Healthy ageing and wellbeing in Europe

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Introduction

- By 2050, 29% of Europe's citizens will be 65 and older.

- The growing life expectancy can be considered a positive advancement only if the additional years are characterized by good health status and a satisfactory quality of life.

- Good health is an essential component of wellbeing and autonomy, and allows an individual to play an active role in his family and society.

Objectives

Analysis of:

- Transversal and longitudinal determinants of healthy ageing and of wellbeing;

- The relationship between health and wellbeing;

- The differences across Countries.

Data

- Survey of Health, Ageing and Retirement in Europe (**SHARE**): fifth wave (2013) linked with the longitudinal survey SHARELIFE (2008-09).

- **Sample:** 7.459 respondents to the two considered surveys who are at least 65 years old and live in: Austria, Belgium, Czech Republic, Denmark, France, Germany, Italy, Netherlands, Spain, Sweden or Switzerland.

Wellbeing

Complex concept

1. Subjective factor;

2. It considers all aspects of a person's life;

3. Positive concept, not the absence of negative aspects/events.

The measure

Wellbeing was assessed using a Confirmative Factor Analysis (CFA) on the 12 items of the CASP-12 (Control, Autonomy, Self-realization and Pleasure) quality of life scale.

12 dummies:
$$\begin{cases} \textit{1 if maximum score (4) on that item} \\ \textit{0 otherwise} \end{cases}$$

Healthy Ageing

Maintaining autonomy and independence for older people is a key goal in the policy framework for active ageing.
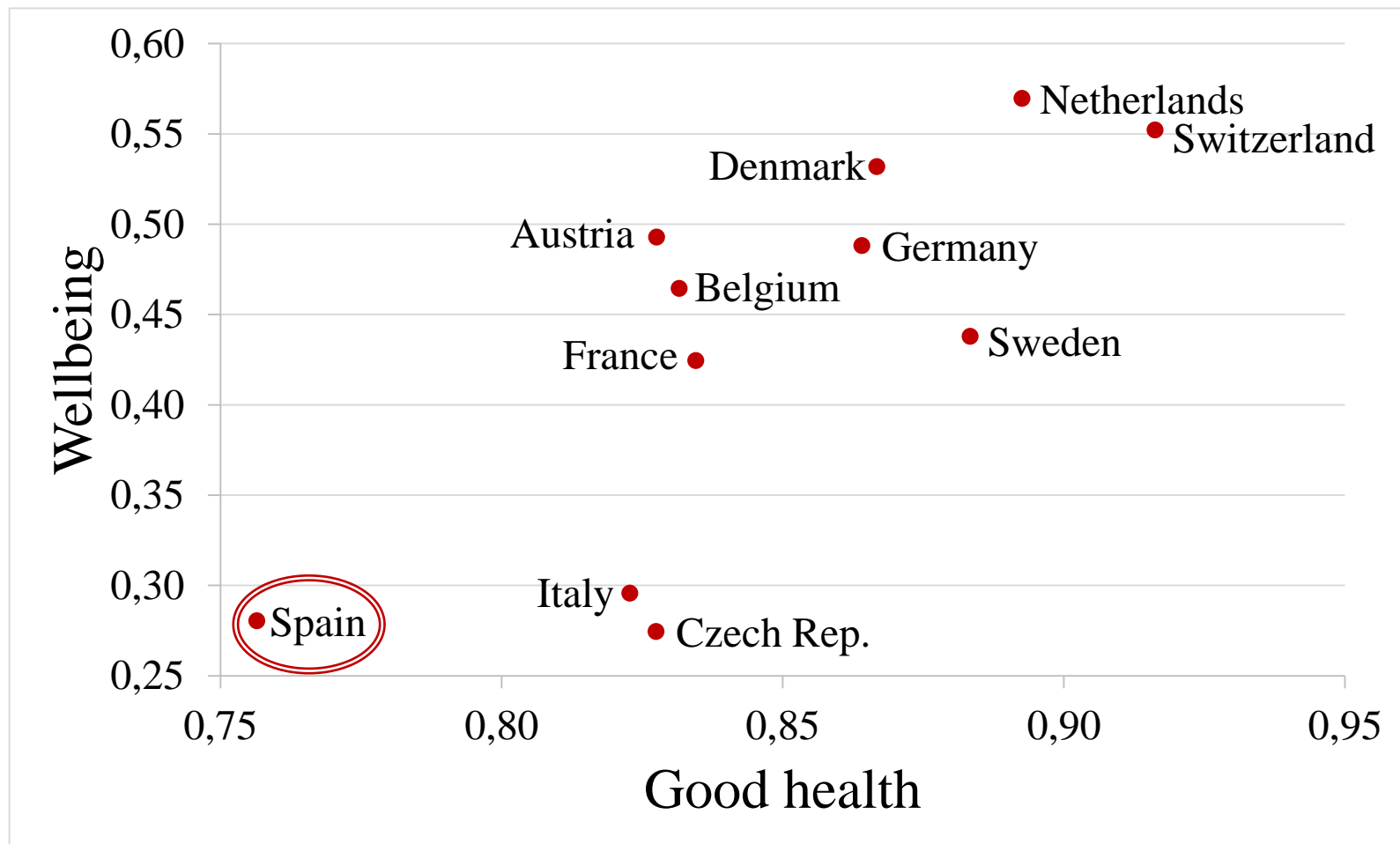
The Measure

CFA on the following variables:

- Number of **chronic diseases;**
- Number of difficulties in **ADL**s;
- Number of difficulties in **IADL**s;

- Times in **hospital** in the last 12 months;
- Number of **mobility** limitations;
- **Drugs** consumption.

Standardized (0-1) factor means of Good health and Wellbeing
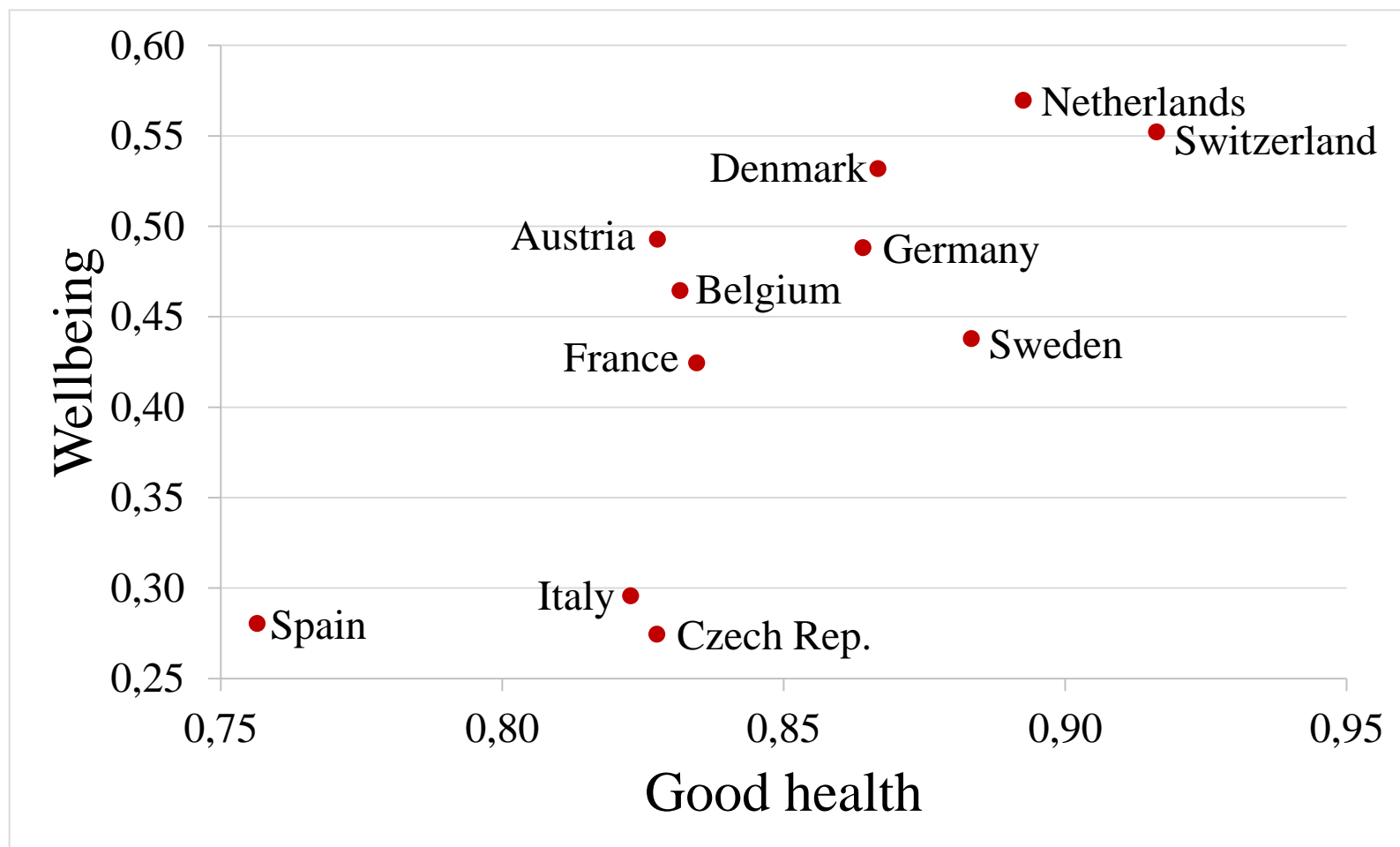
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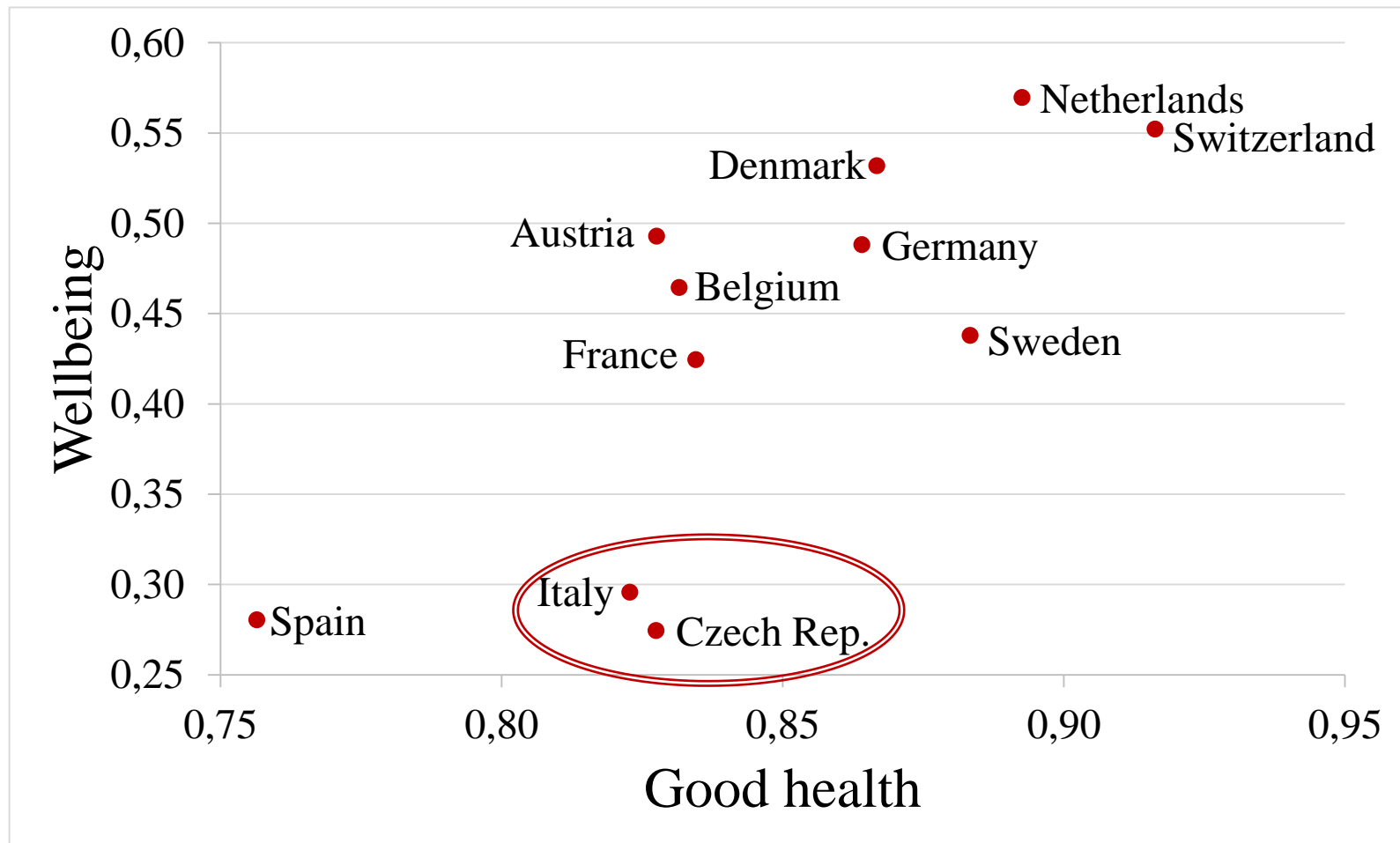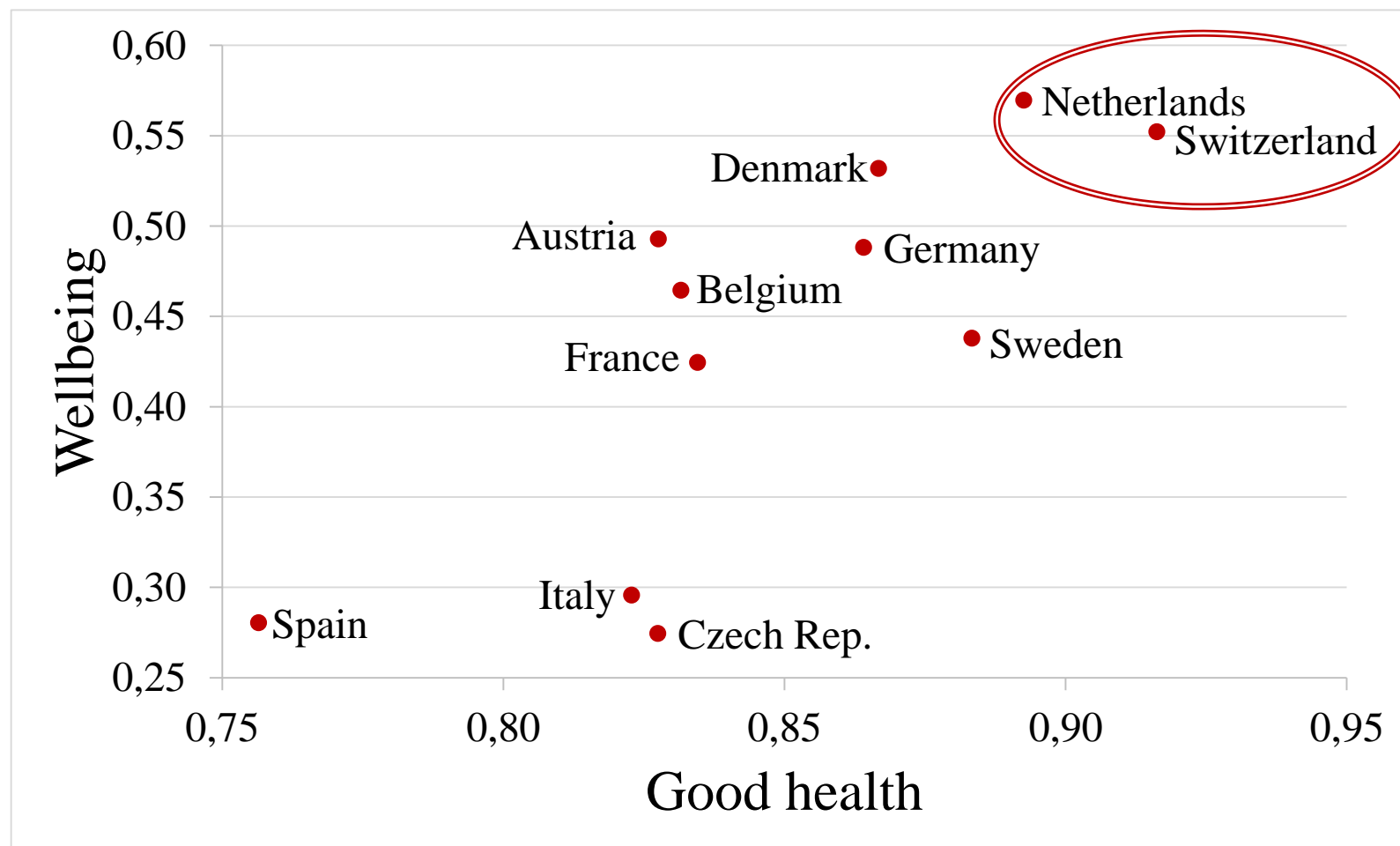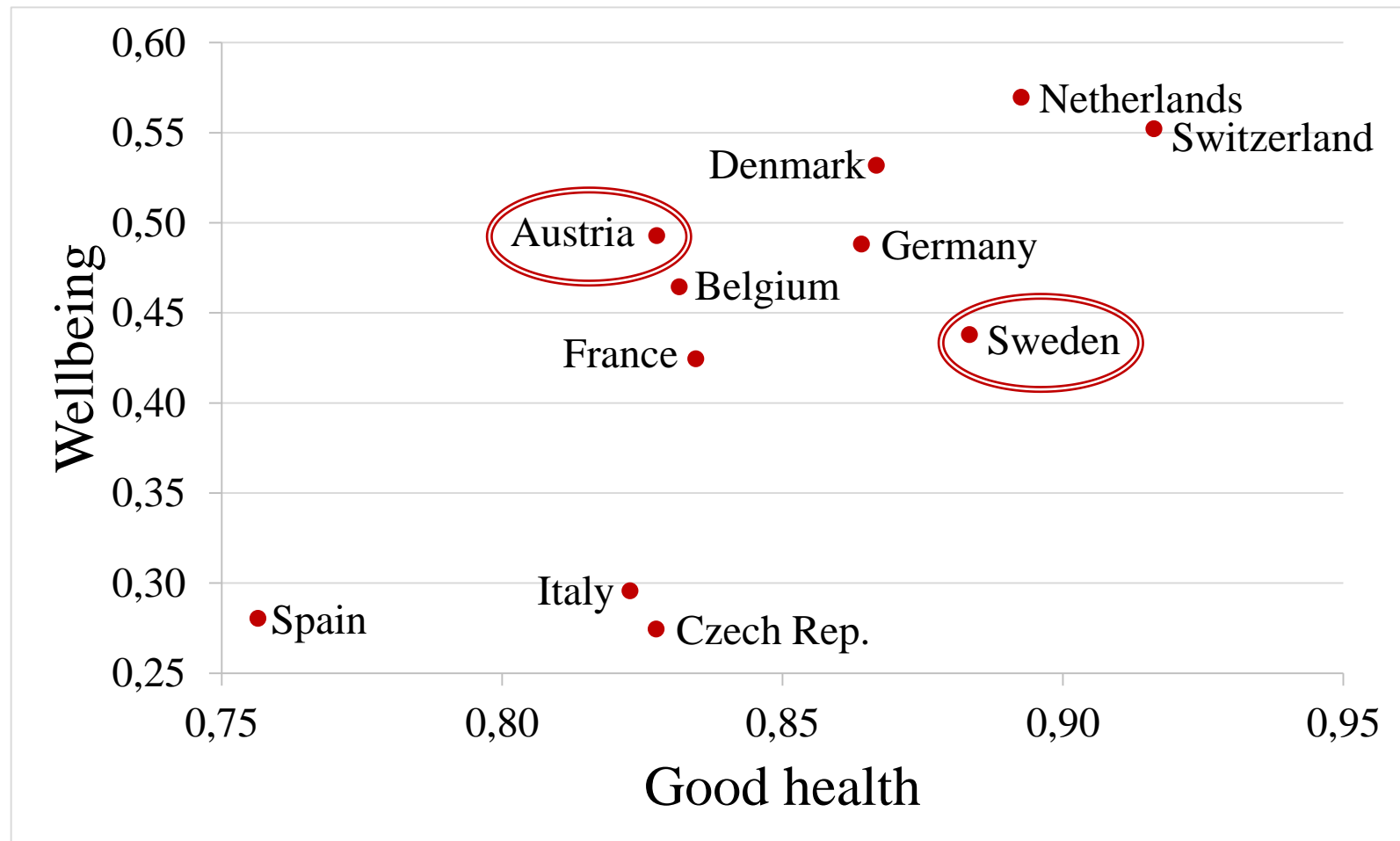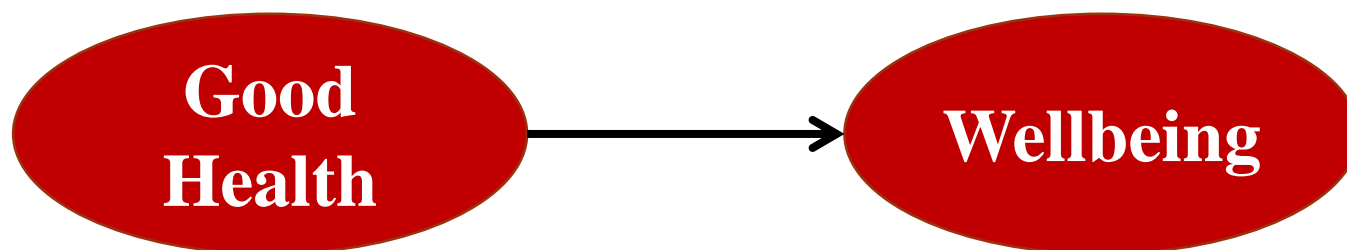
Standardized (0-1) factor means of Good health and Wellbeing

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Conceptual Model

Conceptual Model

Country

Demographic variables

Good Health → **Wellbeing**

Childhood   *Adulthood*

Health behaviours
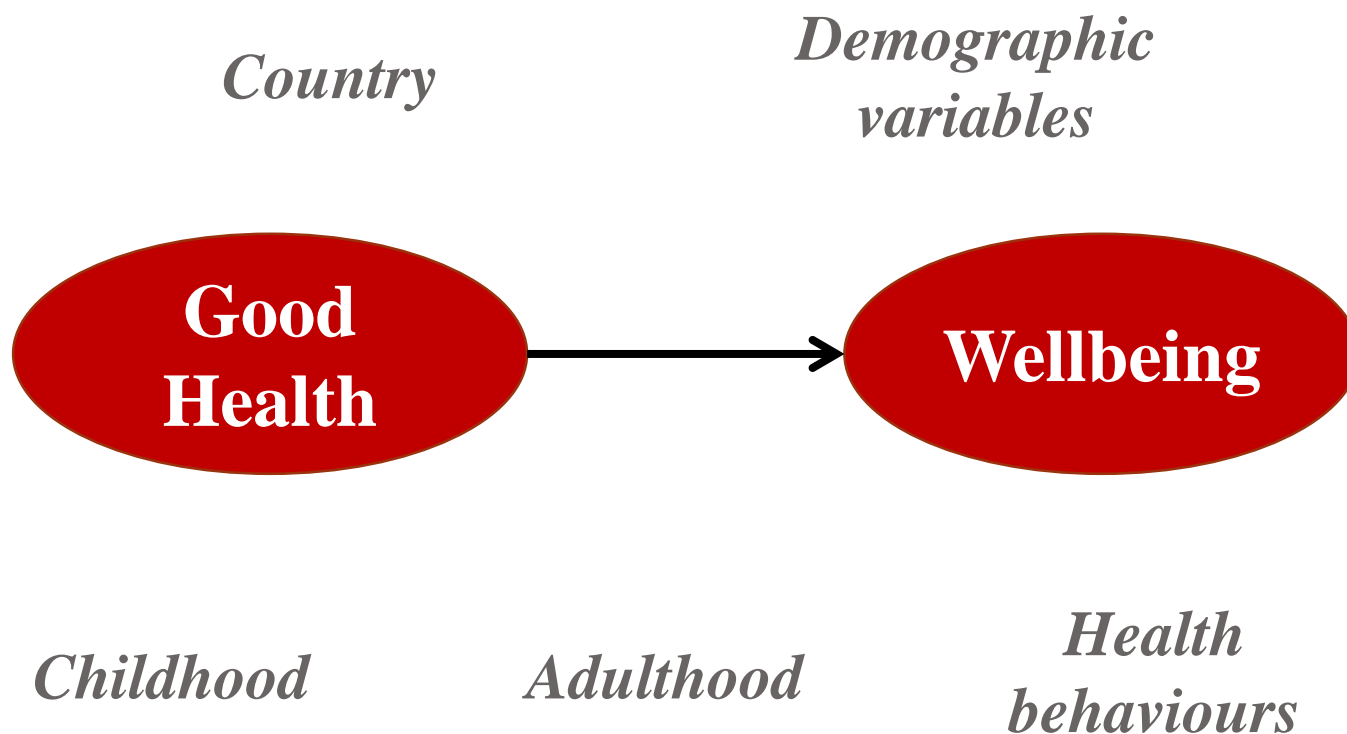
Childhood

- Socio-economic conditions in childhood
  - Occupation of the breadwinner;
  - Rooms per person;
  - Books in the family home;
  - Facilities in the accomodation.

- Ability at 10 years

  in Mathematics and Reading.

- Traumatic events

  (Being placed in an orphanage; Being fostered by another family; Parents drink heavily; Parents with mental health problems).

Childhood: some descriptive results

Odds ratio of **good health** (above the third quartile) in old age related to:

Per-capita rooms	OR	95% C.I.	
(0.5 -1] *vs* <=0.5	1.58	1.40	1.79
>1 *vs* <=0.5	1.68	1.43	1.98

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Ability in childhood	OR	95% C.I.	
Above average *vs* Average/Below average	1.30	1.15	1.47

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No *vs* Yes	1.39	1.18	1.65

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Traumatic events	OR	95% C.I.	
No *vs* Yes	0.99	0.84	1.17

Adulthood

- **Household economic difficulties in:**
  - Buying grocery;
  - Going on holiday;
  - Paying an unexpected expense;
  - Buying clothes if needed;
  - Buying shoes if needed;
  - Covering heating costs;
  - Covering visits to dentist;
  - Replacing glasses if needed.

- **Occupational level** of the job held for the longest time.

- **Traumatic event:** Death of a son/daughter.

Adulthood: some descriptive results

Correlation coefficient between the factor **good health** in old age and:

Economic difficulties	r = -0.217**

Correlation coefficient between the factor **wellbeing** in old age and:

Economic difficulties	r = -0.298**

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Odds ratio of **good health** (above the third quartile) in old age related to:

Occupational level	**OR**	**95% C.I.**	
High *vs* Medium/Low	1.93	1.72	2.17

Odds ratio of **wellbeing** (above the third quartile) in old age related to:

Occupational level	**OR**	**95% C.I.**	
High *vs* Medium/Low	1.58	1.40	1.78

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Occupational level	**OR**	**95% C.I.**	
High *vs* Medium/Low	1.93	1.72	2.17

Death of a son/daughter	**OR**	**95% C.I.**	
No *vs* Yes	1.54	1.25	1.90

Odds ratio of **wellbeing** (above the third quartile) in old age related to:

Occupational level	**OR**	**95% C.I.**	
High *vs* Medium/Low	1.58	1.40	1.78

Death of a son/daughter	**OR**	**95% C.I.**	
No *vs* Yes	1.35	1.09	1.67

Health behaviours

- Smoking
- Alcohol comsumption
- Physical activity
- BMI

Problem: Direction of effects

Example:
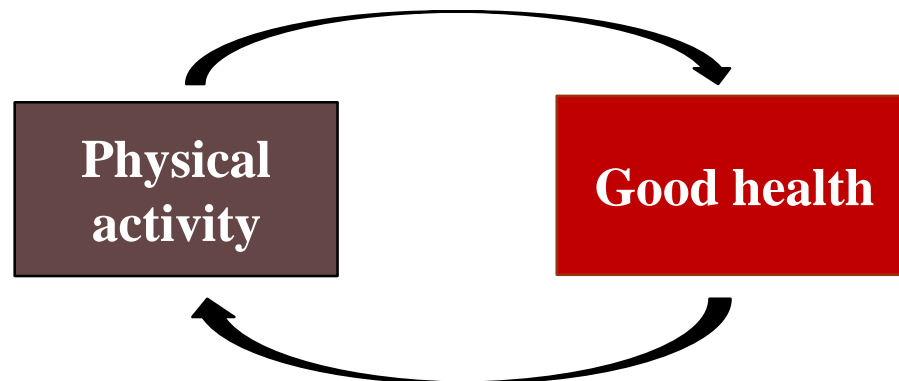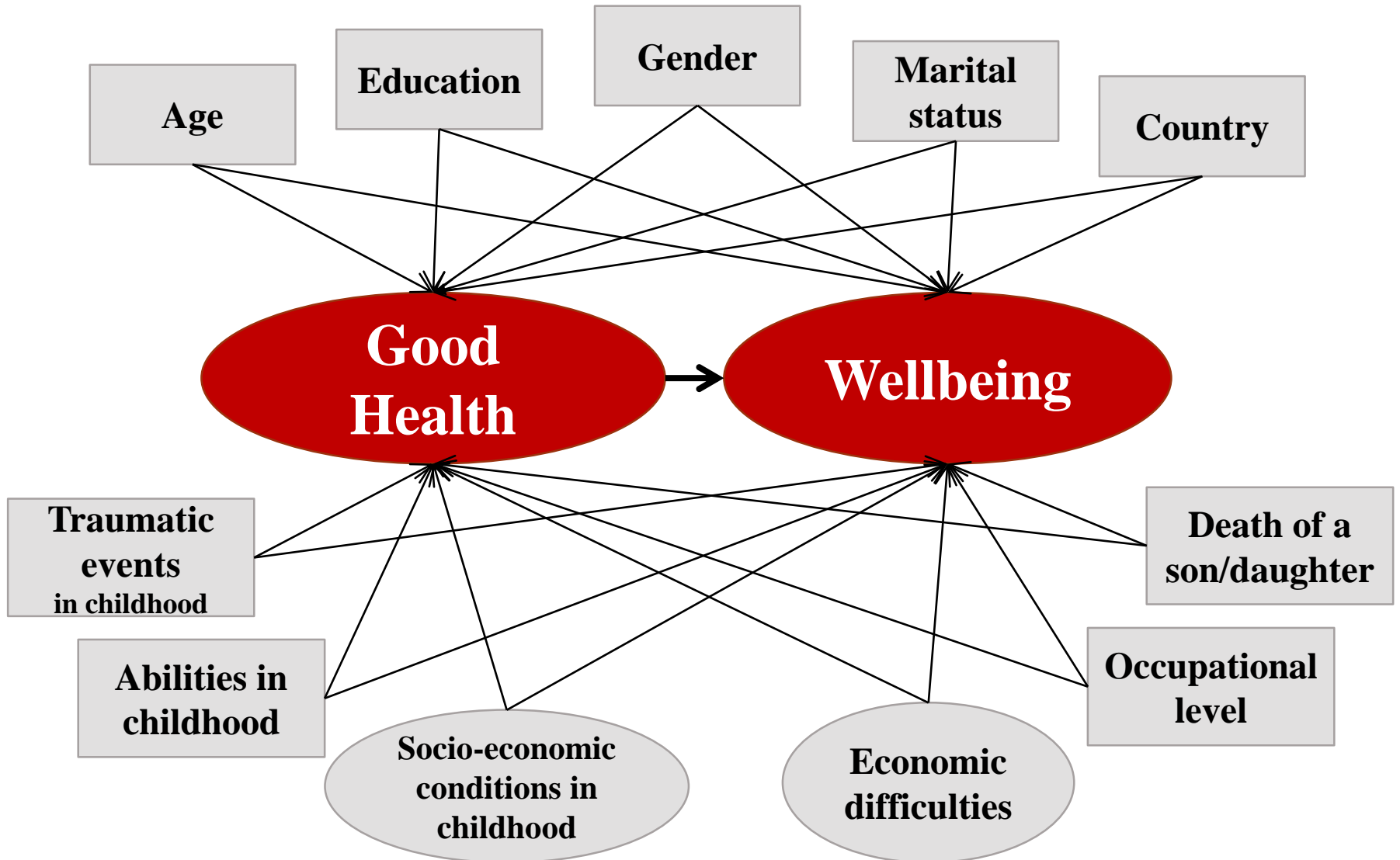
Multivariate model

Structural Equation Models (SEMs)

What is SEMs?
Confirmatory models consisting of a measurement model (which relates the latent variables with those observed) and a structural model (which describes the relationships between the latent variables).
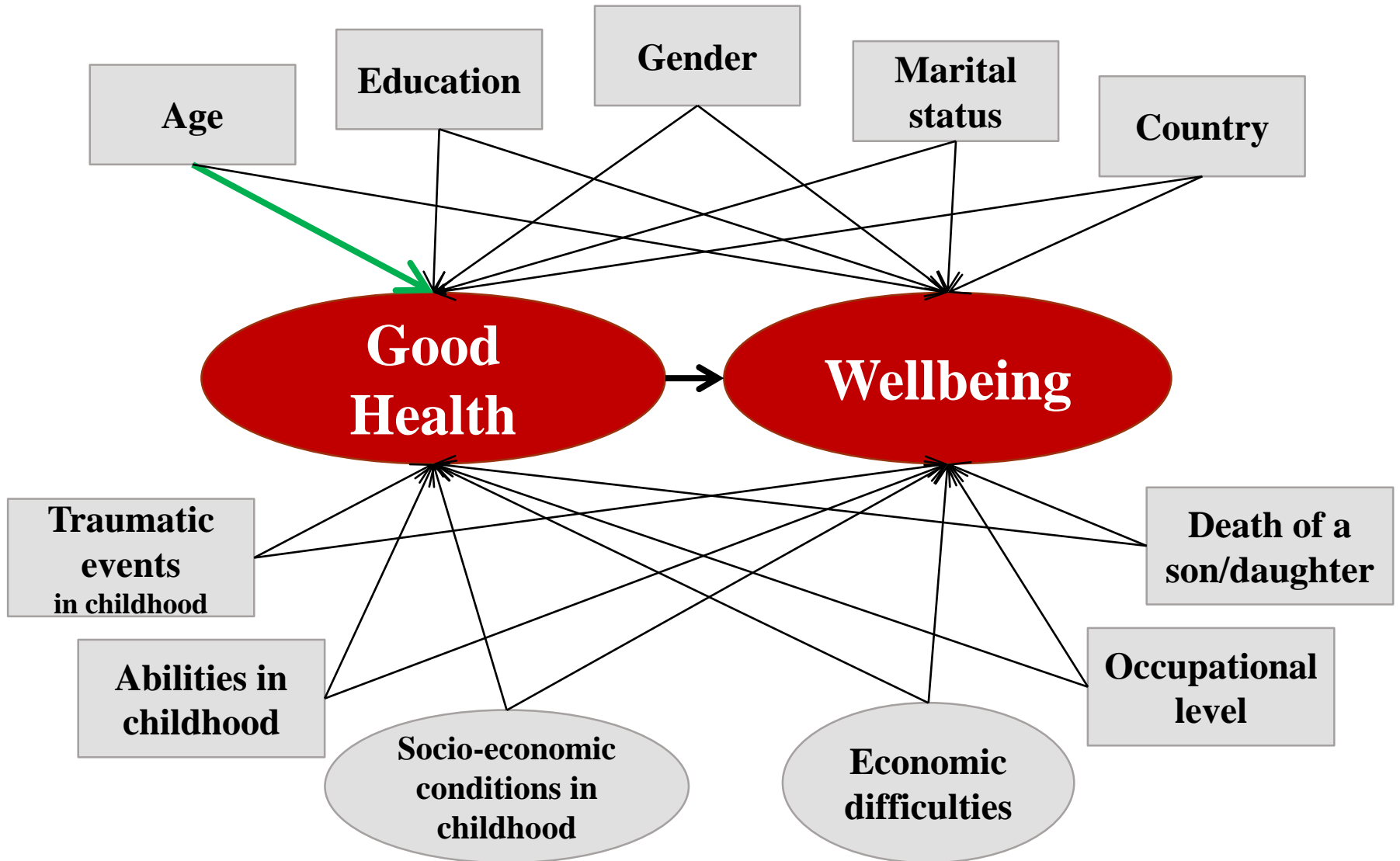
Why SEMs?
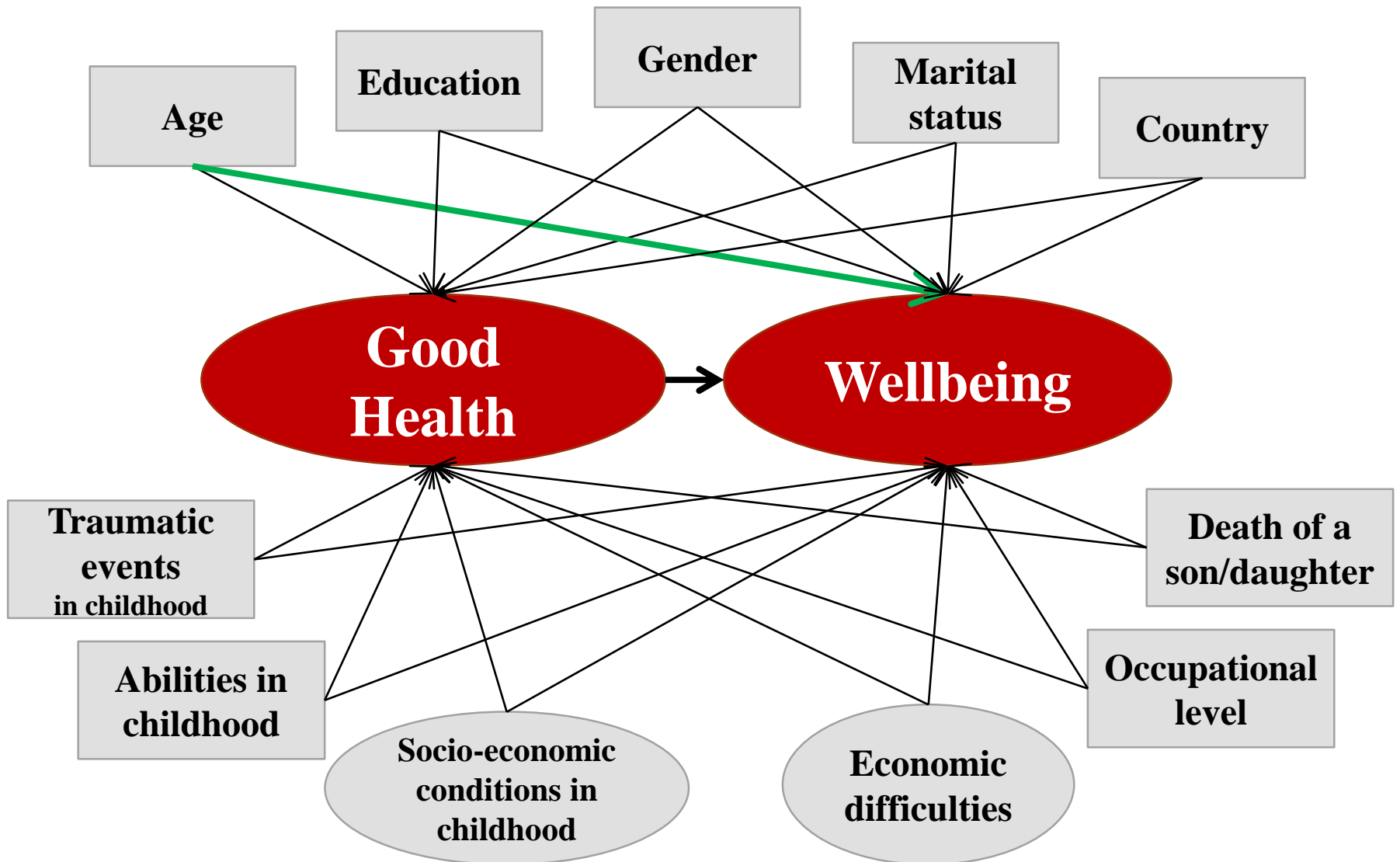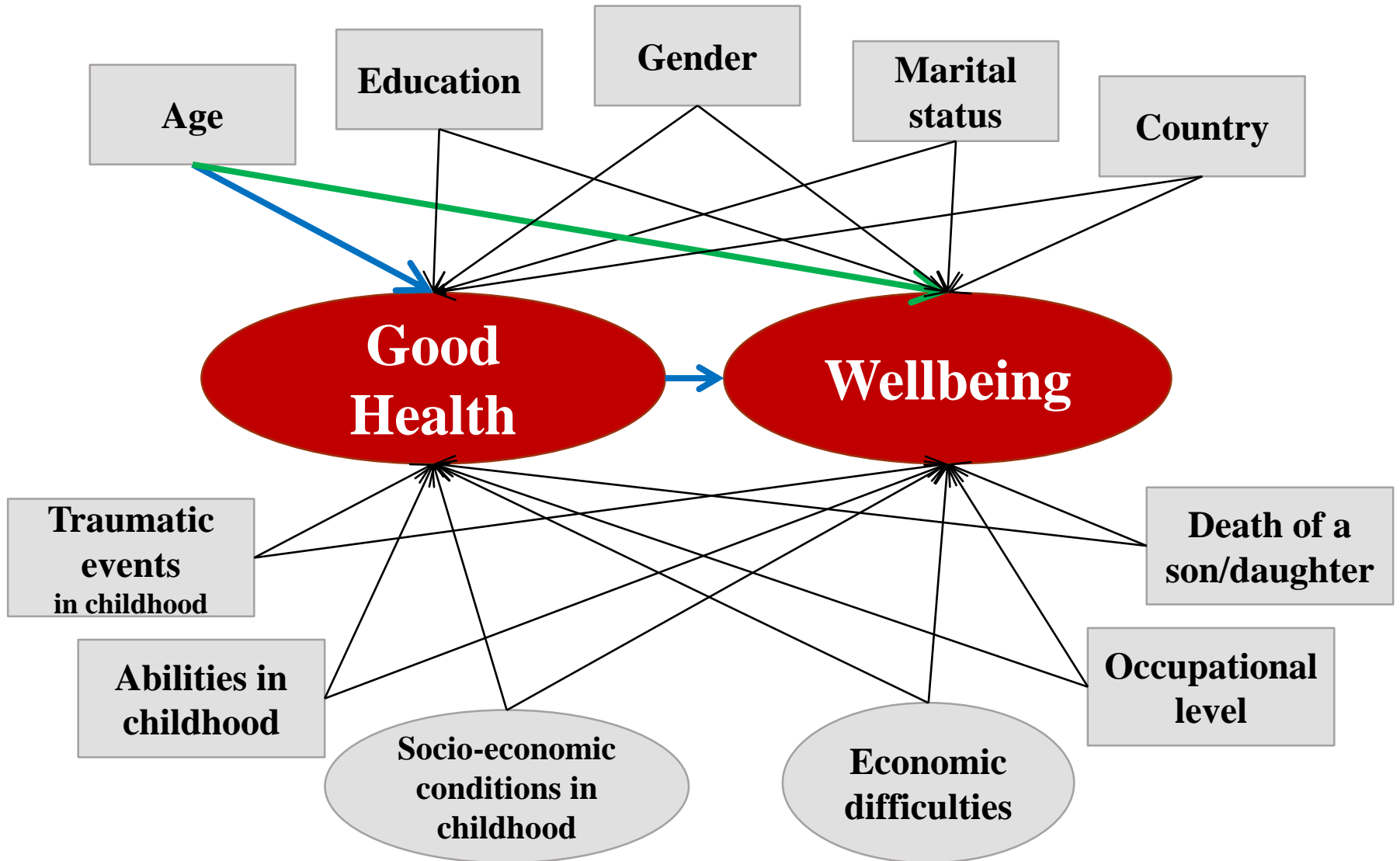Direct and Indirect effects can be estimated.

Final model (1)

Final model (2)

Final model (3)

Final model (3)

Results: Good health (1)

Effects on Good health	Direct	Indirect	Total
Gender *(Male)*	0.1107**	-	0.1107**
Age: 75-84 years *(65-74 years)*	-0.1421**	-	-0.1421**
Age: 85+ years *(65-74 years)*	-0.3131**	-	-0.3131**
Marital status: Married/cohabiting *(Never married/Divorced)*	0.0750**	-	0.0750**
Marital status: Widowed *(Never married/Divorced)*	-0.0021	-	-0.0021
Education level *(High)*	0.0362*	-	0.0362*
Occupational level *(High)*	0.0195	-	0.0195
Traumatic events in childhood *(Yes)*	-0.0461**	-	-0.0461**
Ability in childhood *(High)*	0.0141	-	0.0141
Socio-economic conditions in childhood	0.0652**	-	0.0652**
Economic difficulties in adulthood	-0.1463**	-	-0.1463**
Death of a son/daughter	-0.0318**	-	-0.0318**

* Significance at 5%   ** Significance at 1%

Results: Good health (2)

Effects on Good health (Ref: Germany)	Direct	Indirect	Total
Country: Austria	0.0022	-	0.0022
Country: Belgium	-0.0135	-	-0.0135
Country: Czech Republic	-0.0162	-	-0.0162
Country: Denmark	0.0276	-	0.0276
Country: France	0.0224	-	0.0224
Country: Italy	0.0293	-	0.0293
Country: Netherlands	**0.0072****	-	**0.0072****
Country: Spain	**-0.0454****	-	**-0.0454****
Country: Sweden	**0.0495***	-	**0.0495***
Country: Switzerland	**0.0928****	-	**0.0928****

* Significance at 5%   ** Significance at 1%

Results: Wellbeing (1)

Effects on Wellbeing	Direct	Indirect	Total
Good health	**0.3474****	-	**0.3474****
Gender *(Male)*	-0.0026	**0.0385****	**0.0359****
Age: 75-84 years *(65-74 years)*	**-0.0627****	**-0.0494****	**-0.1121****
Age: 85+ years *(65-74 years)*	**-0.0458***	**-0.1088****	**-0.1545****
Marital status: Married/cohabiting *(Never married/Divorced)*	**0.0351****	**0.0260****	**0.0612****
Marital status: Widowed *(Never married/Divorced)*	-0.0150	0.0007	-0.0142
Education level *(High)*	0.0117	**0.0126***	0.0243
Occupational level *(High)*	0.0001	0.0068	0.0068
Traumatic events in childhood *(Yes)*	-0.0058	**-0.0160****	-0.0218
Ability in childhood *(High)*	0.0217	0.0049	**0.0266***
Socio-economic conditions in childhood	**0.0687****	**0.0226****	**0.0914****
Economic difficulties in adulthood	**-0.1506****	**-0.0508****	**-0.2014****
Death of a son/daughter	-0.0078	**-0.0110***	-0.0188

* Significance at 5%   ** Significance at 1%

Results: Wellbeing (2)

Effects on Wellbeing (Ref: Germany)	Direct	Indirect	Total
Country: Austria	0.0117	0.0008	0.0125
Country: Belgium	-0.0138	-0.0047	-0.0185
Country: Czech Republic	**-0.1701****	-0.0056	**-0.1757****
Country: Denmark	**0.0391***	0.0096	**0.0487****
Country: France	**-0.0363***	0.0078	-0.0285
Country: Italy	**-0.2050****	0.0102	**-0.1949****
Country: Netherlands	**0.0520****	**0.0250****	**0.0769****
Country: Spain	**-0.1433****	**-0.0158***	**-0.1591****
Country: Sweden	**-0.0823****	**0.0172***	**-0.0652****
Country: Switzerland	0.0302	**0.0322****	**0.0624****

* Significance at 5%   ** Significance at 1%

Conclusion

- As expected, good health has a strong effect on wellbeing.

- Importance of indirect effects on wellbeing, that accentuate the total effect.

- Health in old age and, even more wellbeing, are closely linked to the conditions experienced during childhood and to the human experience accumulated over a lifetime.

- Evidence of country disparities, especially in wellbeing.

Thank you