

TABLES Chapter 10:

On the Construction of Early Warning Indicators of Old-Age Poverty: The Index-Building versus the Microsimulation Approach, Georg P. Mueller

**Table 10.1: Estimates of the poverty lines and poverty rates of
Germany, USA, and Sweden**

Variable	Germany	USA	Sweden
Median M of the standardised household incomes	1343.5 EUR	2651.7 USD	24095.6 SEK
Poverty line = 50% of the median M	671.8 EUR	1325.8 USD	12047.8 SEK
Poverty rate of the general population	11.0%	26.1%	8.8%
Poverty rate of the 55- 75 old, <i>before</i> retirement	8.2%	20.1%	3.7%
Poverty rate of the 55- 75 old, <i>after</i> retirement	6.4%	22.0%	11.0%

Definitions (variables in *italics* refer to ISSP 2008): Standardised household income = $xx_inc / \text{Squareroot}(bompop)$. Source: International Social Survey Programme (ISSP 2008) "Religion III". Case weights: Sweden = 1; USA = 1; West-Germany = 1; East-Germany = 0.557 (= weight for correcting the over-representation of the East-Germans in the sample of the German ISSP-Survey).

Table 10.2: Logistic regression-coefficients for explaining old-age poverty

Variable	Germany		USA		Sweden	
	Initial	Final	Initial	Final	Initial	Final
Female * Retired	[0.261]	-.---	[0.557]	-.---	[0.568]	-.---
Married * Retired	[-0.864]	-1.056*	[-0.882]	-0.823*	[5.785]	-.---
Divorced * Retired	[0.711]	-.---	1.237*	1.243**	[8.590]	2.735***
Single * Retired	[0.389]	-.---	[-1.405]	-.---	[7.161]	1.174*
Underclass * Retired	[-0.037]	-.---	3.247**	2.666*	[0.837]	-.---
Immigrated * Retired	[1.667]	1.704*	-.---	-.---	[1.424]	-.---
Retired	[-0.062]	-.---	[-0.271]	-.---	[-6.048]	-.---
Constant	-2.411***	-2.252***	-1.380***	-1.397***	-3.471***	-3.071***
Nagelkerke pseudo r-sq	[0.057]	0.046*	0.094**	0.080***	0.168**	0.117***
Number of obs. N	381	384	316	316	317	351

Significances (1-tailed): ***: 0.1%, **: 1.0%, *: 5%, []: n.s., -.---: Not used. Sample: Only persons in the age-interval [55,75]. Source: International Social Survey Programme (ISSP 2008). Method: Binary logistic regression. Dependent variable: (Variables in *italics* refer to ISSP 2008): Poor = 1, if the standardised household income $xx_inc / \text{Squareroot}(bompop)$ is below the poverty-line of Table 10.1; Poor = 0, else. Independent variables (Variables in *italics* refer to ISSP 2008): Female = 1, if *sex* = 2; Female = 0, else. Married = 1, if *marital* = 1; Married = 0, else. Divorced = 1, if *marital* = 3 or *marital* = 4; Divorced = 0, else. Underclass = 1, if *educyrs* ≤ 8; Underclass = 0, else. Immigrated = 0, if *ethnic* = citizenship in the respective country; Immigrated = 1, else; for USA due to missing data: Immigrated = -.---. Retired = 1, if *vrkst* = 7; Retired = 0, else. Case weights: Sweden = 1; USA = 1; West-Germany = 1; East-Germany = 0.557 (see legend for Table 10.1).

Table 10.3a: Germany: Forecasts by different indicators

Indicator	Forecasted time period:		
	+0 years	+10 years	+20 years
V_Index	0.47	0.53	0.57
V_Share	0.03	0.08	0.11
V_Gap	1.91	2.37	2.49
V_Immigrated	100.0	100.0	100.0
V_Non-married	0.0	20.5	25.1
%_Immigrated	2.6	8.1	11.2
%_Married	75.8	73.8	71.3

$V = 1.704 * \text{Immigrated} - 1.056 * \text{Married}$. $V_Index = \exp(\text{mean}(V))$, by cohort. $V_Share = \text{Share of persons with } V > 0 \text{ in a cohort}$. $V_Gap = \exp(\text{mean}(V))$ for persons with $V > 0$. Forecasted time period = 0 corresponds to the survey year 2008. $V_Immigrated = \%$ -share of immigrated in vulnerable persons with $V > 0$. $V_Non-married = \%$ -share of non-married in vulnerable persons with $V > 0$. $\%_Immigrated = \%$ -share of immigrated in the total population. $\%_Married = \%$ -share of married in the total population.

Table 10.3b: Sweden: Forecasts by different indicators

Indicator	Forecasted time period:		
	+0 years	+10 years	+20 years
V_Index	1.62	2.25	1.94
V_Share	0.31	0.49	0.47
V_Gap	4.75	5.29	4.06
V_Divorced	24.7	31.5	14.5
V_Single	75.3	68.5	85.5
%_Divorced	7.6	15.3	6.9
%_Single	23.3	33.3	40.3

$V = 2.735 * \text{Divorced} + 1.174 * \text{Single}$. $V_Index = \exp(\text{mean}(V))$, by cohort. $V_Share = \text{Share of persons with } V > 0 \text{ in a cohort}$. $V_Gap = \exp(\text{mean}(V))$ for persons with $V > 0$. Forecasted period = 0 corresponds to the survey year 2008. $V_Divorced = \%$ -share of divorced in vulnerable persons with $V > 0$. $V_Single = \%$ -share of singles in vulnerable persons with $V > 0$. $\%_Divorced = \%$ -share of divorced in the total population. $\%_Single = \%$ -share of singles in the total population.

Table 10.3c: USA: Forecasts by different indicators

Indicator	Forecasted time period:		
	+0 years	+10 years	+20 years
V_Index	0.92	0.91	0.96
V_Share	0.26	0.26	0.29
V_Gap	4.38	4.26	3.92
V_Divorced	89.1	92.4	95.8
V_Non-married	95.7	92.4	98.6
V_Underclass	15.2	13.6	7.0
%_Divorced	23.3	23.7	27.3
%_Married	58.0	58.8	52.2
%_Underclass	4.0	3.5	2.0

$V = 1.243 * \text{Divorced} + 2.666 * \text{Underclass} - 0.823 * \text{Married}$. $V_Index = \exp(\text{mean}(V))$, by cohort. $V_Share = \text{Share of persons with } V > 0 \text{ in a cohort}$. $V_Gap = \exp(\text{mean}(V))$ for persons with $V > 0$. Forecasted period = 0 corresponds to the survey year 2008. $V_Divorced = \%$ -share of divorced in vulnerable persons with $V > 0$. $V_Non-married = \%$ -share of non-married in vulnerable persons with $V > 0$. $V_Underclass = \%$ -share of underclass in vulnerable persons with $V > 0$. $\%_Divorced = \%$ -share of divorced in the total population. $\%_Married = \%$ -share of married in the total population. $\%_Underclass = \%$ -share of underclass in the total population.