Replications of Table 5 (AK)

Main Replications

We replicate Table 5 for different data sets. As in BCH, all observations with $z > 10$ were dropped for these replications. This RMD file only prints the resulting tables. To perform the computation, source the file `ak_table.R` and then run the function `make.ak.tables()`.

Note that in Panel B the actual 3rd interval used by BCH was from [1.96,2.33], even though [1.96, 2.58] was stated. We replicate based on the actual interval used: [1.96, 2.33].

Orginal data supplement in BCH AER article

	DID	IV	RCT	RDD
	(1)	(2)	(3)	(4)
Panel A				
$\beta_{[0<Z<1.96]}$	0.237	0.214	0.523	0.354
	(0.010)	(0.010)	(0.024)	(0.020)
Scale	0.006	0.021	0.020	0.004
	(0.001)	(0.003)	(0.002)	(0.001)
Location	0.004	0.013	0.013	0.002
	(0.000)	(0.002)	(0.001)	(0.000)
Degrees of Freedom	2.249	2.464	2.335	2.100
	(0.045)	(0.060)	(0.051)	(0.080)
Panel B				
$\beta_{[0<Z<1.65]}$	0.181	0.159	0.493	0.301
	(0.009)	(0.008)	(0.029)	(0.021)
$\beta_{[1.65<Z<1.96]}$	0.465	0.559	0.836	0.660
	(0.028)	(0.034)	(0.051)	(0.057)
$\beta_{[1.96<Z<2.33]}$	0.732	0.834	1.080	0.863
	(0.039)	(0.046)	(0.062)	(0.070)
Scale	0.006	0.018	0.019	0.003
	(0.001)	(0.003)	(0.002)	(0.001)
Location	0.003	0.011	0.012	0.002
	(0.001)	(0.002)	(0.002)	(0.000)
Degrees of Freedom	2.408	2.589	2.329	2.193
	(0.051)	(0.063)	(0.053)	(0.095)

The table above should be identical to Table 5 in the AER article.

Updated data without rounding adjustment

	DID	IV	RCT	RDD
	(1)	(2)	(3)	(4)
Panel A				
$\beta_{[0<Z<1.96]}$	0.239	0.214	0.544	0.352
	(0.010)	(0.010)	(0.023)	(0.020)
Scale	0.006	0.021	0.019	0.003
	(0.001)	(0.003)	(0.001)	(0.001)
Location	0.004	0.013	0.011	0.002
	(0.001)	(0.002)	(0.001)	(0.000)
Degrees of Freedom	2.228	2.461	2.286	2.107
	(0.045)	(0.060)	(0.049)	(0.080)
Panel B				
$\beta_{[0<Z<1.65]}$	0.184	0.159	0.517	0.299
	(0.009)	(0.008)	(0.028)	(0.020)
$\beta_{[1.65<Z<1.96]}$	0.465	0.559	0.843	0.658
	(0.029)	(0.034)	(0.050)	(0.057)
$\beta_{[1.96<Z<2.33]}$	0.738	0.834	1.085	0.862
	(0.040)	(0.046)	(0.060)	(0.070)
Scale	0.005	0.018	0.018	0.003
	(0.001)	(0.002)	(0.001)	(0.001)
Location	0.003	0.011	0.010	0.001
	(0.001)	(0.002)	(0.001)	(0.000)
Degrees of Freedom	2.380	2.586	2.280	2.201
	(0.050)	(0.063)	(0.051)	(0.095)

Updated data with rounding adjustment

We drop all observations with $s < 37$.

	DID	IV	RCT	RDD
	(1)	(2)	(3)	(4)
Panel A				
$\beta_{[0<Z<1.96]}$	0.222	0.253	0.574	0.521
	(0.011)	(0.014)	(0.027)	(0.047)
Scale	0.011	0.060	0.054	0.059
	(0.002)	(0.005)	(0.002)	(0.007)
Location	0.005	0.035	0.026	0.039
	(0.001)	(0.003)	(0.001)	(0.004)
Degrees of Freedom	2.317	2.660	2.475	2.139
	(0.063)	(0.076)	(0.075)	(0.123)
Panel B				
$\beta_{[0<Z<1.65]}$	0.162	0.195	0.544	0.503
	(0.009)	(0.013)	(0.031)	(0.057)
$\beta_{[1.65<Z<1.96]}$	0.505	0.647	0.947	0.916
	(0.039)	(0.046)	(0.066)	(0.113)
$\beta_{[1.96<Z<2.33]}$	0.683	0.986	1.122	1.199
	(0.049)	(0.062)	(0.076)	(0.137)
Scale	0.010	0.052	0.051	0.055
	(0.001)	(0.005)	(0.002)	(0.007)
Location	0.004	0.031	0.025	0.038
	(0.001)	(0.003)	(0.001)	(0.005)
Degrees of Freedom	2.544	2.736	2.470	2.096
	(0.076)	(0.084)	(0.078)	(0.135)

Alternative replications dropping only z > 100

In the published do file by BCH they only drop z > 100 (but that was not the code run to generate the tables in the AER article). We replicate now the 3 tables above for this selection.

Results are still qualitatively similar. By comparing the tables, we see however that the decision to drop z > 100 or z > 10 has a bigger impact on the estimates than our rounding adjustment.

Orginal data supplement in BCH AER article

	DID	IV	RCT	RDD
	(1)	(2)	(3)	(4)
Panel A				
$\beta_{[0<Z<1.96]}$	0.290	0.252	0.661	0.456
	(0.012)	(0.015)	(0.032)	(0.033)
Scale	0.007	0.022	0.026	0.005
	(0.001)	(0.004)	(0.002)	(0.002)
Location	0.004	0.014	0.017	0.003
	(0.000)	(0.004)	(0.002)	(0.001)
Degrees of Freedom	1.573	1.845	1.740	1.440
	(0.033)	(0.048)	(0.040)	(0.047)
Panel B				
$\beta_{[0<Z<1.65]}$	0.246	0.200	0.688	0.423
	(0.011)	(0.012)	(0.042)	(0.034)
$\beta_{[1.65<Z<1.96]}$	0.596	0.674	1.075	0.870
	(0.036)	(0.043)	(0.068)	(0.076)
$\beta_{[1.96<Z<2.33]}$	0.898	0.973	1.329	1.088
	(0.048)	(0.056)	(0.078)	(0.089)
Scale	0.007	0.019	0.025	0.005
	(0.001)	(0.003)	(0.002)	(0.001)
Location	0.004	0.012	0.018	0.003
	(0.000)	(0.003)	(0.002)	(0.001)
Degrees of Freedom	1.611	1.866	1.677	1.432
	(0.036)	(0.047)	(0.041)	(0.051)

Updated data without rounding adjustment

	DID	IV	RCT	RDD
	(1)	(2)	(3)	(4)
Panel A				
$\beta_{[0<Z<1.96]}$	0.292	0.251	0.671	0.447
	(0.012)	(0.015)	(0.031)	(0.031)
Scale	0.007	0.022	0.023	0.005
	(0.001)	(0.004)	(0.002)	(0.001)
Location	0.004	0.014	0.014	0.003
	(0.001)	(0.003)	(0.001)	(0.001)
Degrees of Freedom	1.572	1.843	1.714	1.463
	(0.033)	(0.047)	(0.039)	(0.048)
Panel B				
$\beta_{[0<Z<1.65]}$	0.248	0.200	0.692	0.414
	(0.012)	(0.012)	(0.040)	(0.032)
$\beta_{[1.65<Z<1.96]}$	0.593	0.674	1.050	0.860
	(0.036)	(0.043)	(0.064)	(0.075)
$\beta_{[1.96<Z<2.33]}$	0.903	0.973	1.299	1.077
	(0.049)	(0.056)	(0.073)	(0.088)
Scale	0.006	0.019	0.022	0.004
	(0.001)	(0.003)	(0.002)	(0.001)
Location	0.004	0.012	0.014	0.002
	(0.001)	(0.003)	(0.001)	(0.001)
Degrees of Freedom	1.609	1.864	1.656	1.459
	(0.036)	(0.047)	(0.040)	(0.052)

Updated data with rounding adjustment

We drop all observations with $s < 37$.

	DID	IV	RCT	RDD
	(1)	(2)	(3)	(4)
Panel A				
$\beta_{[0<Z<1.96]}$	0.256	0.298	0.702	0.546
	(0.013)	(0.017)	(0.035)	(0.046)
Scale	0.011	0.069	0.061	0.061
	(0.002)	(0.005)	(0.002)	(0.006)
Location	0.005	0.043	0.032	0.041
	(0.001)	(0.003)	(0.001)	(0.004)
Degrees of Freedom	1.766	2.137	1.885	1.988
	(0.051)	(0.062)	(0.058)	(0.108)
Panel B				
$\beta_{[0<Z<1.65]}$	0.203	0.250	0.717	0.536
	(0.011)	(0.017)	(0.043)	(0.055)
$\beta_{[1.65<Z<1.96]}$	0.612	0.776	1.168	0.953
	(0.047)	(0.057)	(0.083)	(0.113)
$\beta_{[1.96<Z<2.33]}$	0.801	1.140	1.333	1.234
	(0.058)	(0.074)	(0.091)	(0.137)
Scale	0.011	0.063	0.059	0.059
	(0.002)	(0.006)	(0.002)	(0.006)
Location	0.005	0.040	0.032	0.040
	(0.001)	(0.004)	(0.002)	(0.005)
Degrees of Freedom	1.855	2.129	1.820	1.939
	(0.059)	(0.065)	(0.060)	(0.116)

AK Specification tests: Correlations

	DID	IV	RCT	RDD
Complete sample:				
Panel A	0.92	0.90	0.92	0.92
	[0.92, 0.93]	[0.88, 0.91]	[0.90, 0.94]	[0.91, 0.93]
Panel B	0.92	0.89	0.92	0.92
	[0.91, 0.93]	[0.88, 0.91]	[0.90, 0.94]	[0.91, 0.93]
Sample adjusted for coarse rounding:				
Panel A	0.92	0.90	0.92	0.91
	[0.91, 0.93]	[0.88, 0.91]	[0.89, 0.94]	[0.89, 0.92]
Panel B	0.92	0.89	0.92	0.91
	[0.90, 0.93]	[0.88, 0.91]	[0.89, 0.94]	[0.89, 0.92]