ECONOMIC EXCHANGE AND SUPPORT WITHIN U.S. FAMILIES

Laurence J. Kotlikoff

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## ABSTRACT

This paper examines U.S. family exchange and support, its levels and trends. The paper points out the importance of demographics and geographic mobility in affecting the amount and form of family exchange. It then considers family economic exchange in the form of shared living, financial transfers, and the provision of time. Finally, it describes recent tests of family altruism and risk sharing.

The paper paints a very pessimistic picture. Demographic, geographic, and economic pressures have taken their toll on U.S. families in recent years. While many Americans are members of extended families that are intact and in touch, a growing number of Americans have few extended family members on whom to rely. Family support in the form of shared living, financial assistance, and significant provision of time is increasingly becoming the exception, rather than the rule. Family economic assistance appears still to be available for many Americans in the case of dire emergencies, but short of such emergencies Americans are increasingly left to fend for themselves.

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I. Introduction

In recent decades the American family has come under increasing assault. Some of the statistics documenting this assault are simply worrisome, others are outright shocking. The forces impinging on the American family are demographic, geographic, and economic. This paper describes some of the demographic and geographic forces and then turns to the question of economic exchange and support within the extended family, including the role played by demography and geography in affecting this exchange. The paper draws primarily on a number of studies that I wrote or am in the process of writing either alone or with coauthors. The picture that emerges is one of diminished family economic exchange, be it in the form of shared living arrangements, intervivos transfers of money or time, or bequests. This picture would be surprising if families were altruistic or at least engaged in selfish risk-sharing. But new direct tests of family altruism and family risk-sharing suggest that neither type of behavior is commonplace. I should caution that this is the modal picture; there is a great deal of heterogeneity in family economic behavior, and in many families economic exchange remains highly significant.

To a large extent the decline in the family's role in economic exchange and support may be traced to the government which, in the case of the U.S. and many other countries, has taken over traditional roles of the family in the area of support for the elderly and the disadvantaged and in insuring against a range of economic risks. But governments have gone far beyond simply supplanting the economic role of the family. In the U.S. over the past four decades the government has engaged in massive redistribution away from young and future generations toward contemporaneous older generations. This policy,

which is continuing full force, will increasingly pit generation against
generation and exacerbate economic tensions within the extended family.

The paper proceeds in Section II with a potpourri of U.S. demographic and
geographic facts about the aging of society, marriage, divorce, the length of
retirement, and the geographic dispersion of families.  Each of these facts
has implications for the scope of economic exchange within the extended
family.  Section III considers trends in and current levels of family economic
exchange and support.  Section IV discusses recent findings concerning family
altruism and risk-sharing.  Section V summarizes key points and trys to
provide a synthetic picture of family exchange in the U.S..

II.  Demographic and Geographic Forces

The Aging of America

Like virtually all developed economies, the U.S. is getting older (see
Table 1).  By the year 2030 the age-composition of the U.S. will resemble that
of present-day Florida, with over a fifth of Americans age 65 or older
compared with only 12 percent today.[1]  Many of the old in 2030 will be very
old.  One in ten Americans will be over age 75, compared with one in twenty
now.[2]  As is well known, this aging reflects the immediate postwar baby boom
and the subsequent baby bust.  The U.S. fertility rate increased from 2.9 to
3.8 between 1946, the year before the baby boom began, and 1957, the peak year
of the boom.  Between 1957 and 1965, the first year after the boom, the U.S.
fertility rate fell from 3.8 back down to 2.9.  U.S. fertility has remained
low.  In the 1970s and 1980s the U.S. fertility rate averaged 1.7 and 1.8,
respectively.[3]

The increase in the number of old relative to young family members will
increasingly limit the amounts and types of support that younger family

members can give to older family members. Today there are 2.2 Americans age
35 to 54 for every American age 65 and older. In the 2030s there will be only
1.2 Americans age 35 to 54 for every older American. The baby boom generation
will be the first generation in modern times to experience old age with so few
children on whom to rely.

Even many of today's elderly have few or no children on whom to rely,
either because they had few or no children or because they have outlived their
children. A 1986-87 survey (Kotlikoff and Morris, 1989) shows that over a
fifth of Massachusetts elderly have no children and that over two-fifths have
either no children or only one child (See Table 2).[4]  Daughters are viewed as
more important care-givers to the elderly than sons. In the Massachusetts
sample 40.5 percent of the elderly reported having no living daughters.

## Marriage and Divorce

Family economic exchange presupposes the existence of families. But the
rate of U.S. family formation has declined. Among unmarried women age 15 to
44 the annual rate of marriage has fallen from 148 per thousand in 1960 to
less than 95 per thousand in 1985.[5]  On an age-standardized basis, the share
of the U.S. population that is married fell from 70.8 percent to 62.5 percent
between 1970 and 1987.[6]

Those who are getting married are getting married at older ages. The
median age of first marriage for females was 20.6 in 1970 compared with 23.6
in 1987. For males the median age of first marriage was 22.5 in 1970 compared
with 25.3 in 1987.[7]  In 1989 never married women constituted 62.5 percent of
women ages 20-24, 29.4 percent of women ages 25-29, and 16.9 percent of women
ages 30-34. The corresponding percentages in 1970 were 35.8 percent, 10.5
percent, and 6.2 percent.[8]

American marriages are less stable than those in other countries.  The
U.S. divorce rate is almost twice the rate of most Western European countries
and four times the rate of Japan[9].  American marriages are also less stable
than was the case in the past.  Today 12.7 percent of Americans 35 to 44 are
divorced, compared to only 2.9 percent in 1960.[10]  Half of marriages begun in
recent years will not last.  And two children in five now grow up in divorced
families.[11]  One wonders whether this high rate of divorce will influence the
degree of support that today's parents will receive from their children and
how such support will be divided between the two parents.  According to a
recent survey almost one quarter of divorced fathers had no contact with their
children in the last five years and another 20 percent had not seen their
children during the preceding year.[12]

The slower rate of formation of new American families and the higher rate
of breakup of existing American families has meant an increasing number of
people living apart from relatives.  In 1960 14.9 percent of U.S. households
were nonfamily households.  By 1989 this figure had risen to 29.1 percent.  It
is projected to reach 36.5 percent by the turn of the Century.[13]  In addition,
the size of family households has fallen — from 3.3 in 1960 to about 2.6
today.[14]

Today over one in four households with children are single-parent
households compared with one in eight in 1970.  In 1989 73.1 percent of all
American children, but only 67.0 percent of Hispanic children, and 38.0
percent of African American children lived with both parents.  The respective
1970 figures were 85.2 percent, 77.7 percent, and 58.5 percent.[15]  Given the
high divorce rate, a majority of today's American children appear likely to
spend some part of their childhood in single-parent households.

**The Length of Life and the Length of Retirement**

Labor force participation by those over 65 is currently only 12 percent. Even males age 55 to 64 are dropping out of work; today only 68 percent of males in this age bracket even participate in the labor force. Twenty years ago the figure was 83 percent.[16] If this trend continues, retirement as early as age 50 will be commonplace. The postwar trend toward early retirement continues notwithstanding the fact that people are living longer and saving less.[17] Today's 30 year old male can expect to live to age 74, 3.5 years longer than the typical 30 year old in 1960.[18] For 30 year old females the expected end of life is age 80, which is 3.1 years more than in 1960.

The upshot of these numbers is that a typical 30 year-old planning to retire at age 55 can now expect to spend close to half of his (her) remaining life in retirement. How will the increases in lifespan and the length of retirement affect family exchange? The answer is that they are likely to reduce the amount of bequests left to children. Ignoring any induced increases in saving, a longer lifespan and a shorter workspan mean that the elderly will earn less and consume more prior to their demise. Even if one takes into account the additional saving induced by the prospect of a longer retirement, the net effect on bequests may be negative (see Skinner 1985).

Another reason that increased lifespan may reduce parental bequests involves the age of their children. As parents live longer they may be more prone to view their children, who will also be older, as already established in life and in less need of bequests.[19] In addition, as parents live longer there is a greater change they will outlive some or all of their children, which may also reduce bequests.

**The Geographic Dispersion of Families**

Physical contact is obviously critical for the exchange/provision of time
to family members. The extent of such contact may also influence the amount
of financial transfers between relatives. Hence, if the family members are
becoming increasingly geographically dispersed, this will impact the level of
family economic exchange. As far as I am aware, there are no studies of
changes over time in the geographic dispersion of family members, but certain
statistics suggest this dispersion has increased through time. First, the
geographic center of the country, when weighted by population, continues to
move west.[20] Second, certain states popular as retirement communities have
seen massive population increases in just the last decade. For example,
between 1980 and 1990, Florida's and Arizona's populations increased at
roughly three times the national rate. The elderly moving to these states
were not, in most cases, taking their adult children with them. Third, the
annual rate of moving from one state to another is very high among the young
and middle aged compared to the elderly. For example, in the two year period
1987 to 1988, 2.8 percent of those 30 to 44 moved out of state, compared with
1.0 percent for those 65 to 74 years old and .4 percent for those age 75 and
older. Again, this suggests the likelihood of a lot of adult children living
a good distance from their parents.

Table 3 gives a sense of the high degree of geographic mobility among
Americans. It uses 1980 Census data to compare individuals' 1980 region of
residence with their region of birth. The observations are sorted by their
age in 1980. The description of regions is given in the end of the table.
The movement out of the central part of the U.S. — the Plains in the table —
is quite striking. Less than three-fifths of those born in the Plains, lived
in the Plains in 1980. But there is also movement from regions typically
viewed as more attractive places to live. Over one in five adult Census

respondents who were born in New England lived outside of New England at the time of the Census.

Recently surveys of the elderly have begun to inquire about the distance of respondents from their children. A 1984 National Health Interview Survey found that over one third of American elderly living apart from their children lived more than one hour from any of their children. Over one fifth lived more than three hours away, and over 7 percent lived more than a day away. A total of 22.4 percent saw their children less frequently than once a month, and 30.3 percent saw their children at most once a month. These figures are essentially the same for elderly living alone and elderly living with others. Finally, the survey shows that children of elderly age 85 and older live somewhat closer to and have slightly more physical contact with their parents.[21]

The Kotlikoff and Morris (1989) survey of Massachusetts elderly also considered the distance between the elderly and their children. They report that one third of Massachusetts elderly either have no children or have no children within an hour. Of those elderly who have children, but are not living with any of them, less than half have more than one child within one hour. If daughters are the more important care-givers, having a daughter close by may be critical for the receipt of care from children. Kotlikoff and Morris find that fewer than half of Massachusetts elderly have a daughter who lives within an hour of them.

In addition to these surveys, the Panel Study of Income Dynamics' (PSID) determined in 1989 the distance of respondents to their adult children. These data indicate that almost one quarter of parents live at least 100 miles away from any of their adult children.

III. Trends and Levels of Family Economic Exchange and Support

Living Arrangements

The single most troubling statistic concerning postwar changes in U.S.
family support may well be the fraction of the elderly living alone.  In 1940
fewer than a quarter of unmarried noninstitutionalized elderly lived alone.
Today over three-fifths of these elderly live alone.  In the case of unmarried
noninstitutionalized elderly age 85 or older the proportion living alone has
risen from 13 percent to 57 percent.  In addition to having a much greater
chance of living alone, the elderly face a much greater chance of
institutionalization.  In 1940 only 7 percent of those age 85 or older lived
in institutions.  The current figure is almost 25 percent.

Demographics may explain some of the trend of the elderly to live alone.
In 1940 for each person age 80 and over there were four people age 60 to 65.
In 1985 for each person age 80 plus there were fewer than two people age 60 to
65.  When the baby boomers are 80 plus there will be only one person age 60 to
65 for each baby boomer.  While demographics surely play a role, most studies
of the living arrangements of U.S. elderly have a) presumed that the elderly
want to live alone and b) argued that the rising incomes of the elderly have
permitted the elderly to live by themselves.  But virtually none of these
studies have considered the attitudes and incomes of the children who would
have to house their aged parents.

Kotlikoff and Morris (1990) present a model of the joint decision of
parents and children to live together.  They show how one can use data on
living arrangements and children's and parents' characteristics to tease out
the preferences of parents and children about shared living.  The empirical
findings, based on their survey of Massachusetts elderly, suggest that
children generally prefer to live alone and that many only agree to share

housing with their elderly parents because it is economically advantageous. Since incomes of parents and children are positively correlated, the previous findings that as their incomes rise the elderly choose to live alone may really be findings that as the income of children rise, they choose not to live with their elderly parents.

At the same time that more and more of the elderly are living alone, there is a growing propensity of young people to live together with their parents. According to U.S. Bureau of the Census data, 11.2 percent of Americans age 25 to 34 now live in their parents' home, compared with 8.0 percent in 1970. For males (females) the current figure is 14.6 (7.9) percent, while the 1970 figure is 9.5 (7.0) percent. Most of the post-1970 increase in the proportion of 25 to 34 year-olds living with their parents has occurred within the last decade. This trend may reflect the depression in the wages paid for entry level jobs caused by the appearance en mass on the job market of the large baby boom cohort (see Welch 1979). Parents may be assisting their 25 to 34 year-old children with housing during difficult times with no quid pro quo. Alternatively, these children may be sharing housing expenses with their parents and, in effect, paying for all or most of their lodging.

## Bequests

While bequests (and intervivos transfers) appear to have played a key role historically in U.S. capital formation (see Kotlikoff and Summers 1981), there is reason to believe that the propensity of the elderly to bequeath their resources to surviving family members has declined and will continue to decline. The reason is that a larger fraction of the resources of the elderly appears now to be annuitized compared to the case in the past. In the limit,

if all of the elderly's resources were annuitized and they did not counteract this annuitization through increased purchase of life insurance, bequests would be zero.

Social Security's old age pensions and Medicare's provision of survival-contingent health care benefits represent two types of government-provided annuities which have grown rapidly since 1960. In 1960 Social Security benefits represented only 4 percent of U.S. personal income; today they represent almost 10 percent of personal income. In 1960 Medicare was not yet in existence. By 1970 Medicare benefits were .9 percent of U.S. personal income. Today they exceed 2.2 percent of personal income.

The increase in private pension annuities in the last three decades has also been striking. In 1960 only 39 percent of the nongovernment work-force was covered by a private pension.[22]   Today's figure is over 50 percent.   The change in the fraction of the elderly receiving pensions is even more striking; in 1960 less than 10 percent of Americans age 60 and over received pension income. Today's figure appears to be almost three times as high.[23] The fraction of the elderly's income represented by pensions was 5.3 percent in 1960. By 1975 the figure had risen to 12.2 percent. Today's figure is over 15 percent.[24]

A different indication of the growth in private pensions is the share of pension fund reserves in total household net wealth. In 1960 pension funds represented only 5.2 percent of U.S. household net wealth. Today's figure is 16.5 percent. Another reason to suspect that a higher share of the resources of the elderly is now annuitized is the fact that the ratio of household networth exclusive of pension fund reserves to national income is down 14 percent from 1960 (3.0 now compared with 3.5 in 1960); i.e., bequeathable wealth relative to income is 14 percent smaller now than it was in 1960.[25]

Table 4 reports some very preliminary findings from ongoing research I am conducting with Alan Auerbach and David Weil on the annuitization of American elderly. The table is based on the 1962 and 1983 Federal Reserve Surveys of Consumer Finances. The table considers male and female elderly broken down into four age groups. For each age group it shows (weighted) average total resources, the (weighted) average amount of annuitized resources, and the ratio of (weighted) average annuitized resources to (weighted) average total resources. Annuitized resources here refer to the actuarial present value of social security benefits, private pension benefits, and human wealth. The analysis does not yet consider Medicare benefits. Total resources equals annuitized resources plus net wealth. The amounts of these resource variables are estimated from data provided in the two household surveys as well as supplementary information. In ascribing household net wealth to the married individuals in the two surveys we allocated half of household net wealth to the husband and half to the wife.

The table indicates a significant increase in the annuitization of the total resources of the elderly. For the resources of the elderly combined, the annuitization ratio increased from .24 to .33 between 1962 and 1983. The increased annutization is particularly striking in the case of women. For example, in the case of women age 70 to 74 the annuitized share of resources rose from 16 percent to 38 percent. Absent offsetting purchase of life insurance, an increase in the share of resources which is annuitized means a decrease in the share of resources that will be bequeathed. Our preliminary findings suggest that additional life insurance purchases have not offset the increased annuitization of the elderly. After we take into account Medicare's implicit health care annuity, we will surely find an even greater degree of annuitization of the resources of the aged. The upshot of these preliminary

findings is that bequests may be playing a smaller role in U.S. capital
accumulation now than was the case 30 years ago. How much smaller? Well, at
this stage of the analysis it appears that the annuitization of resources of
the elderly may have reduced the share of resources bequeathed by 15 to 25
percent.

## Intervivos Financial Transfers

The striking thing about intervivos financial transfers is that, apart
from college support, such transfers appear to be primarily an activity
carried out by the rich. A recent study by Gale and Schultz (1991) using the
1983 and 1986 Federal Reserve Surveys of Consumer Finances (SCF) indicates a
significant amount of such transfers in the aggregate. Their estimate of the
flow of transfers (excluding college support) in 1983 is $42 billion, which is
1.2 percent of 1983 GNP. In per capita terms $42 billion translates into $179
per person in 1983.

The aggregate flow of transfers in 1983 is sizeable notwithstanding the
fact that only 3.1 percent of households reported making annual transfers of
$3000 or more. Among households who made transfers, the average annual
transfer was $5400. The distribution of transfers given as well as transfers
received is highly skewed. The 10 percent of those giving transfers who gave
the most accounted for 56 percent of total transfers given.[26] The 10 percent
of recipients who received the most transfers accounted for 52 percent of all
transfers received. Three quarters of all transfers involved parents
transfering funds to their children. Another 14.6 percent of transfers
involved children supporting their parents. Children received 74.9 percent
and grandchildren 11.8 percent of all funds transfered.[27]

Not surprisingly, those making transfers have higher incomes, on average, than the average for the entire sample. In the SCF data those making transfers had incomes that were almost twice as high as the sample average. Those receiving transfers also reported higher than average incomes. Their average income exceeds the sample average by 24.8 percent.

In their survey of Massachusetts elderly Kotlikoff and Morris (1989) also considered the extent of financial transfers. Only 3.3 percent of their sample reported receiving regular monthly financial help from their children. A slightly higher percentage, 4.5 percent, of very poor elderly reported monthly receipt of money from their children. On the giving side, 2.6 percent of the elderly reported making regular monthly transfers to their children. The amounts of transfers per month received ranged from $13 to $740. The amounts of transfers per month given ranged from $20 to $1,605.

The SCF and Kotlikoff and Morris surveys as well as newly available PSID data on transfers all confirm that financial intervivos transfers are infrequent and generally small in the case of the poor and middle class. But these cross-section snapshots of intervivos transfers may be misleading. If we had long term panel data on the poor and middle class we might find that a much greater percentage of these groups engaged in such transfers, but on an occasional basis, and in the case of real need on the part of a relative. The transfers made on such occasions might well be significant, but might be missed by the wording of the standard transfer survey questionnaire. This concern about snapshot surveys carries over to other types of family exchange, such as shared living. While only a small fraction of the elderly live with their children at any point in time, in a panel context we might find that a much larger fraction of the elderly live with their children at some point in their old age.

## The Provision of Time to the Elderly

While the elderly may need and appear to be receiving less financial help from their children, their need for companionship and physical assistance may well have increased in the postwar period; the greater longevity of the elderly often means living for years in poor states of health. Boersch-Supan, et. al. (1992) use the Kotlikoff-Morris survey of the children of Massachusetts elderly to study the provision of time by children to the elderly. They develop an altruism-based model to analyze the determinants of this decision. Their findings indicate that older parents, less healthy parents, and non-institutionalized parents receive more time from their children, while younger children, healthier children, and female children provide more time. In contrast to these demographic determinants, economic variables, such as children's wage rates and income levels, appear to play a rather insignificant role in the provision of time. In addition, the evidence does not support the view that parents purchase time from their children.

The time question in the Kotlikoff-Morris survey of children that provides the dependent variable for their analysis is: "In the last month, how many hours did you (and your spouse) spend with your parents, visiting, going out together, and/or helping him/her/them?" Of the 1179 (out of 1650) children in the sample who indicate they were not living with their elderly parent, 29 percent reported spending zero time per month with their elderly parent. Another 31 percent reported spending 1-10 hours per month; 18 percent reported spending 11-20 hours per month, 9 percent reported 21-30 hours per month, 5 percent reported 31-40 hours per month, and 8 percent reported spending 41 or more hours per month.[28] Thus, while most children provided time to their parents, less than a quarter reported spending more than a day a

month with their parents.  In this regard it should be noted that the elderly

parents in the Kotlikoff-Morris sample were disproportionately older and in

poorer health.  Indeed, 40 percent of the elderly in their sample self-

reported their health as fair or poor (as opposed to excellent or good).

There is some evidence in the data that children free-ride on their

siblings provision of time.  The average number of hours provided per month is

15, and the median number is 8.  Within this subsample of non-co-resident

children, average and median hours provided by only children are 24 and 16;

average and median hours (per child) provided by children with one sibling are

16 and 9; and average and median hours (per child) provided by children with

two or more siblings are 12 and 5.


IV.  Family Altruism and Risk Sharing

Apart from college support and transfers among the very wealthy, there

is, as just indicated, little evidence of systematic annual intervivos

transfers running either from parents to their adult children or from adult

children to their parents.  But these facts do not necessarily rule out

altruistic linkages between parents and children.  The standard Barro/Becker

altruism model does not require more than periodic intergenerational

transfers.  It does, however, require that altruistically linked family

members share, in terms of consumption, their resources, both at a point in

time and over time.

Altonji, Hayashi, and Kotlikoff (1989) and Hayashi, Altonji, and

Kotlikoff (1991) use matched data from the Panel Survey of Income Dynamics to

test directly the implication of the traditional model of altruism — that

parents and children share their resources.  Their data are primarily on the

consumption and income of parents and their adult, non co-resident children.

The altruism model predicts that the distribution of consumption among altruistically linked family members will not depend on the distribution of income across these members. The presence of altruism also implies that families will share risk, so that the distribution of changes over time in consumption of family members will not depend on the distribution of changes over time in the resources of these family members. This property concerning changes in consumption over time also holds in the case of nonaltruistic family risk-sharing.

The two studies find strong evidence against such resource sharing. Extended American families do not, as a rule, pool resources at a point in time. Nor do they, as a rule, share risk by pooling resources over time. The two studies reinforce similar findings based on cohort data reported in Abel and Kotlikoff (1989). The distribution of resources across households within the extended family is a highly significant (statistically and economically) determinant of the distribution of consumption within the extended family. This finding holds as well as for extended families consisting of rich parents and poor children.

Altonji, et. al. also test whether less than a pure altruistic model is at play. They do so by asking whether only own resources matter, i.e., whether the resources of extended family members have no affect on a household's consumption. The results indicate that extended family member resources have at most a modest effect on household consumption after one has controlled for the fact that extended family resources help predict a household's own permanent income.

While the simple Barro/Becker altruism model appears to be ruled out, there are other models of altruism whose predictions are potentially more in accord with these findings. Kotlikoff and Razin (1988) and Kotlikoff (1987)

offer models of altruism in which the altruist doesn't know the potential

donee's true need. In order to ensure against manipulation by the donee, the

altruist will not simply share his resources, but will condition his transfers

on the donee's behavior. For example, he may condition his transfers on the

earnings or savings of the donee. Kotlikoff and Rosenthal (1988) argue that,

contrary to the Barro/Becker model, donees may try to manipulate altruists by

refusing to accept transfers below specified amounts. Their ability to do so

depends on their initial resource positions - their "threat points." All

three of these models have the implication that the distribution of

consumption within the extended family will depend on the distribution of

resources, hence, none of the three models of altruism are ruled out by the

empirical findings of Abel and Kotlikoff (1989), Altonji, et. al. (1989), and

Hayashi, et. al (1991).


V. **Summary and Synthesis**

Demographic, geographic, and economic pressures have taken their toll on

U.S. families in recent years. While many Americans are members of extended

families that are intact and in touch, a growing number of Americans have few

extended family members on whom to rely. Family support in the form of shared

living, financial assistance, and significant provision of time is

increasingly becoming the exception, rather than the rule. Family economic

assistance appears still to be available for many Americans in the case of

dire emergencies, but short of such emergencies Americans are increasingly

left to fend for themselves.

The breakdown of so many American families may have longer term

implications for the U.S. economy. Clearly, children growing up in single-

parent households are likely to be at a disadvantage with respect to their

educational attainment among other things. While I am not aware of studies of parental time spent educating children, such studies, were they to be conducted, would surely suggest that this form of economic exchange within American families has declined as well. Less education for children may ultimately spell less technological improvement for the economy at large.

The diminution of family ties through divorce may influence the extent of support of children for their divorced parents, when their parents reach old age. It may also reduce the desire on the part of many divorced parents to leave bequests, particularly in the case of divorced parents who spent little time with their children when they were young. Even in the absence of a deterioration of family ties, there are external forces that are likely to reduce bequests through time. The increasing annuitization of the resources of American elderly means that making bequests can no longer be an after-thought, but will require a conscious decision to purchase life insurance. In this regard it is important to note that American males have for years been purchasing inadequate amount of life insurance when it comes to protecting their wives and children against their early deaths.[29]

If the propensity to bequeath is declining because of the provision of annuities and the deterioration of family ties, this has potentially major implications for U.S. saving. As is well known, the U.S. saving rate has been critically low for over a decade. Is the recent decline in U.S. saving due to an increase in consumption of the elderly facilitated by the reduction of their lifespan risk associated with their having more of their resources annuitized? This question is one worthy of careful research. Certainly, the process of successive generations leaving resources to their descendants has played a critical role in U.S. wealth accumulation in the past. We may need

to look to this process if we are to understand the recent dramatic decline in U.S. saving.

To conclude, the American family is alive, but not well, and, as a consequence, family exchange and support is probably at its lowest point in the nation's history. As the marriage rate continues to decline, as the fertility rate continues to remain low, as the divorce rate continues to stay high, as Americans continue to move physically apart, and as the population continues to age, prospects for a reversal in the trend in U.S. family economic exchange and support are meager indeed.

Notes

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[1] This graphic way of describing the aging of the U.S. was gleaned from Cutler et. al. (1990).

[2] Auerbach, Alan J. and Laurence J. Kotlikoff, "Demographics, Fiscal Policy, and U.S. Saving in the 1980s and Beyond," in The National Bureau of Economic Research, Tax Policy and the Economy, vol.4, 1990.

[3] U.S. Bureau of the Census, U.S. Historical Statistics, p. 50.

[4] These figures are slightly higher than those contained in unpublished data from Supplement on Aging to 1984 National Health Interview Survey (see 1989 U.S. Statistical Abstract, Table no. 47, p.37).

[5] 1989 U.S. Statistical Abstract, Table no.127, p. 85.

[6] 1989 U.S. Statistical Abstract, Table no. 40, p. 42.

[7] Statistical Abstract of the United States 1991, Table no. 131, p. 87.

[8] Ibid., Table no. 52, p. 44.

[9] U.S.A. Today, July 9, 1991.

[10] Business Week, May 20, 1991, p.76.

[11] Brody, Jane E., "Children of Divorce: Steps to Help Can Hurt," The New York Times, Tuesday, July 23, 1991, p. C1. The 1989 U.S. Statistical Abstract Table no. 132, p. 87 indicates that in 1985 1.73 percent of all children 18 or younger were children of parents who became divorced in 1985. The comparable percentage for 1970 was 1.25 percent.

[12] The survey by Dr. Frank F. Furstenberg Jr. and colleagues at the University of Pennsylvania is cited in the article just cited by Jane E. Brody.

[13] U.S. Statistical Abstract 1991, Table no. 62 and U.S. Statistical Abstract 1989, Table no. 59, p. 45.

[14] Statistical Abstract of the United States 1989, Table no. 58, p. 45.

[15] Statistical Abstract of the United States 1991, Table no. 70, p. 53.

[16] U.S. Bureau of Labor Statistics, "Employment and Earnings", Monthly Labor Review, November 1989 and unpublished data.

[17] There are a number of reasons for the trend toward earlier and earlier retirement. First, at least until recently, each successive postwar cohort has had a have higher lifetime income than its predecessor thus providing each successive cohort with greater economic means to retire early. Second, many private pension defined benefit plans have been structured to provide very significant incentives for retiring early from one's principal job (see Kotlikoff, Laurence J. and David Wise, The Wage Carrot and the Pension Stick, The W.E. UpJohn Institute for Employment Research, 1989. And third, those generations retiring in the last four decades received significant net transfers (to be payed by subsequent generations) from the government; these transfers helped provide the means to finance an early retirement.

[18] U.S. Statistical Abstract, various issues.

[19] I thank Dr. Yutaka Kosai for pointing this out to me.

[20] Ibid., p. 8.

[21] Statistical Abstract of the United States 1989, Table no. 43, p. 37.

[22] See Kotlikoff and Smith, 1983.

[23] Ibid.

[24] Ibid.

[25] Board of Governors of the Federal Reserve System, "Balance Sheets for the U.S. Economy, 1949-88," Balance Sheets, Flow of Funds, October 1989, pp. 17, 20.

[26] Gales and Schultz (1991), Table 3.

[27] Ibid.

[28] In the Kotlikoff-Morris survey of the elderly, 57 percent reported receiving five or more hours of time from one or more of their children in the previous month.

[29] See Auerbach and Kotlikoff (1987 and 1991).

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Table 1

Population Age Distributions for the United States by Decade

| Age Group | 1950's | 1960's | 1970's | 1980's | 1990's | 2000's |
|-----------|--------|--------|--------|--------|--------|--------|
| 0 - 17    | .329   | .356   | .318   | .268   | .256   | .239   |
| 18 - 25   | .109   | .114   | .143   | .140   | .111   | .110   |
| 25 - 34   | .133   | .109   | .125   | .156   | .146   | .120   |
| 35 - 54   | .256   | .240   | .220   | .228   | .277   | .299   |
| 55 - 64   | .090   | .088   | .092   | .092   | .083   | .103   |
| 65 PLUS   | .084   | .093   | .102   | .116   | .126   | .129   |

| Age Group | 2010's | 2020's | 2030's | 2040's |
|-----------|--------|--------|--------|--------|
| 0 - 17    | .222   | .216   | .210   | .207   |
| 18 - 24   | .106   | .097   | .097   | .096   |
| 25 - 34   | .123   | .117   | .111   | .113   |
| 35 - 54   | .269   | .253   | .255   | .249   |
| 55 - 64   | .132   | .128   | .113   | .120   |
| 65 PLUS   | .148   | .188   | .214   | .215   |

Source: Auerbach and Kotlikoff (1990)

Table 2

Percent of Massachusetts Elderly with Specified Number of Children[*]

| Percent of Elderly with | Single Males | Single Females | Married | Total |
|---|---|---|---|---|
| Zero Children | 26.0 | 26.0 | 13.2 | 22.4 |
| One Child | 22.3 | 20.6 | 17.1 | 19.8 |
| Two Children | 20.4 | 22.1 | 29.8 | 24.0 |
| Three Children | 14.9 | 14.5 | 22.0 | 16.7 |
| Four Children | 9.7 | 7.8 | 9.0 | 8.3 |
| Five or More Children | 6.7 | 9.0 | 9.0 | 8.8 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 |

[*] Source: Kotlikoff and Morris (1990). The sample sizes are 269 single males, 1,418 single females, and 667 married individuals.

Table 3

U.S. Location Distributions

Distribution of Those Born in the Northeast Age:

|  | 20-39 | | 40-59 | | 60-79 | |
|---|---|---|---|---|---|---|
|  | Number | Percent | Number | Percent | Number | Percent |
| Northeast | 13,162 | 78.32 | 8,827 | 79.35 | 5,976 | 77.54 |
| Great Lakes | 631 | 3.75 | 478 | 4.30 | 276 | 3.58 |
| Plains | 208 | 1.24 | 75 | 0.67 | 37 | 0.48 |
| West | 1,101 | 6.55 | 724 | 6.51 | 473 | 6.14 |
| South | 1,704 | 10.14 | 1,020 | 9.17 | 945 | 12.26 |
| Total | 16,806 | 100.00 | 11,124 | 100.00 | 7,707 | 100.00 |

Distribution of Those Born on the Great Lakes at Age:

|  | 20-39 | | 40-59 | | 60-79 | |
|---|---|---|---|---|---|---|
|  | Number | Percent | Number | Percent | Number | Percent |
| Northeast | 506 | 2.92 | 320 | 2.93 | 171 | 2.31 |
| G. Lakes | 13,365 | 77.13 | 7,985 | 73.15 | 5,398 | 73.00 |
| Plains | 480 | 2.77 | 300 | 2.75 | 216 | 2.92 |
| West | 1,425 | 8.22 | 1,354 | 12.40 | 905 | 12.24 |
| South | 1,552 | 8.96 | 957 | 8.77 | 705 | 9.53 |
| Total | 17,328 | 100.00 | 10,916 | 100.00 | 7,395 | 100.00 |

Distribution of Those Born in the Plains at Age:

|  | 20-39 | | 40-59 | | 60-79 | |
|---|---|---|---|---|---|---|
|  | Number | Percent | Number | Percent | Number | Percent |
| Northeast | 69 | 2.10 | 52 | 2.12 | 45 | 2.49 |
| G. Lakes | 330 | 10.04 | 225 | 9.18 | 205 | 11.36 |
| Plains | 1,934 | 58.86 | 1,263 | 51.53 | 856 | 47.42 |
| West | 650 | 19.78 | 716 | 29.21 | 566 | 31.36 |
| South | 303 | 9.22 | 195 | 7.96 | 133 | 7.37 |
| Total | 3,286 | 100.00 | 2,451 | 100.00 | 1,805 | 100.00 |

**Table 3 Continued**

Distribution of Those Born in the West at Age:

|           | 20-39  |         | 40-59  |         | 60-79  |         |
|-----------|--------|---------|--------|---------|--------|---------|
|           | Number | Percent | Number | Percent | Number | Percent |
| Northeast | 194    | 2.43    | 53     | 1.73    | 29     | 2.10    |
| G. Lakes  | 261    | 3.27    | 79     | 2.58    | 35     | 2.54    |
| Plains    | 317    | 3.97    | 109    | 3.56    | 60     | 4.35    |
| West      | 6,654  | 83.30   | 2,671  | 87.29   | 1,208  | 87.60   |
| South     | 562    | 7.04    | 148    | 4.84    | 47     | 3.41    |
| Total     | 7,988  | 100.00  | 3,060  | 100.00  | 1,379  | 100.00  |

Distribution of Those Born in the South at Age:

|           | 20-39  |         | 40-59  |         | 60-79  |         |
|-----------|--------|---------|--------|---------|--------|---------|
|           | Number | Percent | Number | Percent | Number | Percent |
| Northeast | 1,090  | 5.17    | 931    | 6.37    | 531    | 5.66    |
| G. Lakes  | 1,453  | 6.89    | 1,530  | 10.46   | 742    | 7.91    |
| Plains    | 277    | 1.31    | 181    | 1.24    | 101    | 1.08    |
| West      | 1,246  | 5.91    | 1,205  | 8.24    | 724    | 7.71    |
| South     | 17,008 | 80.71   | 10,776 | 73.69   | 7,288  | 77.65   |
| Total     | 21,074 | 100.00  | 14,623 | 100.00  | 9,386  | 100.00  |

Source: US Department of Commerce; Bureau of the Census: 1980 Census of Population and Housing, 5 percent sample.

**Table 3 Continued**

| Northeast | West |
|-----------|------|
| Connecticut | Arizona |
| Maine | Alaska |
| Massachusetts | California |
| New Hampshire | Hawaii |
| Rhode Island | Nevada |
| Vermont | New Mexico |
| Delaware | Oregon |
| Washington D.C. | Utah |
| Maryland | Washington |
| New Jersey | |
| New York | South |
| Pennsylvania | Alabama |
| | Arkansas |
| Great Lakes | Georgia |
| | Kentucky |
| Illinois | Louisiana |
| Indiana | Mississippi |
| Iowa | North Carolina |
| Michigan | Oklahoma |
| Minnesota | South Carolina |
| Missouri | Tennessee |
| Ohio | Texas |
| Wisconsin | Virginia |
| | West Virginia |
| Plains | |
| Colorado | |
| Idaho | |
| Kansas | |
| Montana | |
| Nebraska | |
| North Dakota | |
| South Dakota | |
| Wyoming | |

Table 4

The Annuitization of the Resources of the Elderly

(thousands of 1983 dollars)

| | Men | | Women | | Total | |
|---|---|---|---|---|---|---|
| | 1962 | 1983 | 1962 | 1983 | 1962 | 1983 |
| Age 65-69 | | | | | | |
| Average Resources | 135 | 295 | 93 | 262 | 111 | 278 |
| Average Annuitized Resources | 48 | 101 | 19 | 80 | 31 | 90 |
| Annuitized Share of Resources | .35 | .34 | .21 | .30 | .28 | .32 |
| Age 70-74 | | | | | | |
| Average Resources | 125 | 194 | 84 | 154 | 104 | 170 |
| Average Annuitized Resources | 37 | 68 | 14 | 59 | 25 | 63 |
| Annuitized Share of Resources | .29 | .35 | .16 | .38 | .24 | .37 |
| Age 75-79 | | | | | | |
| Average Resources | 87 | 155 | 71 | 124 | 78 | 136 |
| Average Annuitized Resources | 27 | 49 | 6 | 44 | 16 | 46 |
| Annuitized Share of Resources | .31 | .32 | .10 | .35 | .20 | .34 |
| Age 80+ | | | | | | |
| Average Resources | 86 | 142 | 52 | 97 | 67 | 117 |
| Average Annuitized Resources | 17 | 33 | 3 | 34 | 9 | 33 |
| Annuitized Share of Resources | .20 | .23 | .06 | .35 | .14 | .29 |

Source: Auerbach, Alan J., Laurence J. Kotlikoff, and David Weil, "The Increasing Annuitization of the Elderly - Estimates and Implications for Intergenerational Transfers, Inequality, and National Saving," article in progress, 1992. These estimates are based on the 1983 and 1962 Federal Reserve Surveys of Consumer Finances. They are highly preliminary.