

# STATISTICAL ANALYSIS OF POVERTY AMONG THE ELDERLY IN A CROSS-NATIONAL CONTEXT

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**Abstract:** The view that poverty does not rise with age has become a world-wide unspoken assumption in poverty debates and policy. Older people are assumed to be comparatively well-off, because they had the opportunity to accumulate social, physical and financial assets during their lifetime. It seems to bring support for this view that in developed countries poverty is significantly lower among old people, due to a widespread rise in transfers to older groups from public and private pensions and the establishment of comprehensive social insurance programs.

In this paper I will compare poverty of the elderly in different countries and analyze how public pension programs, when available, may impact it. I will argue that understanding poverty in later life, and developing appropriate policy, requires the acknowledgment of the contribution of older people to their households and communities.

## 1. Introduction

The economic well-being of the elderly as a group in developed countries is now either equal or greater than that of non-elderly, since a large and sustained decrease in poverty took place among people over age 65 during the last 20 years. The recent expansion of pension programs in the developing countries also, seems to provide support for this view.

Nevertheless, even in developed countries, substantial pockets of poverty and economic insecurity still exist on a large scale, especially among the oldest old, among older single women and ethnic minorities. Large numbers of the elderly whose incomes are above the poverty index have incomes that are clustered not far above the poverty level – incomes that make them extremely vulnerable, for example, to the rising costs of healthcare. And many people in old age still experience a large drop in living standards when they retire, as revealed by comparing the pre- and post-retirement income.

Economic development produces changes in a country's economic environment that typically result in increases in real income per capita, declines in population growth and consequent aging of the population, as well as the development of national retirement programs. Various studies have demonstrated that there is a negative relationship between income and labor force participation at the old age (Table 1). Regions composed of countries with low average income tend to have higher rates of labor force participation among older citizens. There are important regional, as well as cultural, ethnic and religious differences that influence the relationship between income and labor force participation. Africa has the highest average workforce participation rate for women and Asia the third highest. When comparing sub-regions, other exceptions occur to the hypothesis of an inverse relationship between income and elderly labor force participation rates. Southern Asia and Eastern/Central Europe have similar average incomes, but Eastern/Central Europe has participation rates that are about one third of those in South Asia. This anomaly may reflect the remains of social welfare systems from the days of central planning. Coverage by pension schemes is broad in most countries (including US)

and eligibility is determined by citizenship, residency, or income status. In contribution-related schemes (Chile, Mexico, etc.) eligibility is usually restricted to individuals who have made contributions for a minimum number of years.

**Table 1**

**Labor force participation rates for age 65 + and per capita income by region**

Region	Income (USD)	Men (%)	Women (%)
Africa	705	64.6	33.8
East	419	71.8	44.0
Middle	949	67.6	38.5
North	1,342	29.2	8.6
South	1,524	49.7	17.3
West	415	70.8	34.3
Asia	4,994	42.9	14.1
East	10,885	32.9	12.1
South central	614	57.4	20.4
Southeast	2,548	45.2	21.7
West	7,196	35.9	5.8
Europe	14,004	11.0	4.7
Eastern/Central	2,527	14.9	7.9
North	20,369	14.9	5.9
South	9,162	10.1	3.4
West	22,576	3.8	1.3
Latin America	2,319	44.3	10.9
Caribbean	4,326	40.8	14.0
Central America	1,405	52.6	10.6
South America	1,758	40.7	9.4
North America	21,060	13.5	6.2
Oceania	6,578	36.7	21.2

*Source: [Robert, 2004], "The Economics of an Aging Society"*

The synchronization of different systems for measuring poverty is important, as the poverty threshold can vary with the method. Some countries, like US, employ an "absolute" standard, which involves the resources to either meet basic needs or to reach the safety-net income specified by the social-assistance system. The US Census Bureau bases its absolute standard on the food consumption in 1961, equivalence scales to account for families of several members and CPI to increase yearly poverty thresholds. With a relative standard, poverty is defined by comparison to the living standards of society as a whole, in relationship to some proportion (i.e. 50 %) of the household-size-adjusted income of the median person.

## 2. The plight of old, single women

Ageing is an increasingly female experience. Women outlive men in nearly all countries, rich and poor. Sub-Saharan Africa's 15 million older women will be 33 million by 2025. The 21.5 million widows in 1990 in China were greater than the combined total for Europe. Older women are sometimes victims of triple neglect and discrimination on account of gender, widowhood and age and, even in developed societies, like Japan, they can be at high risk for poverty.

The poverty of older single women in Japan is linked to the post-war development of the Japanese economy. The gender roles were reinforced in the family, as the majority of women were unpaid domestic workers and full employment was achieved only for male workers. As a result of the Japanese society being 'male-dominated', the employment system being 'large-firm-oriented', and with social security systems based on 'the family as a unit', women faced many difficulties in establishing the means for independent living in old age. This was particularly apparent for those who were outside mainstream family structures. Single old women today have relatively low pensions, fewer opportunities for employment, and difficulty in renting rooms. The poverty rate estimates are much higher than for US (11.8%) [Frick, 2003].

During the last 50 years, the life expectancy in Japan became the highest in the world: 83 years for women and 76 years for men. In line with these trends, Japan has also experienced significant changes in its age structure, and is now at the forefront of an ageing world (Table 2). In addition to demographic changes, Japan's postwar economic growth brought rapid industrialization and urbanization, and associated changes in social values and lifestyles. One significant issue has been the transformation of living arrangements. Current housing circumstances, family patterns and relations of older women are different, as compared with past patterns in the context of post-war social change in Japan [Ishihara, 2000]. These issues are linked to the development of the post-war welfare system and the welfare circumstances of the pre-war generation of women, particularly those who are currently disadvantaged.

**Table 2**

**Percentage of older people aged 65 and over in the total population**

Japan	7.1	11.8	21.3	26.7
France	12.9	14.6	17.2	22.6
Sweden	13.7	18.0	19.6	23.7
UK	12.9	15.7	17.1	21.5
USA	9.8	12.5	13.3	18.7

*Source: US Bureau of Census, International Population Reports*

The vast majority of people in Japan used to spend their later life living with their children, and approximately 60 per cent of older people still live “inter-generational” (older parents living with their adult children). Proportions of the Japanese elderly living with their children are much higher than in southern Europe (39% in Italy) and the northern-European countries (4% in Denmark). The socio-economic changes, however, have broken down the traditional family structure, and the number of elderly-only households (consisting of only 65+ years old people (couples or one-person) has been rapidly increasing. Since 1975, households of single-elderly persons and elderly couples have increased 2.7 times and 3.2 times, respectively (Japanese Ministry of Health and Welfare, 1991). This indicates that the traditional arrangement of extended family living is no longer the only housing option for Japanese people in later life. Japan's older people have preference for more independent living, albeit still constrained by underdeveloped social services.

For comparison, in the US, as previous research has established, the elderly prefer to live apart from their children (Robert, 2004). In 1989 only 13 percent of the aged were living with their children or with another non-spouse relative. For older people, moving to a household with relatives remains an act of financial or social necessity

rather than preference. In an effort to enable an elderly person who is otherwise functioning well to remain in his or her house or apartment, relatives may provide economic assistance to supplement public transfers, even if relatively little help is usually given in the form of money on a regular basis.

A significant pocket of poverty in the otherwise well-off Japanese society comprises the “oldest of the old single women”, who were of marriageable age (18 to 28 years old) at the end of WW2. At that time, their parents or relatives followed traditional procedures to arrange their marriage. Typically, these women had no say in the selection of their partner, and simply obeyed their parents' decision. Married couples in this cohort produced the baby-boomers, and raised them in a rapidly democratizing society [Ishihara, 2000]. The post-war generation could naturally adapt to the modern family philosophy. The same process, however, could be viewed and experienced very differently by the pre-war generation, which was brought up with traditional values under severe economic conditions. Sometimes, those women called themselves the “disadvantaged sandwich generation, having experienced a 180 degree change in family system, values, and relations after the war”. The life stories of these older women provide, through their individual perspective, ambivalent feelings and experiences, insight into the transformation of the family and society.

In Japan, either through choice or constraint, traditional extended family living has shifted towards more individualistic housing alternatives for older people in urban areas. The problems of maintaining privacy, freedom and independence in traditional shared living arrangements have become accentuated in modern society. Those problems could be reduced through housing design which allows for the creation of two separate households, with separate amenities, under the same roof. With new ways of living added to traditional ones, this presents the possibility of co-residency, thus enhancing the ability of older people to maintain their independence at home and in the community. For many people, however, it is an unrealistic dream to have such housing built in later life. Living only a short distance from their adult children, especially from daughters is a more realistic aspiration. Living independently for as long as possible without becoming a burden to their adult children is the collective wish among many of the older women.

Current debates in Japan suggest that shifting social security access towards a more individual basis would reduce inequalities between genders and among people in various family patterns (e.g. single women, single-parent households). Gender equality in social security systems has to be first achieved in employment, since women's low social security benefits reflect their low salary and frequent unpaid work [Ishihara, 2000]. Both revised labor and social policies are needed to support women's economic independence.

Internationally, the single old women constitute an important pocket of poverty. Among developed countries Netherlands and Sweden appear to have the best record in preventing poverty among older single women [Siegenthaler, 1996]. France's position is second to that of the front runners (Table 3). France protects older single women well, but in the 75-or-older age bracket, the level of poverty tends to be a little more elevated. Germany follows at a greater distance, and has often been singled out as the rich continental welfare state with the most serious poverty problem among older single women. The United States ranks last among the countries selected in this table. Considerable discrepancies persist in the well-being of older single women in different countries. Their economic security seems to be guaranteed only in the Netherlands, Sweden, and France (Table 3).

Table 3

**Poverty rates among the aged in some developed countries  
(Proportions below respective income thresholds)**

	France	Germany	Netherlands	Sweden	Switzerland	United States
One-person households, aged 65+, 50% of mean disposable income	19.3	N/A	1.6	N/A	N/A	N/A
Single women, aged 60+, 50% of median disposable income	N/A	10.2	5.9	0.0	11.3	30.5
Single person of retirement age, 50% of median gross income	2.0	30.7	8.3	.0	26.7	18.5
Single women, aged 65+, 40% of median total money income	.8	2.4	.0	1.7	N/A	17.6
Female one person households, aged 75+, 50% of mean disposable income	1.2	15.9	.0	N/A	N/A	N/A
Single women, aged 75+, 50% of mean income	6.0	14.7	.9	6.4	N/A	37.8

*Source: [Siegenthaler, 1996]*

One unambiguous finding stands out: the Dutch benefits are the most generous. Whether the standard is a social minimum, a replacement rate (comparing old-age benefits to former earnings levels), or minimum benefits, those standards are met best in the Netherlands. The relative ranking for France, Germany, and Switzerland differs considerably across the various measures. In Germany, a minimum safeguard is missing, but the risk of poverty is obscured by a high average benefit, augmented by quite generous government pensions from which relatively many women benefit.

The question is what characteristics of old-age security systems are most suitable for protecting older single women from poverty. A minimum available to all, set above a customary relative poverty level will be the most effective in that regard. Among the above countries, only the Netherlands has committed itself to that generous but relatively costly solution.

Another effective arrangement would be a compulsory, earnings-related second pillar, either devised as such (as in the case of Sweden) or consolidated out of various employer pension plans (France, Switzerland as of 1985). Risks remain under this arrangement, as women sometimes have less complete work histories. Where such

schemes remain voluntary (Germany, Switzerland before 1985, and the United States), the prevalence of old-age poverty among single women is higher. Interestingly enough, such poverty issues seem to be present in a relative sense even in the generous Netherlands, which also has a voluntary complementary scheme.

Another solution is to provide means-tested supplements that bring up the benefit to some "adequate" level. The French system has merged a heterogeneous array of plans, but also added various case-specific, means-tested supplements, ranging from extra benefits for former working mothers with large families to the minimum home-care subsidies. This approach, in less multi-faceted form, is also part of the Dutch, Swedish, and Swiss systems. The primary risk of such an approach is that take-up by those in need may be incomplete.

One less effective means to cope with poverty among single elderly women is social assistance. In most countries, it is a rather residual factor that tends to be uneven in its levels of support, as well as neglected in terms of adjustment to cost-of-living increases. Take-up of benefits tends to be low. None of the countries above with a relatively high risk of poverty among older women (Germany, Switzerland, and the United States) have made great progress in coping with the problem by relying on social assistance payments.

### **3. Old age poverty in developing countries**

The myth that older populations do not exist in the developing world because of low life expectancy does not stand up. Those who survive diseases of infancy and childhood have a good chance of living to be grandparents. Around 61 percent of the global population over 60 years old lives in developing countries at present; the number will grow to 70 percent by 2025. The number of older people in developing countries will more than double over the next quarter century, reaching 850 million by 2025 – 12 percent of the population. By 2020, countries like Cuba, Argentina, Thailand and Sri Lanka will have higher proportions of over-65s than the USA does today (10.9 percent). Furthermore, changes in household structures arising from such factors as migration, and HIV/AIDS, are undermining the community support for the aged.

In the absence of appropriate policy interventions, old age poverty can become a larger problem for developing countries in the next few decades. Yet, the understanding of old age poverty in developing countries is in many respects deficient. Consistent and comprehensive indicators tracking old age poverty are lacking. Comparisons across developing countries pose problems, because the elderly contribution to economy is commonly undervalued and they are perceived as a homogeneous, dependent group.

The low priority attached to poverty in later life in developing countries is perhaps best demonstrated by the absence of comprehensive indicators. Household survey data based on income and expenditure patterns show a large cross-country variation in poverty rates. Table 4 summarizes estimates of the incidence of poverty among older groups in developing countries. The first column contains estimates of the proportion of older people who are poor. The incidence of old-age poverty ranges from 7.5% in Taiwan to 64% in Ghana. Poverty rates range from 9.8% in Chile to 69.9% in Honduras. The third group of estimates is for transition economies. These show high poverty rates among 65–74 year olds, rising for those aged 75 and over (in brackets). The poverty rates for the younger age group range from 18.3% in Poland to 47.6% in the Kyrgyz Republic. Despite problems with comparability across regions, the estimates indicate that poverty in later life is a significant issue in developing and

transitional countries.

**Table 4**

**Incidence of old age poverty in developing countries (countries grouped by study)**

	Poverty rate (percentage of old who are poor)	Poverty rate of older people vs. the population a whole	Poverty rates of older people vs. children
Ghana	64.1	1.00	0.93
South Africa	32.0	1.00	0.82
Thailand	28.7	0.98	0.79
Taiwan	7.5	1.13	0.75
Pakistan	9.6	0.80	0.68
Ukraine	27.7	1.27	1.16
Argentina	11.7	0.73	
Bolivia	39.4	0.79	
Brazil	13.7	0.47	
Chile	9.8	0.49	
Colombia	36.9	0.93	
Costa Rica	18.2	0.98	
Dominican Republic	36.9	1.14	
Ecuador	47.1	0.87	
El Salvador	41.9	1.01	
Honduras	69.9	1.00	
Mexico	36.4	0.83	
Nicaragua	66.0		
Panama	14.9	0.70	
Paraguay	38.7	0.91	
Venezuela	39.5	0.88	
Bulgaria	35.0(47.5)	1.34	1.24
Hungary	23.6(37.7)	0.62	0.90
Poland	18.3(22.1)	0.79	0.57
Estonia	37.0(47.9)	1.12	1.15
Kyrgyz Republic	47.6(41.4)	1.12	1.03
Russia	45.0(45.9)	1.13	1.04
Kazakhstan	16.0	0.80	0.64
Jamaica	17.4	0.87	
Peru	14.6	0.73	

*Source: [Barrientos, 2003]*

It is helpful to compare poverty rates among older people to the entire population, since poverty for the old is bound to be high in countries where aggregate poverty is high. The second column of Table 4 shows the ratio of poverty rates for older groups and for the population as a whole. Values greater than 1 indicate that older people are overrepresented among the poor, while values less than one indicate underrepresentation. In only three countries, Brazil, Chile and marginally Hungary, this ratio is below two-thirds, indicating that older people are significantly less poor than the

population as a whole. In Chile and Brazil this is a result of generous pension and safety net coverage. In seven countries, older people are overrepresented among the poor. In the rest, poverty rates for older people are close to poverty rates for the population as a whole. The degree of over- and under-representation is, in most cases, small and the figures show that poverty in later life broadly reflects aggregate poverty. Studies providing estimates of poverty rates by age groups generally conclude that poverty is higher among the young and the old, compared to the population of working age, and highest among the very young and the very old. The relationship between age and poverty is broadly "U" shaped. For the transition economies reported in the table, with a single exception, poverty rates are higher among those aged 75 and over, than among 65–74 year olds: in later life, poverty rates do rise with age.

The issue of whether poverty incidence is higher among the young or the old has received a lot of attention, especially in contexts where anti-poverty interventions are targeted on the largest groups of poor people. The last column in Table 1 provides estimates of poverty rates among the old relative to poverty rates among children. Values greater than 1 represent higher relative poverty among the old. There is a higher incidence of poverty among children than among older people for all the developing countries in Table 4 but the evidence is mixed for the transitional countries.

The evidence on old age poverty emerging from household survey data has important limitations. It focuses on income or expenditure measures of poverty and relevant data for low-income countries are at times absent. The evidence emerging from qualitative and participatory studies can help overcome these limitations, and provide a broader picture of the experience of later life. Qualitative research in a range of countries shows that old age is associated with a higher incidence of vulnerability, social exclusion and poverty [Barrientos, 2003]. The rates of labor force participation are higher than in developed countries, but the elderly are found predominantly in informal and precarious employment. The old-age poverty is significantly persistent, since the opportunities available to the old to escape poverty decline with age. Studies in Africa, the Caribbean and Asia Pacific regions indicate considerable uniformity of older people's perceptions and experiences of poverty. Poverty is associated with the inability to fulfill social and economic roles and responsibilities, and there is a close relationship between older people's ability to contribute and their ability to access support.

In many developing countries demographic and economic changes increase strains on family support structures. Falling fertility rates, combined with increasing longevity will cause that additional old, dependent parents be in the care of fewer children, and the impact will be greatest on those with the least material resources. Rapid urbanization and migration for work in many countries have significantly altered family and community relations, especially where changing living conditions and lack of income stretch family capacities to provide for the more vulnerable members

Labor force participation by older workers is relatively high in developing countries, but their employment opportunities and remuneration decline with age [Barrientos, 2003]. Studies of the income sources of older households in Latin America find that hours of work for workers aged 65 and over are on average very similar to the hours worked by those aged 50–59, but that older workers receive significantly lower pay. Old age poverty is multidimensional, as older people also have less access to paid work, basic services, and social networks.

In African countries, such as Mozambique, Tanzania or South Africa, the family support and traditional community groups (e.g. burial groups) continue to prevail, but are



weakening. A large proportion of the aged care for sick or dependent adults and they also have significant roles as care-givers for people with AIDS. The ability to contribute is essential to access household support - 45 percent of those over 65 years old in rural areas work to earn income, and 19 percent work over 7 hours a day). Another recurring theme in these countries is the widespread abuse of older people and of older women in particular, with instances that sometimes reach ridiculous dimensions: in Mozambique, witchcraft accusations to old, single women are a major problem.

As detailed in qualitative and participatory studies carried by "HelpAge International", within the "World Development Group", in Bangladesh, Lao and Vietnam, old people are widely excluded from basic services provided by government and non-governmental organizations. Older people work well into old age and their income is essential in poor families and in cases their only source of support. In the rural areas in these countries the majority of older people cannot meet basic needs. Food, water and housing quality and availability are the main problem and the access to healthcare and information is very limited.

Poverty can have a strong negative intergenerational impact, reinforcing the transmission of poverty from one generation to the next [Barrientos, 2002]. In Cambodia, it was found that older people who had not been able to increase their land ownership were transferring uneconomic plots to their children, who were in turn unable to support both their own children and their aging parents. One of the subjects in the study described the reality of intergenerational poverty as being "poor from the parents down to the grandchildren".

In the context of developing countries, it is a widely shared assumption that households provide the bulk of social support for older people, which implies that old people are poor because they belong to poor households, not because of their age. The conventional methodology for inferring individual well-being from household income or consumption underestimates the incidence of poverty among older groups. Standard measures of per capita household income do not account for inequality in the distribution of income and consumption in the household. Everyday experience and various studies on gender differentials in the division of income have shown that, especially in developing countries, the intra-household distribution of resources follows, broadly, the individuals' contributions to household income. Inequality in the intra-household distribution of income raises aggregate inequality and lowers the relative incomes of older people.

Another commonly held view on the relationship between old age and poverty in developing countries is that poverty reduction programs have lower social payoffs than programs aimed at the young [Barrientos, 2003]. The recent economic expansion and structural changes in the developing world will not, by itself, necessarily reduce older people's poverty risk. Yet, the eradication of old age poverty in developing countries has not been a priority for academic research or policy, and anti-poverty programs seldom target older groups. The low-priority attached to old age poverty is long-standing in development. Treas and Logue concluded it was based on the judgment that there were other, more likely contributors to development and other, more pressing needs, like, for instance, children and their mothers [Treas, 1986].

This view draws from the human capital theory, which approaches expenditure on education and healthcare as an investment in the productive capacity of the individual, which will yield returns over time. The young, it is thought, have a better prospect for returns than the old. In the case of insufficient resources and limited political support for social assistance programs, the above considerations are strongly sustained. As a result, in

the developing world, with a few exceptions, old age social security programs are scarce.

The importance of support networks comes out clearly from various studies. These found that older people without adult children and those who are widowed are more vulnerable to poverty. Older women are more likely than men to be widowed due to their greater longevity and to the practice of men to marry younger women. Widowed and childless women are especially vulnerable in societies where they lack rights of ownership and where property is inherited through the male line. In poorer communities, especially in rural ones, the family is the main source of support for poor old people, but in many cases its capacity to support older members is severely limited.

Older people make a significant contribution to their family and social networks, often at the expense of their own well-being. In Cambodia, the most common cause of absence of adult children in a household used to be the war, but now it is economic migration. In one site, Phnom Kngap, older people were raising grandchildren for absent parents in 20 out of 70 households [Barrientos, 2002]. Many of them reported receiving some money from their children, but only a small minority received enough to cover their needs. The studies also document the role of older people in providing care for HIV/AIDS sufferers, and for their children and their families.

In conclusion, old age poverty is a significant issue in developing countries, as confirmed by household survey data and qualitative and participatory research. Qualitative research in low-income countries and poorer communities indicates that old age poverty extends beyond income and expenditure indicators, and includes access to social networks, basic services, and markets.

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