

Poverty, Household Composition, and Welfare States:

A Multi-level Analysis of 22 Countries

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Poverty in 22 Countries

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Objectives. This cross-national study examines poverty of older adults and their household members and relates the risk of poverty to macro-level state approaches to welfare as well as to micro-level composition of households.

Methods. Data on individuals in households containing older adults for 22 countries come from the Luxembourg Income Survey. Besides relating the risk of poverty to the type of state welfare regime, multi-level robust-cluster analysis considers the characteristics of household head (age, gender, marital status, education) as well as the household's numbers of earners, older adults, and children.

Results. Persons in households with older adults are significantly less likely to be poor in countries with social democratic and conservative welfare regimes than in Taiwan, an exemplar of limited social welfare programs. Controlling for country differences in household composition increases the differences in poverty risks. Living with fewer children, more older adults, and more earners lowers the risk of poverty, as does having a married and better-educated household head.

Discussion. Countries with more generous social welfare provisions have lower risks of poverty despite having household characteristics that are comparatively unfavorable. As Taiwan demonstrates, household composition, particularly a reliance on multi-generational households, compensates for limited state welfare programs.

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In industrialized countries, support for older adults comes from three institutions--the social welfare system, the market economy, and the family (Esping-Anderson, 1990, 1999; O'Rand & Henretta, 1999a). The adequacy of these institutional resources varies from country to country, as evidenced by the substantial differences between industrialized nations in the poverty rates for older adults (Korpi & Palme, 1998; Lefèbvre, 2007). For instance, old age poverty is relatively high in the U.S., Australia, and Great Britain, but comparatively low in Denmark and Sweden. Although these differences are consistent with the more limited income security programs in the former countries and the more generous provisions in the latter ones, a full accounting of cross-national differences in late-life poverty risks extends beyond social welfare adequacy to consider the needs and resources of the households in which older adults reside. This calls for a multi-level approach that incorporates both country-level distinctions in social welfare approaches and micro-level household composition and characteristics. Because individuals who share households usually share incomes and living standards, too, this paper considers the poverty risks for all persons, young and old, who live in households having one or more older adults. To evaluate the factors that are associated with the risk of poverty for older adults and their household members, this paper draws on Luxembourg Income Survey (LIS) data for 22 countries, including less often studied Southern European, post-socialist, and East Asian states.

Older adults are more likely to be poor than younger adults, but social security provisions have lifted the majority of retired older adults above the official poverty line in industrialized countries (Costa, 1998; Preston, 1984). Reversing the mid-1990s pattern of older adults being better off than children in Western countries (Bradbury & Jantti, 2001), poverty for older adults increased into the early 21st Century, and older adults even became more vulnerable to poverty than children in some nations (Förster & d'Ercole, 2005). Elderly poverty, however, shows a modest positive association with child poverty across Western nations so that countries where older adults are at higher poverty risk are also places where children are more likely to be poor (Brady, 2004). In general, poverty risks differ across countries, reflecting the complicated mix of household factors and the structural influences of the family, market, and welfare institutions. The Nordic countries, for example, have comparatively low late-life poverty compared to English-speaking countries (Smeeding, 2005).

The Welfare system

Cross-national differences in poverty stem, in part, from the differences in national welfare systems that determine how well they compensate for disadvantages in the labor market or inadequacy of family supports (O'Rand & Henretta 1999a). The levels of social spending and the age groups favored by benefit programs are consequential (Pampel, 1994). In 1983-1993, Greece, the US, Italy, and Spain were described as the OECD countries with the most elderly-oriented social programs, but they devoted a relatively small share of government budgets to the elderly and even less to the non-elderly (Lynch, 2001). According to the basic ENSR indexes (the elderly/non-elderly

government spending ratio), Nordic countries had age-neutral social policies but devoted a large share of their budgets to both the elderly and the non-elderly. Government social provisions for both young and old are very limited in East Asia, where economic growth has been prioritized over social welfare programs. Older adults are the poorest age group in Taiwan as well as South Korea, Singapore, and Hong Kong (Bradbury & Jantti, 2001; Chen, 1996; Choi, 1996; Hong Kong Council of Social Service, 2004; Lee 1998). The negative connection between poverty and social spending has been widely documented across countries (Brady, 2004, 2005; Cantillon & Bosch, 2002; Kenworthy, 1999; Moller et al., 2003), as has the negative relation between poverty and the comprehensiveness of social welfare policies (Caspers & Mitchell, 1993; Esping-Andersen, 1990, 1999; Ferrera, 1996; Korpi & Palme, 1998).

A widely used nation state typology by Danish sociologist Esping-Andersen (1990, 1999) identifies three types of capitalist welfare regimes that capture several important differences in their approaches to social welfare. In liberal regimes (e.g., US, UK, Canada, Australia), transfers are comparatively modest and limited to the needy because of a preference for market-oriented solutions. The Nordic social democratic regimes provide universal coverage and high levels of social provisions. In conservative regimes (e.g., Germany, France, Belgium, Austria), social programs sustain status differences with different benefits for different occupational groups while welfare and tax policies promote male-breadwinner rather than dual-earner or female-headed families (Bussenmaker & Kersbergen, 1994; Esping-Andersen, 1990, 1999; Forssén & Hakovirta, 2002; Gustafsson, 1994; Leira, 2002; Siaroff, 1994). In general, social democratic regimes have low poverty, liberal regimes have high poverty, and conservative states fall

in the middle.

Mediterranean countries (e.g., Greece, Italy, Portugal, and Spain) share some unique traits marking them as another distinct welfare regime type (Caspers & Mitchell, 1993; Ferrera, 1996). Their welfare systems are characterized by dualistic schemes (differing provisions for regular and irregular sector workers), institutional fragmentation (separate plans for various occupational groups), universalistic health care, a mix of public and private welfare, and particularism and clientelism (welfare serving political purposes). Their dualistic welfare systems provide generous provisions to the core (regular/institutional) labor force but only limited benefits to the irregular market (smaller enterprises, traditional services, agriculture) (Ferrera, 1996). Older adults retiring from the irregular sector are, thus, at higher poverty risk.

Former socialist countries, a fifth type of welfare state, spend around 20% of GDP on their extensive social programs (OECD, 2004). Before 1989, comprehensive welfare provisions guaranteed jobs for men and women, generous pensions, housing, health care, education stipends, child care, and maternity leave. In the transition from socialism, these countries restructured their social programs--raising the age of retirement, making benefits more earnings-related, and means-testing family allowances (Förster & Tóth, 2000). With larger benefit inequality between genders and across social classes (Makkai, 1994; Steinhilber, 2002), the new programs can lead to greater poverty.

Esping-Andersen (1999) classifies Taiwan, Japan, and probably South Korea as conservative regimes, but others identify distinctive characteristics in East Asian welfare systems: low social spending, an emphasis on the family--not the state--to support individuals, the subordination of welfare to economic goals, and the development of

social policies in order to build political support (Holiday & Wilding, 2003; Tang, 2000; Walker & Wang, 2005; White & Goodman, 1998). Indicative of limited social provisions, the total public social spending in Taiwan amounted to 8% of GNP in 1995; by contrast, the Western OECD countries spent 15% to 30% of their GDP on social spending (OECD, 2004, Yei & Lai, 1998). Traditionally, the Taiwanese welfare budget targeted soldiers, veterans, and government employees (Aspalter, 2002; Tang, 2000). As democratization accelerated after 1987, new welfare programs were introduced, including the National Health Insurance Scheme (NHI), unemployment compensation under the Labor Insurance program (LI), and allowances for aged farmers and for middle- and low-income older adults. By 2000, over 76% of Taiwanese older adults were covered by one of these programs (Sun, 2002), but social provisions are limited. The LI replacement rate is only 15% of average earnings (Sun, 2002).

Household composition

Although state social welfare systems offer protection against inadequate earned income, individuals often count on co-residence to reduce their poverty risk, because income, housing, and other costs can be shared (Alcock, 1996). In Western countries where social benefits are often pegged to family status (Meyer, Street & Quadagno, 1994), households headed by a single elderly adult, particularly a woman, are at higher poverty risk than households headed by an older couple; the households of single mothers are at greater risk than those with two parents (Casey & Yamada, 2002; McLahanan & Casper, 1995; Rainwater & Smeeding, 2003; Ritakallio, 2002; Stark et al., 2005). In Australia, Canada, Finland, Germany, Poland, Taiwan, and the U.S., older adults who live alone

also have higher poverty rates than those who live with others besides a spouse (Saunders & Smeeding, 1999). In addition to the advantages of economies of scale, co-residence works against poverty by diversifying income sources. In multigenerational households, older people benefit from younger adults' earnings while younger people benefit from older adults' retirement pensions.

Reflecting cultural norms, the demographic availability of kin, and economic need, the likelihood of co-residence, especially living in multigenerational households, varies cross-nationally (Kiernan, 1986; Pampel, 1992). Among 20 industrialized countries, the percent of adult men residing with their mother ranged from 11% in Norway and Sweden to 38% in Italy, 42% in Slovenia, and 43% in Japan (Treas & Cohen, 2006). Among women, ages 20-24, in 20 developed nations in the 1990s, 8% in Sweden lived with parents compared to 87% of Italians (Lesthaeghe, 2000). In Southern and East Central European countries where young people depend on parental support, they remained at home until they married. In Northern and Western Europe where jobs, scholarships, and social welfare benefits offered financial alternatives, young women left home earlier to live alone or to live with roommates or a cohabiting partner. Having more adequate pensions, older people are more likely to live alone or with just a spouse in Western Europe and North America than in Southern or Eastern Europe and Asia (Laslett, 1988; Reher, 1998; Sun, 2002). Even as older adults in Europe have grown more likely to live alone than with their grown children, country-to-country differences in their living arrangements remain (Pampel, 1992).

Welfare Regimes and Household Composition

Regional differences in living arrangements described above map to the generosity of

public benefits and to state welfare regime types. Historically, there were cultural differences in family arrangements (Laslett, 1988; Reher, 1998), consistent with the familistic values of Eastern and Southern Europe and the individualism of Northern and Western Europe. In their development, state welfare regimes incorporated these differing cultural orientations. Esping-Andersen (1999) observes that some welfare states have been at the vanguard of defamilization, whereby the state assumes dependent care responsibilities that once fell to the family. The Nordic social welfare states rank high on defamilization. The conservative countries like Germany and the Netherlands fall in the middle with family services and home help for the aged. Liberal regimes like the US and the UK rank low although not as low as Southern Europe, where the late development of public services meant little state support for caregiving.

Where social welfare and defamilization is least advanced, both older adults and unemployed young adults are more likely to live in multigenerational households (Esping-Andersen, 1999). Generous welfare benefits and social services eliminate much of the economic necessity for social democratic Swedes to double up with their parents. In service-poor Southern Europe, however, multigenerational living is an essential strategy to maintain an adequate living standard. Taiwan, like other East Asian countries, also has high rates of co-residence, reflecting not only Confucian cultural traditions favoring multigenerational households, but also the extremely limited state social welfare provisions.

Because living arrangements are associated with welfare provisions and because both affect the risk of poverty, the poverty risks for older adults and their household members cannot be understood without considering both state welfare approaches and

household composition. Given that co-residence is the leading way to avoid poverty where old age and family benefits are inadequate to make up for low earnings, we hypothesize that the regime differences in poverty for those in elderly households will be even greater if the characteristics of households are controlled.

Not only do living arrangements matter for poverty risks, but so do the characteristics of household members. Households are more likely to be poor if they have either young or old heads as opposed to middle-aged heads at the peak of their earning power (Smeeding & Sullivan, 1998). Because women's earnings and retirement incomes are lower than men's, households with female-heads are poorer than those headed by couples (McLahanan & Casper, 1995). Education is positively correlated with earnings so households with less educated heads are at higher risk of poverty (Sullivan & Smeeding, 1997). Conferring greater access to market income, more earners—typically young and middle-aged adults but sometimes older adults, too (O'Rand & Henretta, 1999b)--constitute a household income advantage that reduces the likelihood of poverty (Ritakallio, 2002). The age structure of households is also an influence on poverty. An additional older adult or an extra child in the household represents an additional demand on household resources. Depending on the welfare system, however, they may also bring in additional income, say, old age benefits for retirees or family allowances for children (Redmond, 2000)

METHODS

This study relies on harmonized, micro-level data for households in 22 countries from the Luxembourg Income Survey (LIS). We use data from wave 5, release 2, from 1999-2001

surveys, except for the wave 4 Czech Republic data, which comes from a 1996 survey. Twenty-two countries were selected based on the availability of household-level and country-level data. These countries cover a range of welfare regime types, including social democratic states (Denmark, Finland, Norway, Sweden), conservative countries (Austria, Belgium, France, Germany, Luxembourg, Netherlands, Switzerland), liberal states (Australia, Canada, UK, US), Southern European countries (Greece, Italy, Spain), former socialist nations (Czech Republic, Hungary, Poland), and Taiwan, the only East Asian state in the LIS. The large, unweighted samples for households with adults, ages 65 and older, range between 568 (Luxembourg) and 13,998 (Denmark). The number of persons in these households range between 877 (Belgium) and 22,097 (US). Analyses use person weights, that is, the household weight multiplied by the number of household members. Households lacking information on income items and independent variables are deleted from analysis. From the original (unweighted) 93,525 households with older adults, the sample is reduced to 92,843 with the omission of cases missing income data. The effective household sample is 83,244 when cases with missing data on independent variables are dropped from analysis; most missing data relate to Denmark and Sweden where education variables were not asked in the survey.

The dependent variable is the likelihood of being poor for individuals residing in households containing older adults. The study uses a relative poverty approach, which evaluates poverty vis a vis the prevailing living standards in the society (Townsend, 1979, 1993). The poverty line is defined as income below 50% of the median net disposable household income, adjusted for household size (i.e., income needs). Net disposable income is the total household money income after taxes and transfers (e.g., public

assistance). An equivalence scale is used to equate households of different sizes for economies of scale and consumption differences (Buhmann et al., 1988). With the scale of power 0.5 or the square root of the number of household members, four people living together, for example, are assumed to live as well on a given income as two individuals living separately. Following the LIS, we bottom code disposable and market income at 1% of equivalized mean income and top code at 10 times the median non-equivalized income.

For independent variables predicting poverty, the micro-level household characteristics include the age, headship type, and educational attainment of the household head. Because studies dating back to Rowntree (1901) show a U-shaped relationship between the household head's age and poverty, the age of household head is measured with years of age and age-squared terms to take account of any nonlinearity. A harmonized LIS variable distinguishes married and cohabiting couples from others. We use this variable to identify households headed by single females, single males, and couples. Based on the LIS educational attainment categories harmonized to take account of country differences in educational systems, head's education is divided into low, medium, and high. In general, the low category consists of primary or elementary education, the medium category consists of secondary education or vocational training, and the high category consists of tertiary education including college, university, and post-university. The numbers of children younger than 18, older adults (65+), and earned income recipients in the household are all continuous variables.

Macro-level variables are welfare regime dummy variables that incorporate the social democratic, conservative and liberal capitalist welfare state types of Esping-

Andersen (1990) and add Southern European and formerly socialist states. As a distinctive case with limited social welfare provisions and high rates of intergenerational co-residence, Taiwan, the only East Asian country in LIS, is designated the omitted reference category.

In multi-level models of the risk of poverty, we use robust cluster analysis, that is, logistic regression which addresses the non-independence of observations that arises when households are sampled within countries. Technical problems with weighting preclude the use of standard multilevel statistical software with the LIS. The robust-cluster variance estimator remains valid with any pattern of correlations among errors within units (Rogers, 1993). Thus, standard errors are not affected by any unmeasured country-specific factors causing a correlation between errors of observations within a country, nor by any other form of within-country error correlation.

RESULTS

For the 22 countries, on average, 11% of the individuals in households containing adults, 65 and older, live in poverty. These households not only contain older adults, but they also tend to have older heads, as indicated by a mean age of nearly 68 years. Consistent with older heads being members of earlier cohorts, relatively few (13%) have high levels of education. The majority of persons in these households (63%) are headed by a couple, but 26% have a single female head and 11% a single male head. For the average individual, there are only .61 earners in the household while the mean number of older adults is 1.4 and the mean number of children is .22.

Figure 1 shows that the risk of poverty for individuals in households containing older adults varies from country-to-country. In Nordic social democratic countries with

--Figure 1 about here--

generous welfare benefits, the risk of being poor is generally low although the percent in poverty in Norway (11%) stands at the mean for the 22 countries. In conservative countries, the record is mixed: the percent is remarkably low in the Netherlands (2%), but Belgium (15%) and Switzerland (13%) register above-average poverty. Although poverty is moderate in Poland (12%), it is considerably lower in the other former socialist countries of Hungary (3%) and the Czech Republic (7%). Except for Canada (5%), liberal regimes like the US (22%) show high risks of poverty for those in households with older adults. As Greece (21%) and Italy (14%) show, Southern Europe is also high, and poverty in Taiwan (15%) is high as well.

Countries in Table 1 differ not only in the poverty risk associated with living in a household containing an older adult, but also in terms of the composition of those households. Taiwan illustrates this point, because it has a package of favorable household characteristics that protect its members against poverty. Among households with older adults, the average head's age is only about 49 in Taiwan, compared to a mean of 68 for the 22 countries and a high of 74 for Norway. In part, because they are younger, only 49% of Taiwanese heads have low educational attainment, compared to an average of 58% for all 22 countries. Fully 72% of Taiwanese heads are married while only 63% of heads, on average, are married in the 22 countries. Only 10% of the Taiwanese households are headed by a female in contrast to 26% overall. The Taiwanese households have one more earner than the overall average. Compared to the 22-countries, Taiwan has slightly fewer older adults (1.35 instead of 1.40), but considerably more children (1.14 instead of .22) living in the households containing older adults. Although children

generally raise the risk of poverty, they also point to the likely presence of their parents, that is, to younger wage earners. Taken together, these characteristics reflect an unusual penchant for multi-generational living by Taiwanese older adults and their kin—one that can insulate against poverty.

Other countries also differ from one another in their household characteristics. For instance, former socialist countries have several poverty-protective factors to buffer the hardships of transition economies and social benefit cut-backs--heads that are a little younger than average as well as numbers of earners somewhat above the norm. Compared to other countries, however, few household heads in former socialist countries (or Southern European ones) report having the advantage of high levels of schooling. Distinguishing the Nordic social democratic regimes is the fact that households with older adults have comparatively few children to support. Compared to Taiwan, none of the other LIS countries has a household composition as favorable to mitigating poverty in the households in which older adults live. Thus, Taiwan—with its beneficial household composition and limited social welfare programs—presents a strategic reference for evaluating the relation of welfare regime types and household characteristics for poverty of older adults and their household members.

The logistic results of the robust-cluster analyses are found in Table 2. Model 1 considers the risks of poverty by welfare regime type for all individuals in households with older adults. According to the odds ratios shown, individuals in social democratic

--Table 2 about Here--

and conservative countries are roughly half as likely to be poor as are those in Taiwan, the omitted reference category. On the other hand, the differences in poverty risk between

Taiwan and liberal, Southern European, and former socialist countries are not statistically significant at the .05 level. The results confirm that older adults and those with whom they reside are at lower risk of economic deprivation in countries with more generous social welfare systems.

Next, we ask how the characteristics of households with older adults are related to the risk of poverty for the household members. Model 2 shows the findings for micro-level household composition variables across the 22 countries. A U-shape relation was expected for the age of head, but the linear age term is not statistically significant at the .05 level once other household factors such as number of earners are controlled. Compared to persons in households headed by couples, individuals living with female household heads are, as expected, significantly more vulnerable to the risk of poverty, being 94%, that is, $[(1.938-1.0)*100]$, more likely to be poor. Those in households headed by single males are 45% more likely. Not surprisingly, the head's educational attainment is negatively associated with poverty. In households where the head has the lowest level of schooling, household members are 2.5 times more likely to be poor than persons in households where the head has the highest level of education. Poverty also correlates negatively with the number of earners in the household. Persons in households having additional older adults (e.g., an older couple rather than a single widow) have lower poverty risk. Children do not enjoy nor confer this advantage. Those in households with more children are more likely to be poor. Each additional child raised the likelihood of poverty by 57% while each additional older adult lowers this likelihood by 30%.

It remains to be seen whether country-to-country differences in the micro-level characteristics of households can account for the differences in poverty risks between

regime types. The multi-level analysis in Model 3 addresses this question. With the micro-level household variables controlled, persons in households with older adults who are fortunate enough to live in the conservative and social democratic countries become even less likely to be poor as compared to their Taiwanese counterparts. For instance, although older adults and those living with them in Nordic social democratic countries are 48% less likely to be poor than are the Taiwanese, they are 72% less likely when national differences in the composition of households are taken into account. The conservative countries see a similar change from 39% to 75% less likely to be poor. This demonstrates that the characteristics of elderly households in conservative and social democratic countries are comparatively unfavorable, having, for example, more female heads and fewer earners than the Taiwanese example. Controls for household composition have a similar impact on the liberal, Southern European, and former socialist countries, suggesting that they have similarly disadvantageous household compositions as compared to Taiwan, but overall these three regime types are not statistically different from Taiwan in poverty risk.

Controlling for macro-level regime type also registers modestly on the magnitude of all the coefficients for household composition. Although the changes are not statistically significant, they are consistent with the notion that some regimes do a better job than others in protecting disadvantaged groups from poverty. Were it not for the income safety net provided by some of the welfare regime types, persons living in households headed by those with low education would be even more likely (3.3 times, not 2.5 times) to be poor than those with highly educated heads. With the different state approaches to welfare controlled, the disadvantage linked to female heads is reduced slightly: those

living with single female heads are 88%, not 94%, more likely to be poor than those with couple headship. Similarly, single male headship means 30%, not 45%, greater risk.

Taking account of welfare regime, the risks associated with the numbers of earners and older adults decline although the poverty risk for numbers of children increases.

CONCLUSIONS

For persons residing in households containing older adults, there is considerable variation in the risk of poverty across developed countries. This variation reflects, in part, the type of welfare regime and the social provisions the state provides. Compared to Taiwan, a developed country with limited public welfare provisions, the more generous Nordic social democratic states and the conservative capitalist welfare regimes of Europe, have significantly lower poverty risks.

Across 22 countries at the start of the 21st Century, a household's characteristics also affect the poverty risk for its members in predictable ways. For persons residing with older adults, having a single male or female rather than a couple heading the household is linked to a greater likelihood of poverty. In households with more earners, people are less likely to be poor, if only because stronger ties to the labor market bring greater income. Similarly, head's higher education, as a marker of the household's income-generating human capital, also portends lower risk of poverty. An additional older adult in the household is associated with lower risks of being poor. Older household members are eligible for old age benefits. Furthermore, a second older adult usually means a couple with a stronger economic portfolio than an elderly single woman. By contrast to older adults, the support requirements posed by additional children confer a generally greater risk of poverty for everyone in the household.

Once constituted, households may buffer against the risk of poverty. Or, by virtue of their disadvantageous composition and characteristics, they may place everyone at risk of being poor. Households not only confer large or small poverty risks, but they also attract people who are more or less needy. Where co-residence is less common, we might expect persons who double up to be needier than in countries where multigenerational living is the norm. We do, however, know that both the risk of poverty and the likelihood of older people living with others are more common where state provisions for dependents and families are limited.

The differences in the risk of poverty between welfare states are not just a function of country-to-country differences in the composition of their households, however. Compared to Taiwan, an example of East Asian welfare states which have very limited social benefits, the more generous Nordic social democratic countries and the Western European conservative states have lower poverty risks. With the micro-level characteristics of households controlled, the social democratic and conservative regimes have even lower risks of poverty vis a vis the Taiwanese case. Western countries have household features--such as higher female headship and fewer earners—that dispose them to higher poverty were it not for their generous welfare systems. By contrast, Taiwanese households have fewer single mothers and elderly women as heads, they have heads who are younger with higher levels of education, and they have more earners per household. All these features dispose them to lower poverty and offset the fact that Taiwan does not offer many social benefits to protect against low earnings. Thus, family co-residence and welfare state provisions offer two means by which older adults and their kin cope when their market income falls short. State and family support of dependents,

young and old, is intimately related. Given the familistic values of societies such as those in Southern Europe and East Asia, it is not surprising that state welfare programs have been slow to develop. Given the generous welfare programs of Nordic social democratic countries, it is understandable that older adults and their kin are able to live independently of one another.

In sum, our analysis makes three broad contributions to our understanding of cross-national poverty risks for older adults and their household members. First, it moves beyond prior cross-national poverty analyses based on aggregate data to a multi-level analysis incorporating micro- and macro-level factors. Second, by expanding cross-national analyses to include an example of East Asian welfare regimes, it demonstrates how household composition can buffer poverty in societies where social provisions are limited. Third, the results reflect back on the project of welfare regime typologies. Although such typologies afford a useful heuristic for state differences, there is more variation within than between the regime types in the poverty of older adults and those with whom they reside. Our analysis offers evidence on where Taiwan, and by extension, other East Asian states, fit in. Although sometimes characterized as a conservative capitalist welfare regime (Esping-Andersen, 1999), Taiwan departs sufficiently from established conservative regimes like Germany or Austria as to constitute a distinct approach to welfare and poverty.

ACKNOWLEDGEMENTS

The authors gratefully acknowledge comments of Wang Feng and Joy Pixley on an earlier version of this research. This study was supported, in part, by a grant to the first author from the Chiang Ching-kuo Foundation for International Scholarly Exchange.

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Figure 1. Percent in Poverty: Persons in Households with Older Adults in 22 Countries, 1996-2001

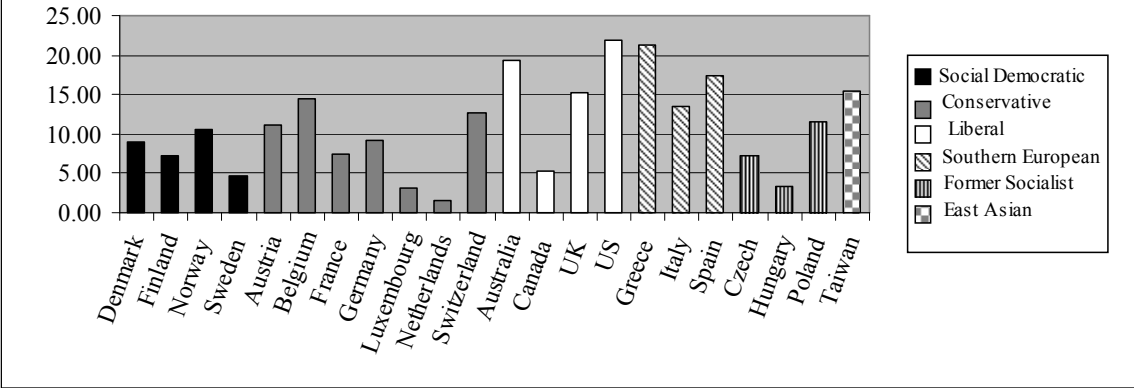


Table 1. Household Characteristic Means and Proportions for Households with Older Adults: 22 Countries, 1996-2001

Country	Age of HH Head	Coupled HH Head	Single Female HH Head	Single Male HH Head	HH Head w/ Low Education	HH Head w/ Med Education	HH Head w/ High Education	No. of Earners	No. of Older adults	No. of Children
<i>Social Democratic</i>										
Denmark	69.73	0.62	0.27	0.12	0.54	0.32	0.14	0.56	1.39	0.06
Finland	69.18	0.53	0.32	0.15	0.64	0.21	0.15	0.61	1.39	0.07
Norway	74.11	0.56	0.32	0.12	0.45	0.43	0.12	0.59	1.40	0.03
Sweden	67.26	0.68	0.20	0.13	0.48	0.35	0.17	0.60	1.39	0.04
<i>Conservative</i>										
Austria	70.31	0.57	0.33	0.10	0.45	0.50	0.05	0.80	1.38	0.36
Belgium	74.08	0.60	0.29	0.11	0.69	0.18	0.13	0.15	1.47	0.03
France	71.87	0.67	0.24	0.08	0.70	0.22	0.08	0.29	1.48	0.06
Germany	71.67	0.62	0.31	0.07	0.79	0.05	0.16	0.36	1.40	0.07
Luxembourg	68.68	0.64	0.28	0.08	0.53	0.35	0.12	0.48	1.38	0.19
Netherlands	72.76	0.62	0.27	0.11	0.45	0.36	0.20	0.13	1.48	0.01
Switzerland	70.28	0.65	0.24	0.11	0.22	0.56	0.23	0.13	1.44	0.15
<i>Liberal</i>										
Australia	69.46	0.65	0.25	0.10	0.65	0.30	0.06	0.47	1.42	0.13

Canada	64.80	0.59	0.26	0.15	0.44	0.43	0.13	0.85	1.42	0.21
UK	71.79	0.60	0.29	0.11	0.73	0.19	0.09	0.37	1.41	0.10
US	69.15	0.60	0.30	0.10	0.28	0.48	0.24	0.83	1.40	0.30
<i>Southern European</i>										
Greece	64.22	0.74	0.17	0.08	0.77	0.14	0.09	0.73	1.39	0.33
Italy	67.58	0.63	0.26	0.10	0.79	0.16	0.05	0.64	1.42	0.15
Spain	68.52	0.69	0.22	0.09	0.87	0.07	0.06	0.97	1.47	0.27
<i>Former Socialist</i>										
Czech	64.47	0.65	0.24	0.11	0.70	0.21	0.10	0.67	1.34	0.19
Hungary	59.46	0.54	0.26	0.21	0.72	0.16	0.11	0.66	1.33	0.22
Poland	58.24	0.68	0.23	0.09	0.42	0.51	0.08	0.95	1.30	0.82
<i>East Asia</i>										
Taiwan	48.66	0.72	0.10	0.18	0.49	0.29	0.22	1.62	1.35	1.14
Total Mean	67.56	0.63	0.26	0.11	0.58	0.29	0.13	0.61	1.40	0.22

**Table 2: Odds Ratios of Poverty Risk for Persons in Households with Older Adults,
22 Countries, 1996-2001**

Variable	Model 1	Model 2	Model 3
Country-level Variables			
<i>Welfare Regimes</i>			
Social Democratic	0.518 *		0.280 *
Conservative	0.607 *		0.254 *
Liberal	1.548		1.100
Southern European	1.011		0.525
Former Socialist	0.801		0.507
Taiwan (ref.)			
Household-level Variables			
HH Head Age		0.969	0.969
HH Head Age Squared		1.000 *	1.000
Single Female HH Head		1.938 ***	1.884 ***
Single Male HH Head		1.454 **	1.302 *
Coupled HH Head (ref.)			
HH Head with Low Education		2.510 ***	3.334 ***
HH Head with Medium Education		2.020 ***	1.862 ***
HH Head with High Education (ref.)			
Number of Earners		0.347 ***	0.306 ***
Number of Older Adults		0.704 **	0.672 ***
Number of Children		1.569 ***	1.466 ***
Log Pseudolikelihood	-35009.317	-31674.523	-30189.512
Pseudo R2	0.020	0.114	0.155

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$