[PRELIMINARY AND INCOMPLETE]

DIVORCE, REMARRIAGE AND INTERGENERATIONAL TRANSFERS FROM PARENTS TO ADULT CHILDREN IN MEXICO

DRAFT – MAY, 2010

Megan McDonald Way

Babson College

ABSTRACT

How do divorce and remarriage affect the amount of financial support older Mexican parents provide to their adult children? Are children of divorce in Mexico more or less able to rely on their parents for help? This paper uses the Mexican Health and Aging Study (2001) to examine how parents' marital status – married, divorced, widowed or remarried - may affect inter-vivos giving by parents, and compares the results to similar data from studies based in the United States. It finds that divorced fathers in Mexico who are not remarried are more likely to give to their adult children, both unconditionally and conditioning on other socioeconomic variables, than any other category of parent, like in the US, but that remarried mothers and fathers behave similarly in regards to transfers to their children of a former union, which is unlike the US, where remarried fathers give much less.

Introduction

How does giving by older parents in Mexico to adult children differ based on the parent's marital status? Are children of divorced and/or remarried parents more or less likely to receive financial support from their parents? The rapid changes in family structure in the US and other western countries are expected to manifest themselves in other countries, such as Mexico, in the future. Family-based financial support is a critical element of the economics of Mexican families. If changes in family structure greatly affect changes in this support, then public policy, particularly regarding social security and old-age pensions, should start to address these issues sooner rather than later.

In the United States it has been shown that parental, particularly father's, divorce and remarriage are correlated with giving to adult children. In Way (2009a) it was shown using data from the Panel Study of Income Dynamics that holding all else equal, adult children of divorced parents are more likely to receive a transfer and receive on average *more* from their parents when a transfer is given than a child of married parents. This increase in giving is driven mainly by the fathers. Remarriage of the fathers, however, is correlated with an overall drop in transfer receipts by adult children when compared to children of an intact union. Mothers' remarriages have no correlation with transfers. Data from the Health and Retirement Study revealed a similar pattern. (Way, 2009b)

Why this pattern exists is not known, but there are important implications of this result. The societal expectations on fathers, or fathers' own personal motivations in giving seem to be related to their marital status in a manner that mothers' are not. Mothers' giving, once controlling for other factors such as income, is remarkably steady regardless of marital status. Is this difference between motherly and fatherly giving found elsewhere? Is there something universal about this pattern?

Mexico, with its far lower divorce rate than the United States and different cultural expectations of marriage and family, offers a contrast that could inform the question. If the patterns of giving to adult children are correlated with parental marital status in a similar way as in the United States, that might

suggest that there is an underlying reason separate from culture and societal norms – perhaps a biological basis for giving, or a genetic fitness motive (Case, Lin and McLanahan, 2000, Cox, 2006) that makes fatherly giving very related to his relationship with the child's mother and other potential or actual mates. If, on the other hand, the patterns are different, then future research might better focus on investigating the cultural and policy issues that might result in changing family structure leading to changing familial economic support.

What I find is that while parental marital status is correlated with parental giving to adult children in Mexico, the patterns are different than in the United States. Unconditionally and conditioning on socioeconomic factors such as income and education, divorced fathers in Mexico are far more likely to give to their children than divorced mothers or widowed fathers. There is almost no difference in giving based on the marriage or remarriage status of married parents, but among children of a prior marriage, remarried fathers are more likely to provide support than remarried mothers. This is a strong contrast to the findings in the United States.

The reasons behind these differences could lie in the cultural differences and different expectations for parents and families in Mexico and the US, and also differences in transfers overall. (In the United States family transfers tend to move downward from the older generations to the younger, whereas in Mexico transfers are more likely to move upward from younger to older.) This paper does not, however, explore the reasons behind the patterns, which are open topics for future research.

Marriage and Divorce Trends in Mexico

Marriage remains a very strong and stable institution in Mexico, despite the influence of its northern neighbor and despite the demographic transition that is often credited in western countries for changing the dynamics of marriage and divorce. Between 1960 and 2000 the mean age at marriage (for men and women together) went from 21.3 to 22.7, a very modest increase, and the percentage of women living in

consensual unions as opposed to marriage also increased only slightly, from 13.3% to 15.8%. At the same time, the total fertility rate dropped dramatically, from 6.8 children per woman in 1960 to 2.5 children per woman in 2000. (Fussell and Palloni, 2004) In other countries, this change in fertility rate is typically accompanied by a change in the timing and frequency of marriage, but in Mexico the demographics of marriage have stayed much the same. (Get reference of other countries)

The trends in divorce have stayed much the same as well. While the divorce rate in the United States soared from about 25% in 1960, to about 50% in 2000, Mexico's inched up from 3% to about 6%. (Suarez-Lopez, 2004).

[LITERATURE REVIEW WILL BE INCLUDED HERE IN NEXT DRAFT]

The Mexican Health and Aging Study

The data for this investigation comes from the Mexican Health and Aging Study, which is funded in the United States by the National Institute of Health, but carried out in Mexico by INEGI (the National Institute of Statistics, Geography and Information Technology). MHAS is structured after the Health and Retirement Study, which provides a useful basis for comparison between the United States and Mexico. It is a nationally representative sample of the 13 million Mexicans born before 1951, including 9,862 households in which one or both spouses was surveyed (15,186 interviews), with an oversampling of the six Mexican states whose population accounts for 40% of all migrants to the US. This oversampling was done in part to get a clear picture of the migration patterns and potential sociological/cultural exchanges that could be resulting from the steady pattern of migration and return between Mexico and the United States. The first wave of the study, carried out in 2001, is the data used in this paper. There was a follow-up survey in 2003.

Descriptive Overview

The subsample of survey respondents that are relevant for this study of transfers from parents to adult children are those respondents, both married and unmarried, with non-resident children who are the potential recipients of these transfers. (Transfers between parents and resident children involve many potential direct payments for services received by the parents so they are not useful in studying transfers in the sense of "gifts" to the child.) The MHAS includes 3326 unmarried respondents with non-resident adult children (2532 women and 794 men) and 5198 married or cohabiting respondents with non-resident children (2062 women and 3116 men.)

The socioeconomic characteristics of these two groups are shown in Table 1. Unmarried fathers are significantly older and wealthier than their female counterparts, and they are also more likely to report being divorced or separated than women. 36.9% of unmarried fathers report being divorced and 60.7% of them who report being widowed. For mothers, 27% report being divorced, and 68.4% of them report being widowed. In terms of transfer behavior, they are much more likely to report giving a transfer to non-resident children than mothers (10.5% vs. 4.3%) and far less likely to report receiving a transfer (22.2% vs. 43.0%) in the last year.

Table 1 – Descriptive Overview of Sample Members with Non-resident Children

	Unmarried (n=3326)		Married/Cohab (n=5198	
	Women n=2532	Men n=794	Women n=2062	Men n=3116
Age	65.8	70.0	59.1	59.9
Income	6,020 pesos	10,195 pesos	5,010 pesos	5,364 pesos
Assets	266,632 pesos	309,294 pesos	426,091 pesos	455,973 pesos
Education (yrs)	3.5	4.0	4.3	5.4
Living children	5.57	5.56	5.61	5.36
Living siblings	3.96	3.68	4.92	4.93
Divorced/Sep	27.0%	36.9%	7.0% (ever)	14.4% (ever)
Widowed	68.4%	60.7%	3.2% (ever)	4.4% (ever)
Gave to NR children	4.34%	10.5%	6.3%	8.9%
Received from NR children	43.0%	22.2%	29.6%	24.8%

What is interesting to note is the unconditional difference in giving to children between divorced and widowed fathers. (See Table 2) 18.8% of divorced fathers reported giving a transfer, and the mean amount was around 222,000 pesos (about $2,220), while only 4.8% of widowed fathers reported giving a transfer, although the transfer amount was much higher, at 899,000 pesos ($8,990). Divorced mothers also gave more often than widowed mothers, (6.3% vs. 3.4%), but the divorced fathers, among the married parents, were by far the most likely to give.

Table 2 – Giving by Unmarried Parents, Unconditional Means

	Mothers		**Fathers**	
	Divorced/Sep n=683	Widowed n=1733	Divorced/Sep n=293	Widowed n=481
Gave to NR children	6.3%	3.4%	**18.8%**	4.8%
Amt given	207,848 pesos	142,339 pesos	221,926 pesos	898,905 pesos

Married fathers and mothers are, on average, much closer in age and income/wealth levels. 14.4% of married fathers indicate that they have previously been divorced vs. 7.0% of married mothers while 4.4% of fathers and 3.2% of mothers report previously being widowed. Among the 5,198 married mothers and fathers, there are 3,580 children of a prior union, and 16,541 children of the current union. Transfer behavior among the married parents is somewhat different than among the unmarried parents. Married fathers are also more likely to report giving to a non-resident child than married mothers (8.9% vs. 6.3%), but the difference is not as large as between unmarried fathers and mothers. Married fathers and mothers are also more alike in their reports of a receipt of a transfer from a child, with 24.8% of fathers reporting receiving a transfer vs. 29.6% of mothers.

The MHAS provides the data necessary to compare giving to children of the current marriage/union vs. giving to children of a prior union. (See Table 3) Unconditionally, the rate of giving is higher to children of a prior union (3.2% vs. 2.8%) although this difference is statistically insignificant. What is different is that if a parent is a remarried *father*, the rate of giving to children of a previous union is 3.94%, whereas if

the parent is a remarried *mother*, the rate of giving to children of a previous union is 1.96%, and this difference is significant. This difference cannot be assumed to be causal. Fathers make a higher income, and may have more control over household resources. The conditional analysis below will see if controlling for income and assets accounts for this difference in giving by remarried parents.

Table 3 – Giving by Married Parents – Unconditional Means

	Children of Current Marriage (n=16,541)	Children of Prior Marriage (n=3580)
Male	50.4%	50.8%
Age	33.3	33.1
Married	87.8%	78%
Ed high school or higher	36.6%	32.2%
Student	1.6%	4%
Good financial situation	29.5%	24.7%
Parent gave to child	2.8%	3.2%
Parent received from child	15.4%	6.6%
Biological mother in sample		40.0%
Biological father in sample		55.6%

Conditional Means

The differences in giving between divorced and widowed unmarried fathers and mothers could also, obviously, be related to economic or other differences between these groups that have nothing to do with divorce. It could simply be that men who divorce, for example, are from a higher socioeconomic class, and that divorce law favors fathers in the distribution of assets, and fathers earn higher incomes than mothers. Using a simple probit model to control for these factors can reveal if the correlation of giving with divorce and fatherhood comes from something other than income or asset levels. In Table 4 the probit reveals that controlling for gender, age, divorce or widowhood, income, assets and education level, divorced fathers are more than twice as likely to give to non-resident children as widowed fathers, and are much more likely than women to give to their children. Indeed, for women only, the state of being

divorced or separated is insignificantly correlated with giving, and income, asset and education levels are

the only variables that significantly predict the rate of giving.

Table 4 – Giving by Unmarried Parents – Probit Results

```
. dprobit gavenr01 sexo edad divsep01 divmale lninc_i lnasset edyrs01;
Iteration 0:   log likelihood = -736.06931
Iteration 1:   log likelihood = -611.24963
Iteration 2:   log likelihood = -601.68185
Iteration 3:   log likelihood = -601.15247
Iteration 4:   log likelihood = -601.14939
Iteration 5:   log likelihood = -601.14939
Probit regression, reporting marginal effects          Number of obs =    3315
                                                       LR chi2(7)    = 269.84
                                                       Prob > chi2   = 0.0000
Log likelihood = -601.14939                            Pseudo R2     = 0.1833
-------------------------------------------------------------------------------
gavenr01 |     dF/dx   Std. Err.      z    P>|z|     x-bar  [    95% C.I.    ]
---------+---------------------------------------------------------------------
   male*|   .0178462   .0103525    1.91   0.056   .237707  -.002444   .038137
   age01 |  -.0012785   .0003204   -3.90   0.000   66.3216  -.001906  -.000651
divsep01*|   .0066902   .0081002    0.85   0.393   .293816  -.009186   .022566
 divmale*|   .0396033   .0217243    2.40   0.016   .087783  -.002976   .082182
 lninc_i |   .0039899   .0010947    3.55   0.000   6.32685   .001844   .006135
 lnasset |   .0042996   .0009151    4.35   0.000   10.0249   .002506   .006093
 edyrs01 |   .0050679   .0007411    7.90   0.000   3.65762   .003615    .00652
---------+---------------------------------------------------------------------
  obs. P |   .0582202
  pred. P |   .0318305  (at x-bar)
-------------------------------------------------------------------------------
(*) dF/dx is for discrete change of dummy variable from 0 to 1
    z and P>|z| correspond to the test of the underlying coefficient being 0
```

In the married sample (see Table 5), I used a linear probability model in order to use fixed effects to

control for parents being in the sample multiple times matched with multiple children. (Parents are

matched with children to identify giving to children of a current union vs. giving to children of a prior

union.) In the married conditional analysis, no difference in giving by mothers and fathers to children of

a former union is identified. The significant correlations are found between parental giving and the

child's gender, age, marital status, being a student and the child's financial circumstances. The other

significant correlation was with the child being a product of the current union. Unlike the unconditional

analysis, which showed that parents were more likely to give to children of a prior union, conditionally

parents are less likely to give to a non-resident child who is of a prior union. Indeed, the child belonging

to both parents increases the probability of giving by about 2.8%, which is quite significant when compared to the overall rate of giving of 7%. The unconditional difference in giving, with children of a former union receiving more often than children of a current union, could be entirely driven by the financial or other circumstances of the child.

Table 5 – Giving by Married Parents – Linear Probability Results

```
Fixed-effects (within) regression              Number of obs      =     18420
Group variable: unhhid                         Number of groups   =      4368

R-sq:  within  = 0.0298                         Obs per group: min =         1
       between = 0.0935                                        avg =       4.2
       overall = 0.0519                                        max =        19

                                               F(18,14034)        =     23.93
corr(u_i, Xb)  = 0.0923                         Prob > F           =    0.0000

------------------------------------------------------------------------------
      gave01 |     Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
     bioboth |  .0276228   .0089013     3.10   0.002     .0101751    .0450706
  bmothstfath|  .0060495    .008791     0.69   0.491    -.011182     .023281
     kidsex01|  .0090472    .002552     3.55   0.000     .0040448    .0140495
     kidage01| -.0005244   .0001938    -2.71   0.007    -.0009042   -.0001445
     kidkid01| -.0001572    .003842    -0.04   0.967    -.0076881    .0073737
      k_elem |   .000962   .0082455     0.12   0.907    -.0152002    .0171242
    k_second |  .0013059   .0087017     0.15   0.881    -.0157506    .0183624
 k_highschool|  .0095326   .0089839     1.06   0.289    -.008077     .0271422
   k_college |  .0073796   .0094323     0.78   0.434    -.011109     .0258682
  k_graduate | -.0368273   .0187109    -1.97   0.049    -.0735032   -.0001514
  k_marrcohab| -.0130572   .0047727    -2.74   0.006    -.0224123   -.0037021
    k_divsep | -.0046949   .0091892    -0.51   0.609    -.0227069    .0133172
   k_widowed |  .0002094   .0160046     0.01   0.990    -.0311618    .0315805
   k_working | -.0019192    .003074    -0.62   0.532    -.0079447    .0041063
   k_student |   .146439   .0090454    16.19   0.000     .1287088    .1641692
  k_finvgood | -.0243337   .0100571    -2.42   0.016    -.0440469   -.0046205
   k_fingood | -.0104281   .0044384    -2.35   0.019    -.019128    -.0017282
   k_finpoor |  .0237013   .0065419     3.62   0.000     .0108783    .0365243
       _cons |  .0274343    .014157     1.94   0.053    -.0003152    .0551838
-------------+----------------------------------------------------------------
     sigma_u |  .17269165
     sigma_e |  .11964778
         rho |  .67566287   (fraction of variance due to u_i)
------------------------------------------------------------------------------
F test that all u_i=0:     F(4367, 14034) =     4.75          Prob > F = 0.0000
```

Discussion

The pattern that emerges from the conditional analysis shows a strong correlation between divorce without remarriage and fathers' giving to their adult children, which is similar to the pattern in the United States. Even controlling for income and assets, divorced fathers are more likely to give. Although no causality is implied by this conclusion, more research is needed to understand why this may be. It could

be that divorced fathers rely on their adult children for social or other types of support, and giving to their children is a way to maintain this support – a type of exchange relationship.

Unlike the pattern in the US, however, remarried mothers and fathers are very similar in their patterns of giving. Where the US data might imply that fathers move on to focus resources on their new wives and families, while mothers stay constant in their support for their children regardless of remarriage, the Mexican data shows that even though the rates of giving among men are lower among the remarried group, they are very similar to the rates of giving among women

References

Fussell, Elizabeth and Alberto Palloni, 2004. "Persistent Marrige Regimes in Changing Times." *Journal of Marriage and Family*, 66:5, pp 1201-1213.

Suarez-Lopez, Leticia, 2004. "Revision Demografica del Divorcio en Mexico" in *El Amanecer del Siglo y la Poblacion Mexicana,* Fernando Lozano et al, ed. Universidad Nacional Autonoma de Mexico: Centro Regional de Investigaciones Multidisciplinarias.

Way, Megan McDonald, 2009a. "Intergenerational Transfer Inflows to Adult Children of Divorce." Dissertation chapter, Economics Department, Boston College.

Way, Megan McDonald, 2009b. "The Correlation Between Expected Parental Longevity and Transfers to Adult Children." Dissertation chapter, Economics Department, Boston College.