

How Class Structures are Shaped by Rising Poverty in West and East Germany after Reunification

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<u>markov models</u>: measurement error most important (Breen/Moisio 2003)

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 however, measurement error also frequent in deprivation measures (Moisio 2004; Whelan/Maître 2005)

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		4-years average		averaged years in stages of						
	persons in %	income position	deprivation score	pros - perity	fragile pros- perity	incon- sistent poverty	vulnera- bility	"simple" poverty	extreme poverty	N
Zone of Prosperity	40.1	138	0.05	3.7	0.3	0.0	0.0	0.0	0.0	6707
Zone of unstable Prosperity	28.2	92	0.44	0.9	2.6	0.2	0.3	0.0	0.0	4599
Inconsistent Poverty	5.0	63	0.80	0.0	0.7	2.9	0.1	0.2	0.0	568
Temporary Poverty	4.9	70	0.92	0.9	0.9	0.3	0.3	1.0	0.5	650
Zone of Vulnerability	10.8	62	1.07	0.1	0.7	0.5	1.7	0.9	0.1	1724
Zone of persistent Poverty	11.0	42	1.88	0.0	0.0	0.1	0.2	1.8	1.9	1482
Total	100	100	0.55	1.8	1.0	0.3	0.3	0.4	0.2	15730

The combined poverty indicator is based on information on relative income position (income poverty) as well as housing conditions, financial assets and unemployment (deprivation indicators) of four subsequent years (see Appendix A for more details).

For example, for the period from 2002 to 2005, 11% of the population was found to be in "persistent poverty" in West-Germany. The averaged (or "permanent") income position of this group accounts to almost 42% of the mean hh-income. On average, nearly two (1.88) of the three selected indicators of the living standards show a deprivation. In contrast to this zone of persistent poverty, 40% of the population was found in stable prosperity, with an averaged income position of 138% of the mean and at least no deprivations.

Interestingly, the average income position and deprivation incidence are quiet similar for the three groups of vulnerability, inconsistent and temporary poverty. However, their experiences over the course of the 4-year-period are very different. Individuals assigned to the zone of vulnerability live – on average – for nearly two years (1.7) in the stage of vulnerability (with incomes between 50% and 75% of mean incomes and deprivations in one of the three indicators) and for nearly another year (0.9) in the stage of "simple poverty" (i.e. combining either income poverty with one deprivation or low incomes (50-75%) with multiple deprivations). The individuals assigned to the group of inconsistent poor are continuously situated in an inconsistent stage (of either income poverty without any deprivations or multiple deprivations with higher incomes), whereas the temporary poor are defined by experiencing stages of extreme poverty as well as stages of prosperity – they are almost evenly spread over the possible stages.







The concept of social exclusion is broader than the concept of poverty, assuming a process of cumulative exclusions in various dimensions of life. However, there is very little agreement how to empirically apply the concept of social exclusion. Moreover, most surveys provide rather few and indirect information on the interesting processes.

We derived two additional indicators from the SOEP data, again based on 4-Year-Panels in order to take into account longer lasting forms of exclusion:

The indicator of the labour market position is based on yearly personal information on employment status and job characteristics. Besides unemployment, marginal labour market positions are indicated by hourly wages below mean wage, precarious employment relations (like short-term contracts or jobs not covered by the social insurance system) and jobs that do not require any education and training. In a first step, individual labour market positions are derived for each 4-Year-Panel, distinguishing between individuals continuously well integrated in the labour market (1), continuously unemployed or in marginal positions (4), temporarily integrated as well as temporarily marginalised, i.e. "fluctuating" (3), continuously not working (0) and all others (2). In a second step, the household context is controlled for by assigning the labour market position of the hh head to all those not in the labour force and by "upgrading" individual labour market positions for all those living together with a continuously well integrated hh head.

The indicator of cultural exclusion is based on 5 items from an activity scale, asking for the incidence of attending popular culture events, high culture events, sports, participating in political groups and engagement in honorary activities. Individuals are classified as culturally excluded if they report to "never" be engaged in these activities over a given 4-Year-Period. Since cultural participation is very much age-dependent, only the information of the head of the hh and its eventual partner is used and applied to every member of the hh. However, the activity scale is not included in the SOEP questionnaire for every year. Thus, for each 4-Year-Period, the activity information is repeated for 2 to 4 times, and therefore, the marginal distributions of the cultural exclusion indicator varies over time due to this measurement issue.



If there exists a trend towards increasing social exclusion, the interrelations between poverty, labour market exclusion and cultural exclusion should become stronger over time. This hypothesis can be examined by means of log-linear models that allow to analyse the trends in the interrelations of the three indicators independently from any changes in the incidence (or marginal distributions) of the three indicators. By constraining the parameters within (e.g. assuming linear relations) and across (e.g. homogeneous grouping effects of time) subtables, more specific assumptions can be tested.



-- Parameter estimates are not reported here due to complexity --



Most interesting for our purpose, the Latent Class Analysis (LCA) allows explicit testing of the assumption that the derived indicators (poverty, labour market exclusion and cultural exclusion) form part of a unique latent dimension of "social exclusion". LCA models the relation between the observed indicators as being driven by an unobserved latent state of "social exclusion".

Moreover, by introducing time and social class as exogenous variables, various assumptions on the relation between social and social exclusion, as well as trends in this relation, can be tested.

As a first step, we test whether the selected indicators form part of a unique latent dimension of social exclusion. We use collapsed versions of the poverty and labour market indicators, distinguishing between (1) prosperity (incl. unstable prosperity), (2) vulnerability (including inconsistent and temporary poverty) and (3) persistent poverty and between (1) integration in the labour market, (2) all others (including not working) and (3) marginalised labour market positions (including longterm unemployed).

To analyse trends over time, we assume a homogeneous measurement model. However, since our indicator of cultural exclusion is not consistent over time, we allow for time-specific conditional probabilities of being culturally excluded for each of the latent classes. Results are given in the next slide.



We obtain an acceptable fit of the model by assuming four latent classes. Each of the latent classes has a homogeneous risk profile over time(with the exception of the risks of being culturally excluded – in this figure, the means are given).





In the next step we now introduce social class as an exogenous variable. In order to avoid sparse cells in the contingency tables, we further collapse the 19 4-year-periods into 6 broader time periods.

• The first model builds on the previous one (assuming a unique latent dimension for the entire population) and analyses the relations between social exclusion and social class by conditioning the risks of belonging to one of these latent groups on social class membership. Results: We find a strong relationship between social class and social exclusion: The risk of belonging to the latent class of social exclusion accounts to more than 30% for the unskilled manual class, but less than 5% for the service classes. Furthermore, also the risks of being detached from social life is also much higher among the working classes, whereas the latent state of vulnerability seems to be a phenomenon typically for the middle classes. – With respect to trends over time, we find that the risks of becoming socially excluded are slightly increasing for the service classes as well as for the working classes. At the same time, the probability of belonging to the latent class of well integrated is rising as well in both the skilled and the unskilled manual class, but decreasing for the higher classes. In other words: There seems to be a process of polarisation going on within the working classes.

• Following this impression, the second model assumes that each social class is internally divided into (three) distinct groups of excluded, vulnerable and integrated individuals. Of course, the risk profiles of these three latent groups are differing across social classes. However, the results obtained are quiet similar to the results of the first model (but less illustrative – see Appendix C for more details). Most interestingly, we find that there is indeed a process of polarisation going on within the working classes, whereas for the higher classes we find evidence for a process of growing uncertainty.



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A. C	onstruction of indica	a comb ator (1)	oined po	overty			
	7 1 .	Income Position					
	Yearly stages		50-75%	>75%			
Depri- vation	2-3 deprivations	extrem poverty	"simple" poverty	incon- sistent poverty			
	1 deprivation	"simple" poverty	vulnera- bility	fragile prosperity			
	no deprivation	incon- sistent poverty	fragile prosperity	prosperity			
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