1	6,9	8,0	11,7	25,4	55,0	*67,3*

Nei primi quattro secoli, le regioni più popolate, stando a questa ricostruzione, risultano essere quelle dell'area europea. In questo stesso territorio, inoltre, si osserva il più deciso incremento della popolazione non solo nel corso dell'Età Moderna, quando i paesi extraeuropei manifestano una stagnazione, ma anche, e soprattutto, nel corso dell'Ottocento, quando, in un quadro di crescita generalizzata, le aree più popolate vedono comunque un aumento molto forte in termini assoluti del numero di abitanti. Nel corso del XX secolo si assiste al notevole incremento della popolazione dei paesi dell'area sud-orientale. La crescita, che vede la consistenza demografica di queste regioni moltiplicarsi per sette, modifica un assetto plurisecolare aprendo, alla luce dei valori previsti al 2100, nuove prospettive connotate anche da un regresso nel sud-est dell'Europa.

Le evidenze della tabella 1 non tengono conto del fatto che l'estensione dei diversi territori è molto diseguale, quindi risulta forse più esplicativa l'evoluzione del popolamento attraverso i dati relativi alla densità degli abitanti riportati nella tabella 2. Osserviamo con maggiore chiarezza alcuni degli elementi cui già si era fatto cenno in precedenza e che riflettono, per i primi secoli presi in esame, come in alcuni di questi territori vi siano incluse ampie zone desertiche e come in altri, al contrario,

predominino nettamente le aree agricole dove si realizzava gran parte della produzione dei beni di consumo primario. Il prevalere degli elementi di costrizione sembra però spezzarsi negli ultimi cento anni, quando alcune aree storicamente sottopopolate, come l'Asia mediterranea, giungono ad avere una densità di popolazione doppia rispetto all'Europa orientale, e addirittura paragonabile a quelle dell'Europa meridionale e dei Balcani. In questo quadro di crescita delle aree centro-meridionali anche l'Africa settentrionale, nonostante inglobi le immense aree desertiche e semidesertiche del Sahara, supera, in quanto a densità della popolazione, le regioni dell'Europa settentrionale.

Considerando unitamente tanto il punto di vista dei numeri assoluti, quanto quello della densità, e soffermandosi a commentare l'evoluzione storica del popolamento secondo le scansioni cronologiche fin qui adottate, in una prima fase i territori più popolati sono quelli dell'Europa, in particolare la parte meridionale e occidentale. All'altro estremo di questa duplice scala, invece, si devono iscrivere i territori dell'Africa settentrionale e dell'Europa del nord. In una seconda fase, però, il quadro cambia. I paesi che erano vissuti ai margini dello sviluppo occidentale conoscono anch'essi una fase di crescita economica e si pongono alla testa anche della crescita demografica.

Soffermandosi su queste evidenze, però, non si mette adeguatamente in luce un elemento che invece riveste importanza cruciale per la ricostruzione della storia della popolazione, e cioè la velocità del suo percorso evolutivo. Per ovviare a questa parziale omissione, è stata costruita la tabella 3, che riporta i tassi di incremento medio annuo della popolazione, e che quindi descrive la velocità con cui aumentò la popolazione nei singoli territori rispetto alle diverse scansioni cronologiche. Secondo questi dati, nel corso del Cinquecento, l'aumento avvenne ad un ritmo del 3 per mille annuo, si ridusse all'1,4 per mille nel Seicento e si posizionò vicino al 4 per mille nel Settecento. Nei due secoli successivi la crescita si posiziona attorno al 7,7 per mille. All'interno del quadro generale, le differenze per macroregioni sono notevoli. In primo luogo, si osserva come nel Cinquecento la crescita si produsse pressoché ovunque, con la sola eccezione dell'Africa settentrionale. Nel secolo successivo l'ascesa rallentò notevolmente quasi dappertutto o, addirittura, si arrestò. Solo nei poco densamente popolati territori dell'Europa orientale e settentrionale essa non solo non seguì l'andamento generale, ma anzi proseguì ad un ritmo piuttosto sostenuto. Nel Settecento la crescita riprese in tutta Europa. Nei territori orientali essa fu ancora più veloce che nel secolo precedente. L'Asia mediterranea mantenne invece i bassi livelli di incremento che l'avevano contraddistinta nel Seicento. Nell'Africa settentrionale, come già si è osservato, si registra addirittura un tasso negativo. Nell'Ottocento la crescita aumenta ovunque. Il ritmo più blando, di poco superiore a quello del secolo precedente, si osserva nell'Europa meridionale. Nel Novecento la situazione muta ancora. Come già si è detto la popolazione cresce con

grande velocità nei territori dell'Asia mediterranea e dell'Africa settentrionale, rallenta la sua progressione, invece, in Europa, dove, con parziale eccezione della sua parte meridionale, più forti si fanno sentire gli effetti della seconda transizione demografica. Queste tendenze sembrerebbero distendersi anche lungo il presente secolo, la velocità di crescita tende, però, a ridursi nei terrori extra-europei e segna una decrescita nell'Europa meridionale e orientare e, soprattutto, nei Balcani.

Tabella 3 – *Tassi di incremento (per mille) della popolazione nell'area euro-mediterranea (1500-2100).*

Territorio	1500-1600	1600-1700	1700-1800	1800-1900	1900-2000	2000-2100
Europa settentrionale	2,9	4,8	4,9	8,7	6,8	*3,7*
Europa occidentale	3,1	1,1	4,2	7,0	5,5	*1,3*
Europa meridionale	3,8	0,2	4,0	5,3	6,2	*-1,5*
Europa orientale	2,6	3,6	5,0	9,7	4,9	*-2,5*
Balcani	3,7	1,2	2,7	8,4	8,1	*-5,6*
Asia mediterranea	3,3	0,3	1,3	5,4	17,8	*5,6*
Africa settentrionale	1,4	0,3	-0,1	8,4	18,7	*8,1*
Totale	3,0	1,5	3,8	7,7	7,7	*2,0*

3. I meccanismi del popolamento

Nel loro complesso le cifre fin qui illustrate ripropongono una dinamica della popolazione per molti versi già nota[2]. Rimane però da vedere attraverso quali meccanismi si sia prodotta. Per questa ragione bisogna approfondire le dinamiche del popolamento anche secondo un'ottica che consideri centrali i fattori propriamente demografici: la mortalità, la fecondità, la nuzialità e le migrazioni.

In età moderna, le caratteristiche demografiche delle popolazioni, nelle loro linee generali, erano contraddistinte da quello che gli studiosi chiamano regime ad alta pressione. In altre parole, le società del passato, in misura più o meno accentuata, si caratterizzavano da alti livelli di natalità e quasi altrettanto alti livelli di mortalità. Per riferire qualche cifra, i livelli di natalità si aggiravano mediamente attorno al 35-38 per mille, quelli di mortalità tra il 30-36 per mille. Vi potevano essere naturalmente notevoli differenze da luogo a luogo e da periodo a periodo, tuttavia la crescita naturale era, in media, contenuta (Schofield, Reher 1991).

Come ha efficacemente riassunto Massimo Livi Bacci (2005), la mortalità in antico regime era la causa principale del 'disordine' demografico. Non seguiva, come oggi, una sequenza ordinata, in cui, quasi sempre, sono i vecchi a morire prima dei giovani, i genitori prima dei figli. Anzi, molto spesso si verificava proprio l'opposto. Parte di questo effetto era dovuto agli elevati tassi di mortalità infantile, ovvero

[2] Questi processi sono descritti in alcuni classici lavori. Richiamiamo qui, per l'Europa, Abel (1976) e Slicher Van Bath (1972); più recentemente Fischer (1996).

all'intensità con cui morivano i bambini nel primo anno di età. La causa principale del 'disordine' demografico era dettata, tuttavia, dalla forte incidenza delle malattie infettive. L'insorgere di una epidemia e il suo diffondersi, non solo innalzava la mortalità 'normale', ma colpiva il più delle volte indiscriminatamente sia tra le donne che tra gli uomini, sia tra i giovani che tra gli anziani (Del Panta 1980). La diffusione delle epidemie, in particolare della più distruttiva: la peste, è stato uno dei più importanti, se non l'unico, elemento di uniformità dal punto di vista demografico dei paesi del Mediterraneo e dell'Europa (Biraben 1975-76). Il mare, già nel Cinquecento, era un unico grande spazio commerciale solcato dai convogli veneziani e genovesi e dalle navi dei corsari, il bacino di scambio attraverso il quale spezie, tessuti, metalli preziosi, schiavi passavano da una sponda all'altra. Questi incessanti contatti facevano sì che virus e batteri si diffondessero seguendo tempi ravvicinati e ritmi molto simili in tutte le terre che lambiva.

L'intensità delle epidemie andò però quasi continuamente diminuendo. Dopo le grandi ondate del XVII secolo la peste fece la sua comparsa sempre più raramente sulla riva nord del Mediterraneo. Contagio dopo contagio le sue incursioni si registravano sempre più a meridione, e sempre in maniera più circoscritta. L'ultima grande epidemia di peste dell'Europa occidentale fu quella di Marsiglia del 1720. Dopo questa data, a parte alcune sporadiche apparizioni, il morbo lasciò per sempre l'Europa occidentale, ma continuò ad imperversare. Lo stesso però non si verificò nelle altre sponde del mare e nell'Europa orientale e balcanica. Sulle coste Algerine e Tunisine le epidemie si abbatterono numerose per molti decenni ancora. Nel corso di tutto il Settecento e per parte dell'Ottocento, il morbo colpì ancora ripetutamente e con forza tutti i territori ottomani.

Contrariamente alla mortalità, su cui abbiamo molte informazioni, sulla fecondità, ovvero sulla capacità delle popolazioni di riprodursi, si sa relativamente poco. Le nostre conoscenze, almeno per i secoli passati, si basano spesso su supposizioni piuttosto che su elementi di prova. Così, in particolare per le dinamiche demografiche di *ancien régime,* si può fare riferimento ad un indicatore indiretto della fecondità, e cioè l'età al matrimonio. Il matrimonio, benché non incida direttamente, come fecondità e mortalità, nel processo di rinnovamento di una popolazione, riveste particolare importanza perché con esso, nelle società tradizionali, aveva inizio la vita riproduttiva. È evidente che questa norma conosce alcune deroghe, basti pensare ai figli nati al di fuori delle unioni 'ufficiali', tuttavia essa mantenne la sua validità per la maggior parte delle società del passato fino almeno alla fine del XIX secolo.

L'età in cui ci si sposava, quindi, è un elemento di estrema importanza per cercare di capire qual era il potenziale riproduttivo di una popolazione. Infatti, in quelle società che non praticavano il controllo delle nascite, una più alta età d'ingresso nella vita riproduttiva significava anche una discendenza minore. Pur con le inevitabili

generalizzazioni, e nella consapevolezza dell'esistenza di diversi significati attribuibili al matrimonio nelle diverse culture, rimane ancora valido nelle sue linee principali il modello proposto da John Hajnal (1965) oramai più di cinquanta anni fa. Secondo Hajnal, dal punto di vista delle caratteristiche matrimoniali, l'Europa, nel passato, era divisa in due grandi aree il cui confine passava lungo quella linea, immaginaria, che collega, grosso modo, San Pietroburgo con Trieste. I territori a ovest di questo tracciato erano connotati da una elevata età alle nozze e da una relativamente alta quota di nubilato definitivo. Viceversa, a est di questa linea, e non solo in Europa, prevalevano, rispettivamente, una bassa età al matrimonio e un basso tasso di nubilato definitivo. In questi territori, dove il matrimonio era più generalizzato e si celebrava in età più precoce, si registravano anche tassi di natalità e di mortalità più alti.

Ad un certo punto, questo quadro iniziò a mutare. La fecondità cominciò a declinare indipendentemente dall'età al matrimonio e dal livello di nubilato. Questo processo cominciò in Francia nella seconda metà del Settecento, e da qui si diffuse, a partire soprattutto dal secolo successivo, in gran parte dei paesi europei e poi, nella seconda metà del Novecento, nei paesi dell'Africa settentrionale e del Medio Oriente. A generare questo nuovo fenomeno contribuirono numerosi fattori, ma risultò fondamentale la diffusione dei sistemi volontari di controllo delle nascite (Coale, Watkins 1986).

Sebbene di difficile studio, la fecondità, anche nei secoli passati, è comunque un fattore che in qualche modo riusciamo a quantificare. Assai più difficile, invece, è trattare l'emigrazione. Anche oggi, infatti, benché le migrazioni siano il fenomeno demografico che più colpisce la nostra attenzione, esso rimane di difficile quantificazione. La cosa è ancora più complicata in prospettiva storica. Anche in Età Moderna, infatti, i movimenti migratori erano importanti e coinvolgevano, limitandosi al solo territorio che stiamo studiando, un numero imponente di persone.

Per generalizzare, e sempre prendendo come base l'intera area euro-mediterranea, si possono trattare separatamente i tre diversi tipi di flussi migratori: l'emigrazione vera e propria, quella cioè verso l'esterno, l'immigrazione, le migrazioni interne (Breschi, Fornasin 2000). Nel corso di questi cinque secoli, e prendendo in considerazione il bilancio demografico di tutta l'area euro-mediterranea con il resto del mondo, il saldo netto delle migrazioni risultò, dal punto di vista numerico, in passivo. Tuttavia, se scomponiamo il territorio in macro aree, si presenta come fortemente negativo per la parte europea e di segno positivo per la parte extraeuropea. Le voci di questo bilancio si sono anche modificate nel corso del tempo. Per quanto riguarda l'Europea, in particolare quella atlantica, il passivo crebbe assai lentamente dal 1500 al 1800, ma fu molto intenso a cavallo dei secoli XIX e XX. Per quel che riguarda la parte extraeuropea si può parlare di un attivo piuttosto consistente nel Cinquecento, dovuto essenzialmente ai consistenti flussi di

schiavi che provenivano dall'Africa sub sahariana (Austen 1979). Questo particolare tipo di immigrazione andò diminuendo nel tempo, per praticamente annullarsi nel corso del Settecento.

Nello sviluppo della dinamica del popolamento in ottica euro-mediterranea i flussi in uscita ed in entrata sono ovviamente importanti in senso assoluto. A livello territoriale, però, assumono rilievo primario anche gli spostamenti interni all'area, almeno quelli che conobbero un impatto duraturo. In questo contesto ebbero una significativa funzione di redistribuzione della popolazione alcuni grandi processi di colonizzazione dell'età moderna. Tali movimenti sono stati particolarmente ragguardevoli per quel che riguarda l'Impero ottomano e la Russia. Anche nel caso di questi spostamenti vi furono regioni che videro incrementare i loro abitanti e altre che invece li videro diminuire. Complice la scelta che abbiamo fatto per costituire le diverse aree geografiche queste migrazioni non disarticolarono i macro-equilibri complessivi, a parte le migrazioni interne all'Impero ottomano che avvantaggiarono soprattutto l'area balcanica a discapito dei territori dell'Asia minore. Però tra Ottocento e Novecento, sulla scia del colonialismo si sono innescati flussi migratori dall'Europa verso i paesi dell'Africa settentrionale e del Mediterraneo orientale, mentre più recentemente ancora si sono sviluppati, e ancora non si sono esauriti, gli importanti spostamenti migratori dalla sponda sud a quella nord e da est verso ovest.

Tutti i processi di trasformazione fin qui descritti, sia che interessino mortalità e fecondità o nuzialità e migratorietà, furono assai lenti fino alla metà dell'Ottocento, ma poi subirono una forte accelerazione. A disarticolare il quadro demografico 'tradizionale', quadro che agli occhi dei contemporanei doveva apparire pressoché immobile, fu la transizione demografica (Chesnais 1992). Questo grande processo storico, che prese avvio in Europa tra la fine del Settecento e la seconda metà dell'Ottocento, innescò una potente fase di crescita. Nonostante la transizione fosse accompagnata, dal sorgere e dal dispiegarsi di imponenti flussi migratori verso le Americhe, la popolazione del vecchio continente crebbe in misura considerevole, e nell'ambito del territorio che si sta analizzando il peso demografico dell'Europa assunse rilievo ancora superiore a quello preminente che già deteneva.

I paesi dell'Africa settentrionale e del medio oriente hanno conosciuto l'avvio della transizione demografica in tempi assai più recenti. Benché la discesa della mortalità sia stata molto più veloce che in Europa e che il decremento della natalità sia stato anche assai più ravvicinato, nella quasi totalità di questi paesi la transizione non si è ancora conclusa (Tabutin, Shoumaker 2005). Analogamente a quanto abbiamo visto per l'Europa, anche questi territori hanno conosciuto la nascita e il dispiegarsi di importanti flussi migratori. Queste migrazioni, però, non si sono dirette verso il nuovo Mondo, bensì, come già si è fatto cenno, verso la sponda settentrionale del Mediterraneo e, in particolare, verso l'Europa meridionale e centrale. Anche in questo caso, in analogia a quanto era successo in anticipo di un

secolo in Europa, la popolazione non ha cessato di crescere in maniera consistente. Questa crescita, oggi, ancora non è conclusa, così come non si sono ancora esauriti i flussi migratori che paiono esserne il complemento.

4. Uno sguardo d'insieme

Lo sviluppo della popolazione dell'area euro-mediterranea, così come è stato descritto in queste pagine, si presenta per certi versi difforme rispetto all'immagine proposta da Fernand Braudel. Lo storico francese riteneva che la popolazione del mondo mediterraneo all'epoca di Filippo II ammontasse a 60 o 70 milioni di individui, con una densità, nell'ipotesi più bassa, di 17 abitanti per chilometro quadrato[3]. Tali stime sono un po' più basse, anche se non di molto, da quelle avanzate qui. Più che il numero, però, ciò che questi dati sembrano mettere in discussione è l'idea dell'esistenza di un ritmo sincrono che legava e in un certo senso univa le due sponde del mare. Questo ritmo si osservava, secondo Braudel, nel contemporaneo movimento della popolazione nei mondi cristiano e islamico. Questa visione, però, se ben si adatta al secolo XVI, deve essere riconsiderata per quel che riguarda i secoli successivi.

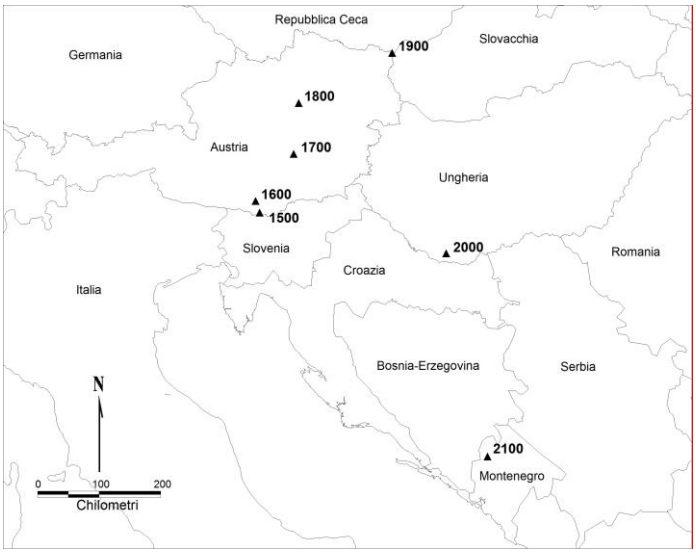
Le ricerche più recenti, infatti, ci segnalano l'idea di diverse velocità di crescita della popolazione nei singoli contesti territoriali. Se si dovesse leggere la storia del popolamento in una ottica puramente malthusiana e quindi, in ultima istanza, sulla sola base delle potenzialità date dalla conformazione fisica e dalle caratteristiche dei singoli territori, non c'è dubbio che tali sviluppi sono in linea con il costante vantaggio che questi dati assegnano alla sponda settentrionale del Mediterraneo e al suo entroterra. La geografia condanna infatti senza appello la minore consistenza dei terreni coltivabili dell'Africa settentrionale rispetto a quella dell'Europa. Tuttavia la dinamica del popolamento non è sottomessa inevitabilmente alle costrizioni di tipo geografico, ma risente delle capacità di adattamento e di sfruttamento delle risorse da parte degli uomini. Naturalmente con la diversa tempistica della transizione demografica i ritmi di crescita si divaricano con tutta la sua evidenza nel corso dell'Ottocento e, soprattutto, del Novecento, per poi tendenzialmente riavvicinarsi in questo secolo.

Un modo diverso per leggere le trasformazioni demografiche in questi 500-600 anni di storia è quello di individuare la collocazione spaziale del baricentro demografico del mondo euro mediterraneo e di osservarne gli spostamenti nel tempo. Il baricentro demografico è quel punto, individuabile sulla superficie terrestre, dove 'gravita' la popolazione del territorio che si sta studiando. L'individuazione di questo punto non è certo cosa agevole. Per semplificare si è adottata la convenzione per cui le popolazioni dei singoli stati hanno come punto di riferimento spaziale le

[3] Per giungere a questa cifra non venivano però considerate le superfici desertiche.

coordinate geografiche della città capitale[4]. Adottato questo criterio, le coordinate spaziali del baricentro non sono niente altro che le medie delle longitudini e delle latitudini di tutte le capitali ponderate con il numero degli abitanti dei singoli paesi. Considerato che per ogni stato si dispone di quest'ultima informazione per sette distinti momenti, sette sono anche i baricentri individuati, uno per ciascun secolo. L'insieme dei sette punti indicati sulla Figura 1 ci dà così l'idea di come il centro gravitazionale dell'area euro-mediterranea si sia spostato (e, ancora, si stia muovendo) nel tempo.

Figura 1 – *Il baricentro demografico dell'area euro mediterranea (1500-2100).*



Come si può vedere, il baricentro del mondo euro-mediterraneo si colloca stabilmente all'interno della vasta area mitteleuropea. Nel tempo, però, ha mutato posizione. Nel corso dei primi quattro secoli si è sempre spostato verso nord, fino a coprire una distanza di circa 250 chilometri dal 1500 al 1900. Solo negli ultimi cento anni, ma si potrebbe ben dire negli ultimi decenni, il suo moto ha conosciuto un repentino cambio di direzione. All'aprirsi del XXI secolo il baricentro si colloca ad una latitudine ancora inferiore a quella di mezzo millennio addietro. La dinamica del baricentro, quindi, ha conosciuto un forte cambio di prospettiva, che non sembrerebbe solo congiunturale: nei prossimi decenni dovrebbe scendere ancora, e di molto (300 km) più a Sud. Ma vi è un elemento ulteriore, e che è rimasto si può dire sottotraccia nell'evoluzione demografica dell'area, ovvero, con l'ottica dei tempi lunghi della storia *à la* Braudel, nella seconda metà del millennio il baricentro della

[4] Si considerano gli stati ai confini attuali e le odierne capitali politiche.

popolazione si è spostato sempre verso oriente. mentre, oggi, si vede un deciso e dominante movimento verso il basso.

Dal particolare punto di osservazione in cui ci si è posti, dunque, si può dire che a fianco dei forti cambiamenti indotti dalla diversa dinamica dei fattori che determinano il popolamento, e di cui i flussi migratori sono l'aspetto che più impressiona e ha impressionato i contemporanei, vi sono dei moti di medio e lungo periodo in cui si evidenzia che, dal punto di vista demografico, l'Europa occidentale ha conosciuto e sta conoscendo, almeno in termini relativi, un graduale processo di ridimensionamento. Nell'ultimo secolo, inoltre, questo ridimensionamento ha causato lo spostamento del punto su cui gravita la popolazione verso sud e verso est, vale a dire nelle direzioni da cui traggono origine le principali correnti migratorie interne al mondo euro mediterraneo.

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SUMMARY

The population of Europe and the Mediterranean countries in a long perspective, 1500-2100

In this paper we reconstruct the dynamics of the population of Europe and the Mediterranean basin from 1500 to 2100. A historical reading of these changes is proposed by analyzing the changes over time in the demographic center of gravity. While in the first four centuries the center of gravity has shifted along the south-west north-east axis, in the last two it shows a strong trend towards the south.

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L'INVECCHIAMENTO DELLA POPOLAZIONE ITALIANA E I SUOI EFFETTI IN AMBITO ECONOMICO[1]

Cinzia Buccianti, Martina Semboloni

1. Premessa

La stagnazione secolare è un concetto descritto dalla penna dell'economista Alvin Hansen alla fine degli anni Trenta del secolo scorso. Tale concetto fu introdotto nel suo lavoro intitolato *Economic progress and declining population growth* in cui esprimeva la convinzione secondo cui l'economia americana, all'epoca, si stava incanalando in un'era di perpetua disoccupazione che avrebbe messo a rischio la crescita economica del paese, ponendo l'accento sul fatto che vi erano poche forze che spingevano verso la piena occupazione. Nella sua analisi, Hansen, prendeva in considerazione tra le cause il declino del tasso di crescita della popolazione che in quegli anni si era dimezzato rispetto al periodo antecedente la Grande Depressione. La tesi di Hansen venne però smentita da imprevisti e avvenimenti storici come la seconda guerra mondiale che segnò l'incremento della spesa connessa allo sforzo bellico e il risultato vittorioso degli Stati Uniti accrebbe il progresso tecnico che trainò il boom economico del secondo dopoguerra con crescita non solo economica ma anche demografica (Pollard, 2018).

Tale teoria è stata recentemente ripresa da Lawrence Summers, politico ed economista statunitense. Dopo la Grande Recessione le aspettative economiche erano quelle di una crescita elevata che in realtà non si è verificata. Summers ha definitivo la situazione attuale di stagnazione secolare come una patologia sistemica ed intrinseca propria delle economie dei paesi industrializzati riconducibile agli anni '80 quando la globalizzazione e la crescita della borsa hanno avuto inizio (Summers, 2016). Nella sua analisi Summers parte dagli stessi fattori secolari evidenziati da Hansen per abbracciare una visione più ampia che includa altri elementi. Il primo fattore secolare, che qui ci preme sottolineare, è il declino del tasso di crescita demografico nelle economie avanzate che si impone, dapprima, sulle popolazioni in età lavorativa e successivamente nei pensionati causando la riduzione degli investimenti poiché ci saranno meno acquirenti in

[1] I paragrafi 1 e 2 sono a cura di Martina Semboloni mentre i paragrafi 3 e 4 sono a cura di Cinzia Buccianti.

futuro. Il declino del tasso di fecondità totale, parallelamente alle politiche errate di ridistribuzione della ricchezza, ha generato non solo un'ineguaglianza sociale ma anche una propensione al risparmio. Ciò è vero per gli Stati Uniti ma, allo stesso tempo, guardando i dati demografici, la situazione non è incoraggiante nemmeno per l'Unione europea e soprattutto per l'Italia dove gli over 60 sono oggi il 43% della popolazione totale. A livello mondiale solo il Giappone è in una situazione complessiva di invecchiamento più intenso (Golini & Rosina, 2012). Il tasso di dipendenza in Italia è pari al 56,96% e ciò significa che ogni 1,76 persone in età lavorativa ce n'è 1 in età non lavorativa (0-14 anni e 65)[2]. Un dato preoccupante per la situazione economica del nostro paese se teniamo in considerazione che l'Istat riferisce un tasso di disoccupazione in Italia pari al 7,8% nel mese di maggio 2020[3].

2. L'invecchiamento della popolazione e riflessi economici

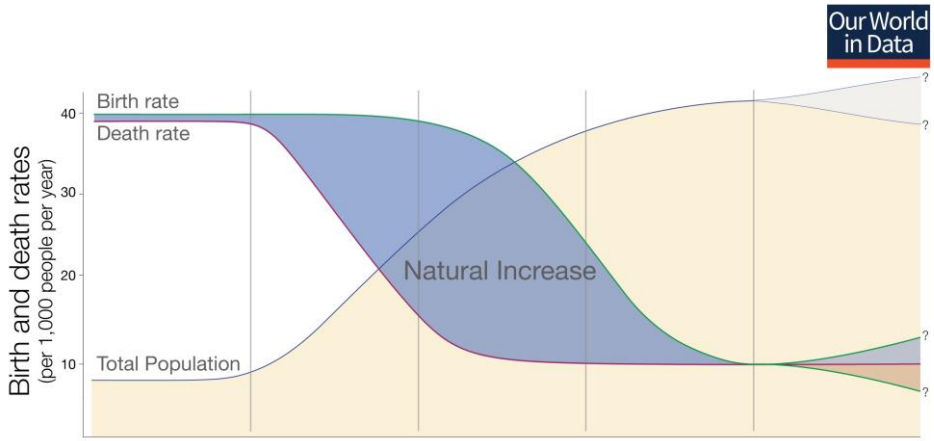
Il XXI secolo si è aperto con un problema di carattere generalmente mondiale: i miglioramenti delle condizioni di vita, dovute alle scoperte in ambito scientifico-sanitario, l'aumento dell'aspettativa di vita, cresciuta a ritmi diversi a seconda delle regioni nel mondo, e il calo del tasso di natalità, unitamente al ruolo giocato dal cambiamento del sistema dei valori negli ultimi decenni del secolo scorso[4], hanno determinato un graduale e progressivo invecchiamento della popolazione. Tale processo ha varie intensità a seconda delle regioni del mondo risultando più avanzato in Europa, America e in alcune zone dell'Asia mentre è meno importante in Africa.

In Italia, come negli altri Paesi avanzati, l'invecchiamento della popolazione può essere spiegato dalla teoria della transizione demografica (Notestein, 1945, pp. 36-57)[5]. La continua variazione dei tassi di natalità e mortalità hanno portato i demografi a sviluppare una teoria che rappresenta un modello di cambiamento economico e culturale nel periodo di industrializzazione che può essere rappresentato in quattro fasi: la prima fase, il periodo pre-industriale, caratterizzato da alti tassi di mortalità e alti tassi di natalità; la seconda fase, di transizione, in cui i tassi di mortalità diminuiscono grazie ai progressi in campo igienico e sanitario ma i tassi di natalità restano alti determinando un aumento della popolazione; la

[2] Elaborazione dati *World Population Prospect 2019*, Department of Economic and Social Affairs, Population Dynamics, United Nation, https://population.un.org/wpp/.
[3] https://www.istat.it/it/archivio/245093
[4] L'Italia, essendo il paese dei record negativi, mostra prima di altre realtà come la crisi demografica induca un ripensamento generale in sviluppo economico, lavoro, welfare e politica estera (Golini & Lo Prete, 2019; Mussino *et al.*, 2000).
[5] pp. 36-57.

terza fase, industriale, dove i tassi di natalità diminuiscono, a causa dell'occupazione e della progressiva emancipazione femminile, e, di conseguenza, i tassi di crescita della popolazione diminuiscono; la quarta fase, post-industriale, in cui i tassi di natalità e mortalità restano bassi generando, appunto, il progressivo invecchiamento della popolazione. Attualmente, le nazioni più avanzate si trovano nell'ultima fase in cui i tassi di natalità sono molto bassi determinando un saldo naturale negativo della popolazione.

Figura 1 – *Le cinque fasi della transizione demografica*.



	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
Birth rate	High	High	Falling	Low	Yet to be seen (Possibly falling further, possibly rising again)
Death rate	High	Falls rapidly	Falls more slowly	Low	Low
Natural increase	Stable or slow increase	Rapid increase	Increase slows down	Falling and then stable	Little change

Fonte: Our world in data. https://ourworldindata.org/world-population-growth.

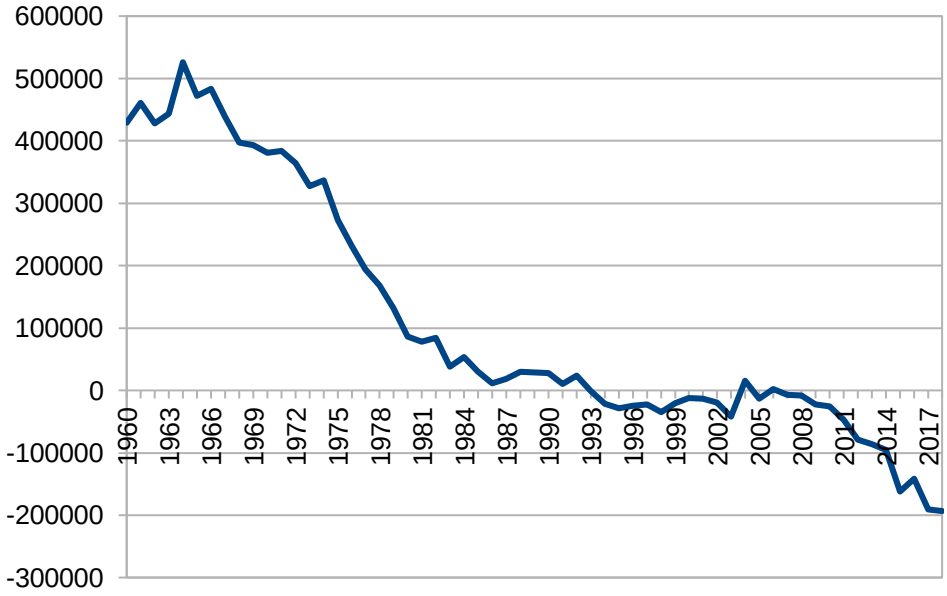
In Italia l'aspettativa di vita nel 1880 era di 35,4 anni. Ma, nel corso della storia del nostro paese, l'aspettativa di vita ha vissuto un aumento spettacolare nel XX secolo: nel 1900 aumentò a 42,8 anni, nel 1930 a 54,9 anni e nel 1959 a 65,5 anni (Livi Bacci, 1998, p. 42). Oggi l'aspettativa di vita in Italia è di 82 anni per gli uomini e 86 anni per le donne[6]. Il tasso di fecondità totale, calcolato sommando i tassi di fecondità specifici per età per le donne di un determinato anno, interpretato

[6] Elaborazione dati *World Population Prospect 2019*, Department of Economic and Social Affairs, Population Dynamics, United Nation, https://population.un.org/wpp/.

come il numero medio dei figli per donna, è pari a 1,3 figli per donna[7], valore ben al di sotto del tasso di ricambio generazionale.

Tasso di natalità e tasso di mortalità hanno diretta influenza sul saldo naturale della popolazione, ovvero la differenza tra il numero di nati vivi e il numero di decessi. Un saldo naturale positivo si verifica quando i nati vivi sono più dei morti, al contrario, un saldo naturale negativo si registra quando i nati vivi sono meno dei morti. L'Italia ha visto diventare il suo saldo naturale da positivo a negativo nel 1995 e ha da tempo perso la sua capacità di crescita. Per effetto di questa dinamica naturale, nel corso del 2018 la differenza tra nati e morti è negativa e pari a -193.000 unità[8]. Quanto appena detto è chiaramente visibile dalla Figura 2.

Figura 2 – *Saldo naturale della popolazione, serie storica e previsioni: caso Italia.*

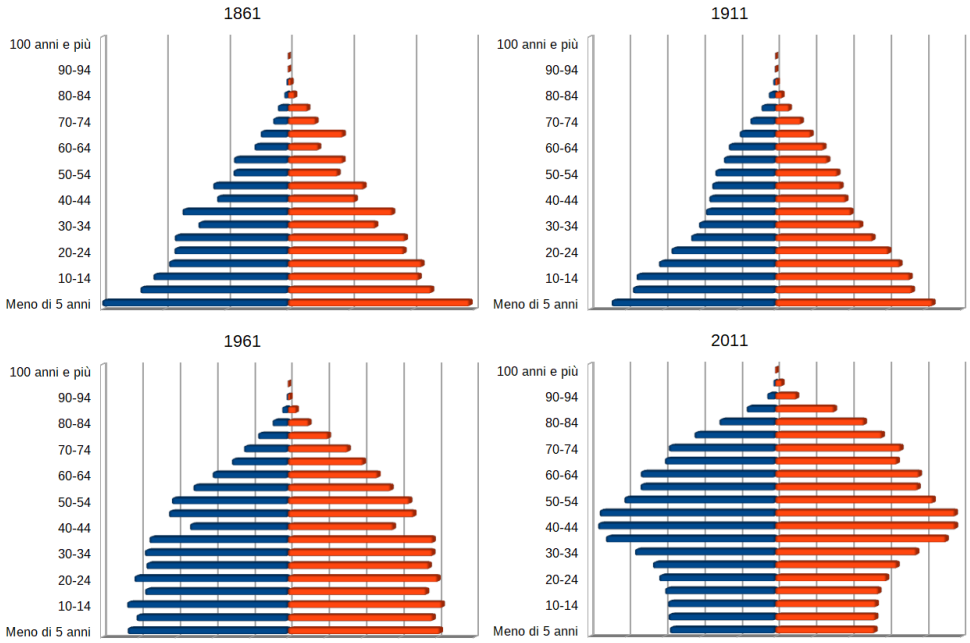


Fonte: Elaborazione degli autori dati Eurostat.

Il focus delle analisi delle analisi sugli effetti economici della demografia si è spostato, recentemente, dalla crescita/decrescita della popolazione sulla composizione della popolazione per fasce di età la cui miglior rappresentazione grafica è la piramide della popolazione (Figura 3).

[7] *Idem.*
[8] Elaborazione degli autori dati Istat.

Figura 3 – *Piramidi della popolazione ai censimenti 1861-1911-1961 e 2011: caso Italia.*



Fonte: Elaborazione degli autori dati Istat

La diminuzione della fecondità e l'aumento della speranza di vita hanno completamente cambiato la struttura per età della popolazione italiana. Dalla forma di una piramide si può dedurre la storia demografica del Paese e l'andamento demografico a cui esso sta tendendo. Nel 1861 e nel 1911 la forma tipica piramidale indica che la popolazione era in crescita. La forma tendente a un rettangolo del 1961 indica una crescita nulla. Infine, la forma a trapezio del 2011 indica un decremento della popolazione.

Il processo di invecchiamento in Italia è meglio spiegato dall'indice di dipendenza anziani ovvero il rapporto tra persone di età superiore a 65 anni, che generalmente sono economicamente inattive, e il numero di persone attive dal punto di vista economico tra i 15 e i 64 anni. Se al censimento del 1861 l'indice di dipendenza anziani era pari al 4,36%, nel 1911 era già salito al 6,95%, nel 1961 si attestava al 10,54% mentre nel 2011 era cresciuto al 26,32%[9]. Tali percentuali indicano un progressivo e importante aumento della dipendenza delle persone anziane dalle persone in età lavorativa che si prevede incrementerà almeno fino al

[9] *Idem.*

2050. L'Italia, va inoltre ricordato, ha registrato l'incremento percentuale più alto dell'indice di dipendenza anziani tra le nazioni dell'Unione europea.

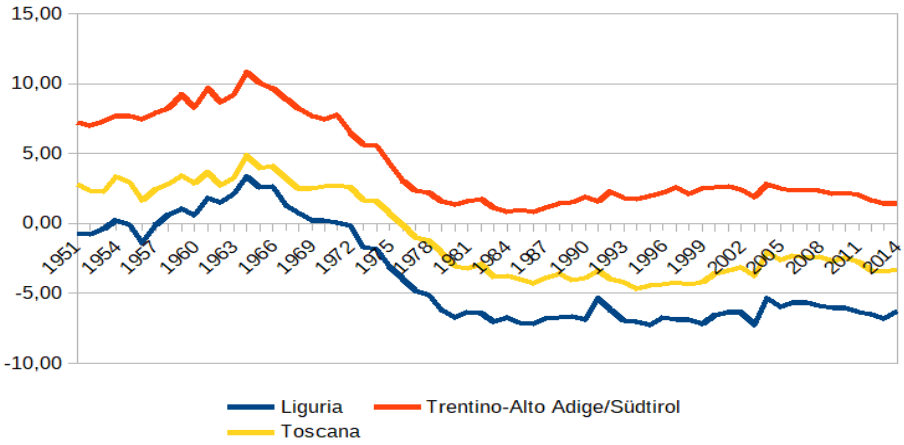
I comportamenti, le attitudini e le preferenze degli individui variano con l'età e con l'aumento dell'aspettativa di vita. Pertanto, l'evoluzione della struttura per età della popolazione può influire sulla performance economica di un paese (Bloom et al., 2001). L'aumento della popolazione giovane in un Paese garantisce, potenzialmente, un dividendo dell'evoluzione demografica in termini di offerta di lavoro. Partendo dal presupposto che gli anziani, ma anche i bambini e i giovani in età non lavorativa, al contrario degli adulti in età lavorativa, consumino più di quanto producano, generano un deficit economico dovuto al ciclo di vita. Tale deficit può essere colmato riallocando risorse dai flussi economici in età di surplus (ovvero dalle generazioni lavorativamente attive) alle generazioni dipendenti. La riallocazione dei flussi economici può essere intrapresa dalle autorità governative attraverso leggi e regolamenti in ambito di istruzione, pensioni e sanità pubblica che sono i settori cruciali del Welfare state che interessano le fasce di età al di sotto e al di sopra dell'età lavorativa. Sulla base di questo assunto, e alla luce dei dati fino ad ora esaminati, ha conseguenze molto importanti sulla sostenibilità dell'attuale sistema italiano di Welfare state e sull'economia in generale (Razin et al., 2002, pp. 900-918; Castles, 2004, pp. 255-277).

3. Evidenze empiriche della situazione nazionale da una comparazione regionale: realtà differenti a confronto

Il Trentino Alto-Adige, con il suo setting istituzionale del tutto particolare, permette di fare una comparazione in termini di politiche demografiche con due realtà peculiari della situazione nazionale. La Liguria, regione notoriamente più anziana d'Italia, e la Toscana che raffigura una situazione intermedia tra le varie realtà nazionali: vicina alla Liguria in termini di invecchiamento, la Toscana è contraddistinta dall'industria manifatturiera e dalla grande varietà di attrattive turistiche, nonché dalla presenza di borghi che oggi hanno dato vita al problema demografico dello spopolamento, ma allo stesso tempo è vicina al Trentino Alto-Adige grazie a una fiorente agricoltura vitivinicola.

La Figura 4 evidenzia l'andamento del saldo naturale nelle tre regioni dal 1951 al 2014 e il diverso anno in cui si è verificato, laddove è avvenuto, il *crossing over* tra nati e morti.

Figura 4 – *Saldo naturale: caso Italia.*

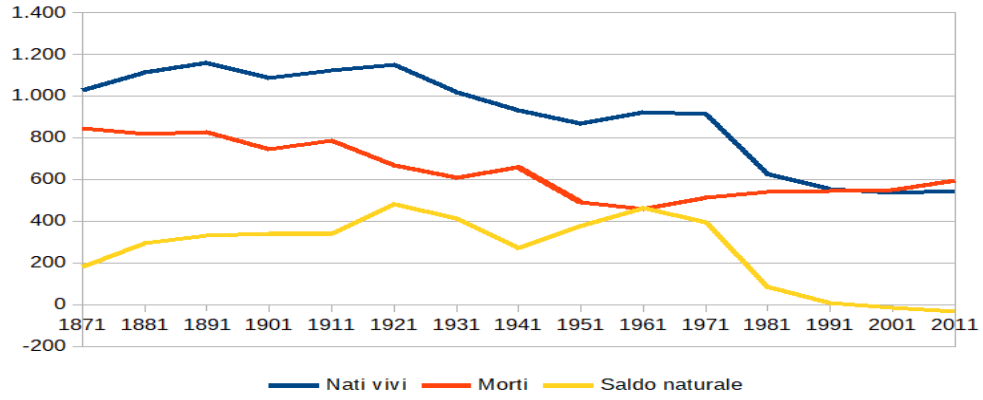


Fonte: Elaborazione degli autori dati Istat

Già confrontando questo primo grafico si nota la diversità tra le due regioni costiere e il Trentino Alto-Adige. Nelle prime due il saldo naturale è negativo e entrambe le regioni sono ampiamente nella quarta fase della transizione demografica mentre nel caso del Trentino Alto-Adige il trend rimane stabile e positivo mentre non si è ancora aperta la quarta fase di transizione.

Se prendiamo in considerazione l'Italia intera, il quadro che ne deriva dimostra una situazione complessa e di difficile gestione non solo regionale ma anche nazionale (Figura 5).

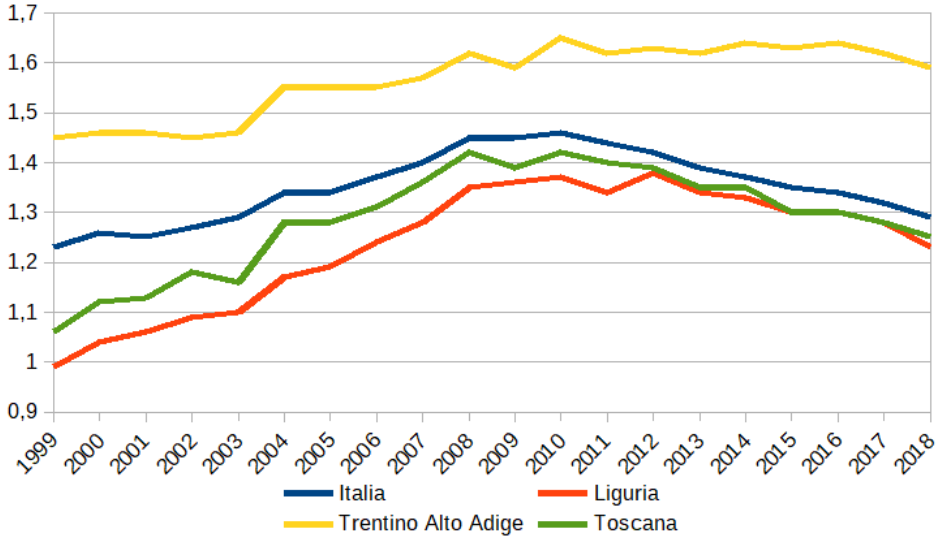
Figura 5 *Nati vivi, morti e saldo naturale: caso Italia (dati in migliaia).*



Fonte: Elaborazione degli autori dati Istat

In termini più dettagliati si può dire che tutto ciò si traduce in un abbassamento del tasso di fecondità totale che per regioni come Liguria e Toscana è al di sotto del ricambio generazionale mentre per il Trentino Alto-Adige rimane al di sotto ma si mantiene vicino al range considerato potenzialmente efficace per mantenere la fecondità al livello di sostituzione (Figura 6).

Figura 6 – *TFT: confronto Italia, Trentino Alto-Adige, Liguria e Toscana.*



Fonte: Elaborazione degli autori dati Istat

Ma ciò che preoccupa maggiormente la popolazione italiana è il rovesciamento della piramide della popolazione che da una forma triangolare ne assume una a cono rovesciato (Figura 3): un tempo la parte bassa della piramide era alimentatore naturale del sistema. La struttura della popolazione per fasce di età dell'Italia rispecchia in pieno ciò che succede in Liguria e Toscana con conseguenza il progressivo invecchiamento della popolazione che darà le sue più negative evidenze nei prossimi cinque-dieci anni con il pensionamento dei cosiddetti *baby boomers*. In base alle proiezioni Istat, la transizione demografica ci dice che tra vent'anni ci saranno 18,8 milioni di cittadini over 65 anni, 5 milioni in più di oggi, contro una popolazione in età da lavoro (15-64 anni) che si sarà ridotta a sua volta di 5 milioni (a 33,7 milioni).

Questo trend è confermato dalla tabella seguente che mostra l'andamento di alcuni indici di struttura in Italia, Toscana, Liguria e Trentino Alto-Adige negli anni 1951, 1991 e 2019.

Tabella 1 – *Indici di struttura: Italia, Toscana, Liguria e Trentino Alto-Adige a confronto 1951-1991-2019.*

	ITALIA			TOSCANA			LIGURIA			TRENTINO		
	'51	**'91**	**'19**	**'51**	**'91**	**'19**	**'51**	**'91**	**'19**	**'51**	**'91**	**'19**
Iv	46,5	97,4	168,9	45,4	165,6	201,4	60,1	204,2	252,4	30,4	91,1	135,8
Iv'	12,2	15,4	22,6	9,8	20,4	25,3	11,0	21,6	28,5	8,2	14,8	20,6
Id	62,1	45,5	56,3	46,0	48,8	60,8	41,4	47,4	65,6	54,3	44,9	55,7
Ida	19,7	22,5	35,3	14,4	30,4	40,7	15,5	31,8	47,2	12,7	21,4	32,1
Idg	42,4	23,1	20,9	31,6	18,4	20,2	25,8	15,6	18,7	41,6	23,5	23,6

Fonte: Elaborazione degli autori dati Istat

Tale capovolgimento della struttura della popolazione, che la letteratura definisce "*peste bianca*", "*anemia demografica*" o "*inverno demografico*" ha le sue conseguenze nell'innalzamento dell'età media e della speranza di vita alla nascita e, successivamente, in un cambiamento dei modelli familiari. Questi scompensi demografici affliggono direttamente il tessuto economico.

L'andamento del dividendo demografico mostra come in Liguria e Toscana il fattore demografico sia molto importante nella dinamica economica e rifletta in qualche modo la struttura della popolazione. Ciò che occorre qui precisare è che mentre la struttura economica di Liguria e Toscana, prettamente caratterizzata dall'industria leggera, soprattutto tessile, e dal turismo, necessiti di manodopera non qualificata, il Trentino Alto-Adige ha intrapreso una traiettoria economica differente nello sviluppo occupazionale indirizzandosi in special modo verso l'innovazione e i servizi. Infatti, regioni come Toscana e Liguria, ma più in generale l'Italia, non hanno spinto verso la realizzazione di politiche economiche innovative e, contemporaneamente, non hanno favorito un sostegno alle dinamiche demografiche portando la popolazione in una sorta di limbo tra scarsi livelli occupazionali e scarsi livelli demografici. Ciò che ne consegue, da questa breve riflessione, è che l'Italia è un paese vecchio di popolazione e di idee, una situazione che richiederebbe uno sforzo ulteriore da parte dei *policy makers* per un grande piano di ripresa economica e demografica. L'attuale tessuto economico non consente alla popolazione giovanile in età fertile di invertire il *trend* della denatalità. Condizione ideale per migliorare l'attuale situazione demografica sarebbe un'innovazione del tessuto economico che consenta di ridurre l'emigrazione giovanile (c.d. "fuga dei cervelli") e favorire la stabilità lavorativa. Tutto ciò dovrebbe essere accompagnato da adeguate politiche demografiche atte al sostegno delle famiglie.

Il Trentino Alto-Adige è un esempio fulgido di questo tipo di pratiche economiche e demografiche: ciò grazie all'ampia autonomia di cui gode la regione. La sua struttura economica è, infatti, agganciata a quella dei Paesi economicamente più sviluppati e nel campo delle politiche demografiche il Trentino Alto-Adige

rappresenta un *unicum* nel panorama italiano con ben 36 interventi negli ultimi dieci anni che vanno dall'assegno di natalità all'abbattimento della retta degli asili nido.

4. Conclusioni

Mentre per continenti come l'Africa e l'Asia si può ancora parlare di "*bomba demografica*" in Europa si assiste al problema opposto. L'Italia, come già abbiamo detto, è attualmente il paese più anziano al mondo dopo il Giappone. Ciò determina nel tempo un problema di squilibri generazionali, più anziani e meno giovani, con un impatto molto importante non solo nel tessuto economico ma anche sul sistema previdenziale: se oggi il rapporto tra lavoratori e pensionati è di 3 a 2, l'Ocse stima che nel 2050 si raggiungerà quota 1 a 1. Va ricordato, infine, che gli effetti delle politiche demografiche hanno tempi molto lunghi e che il dibattito non si dovrebbe limitare ai rimedi per contrastare il calo della natalità e l'invecchiamento della popolazione ma sarebbe urgente programmare provvedimenti a partire da scuola, lavoro e pensioni, politiche che vanno di pari passo con il problema demografico.

A tal proposito, per porre un rimedio agli effetti dell'invecchiamento della popolazione sarebbe opportuno tenere in considerazione un modello controtendenza nello scenario europeo: è il caso francese che ha fatto della famiglia la prima cellula del suo corpo sociale, della sua ricchezza e del suo dinamismo. La ricetta francese concerne nell'investire nei servizi pubblici e nelle politiche a favore della famiglia, una capitalizzazione che possiamo riassumere come un investimento nella vita. Un paese dove si fanno figli è un paese che pone le basi su un avvenire florido. Un cambiamento necessario nella mentalità delle persone e dei politici che devono riconsiderare la vita e le nascite non solo come un bene privato ma un bene pubblico comune che la collettività è tenuta a garantire e proteggere.

In conclusione, che ruolo ha la cultura nella nostra analisi? Il problema è di vastissima complessità e rappresenta una cartina tornasole della storia politica italiana. Ma se di cultura si vuol parlare, forse sarebbe più appropriato parlare di cultura politica fatta di provvedimenti a breve e medio termine oltre che di provvedimenti a lungo termine. Quello che appare da questa breve analisi è un quadro poco rasserenante: affinché il nostro Paese non perda il binario dei Paesi sviluppati, è necessario che i mantra «non si fanno più figli» o «solo gli immigrati fanno figli» non diventino l'ennesima sentenza assolutoria per rimandare scelte che giorno dopo giorno diventano sempre più obbligate.

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SUMMARY

Secular stagnation and demography: the ageing of the Italian population and its effects on the economy

What is the relationship between population ageing and the economy? Starting from the definition of secular stagnation, we intend here to analyze the data of the Italian population and its effects on welfare by comparing three different regional realities.

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GEOGRAPHICAL VARIATIONS IN MORTALITY AND UNEMPLOYMENT IN ITALY

Vanessa Santos Sánchez, Gabriele Ruiu, Lucia Pozzi, Marco Breschi, Giovanna Gonano

1. Background

As underscored by Regidor et al. (2015), in recent years an increasing number of research efforts have been devoted to refining the statistical methods for analysing mortality in small geographical areas. However—and to some extent, surprisingly—there are very few empirical works exploring the geographic pattern of disparities in mortality (see also Divino et al. 2009).

Small-area analyses allow exploring not only the distribution of mortality in detail, but also the possible relationship between mortality and other contextual variables that could, at least in part, explain the health status of a population, such as socioeconomic or environmental variables.

In this context, Italy seems to be a particularly interesting case. The country is indeed well known in demography for being among those with the highest life-expectancy at birth but also for the substantial economic divide between the northern and the southern parts of the country (Daniele and Malanima 2017). Nevertheless, little is known about geographical differences in mortality at the municipal level.

To our knowledge, the bulk of previous research focuses on the regional (NUTS 2) or provincial (NUTS 3) level (Egidi et al. 2005). The few that consider the municipal level limit their analysis to the territory of a single region (Biggeri et al. 2006), to a few municipalities extracted from different macro-areas (Lillini and Vercelli 2018), or they do not take into account the eventual role played by economic differences among municipalities. An important exception is the work of Caranci et al. (2010). Their study uses 2001 census data to construct a social deprivation index at the municipal and census block level to show that the geographical pattern of deprivation was compatible with the geographical pattern of general mortality. However, only the correlation between mortality rates and these indicators was furnished, without taking into account the presence of spatial-autocorrelation. As pointed out by Valcu and Kempenaers (2010), this may lead to several statistical issues, such as an increased type I error rate in a simple correlation exercise or the violation of independence-of-error terms in linear and generalized linear models.

This paper focuses on a single dimension of economic deprivation: unemployment. It should be mentioned that the relation between unemployment and general mortality is quite controversial. In particular, the role of unemployment as a determinant in mortality from all causes has been questioned in the literature (see discussion in Clemens et al. 2015). Specifically, it may be argued that unemployed individuals are selected from those in poor health, therefore the eventual increase in mortality risk could have a cause other than the unemployment itself. In order to partly cope with this possible criticism, we calculated the unemployment rates at the municipal level using data from the 2011 Italian Census. Given that this was a period of severe economic recession in Italy, unemployment should have hit all individuals as it climbed, without particular health–based selection effects (see Lagravinese 2015 for a discussion of the Italian economic recession), thus moderating its selection as an unemployment effect. To have an idea of the changes in unemployment levels, we observe that, according to ISTAT data, at the end of 2007, the unemployment rates (both sexes considered together) in Italian macro-areas were: 3.8% in north-western Italy, 3.1% in north-eastern Italy, 5.3% in central Italy, and 11% in southern Italy. By the fourth quarter of 2011, these rates soared to 7.2%, 7.1%, 9.1%, and 14.8%, respectively.

This work aims to offer a spatial analysis of municipal mortality for the whole of Italy in the period 2012–2016, and to assess whether the very large geographical disparities in unemployment levels, may be of help in explaining mortality differentials across the country

The paper is organized as follows: in the next section, we present data and methods; in the third section, we illustrate and discuss the main results; and the last section is devoted to final considerations.

2. Data and Methods

We carried out a cross-sectional small-area study with the municipality as the spatial analysis unit for the period 2012–2016. The study includes all the 7,998 Italian municipalities that existed in the year 2016.

We used death entries, broken down by municipality, year, and gender, as case source.

Municipal populations, broken down by age group (20 groups of five not-overlapping years) and gender were obtained for each year. The population for the whole period was calculated by adding the population of each year.

Mortality and population data came from the official statistics produced by the Italian National Institute of Statistics (Istat).

Unemployment data at the municipal level were obtained from the 2011 Census. The unemployment rate (ur) was calculated as the ratio between the number of unemployed or looking for a first occupation persons (both sexes considered together) by municipality and the total labour force. Subsequently, in order to create an index, the quintiles of the distribution of the rates were calculated, assigning level 1 to the municipalities with the lowest level of unemployment and level 5 to those with the highest unemployment (see Figure 1). The intervals defined by quintiles are, respectively: ur ≤ 0.0531, 0.0531< ur ≤ 0.069, 0.069 < ur ≤ 0.0901, 0.0901< ur ≤ 0.1547, ur > 0.1547. Looking at Figure 1, we see that territorial differences in unemployment levels are quite impressive. Note that almost all southern municipalities fall in the fourth or the last quintile.

Standardized mortality ratios (SMRs) were calculated as the ratio of observed to expected deaths. To calculate the number of expected cases, age- and sex-specific mortality rates for Italy as a whole were multiplied by the corresponding municipal population.

Smoothed municipal relative risks (RRs) with their corresponding 95% credibility intervals and posterior probabilities (PRPs), when the smoothed RR was greater than one, were calculated using the conditional autoregressive model proposed by Besag et al. (1991). This model fits a Poisson spatial model with two types of random effects—a non-structured effect that takes into account the municipal heterogeneity, and a structured effect, the spatial term, that considers municipal contiguity. To define area contiguity, we used the adjacent municipal boundaries. The model takes the following form:

$$O_i \sim Po(E_i \lambda_i)$$
$$\eta_i = \log(\lambda_i) = \alpha + h_i + b_i \quad (1)$$

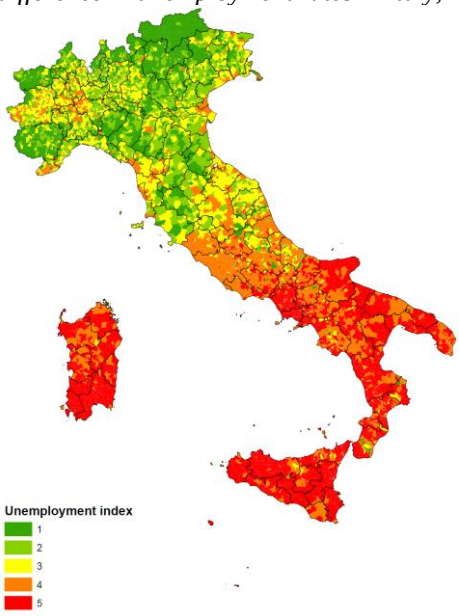
where λ_i is the RR in area i, O_i is the number of observed cases, E_i is the number of expected cases, α is the intercept, h_i is municipal heterogeneity and b_i is the spatial term. The non-spatial random effect (heterogeneity) is assumed to be normally distributed with zero mean and constant variance. For the random effect that reflects spatial variability, an autoregressive CAR conditional model was used (Clayton et al. 1993).

To analyse the effect of unemployment on mortality, the municipality's unemployment index was included as an explanatory variable in the model, taking the municipalities with the lowest unemployment as reference category. As such, the model takes the following form:

$$\eta_i = \log(\lambda_i) = \alpha + h_i + b_i + \beta \quad (2)$$

where e^{β} is the RR associated with the unemployment index.

Figure 1 – *Geographical difference in unemployment rates in Italy, 2011.*



The tool used for Bayesian inference of subsequent marginal distributions was Integrated Nested Laplace Approximations (Rue et al. 2009). For this purpose, we used the R-INLA library available in the R statistical package.[1] Maps of the smoothed RRs were divided into seven quantiles in order to guarantee homogeneity in all geographic areas. Regarding PRPs, following the criterion proposed by Richardson et al. (2004), we will consider that municipalities with 'high mortality risk' are those with a value equal to or greater than 0.8, and municipalities with 'low mortality risk' are those with a value equal to or less than 0.2. For this purpose, ArcMap software version 10.5 was used.

3. Results

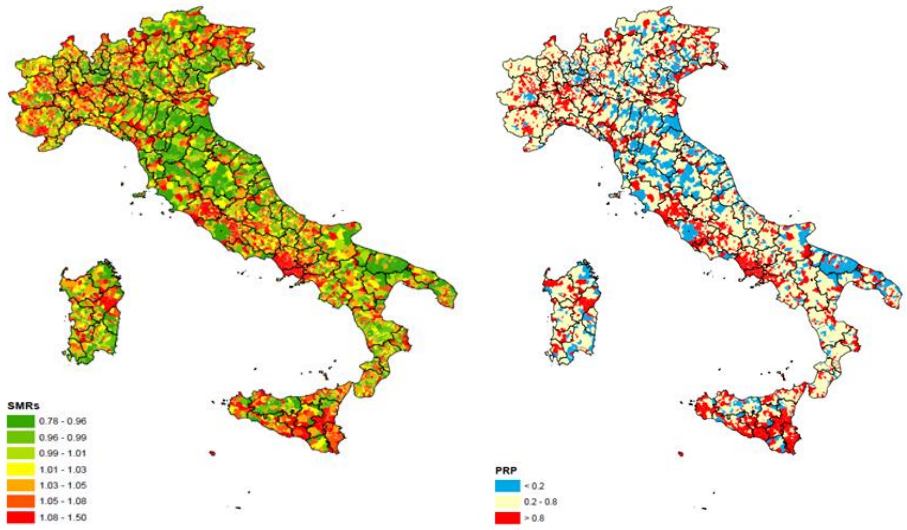
In the period 2012–2016, the Istat recorded a total of 3,074,775 deaths—1,478,525 (51.91%) were male deaths and 1,596,250 (48.09%) were female ones.

[1] : http://www.r-inla.org/. [Accessed 22 November 2018].

For men, a spatial pattern of mortality is observed in the SMRs (Figure 2 panel A). The map shows municipalities with higher mortality in the south-west of the Peninsula, specifically in the regions of Campania (Caserta and Naples Provinces) and Latium (Viterbo Province). Nuoro Province in Sardinia also stands out, as well as the south-eastern part of Sicily. The pattern of mortality observed in SMRs is maintained for PRPs (Figure 2 Panel B).

Figure 2 – *SMRs and PRPs men. Italy, 2012–2016.*

A - *SMRs* B -*PRPS*



The spatial mortality pattern for women is very similar (Figure 3 Panel A). The regions of Campania and Sicily remain the areas characterized by the highest mortality, although in the case of men, more provinces in Sicily report elevated mortality. The situation of the Apulia region in the south of the Peninsula is also noteworthy. As seen in Figure 3 Panel B, all these regions show statistically significant high mortality.

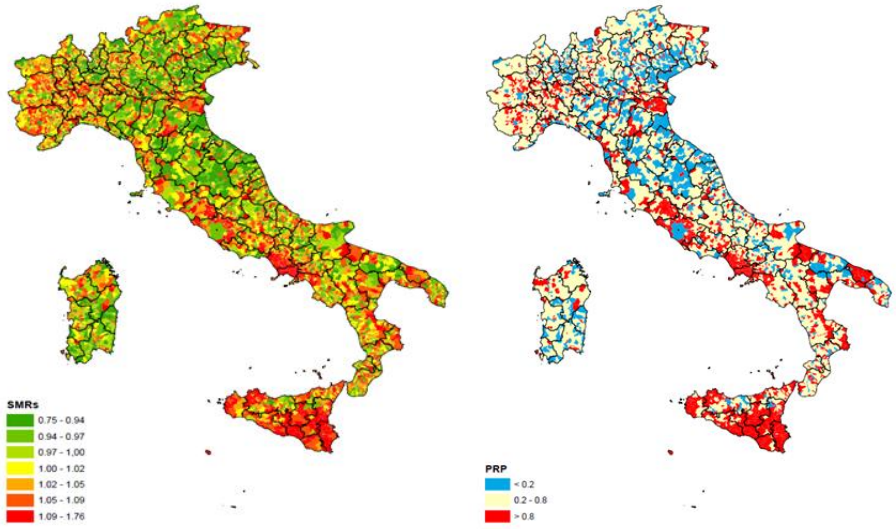
It should be noted that one of the largest European steel mills, whose production site has been classified by the Italian Ministry of the Environment as causing high environmental pollution, operates in the territories of Taranto in Apulia. Similarly, a high-polluting petrochemical plant was located in Gela (south-eastern Sicily) from 1963 to 2014. In the appendix, Figure 4 shows the map of the distribution of municipalities with industrial facilities registered as polluters in the European

register E-PRTR. All facilities are required to declare emissions above designated thresholds, and the data are used to create an inventory of geo-located facilities in Europe that have an environmental impact.

Even though the areas with a high risk of mortality tend to coincide with the location of high polluting industrial plants, without cause-of-death data at the municipal level (not publicly available), establishing a link between environmental pollution and high mortality is not feasible.

Figure 3 – *SMRs and PRPS women. Italy, 2012–2016.*

A - *SMRs* B -*PRPS*



Turning our attention to the relationship between territorial socio-economic differences and mortality disparities, Table 1 reflects the distribution of mortality RRs adjusted by the unemployment index for all Italian municipalities. For both sexes there is high mortality risk in municipalities with a higher level of unemployment (the first quintile of ur is used as reference category), although the results are more pronounced in women: RR = 1.11, 95% CI = (1.09–1.12) in women vs RR = 1.05, 95% CI = (1.04–1.07) in men. Note that these results take into account the presence of spatial auto-correlation and municipal heterogeneity.

Table 1 - *RRs adjusted by unemployment index category and gender.*

Unemployment level	Men		Women	
	RR	CI 95%	RR	CI 95%
1	1.00		1.00	
2	0.98	0.97-0.99	1.00	0.99-1.01
3	**1.01**	1.00-1.02	**1.02**	1.01-1.03
4	**1.02**	1.01-1.03	**1.05**	1.04-1.06
5	**1.05**	1.04-1.07	**1.11**	1.09-1.12

Reference level: Level 1 of unemployment index. Bold: Statistically significant result

This result may seem surprising, as the vast majority of epidemiological studies in the literature report that the effect of unemployment on overall mortality tends to be higher for men than for women (e.g., Clemens et al. 2015). Laliotis and Stavropoulou (2018) argue that the effect of unemployment may vary among different population groups, depending on the degree of their vulnerability to a general worsening of economic conditions. Because our data refer to a period of severe economic crisis in Italy, it could be hypothesized that Italian women were more severely hit by the great recession than men. In a pooled cross-section time series analysis involving European countries and focusing on the relationship between mortality from heart disease/stroke and unemployment, Brenner (2016) finds that the effect of rising unemployment is stronger for women than for men.

In addition, Brenner (2016) finds that the effect of unemployment on male mortality is mainly exerted on those of working age, while women are hit both earlier and later in life by periods of economic hardship; they tend to suffer the negative consequences of such events despite being out of the work force. He proposes a possible explanation based on the psychological stress suffered by the whole family when one member is hit by an episode of job loss (see also the review by Mucci et al. 2016). A period of prolonged stress may result in increased blood pressure with associated increase of mortality from cardiovascular diseases and/or the accompanying unhealthy behaviours, such as increased alcohol consumption or smoking (Brenner 1987), or in extreme cases, suicide (Blakely et al. 2003). In line with this view, Marcus (2013), using data from Germany, shows that unemployment episodes reduce the psychological well-being of spouses almost as much as the direct effect on the individual experiencing the episode. Following Brenner (2016), the mechanism of psychological stress should be even stronger in countries like Italy and Greece, where traditional gender roles remain strong, and women are expected to provide the emotional support for the family.

5. Conclusions

Italy is recognized as having wide differences in the level of structural unemployment, but it should be mentioned that, even though the initial macro-economic conditions were already very disparate across the country, the 2008 economic recession was particularly harsh throughout the entire country. This dramatic event afforded an occasion to moderate a possible problem of selection into employment status by health status. To our knowledge, this is indeed the first study in Italy to analyse the relationship between the spatial distribution of mortality and unemployment at the municipal level by means of a hierarchical spatial model. Not surprisingly, we find that the municipalities characterized by the highest unemployment rate are also more likely to be at high risk of mortality. This result suggests that, when elaborating social indicators to evaluate the impact of unemployment on the well-being of a community, one should take into account also its side effects on mortality.

A more surprising result is that associated with gender. In particular, we find that the effect seems to be stronger for women than for men. Similar findings were obtained in Greece, suggesting that strongly diversified gender roles existing in the two countries may exacerbate the effect of psychological stress on mortality, as previously described in Brenner's (2016) findings.

A note of caution is advisable in interpreting our results. While we can define the geographic distribution of mortality thanks to the cross-sectional design of the study, the ecological fallacy must be considered. However, as argued by Clayton et al. (1993), the use of hierarchical spatial models with explanatory variables at the municipal level reduces the risk of incurring such problems.

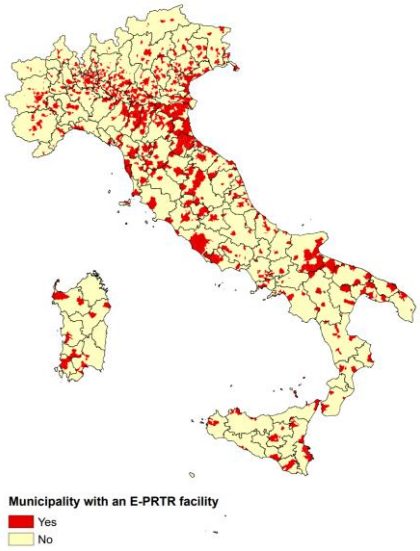
Further, we are unable to explain exactly why the risk is higher in particular areas, nor the relation between mortality and the risk factor being studied. For instance, the geographical pattern in mortality observed in Campania, Sicily, and Apulia may be due to the higher level of unemployment, to environmental factors, or to a combination of the two. It can be argued that the high polluting industrial plants in Southern Italy are not located there by accident. Indeed, the Italian industrial plan elaborated in the sixties decade of the 20th century (Felice and Lepore 2017) tried to cope with the problem of large disparities across regional economies by favouring the location of heavy industries in the south. The strategy elaborated to mitigate both the high level of structural unemployment and the well-known process of mass migration from southern to northern Italy seems to have failed in both aims in the long-run. Indeed, according to Istat (2018), the migratory balance in all the southern regions has been consistently negative in the last 20 years, and the migratory flows from south to north acquired particular strength in the years of the crisis. In addition, the failure in solving the problem of divergence in the unemployment level, the

deterioration of environmental conditions of a large part of southern Italy may have created a particularly fragile socio-ecosystem and caused unexpected disparities in mortality. The use of the conditional tense is a must, given that further research is needed to clarify whether a causal relation exists. Despite this, we believe that the Italian case represents an interesting one that offers a better understanding of the policies for improving the conditions of developing countries.

Finally, another possible limitation lies in the joint analysis of all causes of death, rather than a separate analysis by cause, which proved impossible due to lack of data. A future extension of this work is to widen the time period under analysis to gain an idea of the evolution of the geographical patterns of mortality from the 1960s (when industrialization started in the South) to the present.

Appendix

Figure 4 - *Municipalities with a facility registered in E-PRTR.*



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SUMMARY

Geographical variations in mortality and unemployment in Italy

This work aims to offer a spatial analysis of municipal mortality for the whole of Italy in the period 2012-2016 and to assess whether the very large geographical differences in unemployment levels may be of help in explaining mortality differentials across the country. We find that the municipalities characterized by the highest unemployment rate, are also more likely to be at high risk of mortality. The effect seems to be stronger for women than for men. We suggest that when elaborating social indicators for evaluating the impact of unemployment on the well-being of a community, also its side effects on mortality should be taken into account.

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