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The gendered lifecycle - Findings from National Transfer Accounts

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Abstract

This paper focuses on gender differences in the individual economic lifecycle and how they translate into resource reallocation between men and women and across ages in the German welfare state. For historical reasons, Germany is a very interesting case to study how different institutional arrangements during the decades of separation shaped the lifecycle of men and women in the East and West.

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1 Introduction

The individual economic lifecycle is a fundamental feature in all economies regardless of their institutional arrangements and degree of development of the countries. Many studies provide vast information about the lifecycle without decomposing the population by different characteristics (Mason et al., 2008; Forsell et al., 2007; Ladusingh and Narayana, 2008). These studies are very valuable but do not consider that individuals are very different. Thus, the mean masks major differences within a society. Here the paper wants to add a more detailed perspective by decomposing the society according to the characteristic gender.

In general, large numbers of heterogeneous individuals are studied in economics. The main focus of this discipline is on the distribution of income and its importance for economic growth (Kuznets, 1955; Persson and Tabellini, 1994). In sociological studies, differences between individuals are studied to a greater extent (Berger, 2004; Hillmert, 2003; Richter and Hurrelmann, 2006). Especially in the literature focusing on the life course perspective, differences between individuals play an important role. For example, the question of how early life conditions affect the later life outcomes of agents is studied mainly in relation to health differences or differences in socioeconomic status (Blackwell et al., 2001; Luo and Waite, 2005; Myrskylä, 2010). Still, little is known about how changes in the age structure affect individuals sharing particular characteristics. The demographic perspective, which can be illuminating in a number of ways, is missing in the majority of studies. This is true at the individual and the societal levels. The studies that take a demographic angle mainly investigate how members of different cohorts are affected by population aging, mainly in terms of net payments to the government (Auerbach et al., 1994) or general public transfer accounts (Bommier et al., 2010). How population aging can alter the living conditions and relative balance of power between subgroups of the population has not yet been fully explored.

The paper wants to address this issue and show how the lifecycle of men and women differs in the German welfare state. This is shaped by the institutionalized settings and offers a unique natural experiment setting in Germany for historic reasons. While the West installed a functioning market economy and the male breadwinner model, the socialist East developed a more gender and income equal society. This is still visible in the individual economic lifecycle that shall be estimated for men and women according to the National Transfer Account methodology (described in the following section). The descriptive results can be illuminating to estimate future pathways of a society against the background of population aging.

Some studies focused on the impact of demographic change on gender systems. A review by Mason (1995) has offered some indications that demographic change could

lead to a less stratified gender system. In addition, the effects of aging on women and their prospects in the labor market has been studied to some extent (Auth, 2004, 2006). Changing employment patterns for women over the coming decades have been predicted (Kistler and Hilpert, 2001; Pack et al., 2000; Allmendinger and Ebner, 2006). Nevertheless a lifecycle approach to study the lifecourse differences among men and women is missing.

Germany has been chosen as the territorial focus of the empirical analysis and the simulation for several reasons. First, with 82 million inhabitants, it is the most populous country and the largest economy in the European Union. Second, Germany, which has been classified as a conservative welfare state , is among the forerunners in the aging process (Grünheid, 2006). Important insights can be gleaned regarding the impact of population aging on the individual's life course. For this project, the gender differences in the aging welfare state will be of particular importance. This directly relates to the third reason for studying the case of Germany: the differences between eastern and western Germany. Due to the unique natural experiment provided by the German setting, and the diverging roles of men and women in the two regions, we can add another dimension of heterogeneity to the picture. The different views of gender roles translate into differing patterns of labor market participation (Rosenfeld et al., 2004), fertility behavior (Konietzka and Kreyenfeld, 2002), demand for childcare (Engstler and Menning, 2003; Hank and Kreyenfeld, 2000), and family structures; which may, for example, affect the availability of family members to provide care for the elderly.

2   Methods and Data

The method applied in the empirical analysis is based on the National Transfer Accounts (NTA) methodology. The NTA is a framework for quantifying public and private interage reallocations in a cross-sectional one-year flow account. The theoretical roots are given by Samuelson (1958), Diamond (1965), Willis (1988), Lee (1994) and Bommier and Lee (2003). The economic lifecycle is fundamental feature of all economies regardless of their predominant redistributing institutions. Due to the economic dependency during childhood and old age large economic flows across age groups are the result, to finance everybody's needs (Mason, 2008). The economic flows are measured across age groups in a systematic and comprehensive way, and identified by the economic mechanisms and mediating institutions (ibid.). The flow account identity is given by

$$\underbrace{Y^l(a) + Y^a(a) + \tau^+(a)}_{Inflows} = \underbrace{C(a) + S(a) + \tau^-(a)}_{Outflows} \tag{1}$$

where $Y^l(a)$ is the labor income, $Y^a(a)$ the asset income and $\tau^+(a)$ are the transfers received at each corresponding age a. $C(a)$, $S(a)$ and $\tau^-(a)$ are consumption, savings and

transfers paid at each age. The inflows need to equal the outflows. Rearranging 1 leads to

$$\underbrace{C(a) - Y^l(a)}_{\text{Lifecycle Deficit}} = \underbrace{\underbrace{Y^a(a) - S(a)}_{\text{Asset-based Reallocations}} + \underbrace{\tau^+(a) - \tau^-(a)}_{\text{Net Transfers}}}_{\text{Age Reallocations}}. \qquad (2)$$

When we speak of the economic lifecycle, we refer to the cross-sectional age patterns (Lee et al., 2006). Interage flows can occur in form of transfers or as asset-based reallocations. Transfers are defined as flows that involve no explicit quid pro quo (Mason, 2008). Asset-based reallocations include credit, buying and selling assets, lifecycle saving, and intentional or accidental bequests. The accounts are accomplished by the different sectors. The private sector is dominated by the intra- and interhousehold transfers, but it also includes non-profit institutions serving households. The public sector includes cash and in-kind transfers, for example education, health or pensions. Emphasis is on age-related programs. The rest of the world is completing the sectors and includes remittances and international capital flows (Mason, 2008).

In the proposed analysis, the estimates will be decomposed by gender and income group to show how inequality in the population results in resource reallocation to weaker individuals. Thus, here I extend the analysis used to compute National Transfer Accounts to show not only reallocation across different age groups but also between individuals having different characteristics but the same age. This is a valuable extention in an aging welfare state as it shows the inequality in a society regarding age and other important characteristics.

Three pieces of data are needed to construct NTAs: a micro survey providing the age utilization profiles, population estimates, and macro controls to adjust the micro profiles to fit the UN System of National Accounts. The national accounts published by the FSO follow the Europäischen System Volkswirtschaftlicher Gesamtrechnungen (ESVG) of 1995, which is based on the System of National Accounts of the United Nations (United Nations, 2002) of 1993. GDP is measured by the production and expenditure approach. (For information on the methodology, see Statistisches Bundesamt (2007)). The population estimates are available in one-year age groups provided by the German Federal Statistical Office, and are based on an extrapolation of last census data. The last censuses carried out in the former Federal Republic of Germany and the former German Democratic Republic were in 1987 and 1981, respectively. Additionally, publications of the Ministry of Health and Education are used in cases in which the national accounts and FSO statistics do not provide sufficient information.

The microlevel survey data are obtained from the EVS of 2003. The EVS is conducted every five years by the FSO, and is based on a representative quota sample of Germany's private households. The EVS includes a detailed account of income by source,

consumption by type, saving flows, and asset stocks by portfolio category. The EVS of 2003 includes around 50,000 households made up of some 127,000 individuals. The waves from 1993 onward include not only the former Federal Republic, but also a sample from the former German Democratic Republic. The survey is representative of households with a monthly net income of less than 18,000 euros. The EVS does not include very wealthy households (70,000 of 38.1 million households), persons with no permanent residence, or the institutionalized population. (For a methodological overview, see Statistisches Bundesamt (2005)). For three months participating households keep a detailed book of household accounts that covers every kind of potential income and expenditure.

3   Expected Results

The research project will provide descriptive results on how subgroups in a society are interwoven in resource reallocation flows and how their individual economic lifecycle varies. In this analysis, main characteristics that can differ between individuals include gender. In addition, regional variations between the East and the West, especially regarding gender differences, are considered. The institutional arrangements including the preference for the male breadwinner model (at least in the West) most likely result in reallocation from men to women across all age groups. This widely differs across the two regions of interest, East and West Germany, due to historical reasons. Although the findings are not likely to deviate from the just mentioned ideas, the magnitudes and likely future pathways are yet unknown. Thus, population aging can affect the balance of power in between subgroups of the population, to which the proposed research can find hints. Population aging can strengthen the role of women in the labor market, and can be an important factor for a more gender-equal society. Women could, for example, use the shortage of labor supply to demand a closing of the wage gap.

In a next step, the research will study the role of social reforms, and evaluate which reforms are suitable for altering the expected inequalities. Especially in an aging welfare state like Germany, policy makers have powerful tools for changing the living conditions of subgroups in a population. The results will be valuable for the discussion about the future of the aging society, and about how the balance of power changes within subgroups. The findings can therefore serve as a decision support for policies.

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