

# Web Appendix of “The Impact of High School Financial Education on Financial Knowledge and Choices: Evidence from a Randomized Trial in Spain”

Table W1: Diff-in-diffs estimates of the effect of the financial literacy program on normalized tests scores

	Unbalanced panel		Balanced panel	
	No strata (1)	Strata dummies (2)	Strata dummies (3)	Strata dummies* (4)
Panel A: Treated students vs controls (9 <sup>th</sup> graders). March				
Treated*After	.158	.158	.157	.157
(S.E)	(.063)	(.062)	(.059)	(.059)
[p-value]	<b>[.014]</b>	<b>[.012]</b>	<b>[.009]</b>	<b>[.009]</b>
Fraction correct in pre-test	.55	.55	.47	.47
R <sup>2</sup>	.002	.049	.002	.050
Number of students (schools)	5,907 (77)		5,468 (77)	
Panel B: Non-treated students in treated schools vs those in control schools (10 <sup>th</sup> graders). March				
“Treated”*After	-.051	-.056	-.108	-.108
(S.E)	(.084)	(.084)	(.077)	(.078)
[p-value]	[.545]	[.508]	[.167]	[.220]
Fraction correct in pre-test	.63	.63		
R <sup>2</sup>	.002	.042	.004	.043
Number of students (schools)	2,966 (77)		2,732 (77)	

Notes: the sample pools the sample of students in the December 2014 and March 2015 tests. The dependent variable is the normalized score in each test (the March score in the March sample and the pre-test in the December sample). Models 2 and 3 include strata dummies. \*Model 4 merges two strata where no school assigned to treatment accepted to participate. Estimation method: Differences-in-Differences. Covariates include the variable After (an indicator variable taking value 1 for the March sample) and the variable Treated (a dummy taking value 1 for students in treated schools). The standard errors (S.E) are corrected for heteroscedasticity and arbitrary correlation at the school level.

Table W2: Diff-in-diffs estimates of the effect of the financial literacy program on several outcomes

Panel A: Responses of home support for saving, hypothetical saving choices, and labor supply among 9 <sup>th</sup> graders. March						
	Talks to parents about economics (From 1 to 5; 1: never, 5: every day)		Hypothetical saving choices (0: later choice, 1: earlier choice)		Money for tasks at home (0: does not, 1: does)	
	Diff-in-diffs	+ fixed effects	Diff-in-diffs	+ fixed effects	Diff-in-diffs	+ fixed effects
	(1)	(2)	(3)	(4)	(5)	(6)
Treated*After	.104	.111	-.031	-.032	.041	.041
(S.E)	(.043)	(.061)	(.017)	(.019)	(.020)	(.029)
[p-value]	[.018]	[.074]	[.076]	[.095]	[.046]	[.154]
R <sup>2</sup>	.050	.748	.201	.426	.003	.714
Number of students (schools)	5,468 (77)		16,157 (77)		5,468 (77)	
Panel B: Responses of financial inclusion (holding a bank account, money card) and saving behavior among 9 <sup>th</sup> graders. March						
	Holding a bank account (0: no, 1: yes)		Holding a money card (0: no, 1: yes)		Saves (From 2 to 5; 2: no, 5: same amount each week)	
	Diff-in-diffs	+ fixed effects	Diff-in-diffs	+ fixed effects	Diff-in-diffs	+ fixed effects
	(1)	(2)	(3)	(4)	(5)	(6)
Treated*After	.031	.031	-.011	-.011	-.026	-.040
(S.E)	(.023)	(.033)	(.016)	(.023)	(.041)	(.053)
[p-value]	[.181]	[.341]	[.502]	[.634]	[.498]	[.444]
R <sup>2</sup>	.023	.783	.005	.629	.028	.481
Number of students (schools)	5,468 (77)		5,468 (77)		4,983 (77)	

Notes: the sample pools the balanced sample of students in the December 2014 and March 2015 tests. The dependent variable is the outcome in each survey (the March answer in the March sample and the December answer in the December sample). Models 2 and 3 include strata dummies. \*Model 4 merges two strata where no school assigned to treatment accepted to participate. Estimation method: Differences-in-Differences (odd-numbered columns) and Differences-in-Differences with a student specific fixed effect (even-numbered columns). Covariates include the variable After (an indicator variable taking value 1 for the March sample) and the variable Treated (a dummy taking value 1 for students in treated schools). The standard errors (S.E) are corrected for heteroscedasticity and arbitrary correlation at the school level. In Panel A, Columns (3) and (4), the number of cases is 16,157 stacked student-choice-surveys (=2,734 students\*2 surveys\*3 choices minus 19 cases of non response). The choice between 100 euros today vs. 120 in six weeks was not included in the December survey and hence is not included for the Diff-in-Diffs specification.

Table W3: The effect of the treatment on selected outcomes, full specification

	Tests scores (correct answers)	Talks to parents about economics	Earlier choice in hypothetical choices	Holds bank account	Money in exchange tasks at home	Incentivized saving task
	(1)	(2)	(3)	(4)	(5)	(6)
Treated	.167 (.064)	.121 (.054)	-.027 (.012)	.015 (.019)	.051 (.022)	-.269 (.150)
Stratum 1: Public schools, Madrid, 1st round of applications [omitted]						
Stratum 2: Concerted schools, Madrid	.074 (.140)	-0.172 (.128)	.032 (.021)	-.079 (.051)	.018 (.045)	.049 (.179)
Stratum 3: Private schools, Madrid (*)	.413 (.130)	-.150 (.065)	-.037 (.022)	.080 (.039)	-.001 (.031)	-.249 (.141)
Stratum 4: Public schools, rest, 1st round of applications	-.075 (.146)	.027 (.103)	-.004 (.019)	.027 (.034)	.033 (.040)	
Stratum 5: Concerted schools, rest, 1st round of applications	.071 (.107)	.013 (.104)	-.004 (.027)	-.005 (.044)	.039 (.039)	
Stratum 6: Private schools, rest	-.242 (.110)	-.071 (.109)	.004 (.015)	.063 (.051)	-.001 (.052)	
Stratum 7: Public schools, Madrid, 2nd round of applications	.064 (.079)	.095 (.175)	.013 (.044)	.053 (.034)	.035 (.053)	-.083 (.159)
Stratum 9: Public schools, rest, 2nd round of applications	.016 (.106)	-.020 (.084)	.008 (.024)	.071 (.030)	.025 (.043)	
Stratum 10: Concerted schools, rest, 2nd round of applications	.246 (.092)	-.003 (.067)	.025 (.026)	.070 (.037)	-.013 (.036)	
Stratum 11: Public schools, 3rd round of applications	-.141 (.112)	-.118 (.175)	-.009 (.022)	.036 (.067)	.030 (.054)	
Stratum 12: Concerted schools, 3rd round of applications	.159 (.105)	-.127 (.057)	-.040 (.023)	.011 (.045)	.010 (.050)	
Stratum 13: Public schools, 3rd round of applications	.044 (.089)	.182 (.116)	.021 (.039)	.151 (.032)	.028 (.028)	
Stratum 14: Intended to give the material in 7th/8th grade (**)	.042 (.086)	.092 (.173)	.054 (.023)	.054 (.028)	-0.044 (.043)	
Stratum 16: Intended to give the material in 1st year of upper secondary (all public)	-.065 (.113)	.025 (.066)	-.012 (.021)	-.033 (.043)	-.009 (.032)	
Choice btw 100€ and 120 in 3 weeks						
Choice btw 100€ and 150 in 3 weeks						
Choice btw 100€ and 180 in 3 weeks						
Immediate payment						-.278 (.041)
Interest rate						-.205 (.040)
Delay						.297 (.054)
Outcomes measured at the baseline (December 2014)	.567 (.020)				.364 (.017)	
Baseline choice btw 100€ and 120 in 3 weeks						-.307 (.156)
Baseline choice btw 100€ and 150 in 3 weeks						.037 (.275)
Baseline choice btw 100€ and 180 in 3 weeks						-.259 (.325)
Baseline talks to parents: every day		1.187 (.063)				
Baseline talks to parents: once a week		.502 (.047)				
Baseline talks to parents: less than once a week		-.664 (.059)				
Baseline talks to parents: never		-.289 (.169)				
Baseline holds bank account				.567 (.018)		
Baseline holds money card				.075 (.026)		
Constant	-.121 (.083)		.541 (.033)	.201 (.026)	.144 (.030)	1.144 (.178)

Notes: (\*) two strata of private schools in Madrid were pooled because no treated schools accepted to participate in one of those two rounds. (\*\*) Strata of schools applying in November 2014 to give the course in 7th and 8th grades were pooled because no treated school (intended to teach in 8th grade) accepted to participate on time and no control school (intended to teach in 7th grade) accepted to participate on time.