Very high ratios are projected for a larger proportion of workers with low earnings. The proportion of projected retirees with P/E ratios under .50 rises sharply for income groups above \$4,000. For example, 79 percent of married males in the \$4,000-\$4,999 earnings group are projected to have P/E ratio under .50. For married males in the \$8,000-\$8,999 group the percentage under .50 increases to 88

percent.

Table 5 presents ratios which incorporate both the supplemental social security pension of the spouse in total pension income and any preretirement earnings of the wife (which lowers the P/E ratio) in total preretirement average earnings. The net result is an improvement in the P/E ratio. Table 5 shows P/E ratio estimates for actual aged couples retiring in the next two decades, almost all of whom are covered by social security. Looking at couples whose average earnings for 5 years prior to retirement were between \$4,000 and \$5,000, table 5 shows that over half are projected to have a P/E ratio (based on all pensions) of less than .50. These lower P/E ratios are due principally to two factors not taken into account in the calculations of table 1: (a) Large number of workers retire early with reduced pension benefits and, (b) Workers' average taxable earnings for social security benefit purposes are always lower than the average pre-retirement earnings as defined in this study.

## JUANITA M. KREPS, LIFETIME EARNINGS AND INCOME DONALD E. PURSELL: IN OLD AGE

Analysis of the variation in the annual income of a particular family as it moves through the life cycle is meager, limited by lack of data and by the time and expense involved in longitudinal research. Information on variations in the family's needs at different stages is similarly scant. Yet the central question involved in one of our major transfers of income—the social security benefit—has to do with the extent to which we wish to smooth the income between age groups by raising benefits for retired families via taxes on the young and

middle aged.

In general, the average earnings of different age cohorts observe the same pattern for most occupations. Immediately after entry into the labor force, annual earnings are low, the income of each successive cohort rising until peak earnings are realized by the age group 45 to 54. The 55 to 64-year-old workers, the oldest cohorts who are fulltime participants in the labor force, have incomes significantly lower than the previous group. Retirement income is typically less than a third of peak annual earnings. Variations in family needs, however measured, are dependent primarily on family size and age composition and there is no necessary correlation of these needs with earnings at different stages of the family cycle. Even for the family whose lifetime earnings are adequate to meet a specified standard (e.g. the poverty level or the modest but adequate standard), a substantial amount of temporal reallocation may therefore be necessary.

Without reference to the question of how this redistribution is achieved, this study examines, first, the available data on income and