# "Measuring the Partner Market" 

Presentation, European Population Conference 2016, Mainz, Germany
Johannes Stauder (first Author), Jan Eckhard, Tom Kossow, and Laura Unsöld (Co-Authors)

Max-Weber-Institute for Sociology, Heidelberg University

## Short abstract:

The research project "Macro-structural conditions of the partner market in longitudinal perspective" applies elaborated partner market measures - like the "availability ratio" suggested by Goldman et al. (1984) - to detect variations, influencing factors and consequences of partner market conditions in Germany between 1985 and 2011. Our presentation will introduce 1) the project's theoretical approach and 2) the applied concept for measuring the partner market. The presentation will also contain main results of the project concerning issues like 3) the variation of partner market opportunities over the male and female life course, 4) differences in partner marked conditions between cohorts, 6) differences between the regions and effect of internal migration on local partner markets, 7 ) the impact of the partner market on couple relationships.

## Extended abstract:

Following Blau's macrostructural theory (Blau 1977a: 40, 1977b), the social differentiation of a population forms patterns of individuals' relationships because the opportunities for contact with other individuals occupying certain social positions are constrained by the macrostructural distribution of these social positions and by relative group sizes within the population. In this respect, the partner market can be conceptualised as a market of potentially suitable partners for intimate relationships. Individuals' opportunities for finding a partner then are restricted by the macro-structural distribution of relevant social positions within spatial limits, because the number of individuals with relevant attributes in these spatial limits define their opportunities for contact with relevant individuals and, in consequence, restrict their opportunities to develop (intimate) relationships (Stauder 2008, 2014).

Shortages of women on the partner market are supposed to be decisive for mating chances and mate selection (Blau et al. 1982; Blau et al. 1984; Klein 2000). Consequently, they also influence the prevalence and the stability of intimate relationships (Becker et al. 1977: 1150) as well as birth rates (Klein 2003). Moreover, some theories state impacts on gender roles
(Guttentag and Secord 1983) and on gender equity within couple relationships (Guttentag and Secord 1983; Heer and Grossbard-Shechtman 1981; South and Trent 1988; Kröhnert and Klingholz 2007). Some even argue that shortages of women on the partner market lead to increased crime rates (Barber 2003; Theweleit 1977, 1978) and to radical political opinions (Kröhnert and Klingholz 2007: 67ff.). In short, the partner market is regarded as a potential factor for several social and demographic processes.

However, up to now, the partner market in European countries and regions has been measured only by using quite crude age-specific sex ratios of sub-populations within quite large spatial entities. This meets with severe criticism (Goldman et al. 1984; Fossett and Kiecolt 1991). Age-specific sex ratios neither account for theoretical considerations about which agegroups are suitable potential partners for each other, nor do they sufficiently account for competition from same-sex individuals from different age-groups. Because of these shortcomings, research based on simple sex ratios cannot distinguish between migration-caused imbalances and preliminarily existing imbalances of the partner market, which arise from oscillating birth rates of the past decades.

The research project "Macro-structural conditions of the partner market in longitudinal perspective" - carried out at Heidelberg University and funded by the German Research Foundation (Deutsche Forschungsgemeinschaft, DFG) - applies more elaborated partner market measures to detect variations, influencing factors and consequences of partner market conditions in Germany between 1984 and 2011 (see also http://www.soz.uniheidelberg.de/projektdetails/835,68,0,0,1.html). The project provides for partner market measures that refer to relatively small spatial units ("Landkreise") and that are sensitive about age preferences as suggested by Goldman et al. (1984) and Fossett and Kiecolt (1991).

Fossett and Kiecolt (1991: 945) suggest "weighted age-specific sex ratios". This indicator reflects age preferences of every male and female age group by using weights which are specified according to preliminary empirical analyses. One practicable way to specify the weights is to empirically analyse age combinations of couple relationships within the population. The weights for a specific age group then result from the probability of being chosen as a partner by members of the reference age group. Equation 1 shows how these weights are used to compute weighted age-specific sex ratios.
(1) $S R_{i}^{F}=\frac{\sum_{j} w_{j} M_{j}}{F_{i}}$

The sex ratio for a given age group $i$ of one sex (here females, $F$ ) is calculated as the sum of the weighted numbers of the opposite sex (here male, $M$ ) over all age groups, divided by the
number of the same sex reference group ( $F_{i}$ ). Age groups are weighted with the specified probabilities of being chosen as a partner by members of the same sex reference group, because every male age group is "suitable" to the women at age $i$ only to a certain degree, which is reflected in these weights.

Goldman, Westhoff, and Hammerslough (1984) still see a fundamental problem in a weighted age-specific sex ratio: It disregards any competition from other same sex age groups on the partner market. The male age groups in the counter of equation 1 are suitable not only for the women in the age group $i$ in the denominator, but to some degree also for some older and some younger female age groups. To resolve this problem, Goldman and colleagues introduce an alternative measure of partner market opportunities, which they call "availability ratio" (AR). The AR is computed as shown in equation 2.

$$
\begin{equation*}
A R_{i}^{F}=\frac{\sum_{j} w_{j} M_{j}}{\sum_{j} w_{j} \cdot \sum_{k} w_{k} F_{k}} \tag{2}
\end{equation*}
$$

Like in equation 1, equation 2 refers to females of a certain age i. Again, the counter represents the weighted sum of all male age groups. But unlike equation 1, the denominator of the AR represents not only a female reference group of one single age. Instead, it represents the average number of women that might - according to their age - be suitable partners for the males in the counter. And in turn this average number is weighted with the degree of suitability of these males for women of age $i$.

For our research, we calculated the AR using the official regional population statistics provided by the German Federal Statistical Office and the statistical offices of the German States. The weights reflecting the suitability of male and female age groups to each other were specified by analysing several German surveys that include detailed information about couple relationships. In our analyses, we weight the distribution of the AR by the number of German males or females at the respective particular age in the particular district and in the particular year.

Our presentation will give a more detailed introduction into a) the project's theoretical approach and b) the applied concept for measuring the partner market. The presentation will also contain main results of the project concerning issues like c) the variation of partner market opportunities over the male and female life course, d) differences in partner marked conditions between cohorts, e) differences between the regions and effect of internal migration on local partner markets, f) the impact of the partner market on couple relationships.

Barber, Nigel, 2003: The Sex Ratio and Female Marital Opportunity as Historical Predictors of Violent Crime in England, Scotland, and the United States, Cross-Cultural Research 37: 373-392.
Becker, G. S., Landes, E. M., \& Michael, R. T. (1977). An Economic Analysis of Marital Instability. The Journal of Political Economy, 85, 1141-1187.
Blau, P. M., Beeker, C., \& Fitzpatrick, K. M. (1984). Intersecting Social Affiliations and Intermarriage. Social Forces, 62(3), 585-605.
Blau, P. M., Blum, T. C., \& Schwartz, J. E. (1982). Heterogeneity and Intermarriage. American Sociological Review, 47(1), 45-62.
Fossett, M. A., \& Kiecolt, K. J. (1991). A Methodological Review of the Sex Ratio: Alternatives for Comparative Research. Journal of Marriage and the Family, 53, 941-957.
Goldman, N., Westoff, C. F., \& Hammerslough, C. (1984). Demography of the Marriage Market in the United States. Population Index, 50(1), 5-25.
Guttentag, M., \& Secord, P. F. (1983). Too Many Women? The Sex Ratio Question. Beverly Hills: Sage.
Heer, D. M., \& Grossbard-Shechtman, A. (1981). The Impact of the Female Marriage Squeeze and the Contraceptive Revolution on Sex Roles and the Women's Liberation Movement in the United States, 1960 to 1975. Journal of Marriage and the Family, 43(1), 49-65.
Klein, T. (2000). Binationale Partnerwahl - Theoretische und empirische Analysen zur familialen Integration von Ausländern in die Bundesrepublik. In Sachverständigenkommission 6. Familienbericht (Ed.), Familien ausländischer Herkunft in Deutschland: Empirische Beiträge zur Familienentwicklung und Akkulturation. Materialien zum 6. Familienbericht. Band I (pp. 303-346). Opladen: Leske + Budrich.
Klein, T. (2003). Die Geburt von Kindern in paarbezogener Perspektive. Zeitschrift für Soziologie, 32(6), 506-527.
Kröhnert, S., \& Klingholz, R. (2007). Not am Mann. Von Helden der Arbeit zur neuen Unterschicht? Lebenslangen jünger Erwachsener in wirtschaftlichen Abstiegsregionen der neuen Bundesländer. Berlin: Berlin-Insititut für Bevölkerung und Entwicklung.
Stauder, J. (2008): Opportunitäten und Restriktionen des Kennenlernens. Zur sozialen Vorstrukturierung der Kontaktgelegenheiten am Beispiel des Partnermarktes. Kölner Zeitschrift für Soziologie und Sozialpsychologie, 60, 265-285.
Theweleit, K. (1977). Männerphantasien. Frauen, Fluten, Körper, Geschichte. Frankfurt am Main: Roter Stern.
Theweleit, K. (1978). Männerphantasien. Männerkörper - zur Psychoanalyse des Weisen Terrors. Frankfurt am Main: Roter Stern.

