# Living standards after divorce: does alimony offset gender income inequalities?

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### Extended abstract

## 1. Background and literature review

Marital separations and divorces have dramatically increased during the last decades. The way they affect the economic situation of both men and women in an asymmetric way has been analysed in the literature (see the literature review of Jeandidier and Bourreau-Dubois, 2005). Most of studies show a worsening of women's living standards after separation: Smock (1993) on U.S. data, Poortman (2000) on Dutch data, Jarvis and Jenkins (1999) on U.K. data, Finnie (1993) on Canadian data, and Uunk (2004) and Andress et al. (2006) comparing European data. Uunk (2004) emphasizes the greater economic dependence of separated or divorced women on public transfers, due to their lesser investment in human capital compared with men during the partnership and to their family duties after separation (on average, mothers have child custody more often and for a longer period). Conversely, these studies show that separation results in a rise in living standards for men, whose magnitude varies between authors.

However two points remain unexplored in the literature. First of all, alimony transfers have received relatively scant attention in the economic or demographic literature on union dissolution<sup>4</sup>. Most studies on living standards after divorce ignore these private transfers among former partners. The lack of detailed information on alimonies explains the scarcity of studies on this topic. They are however of great interest, because they may represent a significant amount of household post-divorce income. Ignoring them could lead to an overstatement of the income decline of women, and symmetrically to an overstatement of income increase for men (Kalmijn and Alessie, 2008). In France, alimonies payment are widespread. According to Chaussebourg (2007), in 75% of divorces, mothers get an alimony, fathers are concerned in 3%, and in 22% of divorces, no alimony is paid. On average, according to a survey made by the French Ministry of Justice, the amount is roughly 188 euros per child to be compared to a monthly income of mothers of 1,114 euros. Of course, these figures are only averages computed at an aggregate level but it yet emphasizes an idea of the importance of taking pension alimonies into account.

Second, in the case of divorce, it is often difficult to recover individuals who move after union dissolution. These moves may not be random since the decision to move or not to move after divorce might be linked to financial constraints. This attrition bias, combined with a relatively low occurrence of the event "divorce" or "separation" between two yearly waves of a panel, induce to a small sample size. A common difficulty is also to follow the two members of the couple and studies

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 $<sup>^4</sup>$  With the noticeable exception of Del Boca (2003) and Del Boca and Ribero (2001) who adopt a theoretical point of view.

comparing the living standards compare women and men at an aggregate level. To our knowledge, except maybe some work using the Scandinavian registers, no study is available following both partners after divorce, and compare living standards before and after.

The French administrative income-tax dataset we are using in this article enables us to overcome these two difficulties. We are able not only to assess the living standards before and after divorce based on a representative sample of divorcees, but also to compare the income sharing before and after the divorce.

First, this paper aims at analysing to what extent the private transfers do play their role in balancing living standards between man and woman after divorce. How does the whole income (sum of both former partners income) after divorce split between former partners? In case of divorce, alimony transfers may reduce living standard inequalities between former spouses. The spouse with the highest living standard may support the other by a regular payment. The amount is fixed by a settlement agreement between former spouses or/and a court decision. It takes into account the child(ren) custody arrangements, i.e. the residence and time spent by the childr(en) with each parent, which is assumed to be positively correlated with the child cost. Two types of alimony exist in France. Child support is supposed to maintain the living standard of children after divorce. The second type of alimony is the spouse one. It exists in France only for married couples (not for consensual unions), whether they are parents (it adds to child alimony in this case) or not.

The second aim of the paper goes beyond the gender inequality issue and aims to assess the efficiency of the child support scale introduced. In particular, we would like to know if this scale reaches its target of reducing heterogeneity in alimony amounts fixed by judges. In France, a single scale used by Family court has been recently introduced to compute the child support amount. That raises a lot of questions about its efficiency. The aim was to homogenise the court decisions about the amount of child alimony decided and to reduce heterogeneity in these decisions. The scale depends on three parameters: the income of the receiving parent, the number of children and the form of custody arrangements. The first two elements are available in the data. For the latter one, we know if children are alternating residence. The use of this scale is not compulsory but it has become more widespread during the last decade (Jeandidier B., Bourreau-Dubois C., Sayn I., 2012). How many divorces are concerned by this scale? Does the use of this single scale leads to more balanced economic situations after divorce?

## 2. Data

The dataset used is an administrative tax-income dataset. We selected all the divorcees whose divorce occurred in 2009<sup>5</sup>, and we matched them with the previous year and the year after in order to compute the living standard before and after.

This data has four main advantages. The first one is the big sample size, around 65,000 couples, *ie* 130 000 partners. It represents roughly half of the total divorced population in 2009 in France (around 127,578 according to INED). Second, this dataset enables to follow the two members of the couple after divorce, which is generally difficult with usual panel data because of attrition. Third, the data set gives information about the paid amount of child and spouse alimony and compensatory allowances. These data are supposed to be quite reliable since people paying alimonies can deduct them from their taxable income and are then encouraged to declare them<sup>6</sup>. Finally, relatively to surveys data in which income are declared and might be subject to imprecise responses, incomes in tax-income dataset are already filled by administrative instance and then more reliable. We know precise amounts for all the types of labour incomes (wages, self-employment income,

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<sup>&</sup>lt;sup>5</sup> We will add divorces in 2008.

<sup>&</sup>lt;sup>6</sup> However, we do not have the amount of the alimony decided by the family court. It could be higher than reported on the income tax return if people do not manage to pay the amount due or postpone the payment.

unemployment allowance...) and for a part of the non-labour incomes (taxable income from wealth for instance). We can recover some public transfers such as lone parent allowance. The family composition (number and age of household children) is also known. The drawback, typical of administrative datasets, is that no other information that those needed by the fiscal administration is available. We do not know anything about the family background or the education for instance.

Sample: All divorced people in 2009 of all ages, married for at least one year, not remarried the year following the divorce.

## 3. Methodology

Our two variables of interest are:

- Living standard after divorce

To obtain comparable living standards between men and women, we have to take into account whether post-divorce households include children or not. In most cases, mothers retain sole custody of their children, even if the percentage of joint physical custody is increasing<sup>7</sup>). So, we will have to control for the household composition. We use different equivalent scales (the "OECD-modified scale", the square root scale (divides household income by the square root of household size). We should also pay a particular attention to joint (or shared) custody. How should we compute consumption units in an alternating residence framework?

We analyze how child support payments modify the distribution of living standards for both men and women. We compute Gini index to assess the role of alimonies in reducing post-divorce inequalities between men and women.

#### - Income sharing

Our second indicator is the income sharing between spouses. It is often used as an indicator of the work division between labor market and unpaid work among spouses, or the negotiation power. The originality is to calculate the sharing rule after divorce and to measure to what extent divorce has affected this sharing rule (by redistributing common resources to individuals) and to what extent private transfers are changing this sharing rule. For instance, if the woman earned 40% of the resources before divorce, would she also get 40% of the joined income after it?

We analyze the variation of these two indicators before and after divorce using difference in differences methods and Blinder-Oaxaca decomposition. We are going to apply it on the gender differences in living standards after marital dissolution. The idea is to measure the part in the gender differences of living standards after divorce attributable to observed characteristics and the part that remained unexplained, which might comes from heterogeneity in court decisions for instance. Among observed characteristics, we select:

- individual characteristics (such as the labour market situation and the wage before the divorce)
- child custody arrangements, which determine the number of persons in the two households after dissolution.
- transfers post-divorce. What is the contribution of child and spouse alimony to the reduction of the gender gap?

To analyze the female/male standards of living differential, we estimate two separate regression equations on standard of living for women and men by Ordinary Least Squares (OLS). We then apply the Blinder and Oaxaca procedure (Blinder, 1973; Oaxaca, 1973) to decompose the men/women gap. This decomposition results in an explained part of the living standard differential, explained by

<sup>&</sup>lt;sup>7</sup> This proportion is reaching almost 15% of divorces involving children parents in France (Chaussebourg, Carrasco, Lermenier 2009).

differences in observed characteristics between women and men. A second part represents the unexplained part of the gap; it captures both the differences in returns of observed characteristics but also the effects due to differences in unobserved or omitted characteristics. More specifically, a positive value for the unexplained part means that a penalty for women in living standard exists, and a negative one that a premium exists. We perform this method by taking and not taking into account private post-divorce transfers to measure how much they manage to mitigate the decline in living standards.

## 4. Some first results

We computed the distribution of taxable income, by deciles, for married couples the year before their divorce, and for all the divorced-person the year after divorce. The figure 1 represents the income mobility (deciles changes) before and after divorce, by sex.

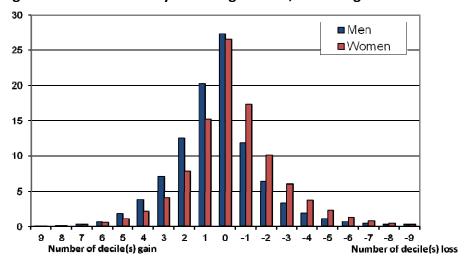


Figure 1: Income mobility following divorce, according to sex

Note: 10% of women and 6.4% of men are two deciles lower in the income distribution following the divorce.

More than one quarter of divorced men and women remain in the same position in the income distribution after the divorce (compared to their situation before). Globally, the women distribution is shifted on the side of losses (on the right) whereas the men distribution is shifted on the gain side (left). 17% of women (12% of men) move down in the income distribution by one decile and 10% of women (6% of men) experience a two deciles loss. Men are more likely to go up in the income distribution after the divorce: 20% of them go to the decile just above and 13% "win" two deciles. This figure confirms that women's income after separation is lower than men's one. This gender inequality might reflect part of the work division between spouses (and marriage specialization) and might also comes from the gender wage gap observed on the labour market for dual-earners couples. This gender differences would be even deeper in terms of living standard since divorced women are more likely to have child custody than divorced men (Child support are yet not taken into account).

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