

**Who Gets What?
Gender Differences in “Spendable” Income**

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Abstract

Feminist policy makers need accurate measures of inequality in the economic well-being of men and women. In this paper we discuss the reasons why the wage gap by gender is a misleading measure of women’s relative economic well-being in the United States. We point to income pooling as an example of resources that remain excluded in individual and family-based) income measures. We construct a household-level index of women’s “spendable” income relative to men’s. To do this, we build on Randy Albelda’s (1988) “PAR index,” a household-level index that incorporates income pooling. We improve on Albelda’s index in three ways. First, we account for economies of scale associated with additional household members. Second, we utilize the Current Population Survey to capture the impact of government taxes and transfers, providing an indicator of “spendable,” rather than “money” income. Finally, as a step toward redefining the concept of “spendable” income, we deduct a lower-bound estimate of child-care costs.

Who Gets What? Gender Differences in “Spendable” Income

Feminist policy makers need accurate measures of inequality in the economic well-being of men and women. Constructing such measures is a more complex exercise than it may seem. The most widely cited indicator of gender inequality is relative labor market *earnings*. Another indicator explored in this session is relative *wealth*. Both these indicators are valuable. We believe they should be *supplemented by* better measures of women’s “spendable” *income* relative to men’s.

Fighting Fire With Fire: Why progressive policy advocates must be fluent in alternative income definitions

Conservatives and moderates construct alternative income measures in order to argue *against* downward redistribution. In particular, they undermine progressive public policy proposals that aim to benefit low-income households such as increases in minimum wages or the earnings disregard (i.e. reductions in the tax rate on earnings) of the earned income tax credit. Such policies, they argue will only generate more “spendable” income and may thereby promote a disincentive to work.¹ Their household income measures reflect net gains (in terms of poverty reduction) from additional work hours, neglecting expenditures incurred by parents, for example, such as child care costs. Carried to its logical conclusion, their staunchly pro-work agenda promotes disincentives to unpaid care work.

Determining relative income is difficult for three reasons. First, income is typically measured on the family or household, rather than individual level. As a result, measures of household income hinge on assumptions regarding economies of scale and income pooling. Second, income has a number of different components, and can be defined in a variety of ways, depending on sources (such as government transfers), types (such as in-kind benefits) and treatment of taxes. Third, conventional definitions of disposable (or “spendable”) income are somewhat misleading, because they fail to account for employment-related expenditures particularly relevant to women, such as child-care costs.

In this paper we explore these three issues, and move toward the construction of an index of women’s “spendable” income relative to men’s. We build on a measure of income dubbed the “PAR” index, first suggested by Randy Albelda (1988), introducing features that account for economies of scale and pooling. We also utilize features of the Current Population Survey that capture the impact of government taxes and transfers, providing a better indicator of “spendable” income. Finally, as a step toward redefining the concept of “spendable” income, we examine the impact of assumptions regarding child-care costs.

I. Pooling and Economies of Scale

The advantage of focusing on *earnings* is that they are unambiguously linked to individuals. But while earnings are the most important component of income for working-age adults, many individuals receive income from other sources, including interest, capital gains, and government transfers. Measures of family and household income are based on the assumption that income is pooled, an assumption that is

probably more plausible for families than for households, but whose empirical validity remains essentially unclear.²

The use of the family rather than the household as the unit of analysis inhibits an analysis of pooling in *two* ways. For the Census Bureau, a family is defined as “a group of two people or more (one of whom is the householder) related by birth, marriage, or adoption and residing together.” Given this definition, it is clear that family-based income measures cannot capture income pooling among families that co-reside. In 2000, nearly twelve percent of all households contained more than one family. Second, the exclusion of unrelated family members from the Census’ definition of family ignores both the contributions (in terms of money and time) and the extra costs associated with unrelated individuals, such as cohabitating partners or foster children. The use of the household as the unit of analysis permits us to capture the costs and benefits of co-residing families and unrelated persons. However, it still neglects gender sensitive costs such as childcare.

In summary, income pooling has countervailing implications for women’s well being. On the one hand, pooling with other adults, including adult men, often increases the resources available to an individual household member. On the other hand, pooling with dependents, including children, generally decreases the resources available to adults.

Overall, women benefit from income pooling. In 2000, median earnings for women working full-time, year round, were \$27,000, about 73% of the male median. But relatively few women lived alone, relying entirely on their own labor market earnings. Median household income amounted to \$37,476. So, if women represented one-half of all household members, and households pooled and spent income equally, women’s per capita income would equal \$18,738.

If all men and women lived in the same households, their per capita household income would, by definition, be equal. However, since many women live in households with children, but without male partners, and these households have significantly lower income than married couple households, women’s per capita household income is lower than men’s.

Albelda’s index of women’s access to income is based on an estimate of their per capita household income, rather than individual earnings. She shows how the “PAR” index rose over the period between 1967 and 1985 as a result of increases in the share of households maintained by women alone.

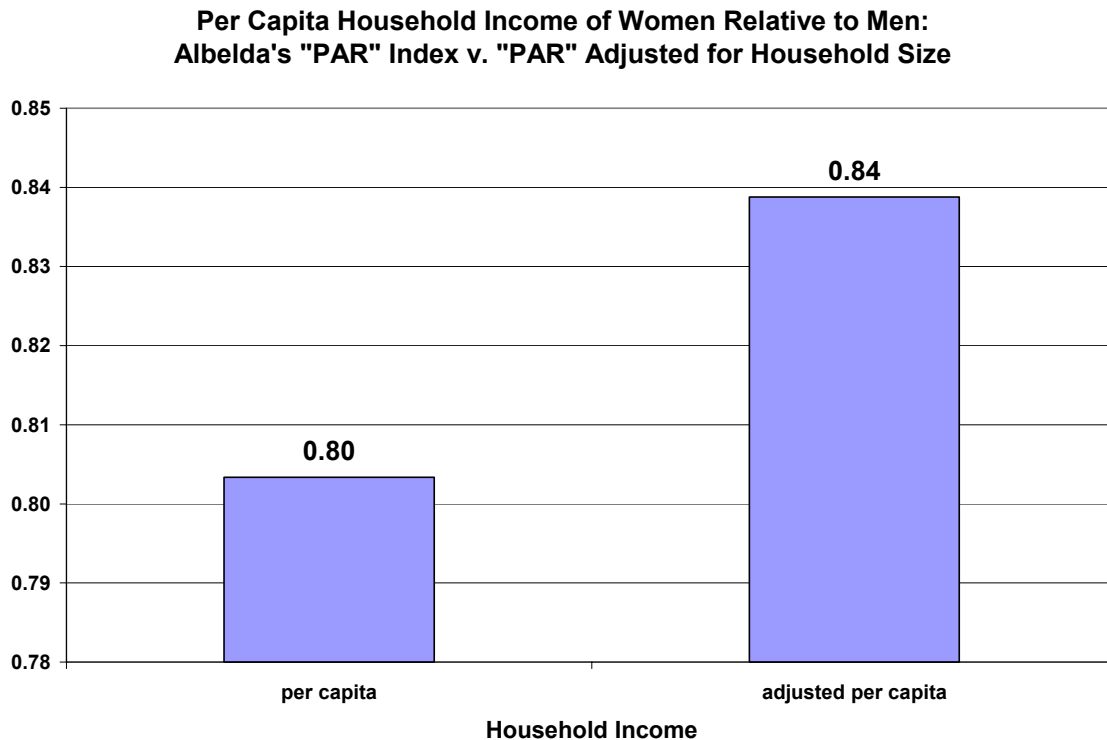
While this is a promising approach, it suffers from several limitations. First, as aforementioned, it assumes that income is shared equally within households, which seems unlikely. Even if income is shared equally within married couple families (an assumption that has been widely challenged) there is little reason to believe that it is shared equally among household members who may be cohabiting for only a brief period, or who have chosen not to marry precisely because they do not want to pool their income.

Second, this assumption ignores the effect of economies of scale. For a variety of reasons, including the prominent role of rent, utilities, and consumer durables, households with larger numbers of individuals generally enjoy lower per capita costs.

One way of taking economies of scale into account, widely used in analysis of the Luxembourg Income Survey, is to divide household income by the square root of the number of household members (Jäntti and Danziger, 2001).

We do not, at this point in time, have any way to improve upon the assumption of equal pooling (though we plan to address this in future work). However, we can show the impact of adjusting Albelda's PAR index by adjusting for economies of scale. Chart 1 compares the PAR index for 2000 (following Albelda's method) with an adjusted index. Apparently women benefit slightly more than men from living in larger households; the adjustment results in a small increase in the measure, from about 80% to about 84%.

Chart 1



II. The Effect of Government Transfers

Albelda's PAR index relies on the most common measure of family income, what the Current Population Survey terms "money income" (HTOTVAL). It is widely recognized that this measure is incomplete, because it does not include the value of in-kind benefits (such as health insurance) or in-kind transfers (such as Food Stamps or Medicaid). Conservatives at the Heritage Foundation argue that the exclusion of such transfers leads to the underestimation of women's "spendable" income.

The Heritage Foundation (2003) compares the standard ("money") income definition to an alternative (work-based) income definition. To construct their alternative, they add the value of the EITC, food stamps and school lunch subsidies to money income and subtract Social Security taxes (FICA) at the family level. Using money income they find that when adults with kids work 2000 hours or more per year,

27.8% of families are poor; using their work-based alternative, they find that number drops to 23.5%.

Conservatives tend to point to in-kind publicly-provided benefits targeted to low-income households such as Food Stamps, Medicaid and subsidized child care. The Heritage Foundation advocates for the inclusion of non-cash benefits into what is termed “official money income.” They do not, however, advocate for the inclusion of non-cash benefits helping (primarily) middle and higher income households such as Medicare.³ In this sense, as we mentioned at the outset, what gets counted as income is controversial.

Another reason it is useful to consider expanded measures of income is that they can be defined in a way that reveals the impact of government transfers and taxes.

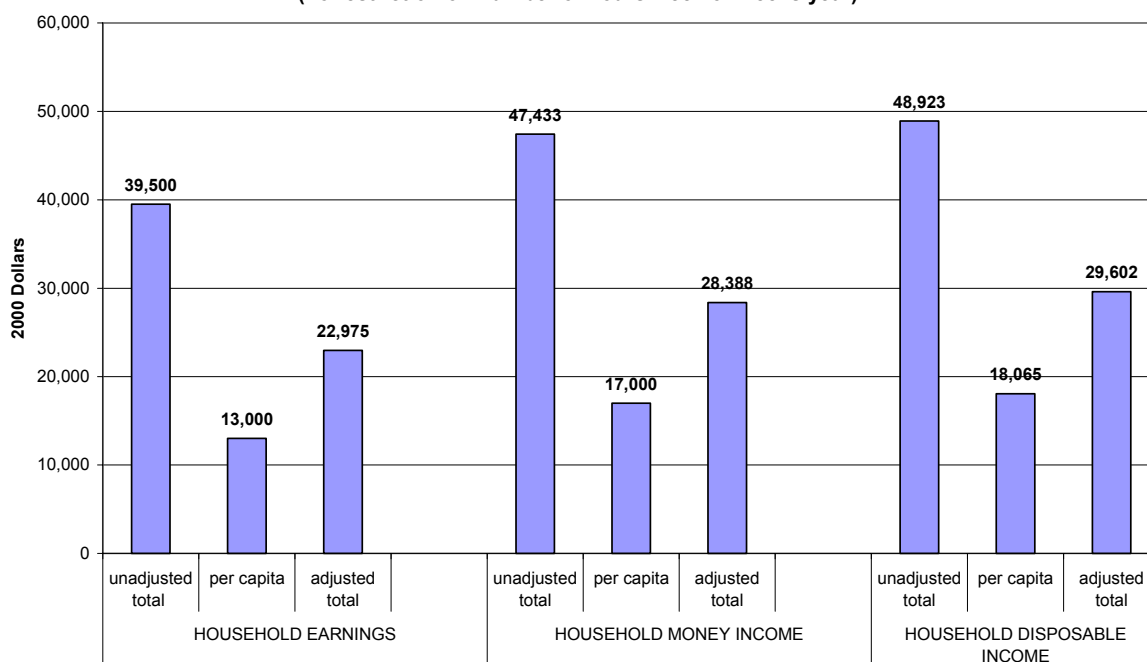
Using data collected from the U.S. Census Bureau’s March 2001 Current Population Survey, we construct a broad measure of income that encompasses both public and private benefits and subtracts major federal and state taxes. The Census calls this household income measure “Definition 15.” A comparison of the two measures of household income follows.

| Money Income (CPS Definition 1) | Income Plus Benefits After Taxes (CPS Definition 15) |
|--|---|
| Personal Earnings | Money Income |
| Public Assistance | Food Stamps |
| Social Security | Housing Subsidy |
| Supplemental Security Income | Medicare (fungible value) |
| Disability income (public/private) | Medicaid (fungible value) |
| Survivor’s Benefits (public/private) | Earned Income Tax Credit (EITC) |
| Educational Assistance | School Lunch |
| Retirement (public/private) | Employer Contribution to Hlth Ins. |
| Unemployment Compensation | Net Return to Home Equity |
| Workers’ Compensation | Capital Gains |
| Veteran’s Administration Benefits | Tax Liability (Federal, State, FICA) |
| Assets (Interest, Dividends, Rent) | |
| Child Support/Alimony | |
| Financial Assistance (private) | |

Median levels of money income and Definition 15 income vary little in the aggregate (in 2000, the ratio of the former to the latter was .98). As can be seen in Chart 2, median disposable Definition 15 income of women is only slightly greater than their money income. However, significant differences between money income and Definition 15 income are apparent in comparisons of households with children and elderly members. Furthermore, the measure of income has significant implications for comparisons between married and single mothers living with children. In 2000 the ratio of money income to Definition 15 income for married mothers living with children under 18 was 106.4. But for single mothers the ratio was .88.

Chart 2

**Median Earnings, Money Income & Disposable Income of Women 15+:
unadjusted, per capita and adjusted
(no restriction on number of hours/week or weeks/year)**



Source: Author's calculations, Census Bureau, Current Population Survey, March 2001

The comparison between money income and Definition 15 income offers insights into the effects of government transfer and tax policies on different groups of women, and is therefore particularly useful to disaggregated comparisons.

In the aggregate, women gain more Definition 15 income relative to money income than men do. As a result, the index of “spendable” earnings based on Definition 15 is higher than Albelda’s index of relative income. (Compare the third set of bars in the chart 2 to the second set.) Still, this measure of women’s economic well-being is misleading; the “improvement” for women using Definition 15, reflected in the height of the last set of bars, is based on a measure that omits the most gender-relevant component of household budgets: child care costs.

III. Child Care and “Spendable” Income

The adjustments that we have made so far improve the accuracy of the index of relative income, and also promise important insights into differences among groups of women, a reflection of tax and spending policies. However, they all have the effect of increasing women’s apparent economic well-being. We now incorporate a third gender-sensitive factor that may reduce measures of women’s relative economic wellbeing.

Measures of women’s income that don’t take the costs of childcare into account almost inevitably show that increased earnings leads to increased well-being. For instance, in her analysis of women’s poverty rates based on the CPS from the 1970s to the 1990s, Karen Christopher (2001) finds that any trend towards “pauperization of motherhood” abated in the late 1990s. But this finding simply reflects the fact that the

official poverty threshold matrix fails to deduct the extra costs associated with childcare from household earnings.

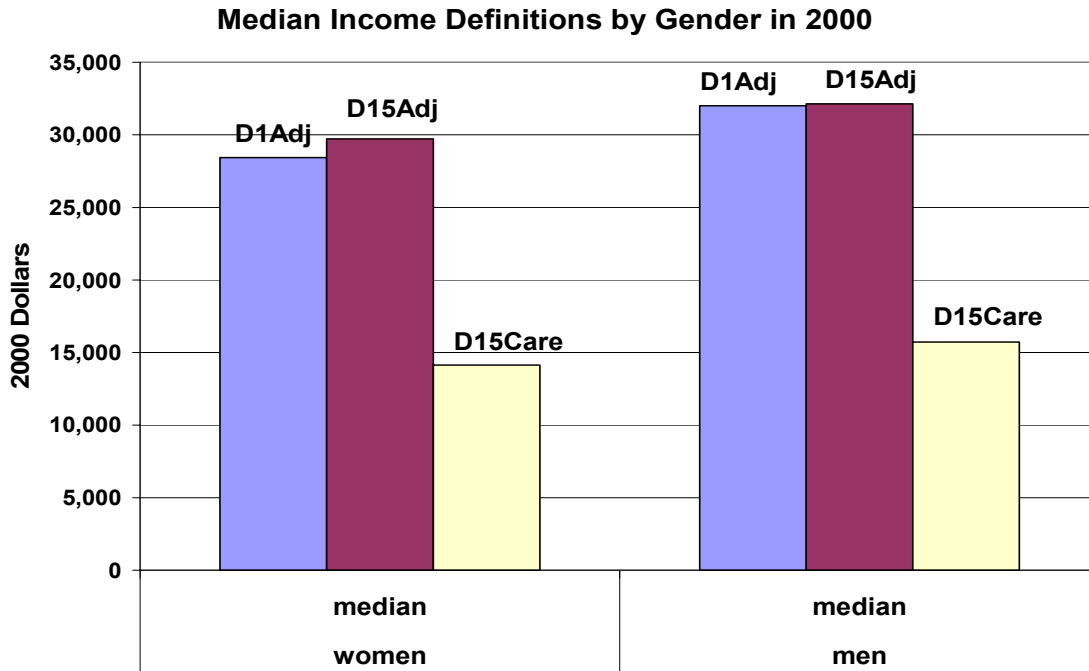
Furthermore, over the lifecycle, women's responsibility for children tends to lower their earnings. In their paper titled "The Wage Penalty for Motherhood," Michelle Budig and Paula England find penalties of 7% per child. And even after controlling for less job experience due to time spent caring for kids, a 5% per child penalty remains. The penalties only increase when a woman is married. This is especially problematic since most women (18+) living with kids are married (69% in 2000).

Some scholars have made efforts to estimate the size of work-related child care costs and deduct these from measures of household income. Since the Current Population Survey does not contain direct survey data on out-of-pocket child care expenses, Isabel Sawhill and Adam Thomas (1999) estimate these expenses using logistic regression analysis with independent variables such as number of children in the household and dummies by race and region. They impute childcare expenses only if all parents in the household work and there is at least one child under the age of twelve in the family. They find that "when income is adjusted for child care expenses, 1.9 additional people-of-whom more than 1 million are children—are thrown into poverty." That is, the overall poverty rate jumps from 11.5% to 12.2% when childcare expenses are subtracted from family income.

We use a simpler method, also based on the Current Population Survey, to construct "D15Care," a variable that captures the differential impact of child care costs on men and women's post tax and transfer income. We base our construction of care costs on Mark Lino's finding: of all households paying for childcare, the average amount spent is roughly 10% of their annual income in 2000.

Chart 3 compares 3 median income measures by gender; all have been adjusted for household size in order to reflect economies of scale. The three household income measures are (1) money income (D1adj), (2) post tax and transfer income, i.e. "spendable" income (D15adj) and (3) "spendable" income with child care expenses deducted at the rate mentioned above. The difference in heights of D15Care by gender is driven by the higher proportion of women residing in households with kids relative to men. Fifty percent of all women 18-64 live in households with kids compared to forty-five percent of all men in the same age range. The difference would be larger if we relaxed the assumption of equal pooling. That is, if we incorporate a deduction in women's income for their higher expenditure on kids, the wedge by gender of D15Care would increase.

Chart 3



IV. Conclusions and Further Research

Money income offers a misleading picture of low-income households; economic well-being is understated as cash and cash-like public and private benefits are excluded from this household income measure.

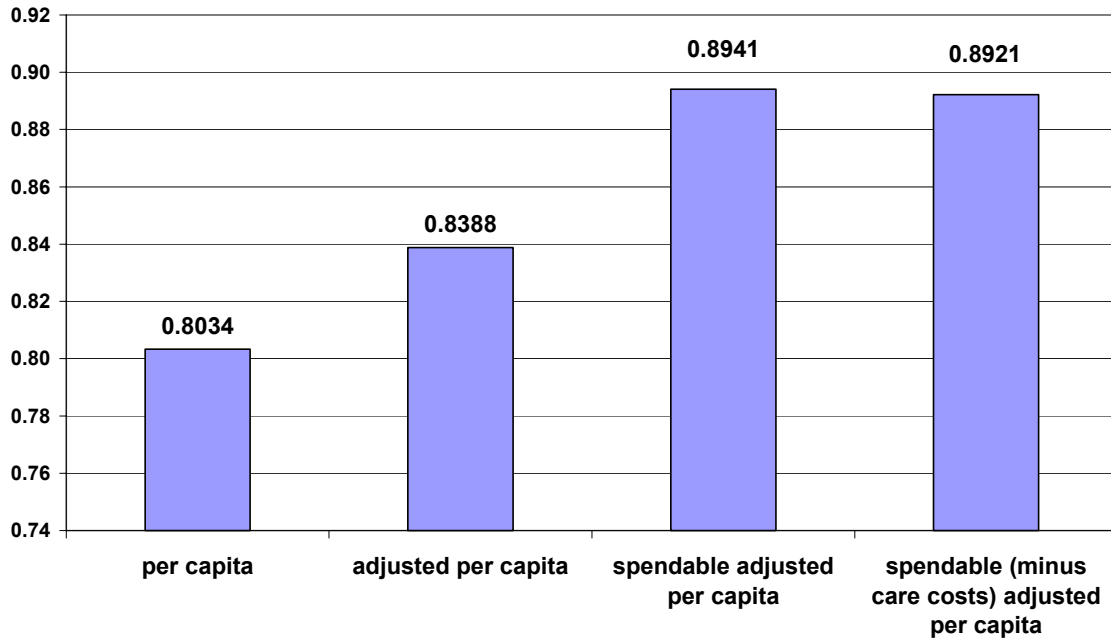
Money income also offers a misleading picture of middle and high income households, which receive private benefits such as employer contributions to health insurance and pensions, which are exempt from taxation. Relatively affluent families also derive greater advantages than others from tax breaks such as the deduction of mortgage interest from taxable income.

Even with a broader measure of income, which better reflects disposable income, a serious shortcoming persists: expenditures on kids remain invisible. If we assume women assume responsibility for the bulk of the cost (both in terms of lost market wages and expenditures) we need a measure such as D15Care (right-most bar in chart 4) which reflects this expense.

Chart 4 summarizes our three changes to Albelda’s household income index. According to Albelda’s index (left-most bar in chart 4), women have access to eighty cents for every dollar that a man can access. The second and third bars from the left improve on Albelda’s index by adjusting for household size and post tax/transfer income respectively. The right-most bar, our own “spendable income index,” reflects a deduction of childcare costs.

Chart 4

**Women's Overall Access to Income in 2000:
Average Per Capita Income of Women Relative to Men**



We hope to use this approach to show a more accurate trend in women's relative economic well-being than that found using the earnings gap of full-time, full year workers. In particular we will assign higher rates of child care expenditures to households that contain more than one kid and to single parent households. We expect this change to further reduce D15Care relative to D15adj. An index that reflects households' rising child care costs due to rising rates of maternal employment is needed to counteract the standard wage-based index. It will illustrate that work initiatives are more costly than they appear to be when using official income measurement methods.

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¹ Dennis Ventry provides an historical overview of the factors that have influenced Republicans' waxing and waning support of the EITC.

² A growing international literature points to evidence of higher expenditures on children when mothers control the household purse. In their study of PROGRESA, Mexico's largest anti-poverty program (which directs benefits only to mothers) Luis Rubalcava, Graciela Teruel and Duncan Thomas find that as the share of household resources from PROGRESA increases, the share of the budget spent on child clothing, education and higher quality diet increase.

³ Health economists Mark McClellan and Jonathan Skinner find that Medicare expenditures are positively correlated with income of recipients. For example, in 1990 female Medicare recipients aged 85 and over in the top decile had expenditures that averaged 15% more than women in the lowest decile. More generally, they find that net transfers flow from lower to higher income beneficiaries and argue that this will continue even after the Baby Boom cohorts reach Medicare eligibility in 2010.