Comments on Libertad González and Berkay Özcan's "The Risk of Divorce and Household Saving Behavior"

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Research Question

- What are the effects of the risk of divorce on savings?
  - "Common pool problem"
  - "Swimming pool fund"

Policy Context

- Macroeconomist's hand-wringing about low savings rates
- *"One of the most striking demographic changes in Western countries over the past few decades has been the increase in marital stability"*

Research Method: Diff-in-diff

- Shock: Legalization of divorce of divorce
- Comparison groups:
  - Non-religious (treated) versus religious (control) Why not more?
  - Ireland versus Spain; Ireland versus UK
- Data: Individual panel; Married couples only; Micro controls: Why?

Key difficulty: Measuring Savings

- "Save": Here is a list of things which a person might have or be able to do. Could you tell me which of the things list you have or can avail of: "Able to save"
- "Debt": 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?
- "Save2": 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?"
- "Savings increase": 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…" [Increased a lot; increased a little; remained the same; fell a little; fell a lot.]
- "DIY saving": 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… Consuming food you produce on your own farm or garden; Consuming goods from your business; Saving money by carrying out any form of home production, repairs, maintenance, all forms of DIY, etc.

Simplest Approach: Diffs-in-diffs ("Save")

Dep. Var = "Save": *Here is a list of things which a person might have or be able to do. Could you tell me which of the things list you have or can avail of: "Able to save'*

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

	Pre-reform (1994-95)	Post-reform (1998-2001)	Diff (Post-Pre)
Treatment (non-religious)	49.6% (1.1)	71.3% (0.9)	+21.6% (1.4)
Control (religious)	56.7% (1.0)	74.0% (0.9)	+17.2% (1.4)
Difference (Treat-control)	-7.1% (1.5)	-2.7% (1.2)	**DD: +4.4% (1.9)**

Reported Results

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

	Probit			LPM, hh. fixed effects		
Post-1997	0,044	(0,023)	*	0,045	(0,025)	*
Treated	-0,087	(0,003)	***			
Treat*Post	0,044	(0,002)	**	0,060	(0,019)	***
L. hh. Income	0,312	(0,014)	***	0,108	(0,014)	***
L. hh. Size	-0,376	(0,018)	***	-0,205	(0,036)	***
U. rate	-0,297	(0,236)		-0,369	(0,439)	
Age of husband	0,062	(0,043)		-0,037	(0,047)	
Age sq.	-0,001	(0,001)		0,001	(0,001)	
Age cubed	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%. The standard errors in the Probit specification are adjusted for clustering at the level of "Post-1997" and "Treated".

- How should we think about standard errors?
  - Clustering at treatment*period level:
    - Is there a structural break in the religious v. non-religious time series?
    - Clustering inappropriate with small *N, T.*
    - Pure time series methods will be more appropriate
      - Particularly when analyzing a macro shock
      - Current problems: Group 1998-2001; Exclude 1996, 1997

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PLACEBO: 1995-1994 Diff	Pre-nonreform (1994)	Post-nonreform (1995)	Diff (Post-Pre)
Treatment	48.6%	50.8%	+2.2%
Control	54.3%	59.8%	+5.5%
Difference	-5.7%	-9.0%	**DD: -3.3%**

More generally: What is the right way to think about standard errors?

Consistent results

- "Able to save"
  - DD=+4.4%
- "There is usually some money left"
  - DD=+6.9%
- "Savings balance increased"
  - DD=+1.6%
- "Currently repaying some debt"
  - DD=-5.4%
- "Some DIY"
  - DD=+4.7%

Consistent results [Should they be consistent?]

- "Able to save": Savings>0
  - DD=+4.4% (mean=63%)
- "There is usually some money left": Savings>0
  - DD=+6.9% (mean=42%)
- "Savings balance increased": Savings>0 *this year*
  - DD=+1.6% (mean=27%)
- "Currently repaying some debt": Debt>0
  - DD=-5.4% (mean=39%)
- "Some DIY" (grow food; use business goods; home production)
  - DD=+4.7% (mean=35%)

- IV interpretation: Regressions above show reduced form
  - First stage:
    *%Divorced or separated = 0.008 (religious*post)+religious+post*
  - IV estimator: Effect of *divorce risk* on savings = DD/.008
  - Alternative interpretation: Divorce legalization is not divorce risk

Alternative contrast: Ireland v. UK/Spain

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 of husband	0,007	(0,021)		-0,038	(0,020)	*
Age sq.	0,000	(0,000)		0,001	(0,000)	*
Age cubed	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 and 39,623, respectively. 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%.

- Why analyze microdata when making international comparisons?

Alternative Contrast: UK and Spain

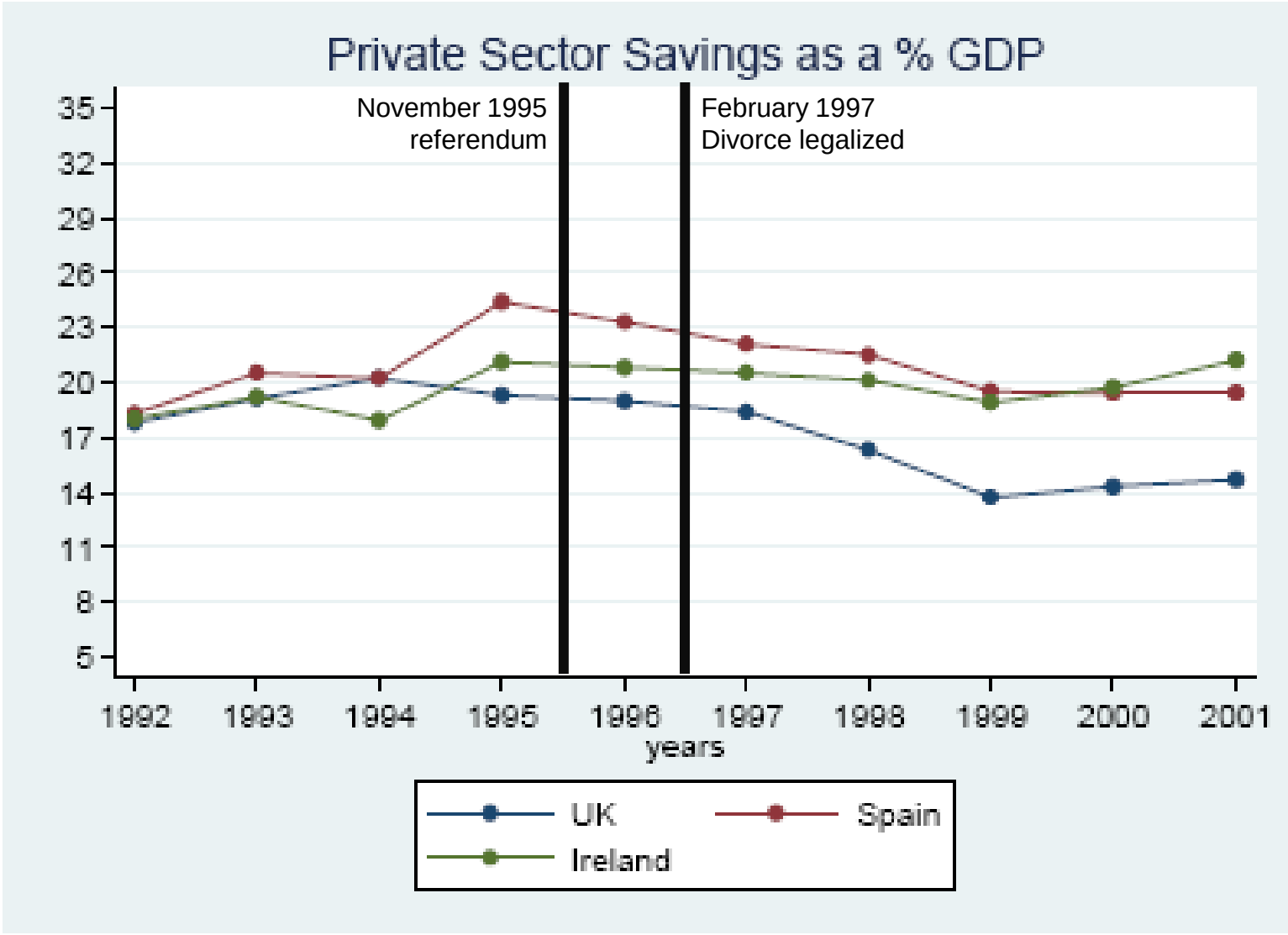
"Save": Here is a list of things which a person might have or be able to do. Could you tell me which of the things list you have or can avail of: "Able to save"

	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

	Pre-reform (1994-95)	Post-reform (1998-2001)	Diff (Post-Pre)
Treatment: Ireland	34.2%	47.6%	13.4%
Control #1: Spain	31.6%	47.0%	15.4%
Diff #1: Ireland-Spain	+2.6%	+0.6%	**DD #1: -2.0%**
Control #2: UK	67.8%	72.4%	4.6%
Diff #2: Ireland-UK	-33.5%	-24.8%	**DD#2: +8.8%**

PLACEBO: 1995-1994 Diff	Pre-nonreform (1994)	Post-nonreform (1995)	Diff (Post-Pre)
Treatment: Ireland	32.2%	36.4%	+4.2%
Control #1: Spain	25.0%	39.1%	+14.1%
Diff #1: IRE-ESP	+7.2%	-2.8%	**DD#1: -10.0%**
Control #2: UK	68.0%	67.5%	-0.5%
Diff #2: IRE-UK	-35.9%	-31.2%	**DD#2: +4.7%**

Super-transparent analysis



Conclusions

- Tremendously important question
  - Does aggregate savings behavior reflect family change?
- Ireland provides a tremendously important experiment
  - Enormous change in family law
- Methodological issues:
  Why the presumption in favor of micro data?
  - Usual answer: Micro data allows us to control for individual differences
    - Which won't change if we have repeated representative cross-sections
    - And in this paper, these controls make no difference
    - Don't we need macro-controls, too? (eg Business cycle)
  - Micro data contains problematic savings measures
    - And macro estimates of the savings rate are quite good
  - If we are worried about macro volatility, we need many more years of data to figure out sampling variation