

Decomposing Youth Poverty in Sixteen Countries

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Introduction

The economic wellbeing of young adults has deteriorated over the past several decades. Back in Rowntree's era (1901), because they were income earners, young people used to fare better than children and older adults. With the prolonged transition from childhood to adulthood, resulting from the extension of education and delayed entry into the labor force, young people, aged 16-24, are found to be more vulnerable to poverty risk than prime-age adults or even retirees (Aassve et al. 2006). The poverty risk for young people, however, varies across countries.

Overall, elderly, and child poverty tends to be negatively associated with social spending (Cantillon and his associates 2002; Bradbury and Jantti 2001). However, the negative connection between social spending and overall poverty risk falls short of explaining the situation with youth poverty. Based on some descriptive analyses provided by previous studies (Iacovou 2009), Scandinavian young people have comparatively higher poverty rates even though other age groups have higher financial security than their counterparts in other countries. On the other hand, youth poverty, in Southern European states, is relatively low compared to overall poverty levels.

As previous studies show, young adult poverty is largely shaped by the labor market which they join, the living arrangements that exacerbate or protect against economic hardship, and state social welfare provisions that offset low earnings (Aassve et al. 2006, 2007, Iacovou et al. 2002). Youth poverty is particularly high in societies with less developed economies and less comprehensive social provisions, because young adults are more likely to be unemployed or to have part-time, temporary, or low-paid jobs. They are also less likely to benefit from social welfare provisions due to a short employment history. Because the income of young adults is usually lower than that of prime-age adults, young people are likely to fall below the poverty line after leaving their parental homes to live alone or with friends and partners. The differential developments of household composition, the labor market, and social welfare systems lead to the divergent poverty patterns of young adults across countries. Few previous studies, however, examine systematically how the three structural factors affect the cross-national poverty patterns. Moreover, most of the previous studies only focus on European and North American countries (Mendola et al. 2008, Smeeding and Phillips 2002).

To provide a more comprehensive and systemic comparative study of youth poverty, this study employs the decomposition technique to examine the effects of household composition, the market, and social welfare on the country-to-country differences in youth poverty and to expand the scope by including East Asian and Latin American countries in addition to North American and European countries. Using 2003-2006 data from the Luxembourg Income Study (LIS), this paper analyzes how youth poverty varies in eighteen countries. I pose two questions: 1) How does the poverty level of young adults vary across countries and welfare regimes? 2)

What are the relative contributions of the living arrangements, market inequality, and social welfare to the differences in youth poverty levels across countries?

Data and Methods

The data used here come from the Luxembourg Income Study (LIS), wave 6 (2003-2006). Sixteen countries with both gross and net income data are included for comparison. They are Australia, Austria, Brazil, Canada, Czech Republic, Denmark, Finland, Germany, Ireland, the Netherlands, Norway, South Korea, Sweden, Taiwan, the U.K., and the U.S. Households lacking information on major income items, such as net disposable income, market income, and social transfers, are deleted from analysis. Following the LIS suggested protocol, cases are weighted to reflect the total population of each country. Since this study examines the poverty of young adults, only individuals aged between 18 and 32 are selected (Smeeding and Phillips 2002). The unweighted sample size of young adults ranges from 2,162 for Austria to 105,593 for Brazil.

Measures of Poverty, Living Arrangements, Market Inequality, and Welfare Efficiency

Following the convention of international studies including the LIS and OECD, the present study uses a relative poverty approach to generate a specific poverty standard for each country. The poverty line is defined as income below 50% of the net median equivalized disposable household income. The net disposable income is the total household income after-taxes and after-transfers. An equivalent scale of power 0.5, or squared root of the number of household members, is used to equate incomes for households of different sizes, reflecting economies of scale and consumption.

The three structural predictors of poverty are market inequality, welfare efficiency, and the living arrangements. Market inequality is measured by the relative poverty rates based on market income across household types. Welfare efficiency is measured by the ratio of poverty rates based on net disposable income (after taxes and after transfers) to the poverty rates based on only market income (before taxes and before transfers). That is, welfare efficiency is evaluated in terms of how much market inequality is reduced through social transfers (Heuveline and Weinshenker 2008). Individuals aged between 18 and 32 years old are defined as young adults (Smeeding and Phillips 2002). The living arrangements are divided into nine types: single females (living alone), single females with minor children, single males, single males with children, coupled young adults without children, coupled young adults with children, young adults residing with single parent, young adults residing with coupled parents, and others.

Analytical Methods

Decomposition is utilized to examine the effects of the living arrangements, market inequality and social welfare. Sweden, with relatively comprehensive social provisions, is employed as a reference country here. I use the equations provided by Das Gupta (1990) and Heuveline and Weinshenker (2008). The re-written equation is a function of three vector factors:

$$P = \sum H_i \times M_i \times (P_i/M_i)$$

where M_i is the market income (before-tax and before-transfers income) poverty rate for young adults in household type i in Sweden and P_i/M_i is the ratio of the net disposable income poverty

rate to the market poverty rate for young adults in household type i in Sweden (that is, welfare efficiency). I use W_i to represent P_i/M_i . Therefore, the equation is re-written:

$$P = \Sigma (H_i \times M_i \times W_i)$$

In the current study, seventeen other countries are included in addition to Sweden. For these countries, the same terms are presented in lower case, producing the following equation:

$$p = \Sigma (h_i \times m_i \times w_i)$$

I perform decomposition analyses to determine the relative contributions of living arrangements, welfare efficiency, and market inequality to the difference in poverty rates between Sweden and each of the other selected countries. The decomposition equations are:

$$p-P = \alpha\text{-effect} + \beta\text{-effect} + \gamma\text{-effect}$$

$$\alpha\text{-effect} = Q(hi) - Q(Hi)$$

$$\beta\text{-effect} = Q(mi) - Q(Mi)$$

$$\gamma\text{-effect} = Q(wi) - Q(Wi)$$

where $p-P$ is the difference in poverty rates between Sweden and any of other countries selected in this study, $\alpha\text{-effect}$ is the effect of the distribution of living arrangements, $\beta\text{-effect}$ is the effect of market inequality, and $\gamma\text{-effect}$ is the effect of welfare efficiency. $Q(Hi)$ is the $\beta\gamma$ -standardized rate for household composition in Sweden for household type i and $Q(hi)$ is the $\beta\gamma$ -standardized rate in any other country included in this study. Likewise, $Q(Mi)$ and $Q(mi)$ are the $\alpha\gamma$ -standardized rates for market inequality and $Q(Wi)$ and $Q(wi)$ are the $\alpha\beta$ -standardized rates for welfare efficiency, for Sweden and any other selected country, respectively. The following equations show the calculation of these standardized rates for household composition:

$$Q(H_i) = (\Sigma H_i \times m_i \times w_i + \Sigma H_i \times M_i \times W_i)/3 + (\Sigma H_i \times m_i \times W_i + \Sigma H_i \times M_i \times w_i)/6$$

$$Q(M_i) = (\Sigma h_i \times M_i \times w_i + \Sigma H_i \times M_i \times W_i)/3 + (\Sigma h_i \times M_i \times W_i + \Sigma H_i \times M_i \times w_i)/6$$

$$Q(W_i) = (\Sigma h_i \times m_i \times W_i + \Sigma H_i \times M_i \times W_i)/3 + (\Sigma h_i \times M_i \times W_i + \Sigma H_i \times m_i \times W_i)/6$$

$$Q(h_i) = (\Sigma h_i \times M_i \times W_i + \Sigma h_i \times m_i \times w_i)/3 + (\Sigma h_i \times M_i \times w_i + \Sigma h_i \times m_i \times W_i)/6$$

$$Q(m_i) = (\Sigma H_i \times m_i \times W_i + \Sigma h_i \times m_i \times w_i)/3 + (\Sigma H_i \times m_i \times w_i + \Sigma h_i \times m_i \times W_i)/6$$

$$Q(w_i) = (\Sigma H_i \times M_i \times w_i + \Sigma h_i \times m_i \times w_i)/3 + (\Sigma H_i \times m_i \times w_i + \Sigma h_i \times M_i \times w_i)/6$$

Findings and Discussion

How do the living arrangements of young adults vary across countries? Consistent with previous studies, our findings show a pronounced divergence between Western and Eastern countries. Among Nordic young adults aged 18 to 32, more than 32% of them live alone or with only minor children. Forty-three percent of them reside with their partners. Contrarily, only 11% of East Asian young adults lead single households either with or without children. More than 56% of them do not leave their parental homes. It is also common for Czech, Irish, and Latin American young adults to stay with their parents or form their households with their partners. Households containing minors headed by single young adults are the least common in all countries, ranging from 0 to 5%.

The economic well-being of young adults also differs across countries and across household types. The poverty level ranges from 4% in Taiwan to 19% in Brazil. East Asian young adults, in general, have a relatively low poverty risk, which is much lower than the elderly

poverty risk in these countries. More than 13% of Nordic young adults are below the poverty line, showing the more disadvantaged economic well-being of young adults than children and older adults in Scandinavia. The incidence of youth poverty in liberal and conservative countries ranges from 7% in Australia to 18% in the US. Brazil has the highest youth poverty level among the 16 countries. In terms of the poverty variations across household types, not surprisingly, single mothers with minor children are the most likely to be poor. The poverty level of single mothers reaches 50% in liberal and conservative countries. On the other hand, young adults residing with their parents are the least vulnerable to poverty risk across countries.

How do the living arrangements, the market, and welfare efficiency lead to the variations in youth poverty across countries? Decomposition with Sweden as the reference country reveals the relative contributions of the three factors. Compared to Sweden, most of the countries have more favorable living arrangements. Leaving the parental home is one leading factor to predict youth poverty. If the living arrangements of Swedish young adults were replaced with those of other countries, its poverty rate can be reduced by one to three percentage points. Market inequality is another factor that deteriorates the economic well-being of young adults. The less egalitarian distribution of the market income in Sweden contributes to a higher poverty risk of young adults than in other countries. Adopting the market income distribution of East Asian countries would lead to a decrease of six percentage points for Sweden. Finally, with the development of welfare states, social provisions emerge to be the most important and systematic financial aids to disadvantaged groups such as the elderly, children, and young adults. Unsurprisingly, Sweden, along with other Nordic countries, provides the most comprehensive coverage to young adults. The relatively limited social provisions in other countries would elevate the youth poverty in Sweden by one to 13 percentage points. The social provisions of Latin American and East Asian countries are the least efficient in reducing youth poverty.

Poverty is embedded in the family and the broader society. Variations in family composition, the labor market, and social welfare across countries contribute to cross-national differences in poverty risks. Based on the decomposition analyses, this study examines the relative contributions of the living arrangements, market inequality, and social welfare to the divergent youth poverty patterns across countries. In sum, this research makes unique contributions to the study of youth poverty cross-nationally. First, it provides estimates of the part that labor markets, families, and social provisions play in buffering poverty of young adults in different countries. Second, by incorporating newly available data on an East Asian and Latin American countries, it maximizes variation in poverty patterns, welfare systems, market structures, and household composition and offers a more comprehensive comparative perspective on poverty risks across welfare regimes. Finally, this study reflects back upon the typology of welfare regimes and its relationship with poverty. Regime typologies are a useful heuristic tool to examine and classify patterns, but the results of this paper point to the need for comprehensive studies of the variations within and between state welfare regimes.