RESULTS with the revised BANKDEP:

WITH YEAR + FIRM FIXED EFFECTS AND MACRO CTRLS – new Bankdep

Table 3 - Change in Capital Structure After the 2001 Banking Reform

Dependent Variable	Bank Debt		Equity		Trade Credit		Capital Cost	
After*Bankdep	-0.314	-0.344	0.129	0.146	0.185	0.198	-0.226	-0.161
	(10.81)	(8.54)	(4.17)	(3.38)	(10.67)	(8.24)	(7.27)	(3.70)
After*Bankdep*ROA$_1$		-0.198		0.225		-0.027		-0.390
		(0.63)		(0.67)		(0.15)		(1.20)
After*ROA$_1$		-0.187		0.111		0.076		0.344
		(1.38)		(0.76)		(0.94)		(2.46)
Macro Ctrl - inflation		0.002		-0.001		0.001		0.001
		(9.14)		(4.83)		(5.58)		(6.01)
Macro Ctrl – int. rate		-0.006		0.001		0.003		0.007
		(7.8)		(2.24)		(9.30)		(14.20)
Firm F.E.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year F.E.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R^2	0.445	0.447	0.433	0.433	0.541	0.542	0.380	0.381
Number of Observations	94296	94296	94296	94296	94296	94296	94296	94296

* Absolute values of the t-statistics are reported in parentheses. Highlighted coefficients are statistically significant.

WITH ONLY FIRM FIXED EFFECTS AND MACRO CTRLS –new Bankdep

Table 3 - Change in Capital Structure After the 2001 Banking Reform

Dependent Variable	Bank Debt		Equity		Trade Credit		Capital Cost	
After*Bankdep	-0.069	0.031	0.151	0.026	-0.082	-0.057	0.336	0.101
	(13.29)	(2.73)	(27.18)	(2.14)	(26.40)	(8.40)	(68.98)	(9.44)
After*Bankdep*ROA$_1$		-2.181		0.831		1.350		-1.727
		(9.16)		(3.26)		(9.48)		(7.05)
After*ROA$_1$		0.714		-0.173		-0.541		0.914
		(7.11)		(1.61)		(9.01)		(8.85)
Macro Ctrl - inflation		0.0002		-0.0000		-0.0002		0.0001
		(2.28)		(0.29)		(3.29)		(0.82)
Macro Ctrl – int. rate		-0.0004		-0.001		0.001		-0.003
		(0.24)		(6.00)		(11.15)		(21.02)
Firm F.E.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year F.E.	No	No	No	No	No	No	No	No
Adjusted R^2	0.443	0.444	0.429	0.431	0.536	0.538	0.344	0.364
Number of Observations	94296	94296	94296	94296	94296	94296	94296	94296

* Absolute values of the t-statistics are reported in parentheses. Highlighted coefficients are statistically significant.

Correspondence with Schoar:

Can,

Thanks for your email. Your understanding is exactly right. we wanted to create a variable that captures the level of banking dependency of the industry prior to the liberalization. If we were to calculate firm level bank dependence we would get a lot of endogeneity in the leverage level which would be driven by the current performance of a firm. We also checked our results with US bank dependence levels as calculated by Rajan and Zinagles

Good luck for your paper. Let me know what you find for Turkey.
Best
Antoinette

Quoting Can Erbil <cerbil@brandeis.edu>:

Dear Antoinette Schoar,

Greetings from the other side of the Charles River.

I am writing you following the suggestion of one of my colleagues, Tanseli Savaser, who praised your responsiveness and approachability. I hope you don't mind a very quick question.

Currently, I am working (joint with Ferhan Salman, Central Bank of Turkey) with firm-level data from Turkey trying to replicate some of your results in your JF 2007 paper with Bertrand and Thesmar (French Banking Reforms of 1985).

I have a very quick question regarding your variable "Bankdep":

In your paper, you define "Bankdep" as the "average debt at the industry level between 1978 and 1983".

If I understand it correctly, "Bankdep" only changes at the industry level, with no change at the firm-level and no change from year to year, fixed at the value of average industry debt (over the period before the reform - you take the average by firms and then by years btw. 1978 and 1983 and find one number for each sector). Is my understanding correct?

Thank you very much in advance.

Can Erbil
Asst. Prof. , Dept.of Economics & IBS
Brandeis University
Research Fellow, EcoMod

PS: Why I want to check if I understood "Bankdep" correctly:

My data set covers 1995-2007 (1995-2000 being the pre-reform period for Turkey), 7478 firms and 29 sectors. So, "Bankdep" variable has only 29 distinctive values (one for each sector) and does not vary by firm or year, only among sectors...

I have tried to replicate your table II (p.609) with the above description of "Bankdep" and my var4 "Bankdep*ROA1" variable kept dropping when I ran the fixed effects model: xtreg BankDebt var1 var2 var3 var4, fe

I am trying to find an insight and thought I may have been interpreting "Bankdep" incorrectly - maybe it also needs to vary from year to year?
Or does "xtreg BankDebt var1 var2 var3 var4" (without ,fe) imply firm and year fixed effects due to how "Bankdep" is defined?

HHI Regressions

```
. xtreg   BankDebt2 varr1  varr2 varr3 varr4 enflasyon mb_faiz  HHI_sube_sayisi, fe
```

| Fixed-effects (within) regression | | | | Number of obs | = | 94293 |
| Group variable: firmno | | | | Number of groups | = | 19781 |

R-sq: within = 0.0052				Obs per group: min =		1
between = 0.0079				avg =		4.8
overall = 0.0059				max =		13
				F(6,74506)	=	65.28
corr(u_i, Xb) = -0.0216				Prob > F	=	0.0000

BankDebt2	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
varr1	.0264749	.0112924	2.34	0.019	.0043419	.0486079
varr2	-2.163503	.2380695	-9.09	0.000	-2.630118	-1.696888
varr3	.7069626	.1003475	7.05	0.000	.5102819	.9036434
varr4	(dropped)					
enflasyon	.0002909	.0001194	2.44	0.015	.0000569	.0005249
mb_faiz	.0000316	.0001598	0.20	0.843	-.0002817	.0003448
HHI_sube_s~i	-.4942697	.1029253	-4.80	0.000	-.6960028	-.292536S
_cons	.5142923	.0209426	24.56	0.000	.473245	.5553397

sigma_u	.31757784	
sigma_e	.27325778	
rho	.57459279	(fraction of variance due to u_i)

F test that all u_i=0:   F(19780, 74506) =   4.67   Prob > F = 0.0000

```
. xtreg   BankDebt2 varr1  varr2 varr3 varr4 enflasyon mb_faiz  HHI_il_sales, fe
```

| Fixed-effects (within) regression | | | | Number of obs | = | 94296 |
| Group variable: firmno | | | | Number of groups | = | 19782 |

R-sq: within = 0.0049				Obs per group: min =		1
between = 0.0050				avg =		4.8
overall = 0.0045				max =		13
				F(5,74509)	=	73.71
corr(u_i, Xb) = -0.0029				Prob > F	=	0.0000

BankDebt2	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
varr1	.030703	.0112595	2.73	0.006	.0086344	.0527716
varr2	-2.181006	.2380736	-9.16	0.000	-2.647629	-1.714382
varr3	.7134466	.100352	7.11	0.000	.5167572	.910136
varr4	(dropped)					
enflasyon	.0002723	.0001193	2.28	0.023	.0000383	.0005062
mb_faiz	-.000039	.0001591	-0.24	0.807	-.0003509	.000273
HHI_il_sales	(dropped)					
_cons	.4175737	.0057499	72.62	0.000	.4063039	.4288436

sigma_u	.31803707	
sigma_e	.27329457	
rho	.57523326	(fraction of variance due to u_i)

F test that all u_i=0:   F(19781, 74509) =   4.69   Prob > F = 0.0000

```
. xtreg   BankDebt2 varr1  varr2 varr3 varr4 enflasyon mb_faiz  HHI_il_assets, fe
```

| Fixed-effects (within) regression | | | | Number of obs | = | 94296 |
| Group variable: firmno | | | | Number of groups | = | 19782 |

R-sq: within = 0.0049				Obs per group: min =		1
between = 0.0050				avg =		4.8
overall = 0.0045				max =		13
				F(5,74509)	=	73.71
corr(u_i, Xb) = -0.0029				Prob > F	=	0.0000

BankDebt2	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
varr1	.030703	.0112595	2.73	0.006	.0086344	.0527716
varr2	-2.181006	.2380736	-9.16	0.000	-2.647629	-1.714382
varr3	.7134466	.100352	7.11	0.000	.5167572	.910136
varr4	(dropped)					
enflasyon	.0002723	.0001193	2.28	0.023	.0000383	.0005062
mb_faiz	-.000039	.0001591	-0.24	0.807	-.0003509	.000273
HHI_il_ass~s	(dropped)					
_cons	.4175737	.0057499	72.62	0.000	.4063039	.4288436

sigma_u	.31803707	
sigma_e	.27329457	
rho	.57523326	(fraction of variance due to u_i)

F test that all u_i=0:   F(19781, 74509) =   4.69   Prob > F = 0.0000

```
. xtreg   BankDebt2 varr1  varr2 varr3 varr4 enflasyon mb_faiz  HHI_tum_sales, fe
```

| Fixed-effects (within) regression | | | | Number of obs | = | 94296 |
| Group variable: firmno | | | | Number of groups | = | 19782 |

R-sq: within = 0.0054				Obs per group: min =		1
between = 0.0058				avg =		4.8
overall = 0.0049				max =		13
				F(6,74508)	=	67.14
corr(u_i, Xb) = 0.0007				Prob > F	=	0.0000

BankDebt2	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
varr1	.0400235	.0113694	3.52	0.000	.0177395	.0623075
varr2	-2.227835	.2381555	-9.35	0.000	-2.694619	-1.761051
varr3	.7317478	.1003785	7.29	0.000	.5350064	.9284892
varr4	(dropped)					
enflasyon	.0004553	.0001234	3.69	0.000	.0002136	.0006971
mb_faiz	-.0001817	.000161	-1.13	0.259	-.0004972	.0001338
HHI_tum_sa~s	.0001352	.0000231	5.84	0.000	.0000899	.0001806
_cons	.4027888	.0062806	64.13	0.000	.3904789	.4150988

sigma_u	.31793627	
sigma_e	.27323377	
rho	.57518707	(fraction of variance due to u_i)

F test that all u_i=0:   F(19781, 74508) =   4.69   Prob > F = 0.0000

```
. xtreg   BankDebt2 varr1  varr2 varr3 varr4 enflasyon mb_faiz  HHI_sales_sektor, fe
```

| Fixed-effects (within) regression | | | | Number of obs | = | 94296 |
| Group variable: firmno | | | | Number of groups | = | 19782 |

R-sq: within = 0.0050				Obs per group: min =		1
between = 0.0048				avg =		4.8
overall = 0.0046				max =		13
				F(6,74508)	=	62.81
corr(u_i, Xb) = -0.0041				Prob > F	=	0.0000

BankDebt2	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
varr1	.030497	.0112592	2.71	0.007	.008429	.0525649
varr2	-2.186155	.2380687	-9.18	0.000	-2.652768	-1.719541
varr3	.7156832	.1003501	7.13	0.000	.5189975	.9123689
varr4	(dropped)					
enflasyon	.00028	.0001194	2.35	0.019	.0000461	.000514
mb_faiz	-.0000682	.0001595	-0.43	0.669	-.0003808	.0002443
HHI_sales_~r	-.0618606	.0214894	-2.88	0.004	-.1039798	-.0197414
_cons	.4215714	.005915	71.27	0.000	.4099781	.4331647

sigma_u	.31806148	
sigma_e	.2732812	
rho	.57529466	(fraction of variance due to u_i)

F test that all u_i=0:   F(19781, 74508) =   4.69   Prob > F = 0.0000