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The Risk of Divorce and Household Saving Behavior

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Abstract

We address the impact of an increase in the risk of divorce on the saving behaviour of married couples. From a theoretical perspective, the expected sign of the effect is ambiguous. We take advantage of the legalization of divorce in Ireland in 1996 as an exogenous increase in the likelihood of divorce. We analyze the saving behaviour over time of couples who were married before the law was passed. We propose a difference-in-differences approach where we use as control groups either married couples in other European countries (not affected by the law change), or Irish families who did not experience a significant increase in the expected risk of divorce (such as very religious families). Our results suggest that the increase in the risk of divorce brought about by the law was followed by an increase in the propensity to save of married couples, consistent with a rise in precautionary savings interpretation.

Keywords

Divorce Risk, Savings behaviour, Religiosity, Diff-and-Diff

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1. Introduction

This paper aims to test empirically the effect of an increase in the risk of marital instability on the saving behaviour of married individuals. Previous theoretical studies have not been able to unambiguously sign this effect, due to conflicting channels at work. We use the legalization of divorce in Ireland in 1996 as an exogenous shock to the risk of divorce perceived by individuals. We propose several control groups (unaffected by the law change) that allow us to use a difference-in-differences approach. Our findings suggest that the legalization of divorce led to an increase in the propensity to save by married individuals (especially females), which is consistent with individuals rising their precautionary savings as a response to the increase in the probability of a negative income shock.

The economic behavior of households in anticipation of the risk of divorce is not an uncharted area. Economists have previously looked at the impact of divorce risk on a number of outcome variables. The most common outcome of interest has probably been the labor supply behavior of the households, especially the female spouse (Johnson and Skinner 1986; Parkman 1992; Papps 2006). Other economic outcomes have also received some attention in the literature. For example, the degree of specialization inside the marriage (Lundberg and Rose 1999), the time allocation of the spouses (Lommerud 1989) and the investment of couples in marriage-specific capital¹ (Stevenson 2007) have all been found to be affected by the divorce risk. Yet, the

impact of a change in the divorce risk on the savings behavior of households has to our knowledge been neglected.

On the other hand, the determinants of the saving behaviour of individuals and households has also long been the subject of study by economists, although we are still far from reaching full understanding of the factors that drive consumption and saving decisions.² The standard stylized models of saving do not account explicitly for life-changing events such as marriage and divorce, which have potentially relevant and long-lasting implications on income and consumption. This is regrettable given that one of the most striking demographic changes in Western countries over the past few decades has been the steady increase in marital instability, which may well have had a significant impact on saving rates.

Some recent theoretical work has made an attempt to introduce marriage and divorce explicitly in a model of savings,³ stressing different channels through which marital transitions can affect consumption and savings. None of them, however, provide an unambiguous prediction regarding the effect of increasing marital instability on the saving behaviour of married couples.

Divorce is generally viewed as a costly event (lawyer fees, etc). Moreover, the economies of scale associated with marriage would be lost upon marital dissolution. Therefore, an increase in the perceived risk of divorce would be viewed by the married individual as an increase in the probability of experiencing a negative

¹ Stevenson defines marriage-specific capital as assets that increase the value of marriage, and whose value falls when the marriage ends, such as investments in the education of the other spouse, having a child, etc. These are different from savings since their value depreciates after divorce.

² An example is the lack of consensus in the literature regarding the source of the drastic fall in saving rates in the US in the 1980's (Browning & Lusardi, 1996).

shock, which is expected to lead to an increase in precautionary savings, similar to the effect of an increase in labor income risk (Cubbedu & Ríos-Rull, 1997).

However, a divorce implies that the common assets of the couple must be split between the partners. Uncertainty regarding the sharing rule (i.e. how much of the couple's joint savings each partner will get to keep) implies that an increase in the risk of divorce makes saving more risky, thus creating incentives to increase current consumption.⁴

There are additional channels that can also lead to a negative relationship between the risk of marital instability and savings, for instance if divorce involves fees that reduce the net worth and thus the return to saving of the couple, or if divorce is potentially followed by remarriage, which implies that individual assets will have to be shared with the new partner (Cubbedu & Ríos-Rull, 1997).

Overall, the expected effect of an increase in the risk of divorce on the saving behaviour of the spouses is ambiguous, thus the need for empirical work to test which of the channels dominates in practice. To our knowledge, we provide the first empirical test for the effect of the increase in the risk of marital instability on the saving behavior of married couples. In order to do so, we take advantage of an exogenous increase in the risk of divorce generated by the recent legalization of divorce in Ireland, and follow a difference-in-differences approach to identify its effect on households' propensity to save.

³ Cubbedu & Ríos-Rull (1997), Lupton and Smith (2003), Browning, Chiappori & Weiss (2004), Guner & Knowles (2004), Aura (2007).

⁴ Aura's model (Aura, 2007) focuses on the effects of different aspects of the divorce legislation on the spouses' incentives to save.

The remainder of the paper is organized as follows. Section 2 introduces the data and the methodology. First we provide support for our identifying assumption that the Irish divorce law of 1996 led to an increase in the perceived risk of marital dissolution. We then propose two alternative control groups and provide some support for the claim that, while they were subject to similar economic conditions, they did not experience an increase in the perceived risk of divorce as a result of the law change. Next we introduce the econometric specification and we discuss the measures of saving behaviour available in the data. Section 3 discusses the results when using the two alternative control groups, and section 4 concludes.

2. Data and Methodology

2.1 The Irish divorce law and the risk of marital dissolution

We propose to identify the effect of an increase in the risk of marital dissolution by taking advantage of the legalization of divorce in Ireland in 1996, which was followed by a rapid increase in divorce rates.

The Irish Constitution of 1937 banned the dissolution of marriage.⁵ After frequent debates over the issue, a referendum was called in 1995, and the ban on divorce was removed after its opponents defeated its supporters by a very slim margin.⁶ The removal of the ban was subsequently incorporated in the Constitution in June 1996, and the new divorce law became effective in February 1997.

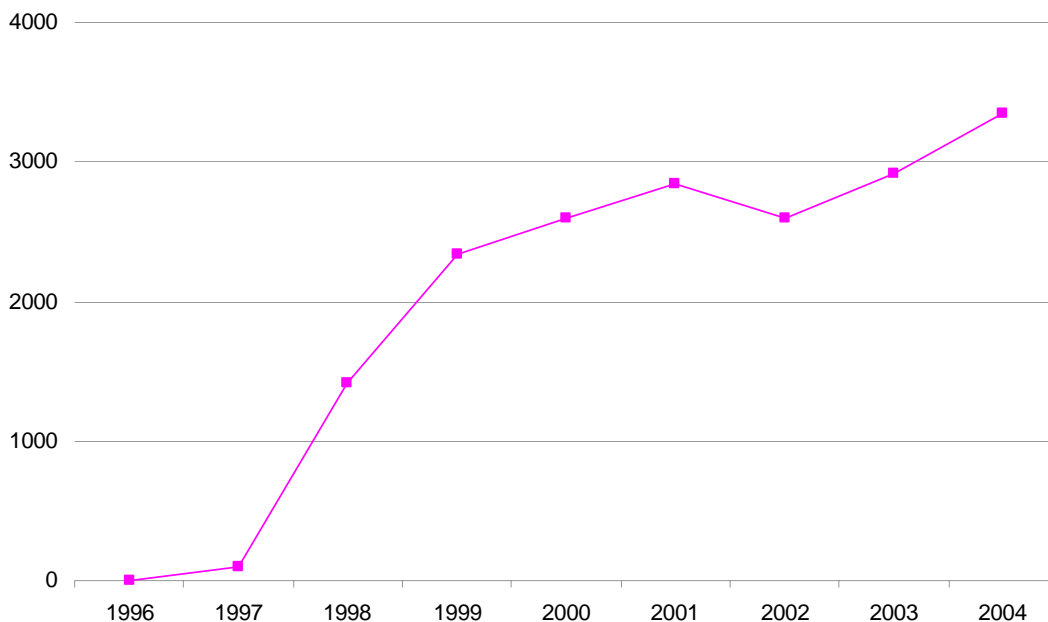
⁵ Judicial separation was possible since 1989.

⁶ We take this as an indication that there were no clear expectations about the outcome of the referendum. In that sense, the legalization of divorce was not anticipated.

The new law dictated that a divorce could be granted only after the partners had been separated during four out of the previous five years. The Irish courts were granted a great deal of discretion regarding the economic consequences of divorce for the spouses. The law states the factors to be taken into consideration, including the contributions made by the two spouses (both pecuniary and non-pecuniary), but there is no explicit policy of equal division of assets.

The legalization of divorce was followed by a rapid increase in the number of divorce applications filed as well as the number of divorces granted over the following years. Figure 1 displays the number of divorces granted between 1996 and 2004. In 1998, the second year after the law came into effect, about 1,500 divorces were granted. By 2004, more than 3,000 new divorces were granted a year.

Figure 1. Annual number of divorces, Ireland 1996-2004



Of course, it is possible that the new divorce law was merely allowing previously separated couples to provide legal burial to their already broken marriage. Our claim, however, is that the legalization of divorce in fact increased marital dissolution rates. In 1994-1995, only 1.78% of Irish adults aged 18 to 65 reported being separated or divorced (Living in Ireland Survey). In 1997-2001, this figure had jumped to a (significantly higher) 2.66%. The next subsection provides additional evidence that certain subgroups of the population experienced substantial increases in the probability of separation or divorce following the 1996 law.

2.2 Finding a control group

In order to identify the effect of the increase in the risk of marital dissolution generated by the legalization of divorce, we would like to find a source of variation in that increase in risk across the population.

Our first approach is to identify a subgroup of the Irish population that we can plausibly expect would be less affected by the legalization of divorce. One possibility is to use religiosity as a source of variation. It may be plausible to think that very Catholic families would be “less affected” by the legalization of divorce, given that the Catholic church bans marital dissolution.

Table 1 shows the percentages of the adult population that reported being separated or divorced by religiosity, both pre (1994-95) and post (1997-2001) the legalization of divorce. Individuals are classified as religious if they report attending religious services at least once a week. Before 1996, non-religious individuals were

significantly more likely to be separated than religious ones (3% versus 1.2%). This difference remains after 1996 (4.2 versus 1.6%).

Table 1. Separation and divorce rates by religiosity, Ireland 1994-2001

| | 1994-95 | | 1997-2001 | | Difference |
|--------------|---------------------|--|---------------------|--|---------------------|
| Religious | 1,181 (0,108) | | 1,552 (0,124) | | 0,371 (0,164) |
| Nonreligious | 2,978 (0,170) | | 4,163 (0,200) | | 1,185 ** (0,262) |
| Difference | 1,797 ** (0,201) | | 2,611 ** (0,235) | | 0,814 ** (0,310) |

Note: The main body of the table show the percentage of the population aged 18 to 65 (by religiosity) who reported being either separated or divorced in each time period. "Religious" is defined as "attends church at least once a week".

Moreover, religious individuals did not experience a significant change in their separation and divorce rate after 1996. However, the separation and divorce rate among non-religious adults increased significantly, from 2.98% before 1996 to 4.16% after. We conclude that it is plausible to claim that legalizing divorce affected non-religious families differentially, increasing their risk of marital breakup, relative to religious ones.

The additional identifying assumption required is that the saving behavior of religious and non-religious families would have followed similar trends over time, in the absence of the law change. In section 3.1 we provide some support for this assumption by showing that the trends were similar for both groups in the years preceding the legalization of divorce.

It is of course hard to claim that religious families in Ireland were completely unaffected by the legalization of divorce. Thus we propose an alternative control group, composed of married couples in other European countries where divorce was already legal and no changes in the regulation of divorce took place during the 1990's. Although families in other European countries were certainly not affected by the Irish divorce law, we need to find countries that were plausibly under similar economic conditions during the relevant period. This is not easy given that Ireland experienced an unprecedented period of economic growth during the 1990's.

The two EU-15 countries with more similar economic conditions to Ireland during the period appear to be the UK and Spain. Figures 2 and 3 display unemployment rates and real GDP per capita growth rates between 1990 and 2001 in the three countries. In all countries, GDP growth slowed down in 1990 and 1991, and then surged up, remaining at a higher level until 2000. That level, however, was about 8% for Ireland, compared with 4% for Spain and the UK. As for unemployment rates, they increased in the three countries until 1993-94, falling steadily since then, with the levels much higher in Spain than in Ireland or the UK. Figure 4 shows private sector saving rates since 1992 in the three countries. All three countries exhibit very similar levels as well as similar trends in the pre-1996 period, especially Spain and Ireland.

Figure 2. Growth rate of real GDP per capita, Ireland, Spain and UK, 1990-2001

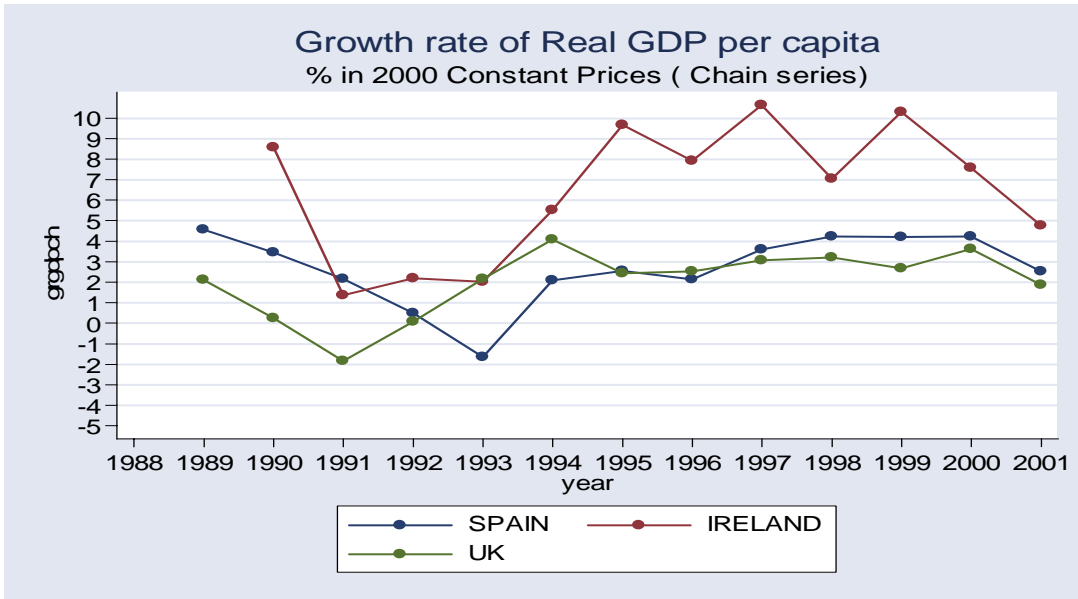
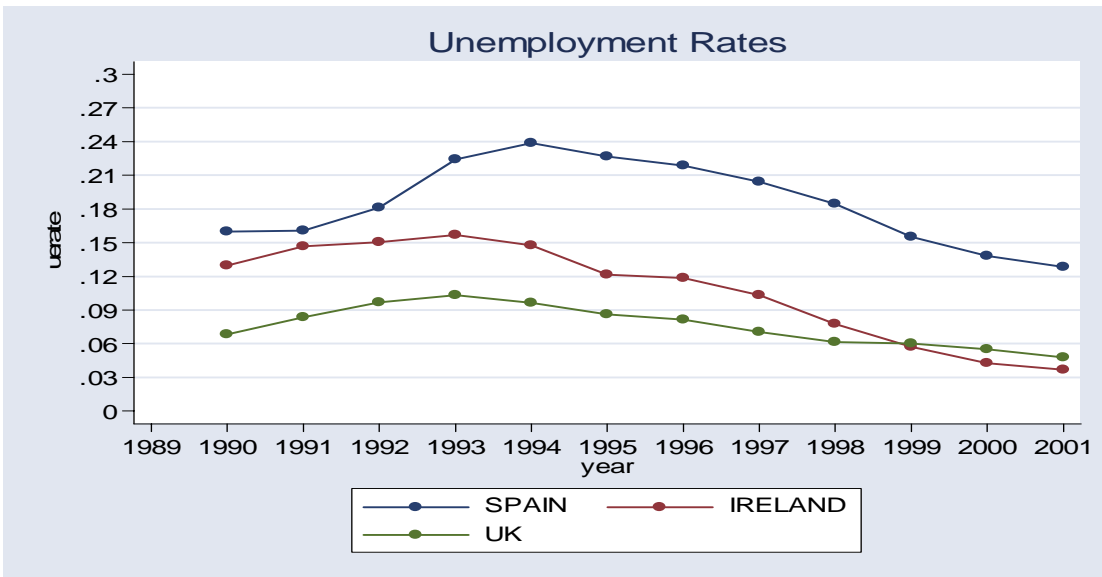
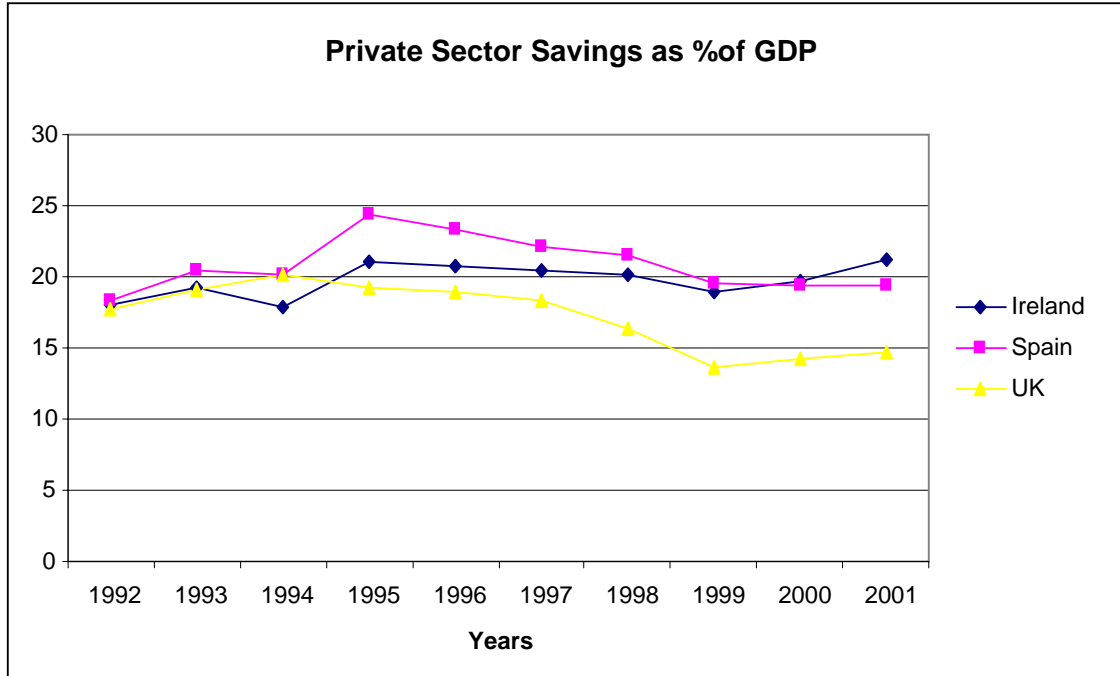


Figure 3. Unemployment rates, Ireland, Spain and UK, 1990-2001



Source: Data derived from “Alan Heston, Robert Summers and Bettina Aten, Penn World Table Version 6.2, Center for International Comparisons of Production, Income and Prices at the University of Pennsylvania, September 2006.”

Figure 4. Private Sector Savings in Ireland, Spain and UK, 1992-2001



Source: Authors elaboration based on the data presented in the European Commission Convergence Report on European Economy 2003.

Although there are some differences across the three countries, we feel the trends are similar enough to allow for the use of Spain and the UK as alternative control groups. Again, section 3.2 will show that household saving behaviour displayed similar trends in the three countries in the years before the Irish reform.

2.3 Econometric specification, data and sample

We estimate different versions of the following baseline specification:

$$S_{ijt} = F(\alpha + \beta_1 T_j + \beta_2 Post_t + \beta_3 T_j Post_t + X'_{ijt} \gamma + \varepsilon_{ijt})$$

Where S is a measure of the saving behavior (see next subsection for the specific variables used) of an individual (or household) i in group j (treated or control) and year t . The function F will depend on the specification (linear, probit and logit models are estimated). T is an indicator for individuals belonging in the treatment group (either non-religious Irish couples or all Irish couples, depending on which control group we use), while $Post$ takes value 1 for all years after divorce was legalized in Ireland. An interaction between T and $Post$ is also included, and X stands for a set of control variables, such as age, income and household size.⁷

The coefficient β_1 measures the average difference in saving behavior between the treated and the control group, while β_2 captures the overall change in saving behavior after the reform. The key parameter is β_3 , which indicates the change in the saving behavior of treated individuals after the reform, relative to the control group.

The data sets used in the analysis are the Living in Ireland Survey for the Irish sample and the European Commission Household Panel survey for the three-country sample. Both data sets are longitudinal household surveys that cover the period 1994-2001.

The sample is composed of all married individuals. In order to avoid potential selection into marriage effects (since the legalization of divorce may well affect the incentives to marry), we exclude couples whose marriages took place in 1996 or later. In order to avoid selection due to separation or divorce, we exclude all individuals that are observed getting separated or divorced at any point during the survey. Thus our sample is in practice composed only of “stable marriages that started before 1996”. We

⁷ In order to account for the potential problem of autocorrelation of the residuals, common in this type of difference-in-difference estimators, we cluster the standard errors following Bertrand et al. 2004.

include individuals of all ages up to 65, in order to exclude retired individuals, whose saving behavior is expected to be different. We also drop years 1996 and 1997 from the sample, since this was the period during which the reforms in the divorce legislation were being implemented, thus we consider them as transition or adjustment years that are not included as either pre or post-reform in the analysis. As a result, our pre-reform years are 1994 and 1995, while the post-reform period spans 1998-2001. The sample size is about 2,800 married couples in the Irish sample.

2.4 Saving measures

The literature has typically measured savings either as current income minus consumption, or as changes in wealth holdings over time. Both measures are deemed to be very noisy as well as subject to substantial measurement error. Our data sources, yet, lack good measures of either consumption or wealth. They do, however, include a range of indicators of saving behavior, both at the household and the individual level. We thus use a set of binary variables that we think capture the propensity to save of households and individuals, but we cannot attempt to construct continuous measures of saving rates.

Appendix 1 reports the exact phrasing of all the variables used to construct our saving indicators. The household-level variables include two alternative measures of whether a household saves a positive fraction of their income. One is derived from the answers to whether the household is “able to save” (“Save”), while the other is derived from a more detailed question that asks whether, considering the household’s income and expenses, at the end of the month there is money left that the household members can save (“Save2”). A third binary indicator takes value 1 if the household reports

significant savings (more than 1,000 pounds a year) derived from do-it-yourself repairs or other home production activities (“DIY savings”). Finally, a fourth household-level saving indicator measures negative savings by indicating households that are currently repaying debt (other than mortgage payments or credit card debt) (“Debt”). Descriptive statistics for the household-level measures of savings are shown in table 2.

Table 2. Summary statistics, Irish sample, household-level variables

| | Religious | | | Nonreligious | | |
|-----------------------------|-----------|--------|------------------|--------------|--------|------------------|
| | 1994 | 1995 | Post (1998-2001) | 1994 | 1995 | Post (1998-2001) |
| Save | 0,5426 | 0,5908 | 0,7397 | 0,4856 | 0,5079 | 0,7126 |
| Save2 | 0,2934 | 0,3842 | 0,4554 | 0,2892 | 0,3347 | 0,4870 |
| DIY savings | 0,4871 | 0,4875 | 0,2560 | 0,4578 | 0,4297 | 0,2671 |
| Debt | 0,3553 | 0,3119 | 0,3588 | 0,4847 | 0,3980 | 0,4181 |
| Age of husband | 48,30 | 48,58 | 50,70 | 42,60 | 42,57 | 46,02 |
| Hh income (pounds per week) | 399,67 | 440,29 | 600,45 | 377,11 | 393,11 | 600,53 |
| Hh size | 4,58 | 4,53 | 4,29 | 4,37 | 4,34 | 4,38 |
| N | 1244 | 997 | 2578 | 1079 | 1010 | 2770 |

At the individual level, we use an indicator constructed from a question that asks whether an individual’s savings, in the bank or other financial institutions, have increased over the previous 12 months (“Savings increase”). Summary statistics for this variable can be found in table 3.

3. Results

3.1 Religious families as control group

3.1.1 Descriptives

Table 2 shows some descriptive statistics for the Irish household sample, separately for religious and non-religious households, and for the pre and post-reform years. Religious households are defined as those where both partners report going to church at least once a week in all interviews⁸.

Note that non-religious families are less likely to save and more likely to be in debt than religious ones. In 1995, 59% of religious families reported positive savings, compared with 51% of non-religious ones. Pre-reform, the proportion of households that reported being able to save was increasing for both the control and treatment group, while the proportion in debt was falling.

Note also that non-religious households are younger than religious ones (by about 5 years on average), have slightly lower income, and slightly smaller household size (due to slightly smaller number of children). Thus it will be important to control for these factors. After 1996, the proportion of households that reported positive savings increased for both treatment and control groups, while DIY savings fell, and the proportion in debt surged back up.

The descriptives for the individual sample are reported in table 3. The proportion of all individuals that reported an increase in their savings over the previous

⁸ To ensure the robustness of our religiosity measure we compared the church attendance rates, with the self-reported religiosity question using the Irish component of European Social Survey (2002). The question requires the respondent to grade religiosity on a 1-to-10 scale, 10 being the “very religious”. Results suggest that basically none of the not religious people go to church once a week, and all of the very religious ones do, and the percentages are monotonic in the religiosity variable. Hence, the data supports that church attendance at least once a week is a solid measure of religiosity.

year was between 20 and 21 percent in both groups. Again, treated individuals are younger, have lower income and smaller household sizes than the control group. After 1996, the proportion reporting that their savings were increasing rose for both groups.

Table 3. Summary statistics, Irish sample, individual-level variables

| | Religious | | Nonreligious | |
|--------------------------------|-----------|--------|--------------|--------|
| | Pre | Post | Pre | Post |
| Savings increase | 0,2026 | 0,2832 | 0,2114 | 0,3060 |
| Age | 47,87 | 50,23 | 41,75 | 45,35 |
| Hhold income (pounds per week) | 437,53 | 594,58 | 392,49 | 598,06 |
| Hhold size | 4,49 | 4,22 | 4,33 | 4,36 |
| N | 2073 | 5466 | 2039 | 5683 |

3.1.2 Results

The regression results for the household sample are reported in tables 4 and 5, while table 6 shows the results for the individual sample. Table 4 focuses on the binary dependent variable “Save”. Results are reported for a Probit specification as well as for a linear probability model that includes household fixed effects.

Higher household income is associated with a higher propensity to save, while larger households are less likely to save. Age shows a positive association with saving activity. Notice that the treated group (non-religious households) is significantly less likely to save than the control group. After 1996, all households increased their propensity to save. However, non-religious families increased their propensity to save significantly more than religious ones, by about 4 to 6 percentage points.

Table 4. Regression results, Irish household sample, dependent variable “Save”

| | Probit | | LPM, hh. fixed effects | |
|---------------|--------|-------------|------------------------|-------------|
| Post-1997 | 0,044 | (0,033) | 0,045 | (0,025) * |
| Treated | -0,087 | (0,015) *** | | |
| Treat*Post | 0,044 | (0,020) ** | 0,060 | (0,019) *** |
| L. hh. Income | 0,312 | (0,010) *** | 0,108 | (0,014) *** |
| L. hh. Size | -0,376 | (0,016) *** | -0,205 | (0,036) *** |
| U. rate | -0,297 | (0,354) | -0,369 | (0,439) |
| Age | 0,062 | (0,030) ** | -0,037 | (0,047) |
| Age2 | -0,001 | (0,001) * | 0,001 | (0,001) |
| Age3 | 0,000 | (0,000) * | 0,000 | (0,000) |

Note: The number of observations is 9,672. The sample includes all couples married before 1996 and never separated or divorced. Marginal effects reported in the Probit specification. One asterisk indicates a 90% confidence level, two indicate 95%, and three indicate 99%.

Table 5 reports the coefficients on the interaction term between “Post” and “Treated” for the other three household-level dependent variables. The results go in the same direction as those in table 4. The second indicator of a household’s propensity to save increased by 5 to 7 percentage points more for treated relative to control families after divorce was legalized, and the estimated effect is strongly significant in both specifications. The size of the effect is similar for the indicator of “do-it-yourself” related savings. Finally, we also find that non-religious families were significantly less likely to be in debt after the reform, relative to religious ones, by 5 to 10 percentage points.

Table 5. Regression results, Irish household sample, 3 dependent variables

| Dep. Var. | Probit | | | LPM, hh. fixed effects | | |
|-------------|---------|----------|-----|------------------------|----------|-----|
| Save2 | 0,0693 | (0,0219) | *** | 0,0529 | (0,0198) | *** |
| DIY savings | 0,0468 | (0,0201) | ** | 0,0676 | (0,0211) | *** |
| Debt | -0,0545 | (0,0198) | ** | -0,1000 | (0,0212) | *** |

Note: The coefficients reported correspond to the interaction between “post-1997” and “treated” (nonreligious). The number of observations is 9,672. The sample includes all couples married before 1996 and never separated or divorced. Marginal effects reported in the Probit specification. Controls included are the separate dummies for “post-1997 and “treated”, log household income, log household size, unemployment rate, age, age squared and age cubed. One asterisk indicates a 90% confidence level, two indicate 95%, and three indicate 99%.

Table 6 reports the results for the individual measure of saving behavior. We report the results for a specification that includes both men and women, as well as separate specifications for husbands versus wives. The control variables show the same patterns as in the household-level specifications. Females are significantly less likely to report increases in their savings than men. Individuals in non-religious households are less likely to report increases in their savings, especially men. The overall propensity to save increased significantly after 1997.

Table 6. Probit results, Irish individual sample, dependent variable “Savings increase”

| | All | | | Husbands | | | Wives | | |
|------------|--------|---------|-----|----------|---------|-----|--------|---------|-----|
| Post-1997 | 0,093 | (0,005) | *** | 0,098 | (0,015) | *** | 0,088 | (0,003) | *** |
| Treated | -0,015 | (0,008) | * | -0,018 | (0,006) | *** | -0,010 | (0,009) | |
| Treat*Post | 0,020 | (0,005) | *** | 0,011 | (0,004) | *** | 0,026 | (0,006) | *** |
| L. hh inc. | 0,179 | (0,008) | *** | 0,198 | (0,031) | *** | 0,160 | (0,046) | *** |
| L. hh size | -0,193 | (0,019) | *** | -0,190 | (0,001) | *** | -0,202 | (0,001) | *** |
| U. rate | 0,981 | (0,142) | *** | 1,274 | (0,000) | *** | 0,719 | (0,000) | *** |
| Female | -0,040 | (0,011) | *** | | | | | | |
| Age | 0,028 | (0,039) | | 0,079 | (0,019) | ** | -0,003 | (0,022) | |
| Age2 | -0,001 | (0,001) | | -0,002 | (0,020) | ** | 0,000 | (0,005) | |
| Age3 | 0,000 | (0,000) | | 0,000 | (0,366) | ** | 0,000 | (0,048) | |

Note: The number of observations is 15,503. The sample includes all couples married before 1996 and never separated or divorced. Marginal effects reported. One asterisk indicates a 90% confidence level, two indicate 95%, and three indicate 99%. Standard errors have been clustered at the treat*post level.

Non-religious individuals were significantly more likely to report increases in their savings after 1997, relative to religious ones, by about 2 percentage points. This effect was particularly pronounced among women (2.6 versus 1.1 for men).

3.2 Spain and the UK as control groups

3.2.1 Descriptives

Table 7 shows some summary statistics for the three-country sample, separately for Ireland, Spain and the UK and for the pre and post-reform periods. Pre-1996, saving rates were much higher in the UK than in Ireland or Spain (68% compared with 36-39% in 1995). Before the reform, saving rates were increasing both in Ireland and in

Spain, although the increase was steeper in Spain. The proportion of households in debt before the reform was highest in Ireland, followed by Spain and the UK. This proportion was falling in all three countries.

Table 7. Summary statistics, three-country sample

| | Ireland | | | Spain | | | UK | | |
|-------------------|---------|--------|--------|--------|--------|--------|--------|--------|--------|
| | 1994 | 1995 | Post | 1994 | 1995 | Post | 1994 | 1995 | Post |
| Save | 0,3219 | 0,3635 | 0,4758 | 0,2496 | 0,3911 | 0,4700 | 0,6805 | 0,6752 | 0,7235 |
| Debt | 0,3302 | 0,2621 | 0,2795 | 0,2514 | 0,2357 | 0,2429 | | 0,1454 | 0,1216 |
| Age | 45,61 | 45,45 | 48,19 | 46,07 | 45,76 | 47,86 | 44,61 | 44,77 | 47,60 |
| Hh income (euros) | 24290 | 25438 | 34914 | 15996 | 16381 | 21018 | 24562 | 24846 | 39998 |
| Hh size | 4,50 | 4,45 | 4,38 | 3,96 | 3,95 | 3,95 | 3,32 | 3,31 | 3,38 |
| N | 2038 | 1920 | 3974 | 4118 | 3669 | 9260 | 1659 | 1561 | 5223 |

The age profile is similar in the three countries, while income levels (expressed in euros) were similar in the UK and Ireland but significantly lower in Spain. Household size was highest in Ireland. After 1997, the propensity to save increased in all three countries, while there was a rebound in debt in both Ireland and Spain, but not in the UK.

3.2.2 Results

The regression results for the three-country sample are reported in table 8. The control variables show similar patterns as in the Irish sample. Higher income is associated with a higher propensity to save, larger households are more likely to be in debt, and debt falls with age.

Table 8. Regression results, three-country sample

| | Save | | Debt | |
|------------------|--------|-------------|--------|-------------|
| Post-1997 | -0,062 | (0,010) *** | 0,006 | (0,010) |
| Ireland*Post | 0,029 | (0,011) *** | -0,011 | (0,010) |
| Log hh income | 0,056 | (0,006) *** | 0,010 | (0,005) * |
| Log hh size | -0,018 | (0,018) | 0,045 | (0,017) *** |
| Unemp. Rate | -1,382 | (0,201) *** | -0,329 | (0,203) |
| Age | 0,007 | (0,021) | -0,038 | (0,020) * |
| Age2 | 0,000 | (0,000) | 0,001 | (0,000) * |
| Age3 | 0,000 | (0,000) * | 0,000 | (0,000) ** |

Note: Reported results are from LPM specifications with household fixed effects. The number of observations is 39,898. The sample includes all couples married before 1996 and never separated or divorced in Spain, the UK and Ireland. One asterisk indicates a 90% confidence level, two indicate 95%, and three indicate 99%.

After 1997, the propensity to save increased in Ireland by about 3 percentage points, relative to the UK and Spain, and this effect was significant. The likelihood of being in debt fell by 1 percentage point in Ireland relative to the other two countries, but this effect was not statistically different from zero. Thus, the propensity to save by married couples increased significantly in Ireland after 1996, relative to the control countries.

4. Conclusions

We have shown that, between 1994-95 and 1998-2001, the propensity to save increased significantly among married couples in Ireland. This increase was significantly higher among non-religious households, compared with religious ones. It

was also more pronounced among women than men. Moreover, the increase in saving rates in Ireland was significantly higher than in other European countries with similar macroeconomic trends over the same period.

One possible reason for this increase in the propensity to save of Irish married individuals is the legalization of divorce that took place in 1996, which increased the risk of marital breakup, especially for non-religious families. These results are consistent with married individuals increasing their precautionary savings in anticipation of a potential divorce.

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Appendix. Variable Definition

1) ZH29 Debt (Household File)

Do you or anyone in your household *currently* have to repay debts from hire purchases or any other loans, apart from any mortgage or loan connected with the house and apart from outstanding credit card debts?

Yes 1

No 2

Missing.....9

2) Zh28_37 Save (Household File)

Here is a list of things which a person might have or be able to do. [Int. Show Card HB] Could you tell me which of the things listed you have or can avail of?

- ZH28_37 Able to save?

Yes..... 1

No..... 2

3) ZH37 Save2 (Household File)

When you consider your household's usual income on the one hand and its expenses on the other would you say that there is usually some money left which household members can save?

Yes 1

No (or very little).....2

4) Z2J64 Savings increase (Individual File)

I would like you to consider, in general, all the savings you have (both in your own name and jointly with other household members) in the Bank, Building Society, Post Office, Credit Union, Savings Bank or in Savings Certificates, Savings Bonds or Prize Bonds. How does your TOTAL balance in all these savings today compare with what it was 12 months ago? Would you say, in general, that it ... [Waves 2-8 only]

Increased a Lot1

| | |
|-------------------------|---|
| Increased a Little..... | 2 |
| Remained the Same..... | 3 |
| Fell a Little..... | 4 |
| Fell a Lot | 5 |
| Missing | 9 |

5) (ZH46_1+ ZH46_2+ ZH46_3) DIY savings (Household File)

Would you say that any of the following results in *a significant* saving (of say IR£1,000

or more each year) in your household's expenditure ...

ZH46_1 ... Consuming food you produce on your own farm or garden Yes/ No

ZH46_2 ... Consuming goods from your business (other than farming) Yes/ No

ZH46_3 ... Saving money by carrying out any form of home production, repairs, maintenance, all forms of DIY etc. Yes/No