

Table 1: Cumulative borrowing statistics from NPSAS, by wave

	1990	1996	2000	2004	2008
<i>Ever borrow</i>	0.545	0.526	0.636	0.656	0.666
<i>Total borrowing (thousands, \$2012)</i>					
Mean	7.2	9.2	14.4	14.8	16.7
25 th	0.0	0.0	0.0	0.0	0.0
Median	1.9	2.5	10.9	11.6	12.1
75 th	11.4	17.7	24.5	23.8	26.6
90 th	20.8	25.4	34.8	36.4	42.5
95 th	27.3	30.8	42.5	47.7	51.6
99 th	48.1	44.9	60.6	65.6	85.0
<i>Total borrowing among borrowers (thousands, \$2012)</i>					
Mean	13.2	17.6	22.6	22.6	25.0
10 th	2.4	5.4	5.6	6.0	5.8
25 th	4.8	9.7	12.9	11.9	12.2
Median	10.4	17.0	21.8	20.4	21.3
75 th	18.0	23.6	29.3	29.8	33.0
90 th	25.7	30.2	38.8	42.6	47.8
95 th	32.1	35.1	49.0	51.6	56.2
99 th	64.2	51.6	64.5	72.7	90.3

Notes: Statistics use population weights (of 2012 vintage) and are for domestic students in the year indicated. Monetary amounts are inflated using the PCE index from the Bureau of Economic Analysis. Borrowing is from all sources except friends and family and excludes loans taken out by parents (PLUS loans).

Table 2A: Oaxaca-Blinder Decompositions of Ever Borrowed, Using Tuition

	2000–1990		2008–1990		2000–1996		2008–1996	
Mean difference (%-points)	9.03	(1.40)	12.04	(1.43)	10.99	(2.02)	13.99	(2.06)
<i>Composition effects due to:</i>								
Age/dependency status	0.27	(0.33)	-0.87	(0.45)	-0.09	(0.39)	1.17	(0.81)
Sex, marital status, ethnicity	0.86	(0.49)	0.99	(0.55)	0.85	(0.52)	1.21	(0.65)
Parental education	-0.42	(0.30)	-0.50	(0.46)	0.98	(0.69)	1.22	(0.93)
Location, in-state status	-1.01	(0.67)	-1.80	(0.65)	0.41	(0.83)	0.39	(0.87)
School sector, attendance, major	-0.01	(1.99)	0.58	(1.06)	1.75	(0.69)	0.83	(1.02)
Expected family contribution	1.09	(0.28)	0.55	(0.42)	-1.08	(0.84)	-2.90	(1.18)
Tuition and grants	3.40	(1.81)	6.44	(1.95)	-0.73	(1.33)	2.05	(1.88)
<i>Total</i>	<i>4.05</i>	<i>(1.51)</i>	<i>5.38</i>	<i>(2.36)</i>	<i>2.07</i>	<i>(2.16)</i>	<i>3.97</i>	<i>(2.94)</i>
<i>Structural effects due to:</i>								
Age/dependency status	3.07	(1.57)	5.92	(1.62)	-0.08	(2.54)	0.36	(2.69)
Sex, marital status, ethnicity	-4.04	(4.58)	-5.16	(4.32)	11.94	(5.59)	10.58	(5.11)
Parental education	1.51	(1.34)	0.33	(1.09)	1.13	(1.97)	-0.37	(1.58)
Location, in-state status	1.72	(2.05)	1.49	(2.16)	-1.77	(2.95)	-2.76	(3.04)
School sector, attendance, major	-1.94	(11.85)	-2.83	(10.65)	-5.92	(6.25)	-5.18	(5.73)
Expected family contribution	-6.33	(2.34)	-1.85	(2.16)	9.90	(3.53)	15.65	(3.19)
Tuition and grants	0.90	(5.41)	-2.50	(6.20)	-4.20	(8.18)	-7.35	(9.54)
Constant	10.08	(14.51)	11.24	(14.40)	-2.07	(11.54)	-0.90	(11.45)
<i>Total</i>	<i>4.98</i>	<i>(1.57)</i>	<i>6.66</i>	<i>(2.22)</i>	<i>8.93</i>	<i>(2.02)</i>	<i>10.03</i>	<i>(2.67)</i>

Notes: Each column refers to the later period less the earlier period. Oaxaca-Blinder decompositions are based on coefficients from the base period reference and are estimated via OLS (with sample weights). Standard errors robust to heteroskedasticity and intra-college correlation are in parentheses. Borrowing is from all sources except friends and family and excludes loans taken out by parents (PLUS loans). Results change trivially if time to degree is included for the latter two panels.

Table 2B: Oaxaca-Blinder Decompositions of Ever Borrowed, Using Cost of Attendance

	2000–1990		2008–1990		2000–1996		2008–1996	
Mean difference (%-points)	9.03	(1.41)	12.04	(1.44)	10.99	(2.02)	13.99	(2.05)
<i>Composition effects due to:</i>								
Age/dependency status	0.28	(0.32)	-0.83	(0.43)	-0.15	(0.39)	1.18	(0.80)
Sex, marital status, ethnicity	0.91	(0.49)	1.12	(0.55)	0.87	(0.50)	1.23	(0.64)
Parental education	-0.41	(0.30)	-0.57	(0.46)	0.90	(0.67)	1.10	(0.91)
Location, in-state status	-1.02	(0.68)	-1.86	(0.66)	0.48	(0.86)	0.38	(0.89)
School sector, attendance, major	-0.51	(0.72)	0.23	(0.78)	1.75	(0.67)	0.80	(1.01)
Expected family contribution	1.18	(0.30)	0.68	(0.44)	-1.08	(0.86)	-2.97	(1.19)
Attendance cost and grants	4.14	(0.94)	7.84	(1.31)	0.50	(1.53)	4.01	(1.82)
<i>Total</i>	<i>4.57</i>	<i>(1.44)</i>	<i>6.62</i>	<i>(1.90)</i>	<i>3.27</i>	<i>(2.26)</i>	<i>5.72</i>	<i>(2.92)</i>
<i>Structural effects due to:</i>								
Age/dependency status	3.12	(1.57)	5.73	(1.63)	-0.43	(2.57)	-0.26	(2.71)
Sex, marital status, ethnicity	-4.94	(4.61)	-6.51	(4.32)	12.78	(5.59)	11.05	(5.15)
Parental education	1.25	(1.33)	0.23	(1.07)	0.84	(1.98)	-0.52	(1.60)
Location, in-state status	1.22	(2.05)	1.82	(2.23)	-1.51	(3.00)	-1.65	(3.11)
School sector, attendance, major	-1.34	(3.91)	-3.68	(3.70)	-6.68	(6.15)	-7.33	(5.77)
Expected family contribution	-7.37	(2.33)	-3.17	(2.17)	9.15	(3.50)	14.74	(3.17)
Attendance cost and grants	-22.89	(9.03)	-5.78	(10.88)	-0.31	(13.41)	17.00	(15.62)
Constant	35.42	(10.88)	16.77	(11.96)	-6.11	(15.16)	-24.76	(17.03)
<i>Total</i>	<i>4.47</i>	<i>(1.54)</i>	<i>5.42</i>	<i>(1.80)</i>	<i>7.73</i>	<i>(2.11)</i>	<i>8.27</i>	<i>(2.59)</i>

Notes: Each column refers to the later period less the earlier period. Oaxaca-Blinder decompositions are based on coefficients from the base period reference and are estimated via OLS (with sample weights). Standard errors robust to heteroskedasticity and intra-college correlation are in parentheses. Borrowing is from all sources except friends and family and excludes loans taken out by parents (PLUS loans). Results change trivially if time to degree is included for the latter two panels.

Table 3A: Recentered Influence Function Decompositions of Borrowing: 2008–1990, Using Tuition

	Mean		50 th percentile		75 th percentile		90 th percentile	
Difference (000s \$2012)	9.44	(0.27)	10.21	(0.48)	15.16	(0.54)	21.66	(0.53)
<i>Composition effects due to:</i>								
Age/dependency status	-0.19	(0.08)	0.42	(0.14)	0.54	(0.17)	0.21	(0.18)
Sex, marital status, ethnicity	0.12	(0.11)	0.18	(0.14)	0.14	(0.23)	-0.11	(0.25)
Parental education	0.00	(0.10)	0.08	(0.11)	0.27	(0.20)	0.14	(0.20)
Location, in-state status	-0.16	(0.13)	-0.37	(0.30)	-0.18	(0.61)	0.00	(0.63)
School sector, attendance, major	0.57	(0.21)	0.96	(0.54)	0.96	(0.83)	1.65	(1.11)
Expected family contribution	0.24	(0.08)	0.67	(0.22)	1.08	(0.21)	1.28	(0.26)
Attendance cost and grants	1.16	(0.83)	1.32	(1.07)	2.67	(2.03)	-4.06	(2.82)
<i>Total</i>	<i>1.74</i>	<i>(0.86)</i>	<i>3.26</i>	<i>(1.48)</i>	<i>5.48</i>	<i>(2.32)</i>	<i>-0.89</i>	<i>(2.75)</i>
<i>Structural effects due to:</i>								
Age/dependency status	-0.16	(0.45)	0.94	(0.79)	-1.46	(0.83)	-3.05	(1.00)
Sex, marital status, ethnicity	-1.23	(1.00)	-2.48	(1.40)	-2.92	(2.11)	-4.05	(2.09)
Parental education	0.02	(0.25)	0.23	(0.34)	-0.75	(0.44)	-0.32	(0.46)
Location, in-state status	-0.41	(0.85)	-0.58	(0.71)	-0.11	(1.15)	-0.34	(1.45)
School sector, attendance, major	0.28	(1.47)	-2.82	(3.31)	1.11	(2.23)	-1.55	(2.86)
Expected family contribution	-0.29	(0.54)	-1.40	(0.67)	0.81	(0.81)	2.93	(1.10)
Attendance cost and grants	4.26	(1.60)	8.16	(3.51)	3.40	(3.19)	9.64	(3.97)
Constant	5.23	(2.48)	4.89	(5.34)	9.60	(4.20)	16.20	(5.69)
<i>Total</i>	<i>7.70</i>	<i>(0.91)</i>	<i>6.94</i>	<i>(1.76)</i>	<i>9.68</i>	<i>(2.35)</i>	<i>22.55</i>	<i>(2.78)</i>

Notes: Each column refers to the later period less the earlier period. The recentered influence functions and quantiles are calculated with sample weights; the decompositions are based on coefficients from the base period reference and are estimated via OLS (without sample weights). Bootstrapped standard errors (100 replications) are in parentheses. Borrowing is from all sources except friends and family and excludes loans taken out by parents (PLUS loans).

Table 3B: Recentered Influence Function Decompositions of Borrowing: 2008–1990, Using Cost of Attendance

	Mean		50 th percentile		75 th percentile		90 th percentile	
Difference (000s \$2012)	9.44	(0.27)	10.21	(0.48)	15.16	(0.54)	21.66	(0.53)
<i>Composition effects due to:</i>								
Age/dependency status	-0.16	(0.07)	0.41	(0.14)	0.46	(0.16)	0.13	(0.17)
Sex, marital status, ethnicity	0.16	(0.10)	0.18	(0.13)	0.14	(0.24)	-0.16	(0.26)
Parental education	0.01	(0.10)	0.08	(0.11)	0.29	(0.20)	0.17	(0.21)
Location, in-state status	-0.19	(0.13)	-0.32	(0.29)	-0.30	(0.60)	-0.04	(0.62)
School sector, attendance, major	0.60	(0.19)	0.96	(0.52)	0.61	(0.79)	1.25	(1.06)
Expected family contribution	0.26	(0.08)	0.61	(0.21)	1.00	(0.21)	1.14	(0.26)
Attendance cost and grants	1.68	(0.35)	2.11	(0.98)	3.71	(1.40)	3.83	(1.93)
<i>Total</i>	<i>2.35</i>	<i>(0.43)</i>	<i>4.03</i>	<i>(1.39)</i>	<i>5.91</i>	<i>(1.78)</i>	<i>6.32</i>	<i>(2.24)</i>
<i>Structural effects due to:</i>								
Age/dependency status	-0.19	(0.45)	1.15	(0.71)	-1.75	(0.80)	-3.47	(0.97)
Sex, marital status, ethnicity	-2.13	(1.06)	-2.99	(1.50)	-4.35	(2.20)	-5.80	(2.28)
Parental education	-0.01	(0.25)	0.21	(0.33)	-0.87	(0.44)	-0.42	(0.47)
Location, in-state status	-0.31	(0.88)	-0.34	(0.68)	0.05	(1.13)	-0.33	(1.44)
School sector, attendance, major	-1.71	(1.08)	-3.02	(1.09)	-1.94	(2.08)	-2.07	(2.65)
Expected family contribution	-0.87	(0.54)	-2.58	(0.67)	-0.22	(0.83)	1.92	(1.19)
Attendance cost and grants	10.31	(2.60)	21.25	(5.33)	13.14	(4.65)	6.41	(5.43)
Constant	2.01	(3.15)	-7.49	(4.51)	5.18	(5.33)	19.08	(7.22)
<i>Total</i>	<i>7.09</i>	<i>(0.46)</i>	<i>6.18</i>	<i>(1.68)</i>	<i>9.25</i>	<i>(1.79)</i>	<i>15.34</i>	<i>(2.33)</i>

Notes: Each column refers to the later period less the earlier period. The recentered influence functions and quantiles are calculated with sample weights; the decompositions are based on coefficients from the base period reference and are estimated via OLS (without sample weights). Bootstrapped standard errors (100 replications) are in parentheses. Borrowing is from all sources except friends and family and excludes loans taken out by parents (PLUS loans).

Table 4A: Recentered Influence Function Decompositions of Borrowing: 2000–1990, Using Tuition

	Mean		50 th percentile		75 th percentile		90 th percentile	
Difference (000s \$2012)	7.13	(0.29)	9.03	(0.61)	13.12	(0.52)	13.96	(0.64)
<i>Composition effects due to:</i>								
Age/dependency status	0.13	(0.07)	0.63	(0.22)	0.81	(0.19)	0.33	(0.21)
Sex, marital status, ethnicity	0.11	(0.10)	0.09	(0.11)	0.05	(0.20)	-0.15	(0.20)
Parental education	-0.01	(0.07)	0.05	(0.07)	0.02	(0.13)	0.14	(0.15)
Location, in-state status	-0.07	(0.14)	-0.88	(0.39)	-0.50	(0.56)	0.07	(0.70)
School sector, attendance, major	-0.02	(0.25)	1.05	(0.65)	-0.01	(0.67)	-0.25	(0.92)
Expected family contribution	0.15	(0.06)	0.49	(0.17)	0.47	(0.11)	0.42	(0.12)
Tuition and grants	0.85	(0.36)	-0.12	(0.45)	0.15	(0.76)	-1.36	(0.92)
<i>Total</i>	<i>1.15</i>	<i>(0.34)</i>	<i>1.32</i>	<i>(0.61)</i>	<i>0.99</i>	<i>(0.89)</i>	<i>-0.80</i>	<i>(0.98)</i>
<i>Structural effects due to:</i>								
Age/dependency status	-0.51	(0.40)	-0.62	(0.84)	0.12	(0.75)	-6.72	(1.26)
Sex, marital status, ethnicity	-1.72	(0.98)	-2.62	(1.88)	-1.21	(2.18)	-4.34	(2.56)
Parental education	0.17	(0.35)	1.37	(0.57)	-0.52	(0.49)	0.11	(0.72)
Location, in-state status	0.23	(0.74)	1.28	(0.85)	0.38	(1.01)	-1.66	(1.53)
School sector, attendance, major	1.37	(1.77)	-5.63	(4.07)	1.80	(2.68)	1.54	(3.83)
Expected family contribution	-1.82	(0.49)	-6.99	(1.15)	-0.09	(0.91)	-0.12	(1.51)
Tuition and grants	2.78	(1.40)	7.15	(2.93)	-0.70	(2.73)	8.73	(3.20)
Constant	5.47	(2.58)	13.42	(5.52)	12.27	(4.77)	17.22	(6.30)
<i>Total</i>	<i>5.99</i>	<i>(0.46)</i>	<i>7.71</i>	<i>(0.99)</i>	<i>12.14</i>	<i>(1.02)</i>	<i>14.75</i>	<i>(1.25)</i>

Notes: Each column refers to the later period less the earlier period. The recentered influence functions and quantiles are calculated with sample weights; the decompositions are based on coefficients from the base period reference and are estimated via OLS (without sample weights). Bootstrapped standard errors (100 replications) are in parentheses. Borrowing is from all sources except friends and family and excludes loans taken out by parents (PLUS loans).

Table 4B: Recentered Influence Function Decompositions of Borrowing: 2000–1990, Using Cost of Attendance

	Mean		50 th percentile		75 th percentile		90 th percentile	
Difference (000s \$2012)	7.13	(0.29)	9.03	(0.61)	13.12	(0.52)	13.96	(0.64)
<i>Composition effects due to:</i>								
Age/dependency status	0.11	(0.06)	0.61	(0.21)	0.70	(0.19)	0.21	(0.21)
Sex, marital status, ethnicity	0.14	(0.09)	0.08	(0.11)	0.04	(0.20)	-0.18	(0.21)
Parental education	-0.02	(0.07)	0.06	(0.08)	0.04	(0.13)	0.15	(0.16)
Location, in-state status	-0.07	(0.14)	-0.84	(0.37)	-0.66	(0.54)	-0.04	(0.68)
School sector, attendance, major	0.21	(0.16)	0.61	(0.42)	0.09	(0.71)	0.12	(0.95)
Expected family contribution	0.17	(0.06)	0.50	(0.17)	0.49	(0.11)	0.43	(0.12)
Attendance cost and grants	0.64	(0.24)	0.31	(0.61)	0.25	(0.70)	0.29	(0.69)
<i>Total</i>	<i>1.17</i>	<i>(0.32)</i>	<i>1.32</i>	<i>(0.67)</i>	<i>0.94</i>	<i>(0.87)</i>	<i>0.96</i>	<i>(0.87)</i>
<i>Structural effects due to:</i>								
Age/dependency status	-0.41	(0.41)	-0.30	(0.79)	-0.17	(0.77)	-6.64	(1.24)
Sex, marital status, ethnicity	-2.26	(0.96)	-2.51	(1.98)	-2.33	(2.17)	-5.63	(2.64)
Parental education	0.13	(0.35)	1.24	(0.57)	-0.66	(0.49)	-0.04	(0.74)
Location, in-state status	0.30	(0.78)	1.23	(0.85)	0.49	(1.01)	-1.60	(1.51)
School sector, attendance, major	-0.52	(1.31)	-4.98	(1.75)	-1.25	(2.65)	-3.27	(3.99)
Expected family contribution	-2.34	(0.51)	-7.80	(1.17)	-0.83	(0.92)	-1.80	(1.58)
Attendance cost and grants	3.27	(1.94)	12.27	(5.94)	0.74	(3.73)	10.76	(5.08)
Constant	7.81	(2.54)	8.56	(5.52)	16.20	(5.36)	21.21	(6.88)
<i>Total</i>	<i>5.96</i>	<i>(0.41)</i>	<i>7.71</i>	<i>(0.97)</i>	<i>12.18</i>	<i>(1.05)</i>	<i>12.99</i>	<i>(1.08)</i>

Notes: Each column refers to the later period less the earlier period. The recentered influence functions and quantiles are calculated with sample weights; the decompositions are based on coefficients from the base period reference and are estimated via OLS (without sample weights). Bootstrapped standard errors (100 replications) are in parentheses. Borrowing is from all sources except friends and family and excludes loans taken out by parents (PLUS loans).

Table 5A: Recentered Influence Function Decompositions of Borrowing: 2008–2000, Using Tuition

	Mean		50 th percentile		75 th percentile		90 th percentile	
Difference (000s \$2012)	2.31	(0.25)	1.18	(0.50)	2.03	(0.38)	7.70	(0.61)
<i>Composition effects due to:</i>								
Age/dependency status	-0.51	(0.11)	-0.34	(0.12)	-0.25	(0.07)	-0.57	(0.18)
Sex, marital status, ethnicity	0.11	(0.05)	0.26	(0.09)	0.13	(0.05)	0.26	(0.12)
Parental education	0.47	(0.08)	1.16	(0.19)	0.40	(0.08)	0.52	(0.14)
Location, in-state status	-0.07	(0.06)	-0.04	(0.21)	0.02	(0.10)	0.42	(0.23)
School sector, attendance, major	0.16	(0.10)	0.50	(0.28)	0.45	(0.14)	0.92	(0.33)
Expected family contribution	0.18	(0.08)	1.33	(0.17)	0.66	(0.07)	1.30	(0.19)
Tuition and grants	1.03	(0.15)	2.44	(0.41)	1.10	(0.20)	2.15	(0.45)
<i>Total</i>	<i>1.37</i>	<i>(0.24)</i>	<i>5.30</i>	<i>(0.65)</i>	<i>2.52</i>	<i>(0.27)</i>	<i>5.01</i>	<i>(0.61)</i>
<i>Structural effects due to:</i>								
Age/dependency status	0.54	(0.42)	1.70	(0.66)	-1.60	(0.48)	4.12	(1.21)
Sex, marital status, ethnicity	0.38	(0.94)	-0.38	(1.48)	-1.84	(1.05)	0.07	(2.39)
Parental education	-0.61	(0.22)	-2.27	(0.43)	-0.38	(0.30)	-0.95	(0.44)
Location, in-state status	-0.66	(0.59)	-1.31	(0.85)	-0.19	(0.65)	0.83	(1.16)
School sector, attendance, major	-0.67	(0.81)	2.22	(1.14)	-0.16	(0.70)	0.98	(1.48)
Expected family contribution	1.44	(0.54)	4.43	(0.84)	0.84	(0.44)	2.61	(0.80)
Tuition and grants	0.76	(1.39)	0.01	(2.66)	5.52	(1.52)	-3.95	(3.03)
Constant	-0.24	(1.88)	-8.53	(3.21)	-2.68	(2.10)	-1.03	(3.79)
<i>Total</i>	<i>0.94</i>	<i>(0.30)</i>	<i>-4.13</i>	<i>(0.75)</i>	<i>-0.49</i>	<i>(0.45)</i>	<i>2.70</i>	<i>(0.90)</i>

Notes: Each column refers to the later period less the earlier period. The recentered influence functions and quantiles are calculated with sample weights; the decompositions are based on coefficients from the base period reference and are estimated via OLS (without sample weights). Bootstrapped standard errors (100 replications) are in parentheses. Borrowing is from all sources except friends and family and excludes loans taken out by parents (PLUS loans).

Table 5B: Recentered Influence Function Decompositions of Borrowing: 2008–2000, Using Cost of Attendance

	Mean		50 th percentile		75 th percentile		90 th percentile	
Difference (000s \$2012)	2.31	(0.25)	1.18	(0.50)	2.03	(0.38)	7.70	(0.61)
<i>Composition effects due to:</i>								
Age/dependency status	-0.47	(0.11)	-0.30	(0.11)	-0.23	(0.06)	-0.55	(0.17)
Sex, marital status, ethnicity	0.10	(0.04)	0.24	(0.09)	0.12	(0.05)	0.24	(0.12)
Parental education	0.44	(0.08)	1.11	(0.19)	0.38	(0.08)	0.48	(0.14)
Location, in-state status	-0.08	(0.06)	0.02	(0.21)	0.08	(0.10)	0.59	(0.24)
School sector, attendance, major	0.12	(0.10)	0.37	(0.27)	0.33	(0.13)	0.60	(0.30)
Expected family contribution	0.18	(0.08)	1.40	(0.17)	0.70	(0.08)	1.42	(0.20)
Attendance cost and grants	1.96	(0.18)	4.29	(0.40)	2.34	(0.21)	4.61	(0.63)
<i>Total</i>	2.26	(0.24)	7.13	(0.62)	3.72	(0.28)	7.39	(0.85)
<i>Structural effects due to:</i>								
Age/dependency status	0.42	(0.40)	1.54	(0.64)	-1.59	(0.47)	3.65	(1.15)
Sex, marital status, ethnicity	0.05	(0.92)	-0.62	(1.48)	-2.04	(1.03)	-0.38	(2.37)
Parental education	-0.55	(0.22)	-2.12	(0.43)	-0.32	(0.30)	-0.85	(0.45)
Location, in-state status	-0.64	(0.57)	-1.06	(0.81)	-0.15	(0.65)	0.69	(1.17)
School sector, attendance, major	-0.92	(0.82)	1.94	(1.13)	-0.50	(0.73)	1.74	(1.52)
Expected family contribution	1.38	(0.52)	3.93	(0.85)	0.42	(0.46)	3.01	(0.86)
Attendance cost and grants	6.12	(2.52)	6.49	(5.04)	13.52	(3.17)	-5.42	(5.70)
Constant	-5.80	(2.95)	-16.05	(5.47)	-11.02	(3.50)	-2.13	(5.99)
<i>Total</i>	0.06	(0.29)	-5.96	(0.71)	-1.69	(0.44)	0.32	(1.15)

Notes: Each column refers to the later period less the earlier period. The recentered influence functions and quantiles are calculated with sample weights; the decompositions are based on coefficients from the base period reference and are estimated via OLS (without sample weights). Bootstrapped standard errors (100 replications) are in parentheses. Borrowing is from all sources except friends and family and excludes loans taken out by parents (PLUS loans).

Appendix Table 1A: Summary statistics of BA/BS graduates from NPSAS, by wave

	1990	1996	2000	2004	2008
<i>Family income (thousands, \$2012), dependent students</i>					
Mean	94.6	96.7	96.3	97.2	107.0
25 th	51.8	49.5	52.6	49.1	55.0
Median	78.8	81.9	85.5	84.8	95.0
75 th	116.0	121.4	125.8	125.8	138.6
<i>Family income (thousands, \$2012), independent students</i>					
Mean	30.8	31.1	39.6	39.5	34.2
25 th	8.8	7.3	11.2	11.5	9.1
Median	20.2	20.2	26.9	28.5	23.4
75 th	46.5	43.3	55.1	56.3	49.1
<i>Expected Family Contribution (thousands, \$2012), dependents</i>					
Mean	18.9	15.4	16.2	17.2	19.8
25 th	5.0	4.4	5.1	4.5	5.4
Median	10.8	11.0	12.0	11.7	15.2
75 th	23.3	21.0	23.3	21.8	27.6
<i>Expected Family Contribution (thousands, \$2012), independents</i>					
Mean	9.9	7.2	8.0	7.9	6.0
25 th	2.1	0.4	0.0	0.0	0.0
Median	4.2	3.1	3.9	2.9	2.1
75 th	12.5	10.2	11.3	10.1	8.0
<i>List tuition (thousands, \$2012)</i>					
Missing (%)	8.4	3.4	4.3	5.5	7.4
Mean	6.3	8.4	8.4	9.4	11.1
25 th	1.8	2.8	2.7	3.5	4.1
Median	3.3	4.7	4.8	5.5	7.0
75 th	8.5	12.6	10.9	11.8	14.4
<i>List cost of attendance (thousands, \$2012)</i>					
Missing (%)	8.8	3.4	5.6	5.6	7.4
Mean	17.9	17.5	18.4	19.6	22.7
25 th	10.0	11.8	11.4	12.3	13.6
Median	15.9	14.8	15.7	17.1	19.8
75 th	23.8	22.2	22.7	23.9	29.5
<i>Total grants (thousands, \$2012)</i>					
Mean	2.2	2.8	3.4	3.9	4.8
25 th	0.0	0.0	0.0	0.0	0.0
Median	0.0	0.3	0.7	1.6	2.1
75 th	3.1	3.8	4.7	5.7	7.0
<i>Tuition net of grants (thousands, \$2012)</i>					
Missing (%)	8.4	3.4	4.3	5.5	7.4
Mean	4.3	5.6	4.9	5.5	6.3

25 th	0.8	1.4	0.9	0.9	1.1
Median	2.4	3.4	3.1	3.6	4.3
75 th	5.3	7.4	6.8	7.6	9.3
<i>Cost of attendance net of grants</i>					
<i>(thousands, \$2012)</i>					
Missing (%)	8.8	3.4	5.6	5.6	7.4
Mean	15.7	14.8	14.9	15.7	17.9
25 th	8.2	9.3	8.9	9.1	10.0
Median	13.7	13.2	13.4	13.8	15.9
75 th	21.0	18.1	18.4	19.6	23.2

Notes: Statistics use population weights and are for domestic students graduating with a bachelors degree in the year indicated. Monetary amounts are inflated using the PCE index from the Bureau of Economic Analysis. Family income is for the calendar year two years prior to graduation year; tuition and fees is for the final year of enrollment for students who attended only one institution that year and is adjusted for attendance intensity. (Both tuition restrictions reflect reporting by NPSAS and not by the authors.) Cost of attendance is tuition plus room and board, books, travel, and other expenses (also adjusted for attendance intensity by NPSAS).

Appendix Table 1B: Summary statistics of BA/BS graduates from NPSAS, by wave

	1990	1996	2000	2004	2008
<i>Dependency Status</i>					
Dependent	59.0	58.7	58.2	59.1	62.7
Independent	41.0	41.3	41.8	40.9	37.3
<i>Age</i>					
Less than 21	3.9	1.5	2.0	6.1	7.0
21	26.2	26.0	25.0	22.5	23.8
22	26.1	22.9	24.0	23.5	23.8
23	12.1	13.4	12.6	12.4	12.9
24	6.1	6.8	6.3	6.3	6.2
25 to 29	10.3	16.0	13.5	12.7	12.1
30 to 34	5.5	4.3	5.7	5.7	4.8
Older than 34	9.9	9.2	10.8	10.9	9.2
<i>Sex</i>					
Male	45.3	43.5	42.5	42.1	42.8
Female	54.7	56.5	57.5	57.9	57.2
<i>Marital Status</i>					
Single, divorced, widowed	79.6	84.6	82.2	81.2	84.9
Married	19.7	15.1	16.9	17.5	14.1
Separated	0.7	0.3	1.0	1.3	1.0
<i>Race/Ethnicity</i>					
White, non-Hispanic	86.2	82.7	75.6	73.6	70.7
Black, non-Hispanic	5.7	6.0	8.2	9.2	9.8
Hispanic	4.0	4.5	6.8	7.7	9.5
Asian	3.6	5.9	6.2	6.2	7.2
Native American/Other	0.4	1.0	3.3	3.2	2.9
<i>Mother's Education</i>					
Unknown	7.1	10.3	9.2	2.5	2.7
Less than HS	7.4	5.0	6.8	6.8	6.0
HS/GED	39.2	36.1	31.0	32.1	27.8
Some college	19.6	18.2	19.1	23.5	26.2
Bachelors	17.3	19.6	22.7	21.9	22.6
Postgraduate	9.4	10.9	11.3	13.2	14.7
<i>Father's Education</i>					
Unknown	9.0	11.4	10.2	4.4	5.0
Less than HS	8.3	6.0	8.0	8.3	7.0
HS/GED	25.2	27.7	25.2	27.7	26.7
Some college	14.7	10.3	14.7	18.8	20.2
Bachelors	19.8	22.3	23.4	21.9	21.7
Postgraduate	19.4	20.5	18.5	18.9	19.5
<i>Attendance Pattern</i>					
Full-time, full-year, 1 sch	45.1	55.5	52.4	52.7	54.1
Full-time, full-year, 2+ sch	1.3	1.5	2.5	3.3	4.5
Full-time, part-year	16.0	11.9	18.0	13.5	13.4
Part-time, full-year, 1 sch	17.3	19.8	15.6	17.9	14.4
Part-time, full-year, 2+ sch	7.0	1.6	0.9	1.3	1.9
Part-time, part-year	13.3	9.8	10.7	11.3	11.7

<i>Years to degree</i>					
Unknown	—	0.7	0.3	0.0	0.0
Fewer than four	—	1.6	12.6	10.8	9.0
Four	—	32.6	34.5	34.5	35.8
Five	—	24.4	21.3	22.6	21.2
Six	—	11.6	8.0	8.1	9.2
Seven to nine	—	12.6	9.2	9.3	10.7
Ten or more	—	16.7	14.0	14.7	14.2
<i>Institution Sector</i>					
Public, Nondoctoral	29.6	20.1	19.6	21.6	17.8
Public, Doctoral	36.4	44.8	46.3	45.8	48.5
Private, NFP, Nondoc	19.5	21.9	19.7	17.9	14.9
Private, NFP, Doc	13.8	12.6	13.2	12.4	15.1
Private, FP	0.6	0.6	1.3	2.3	3.7
<i>Institution Region</i>					
New England	10.8	4.7	6.5	8.2	5.7
Mid East	19.5	19.8	17.9	14.8	17.3
Great Lakes	18.9	18.1	16.6	14.4	14.9
Plains	6.7	7.5	8.6	8.3	7.6
Southeast	18.3	22.4	22.7	26.2	25.3
Southwest	8.2	10.9	10.5	8.5	11.5
Rocky Mts	3.8	2.9	3.7	6.6	3.9
Far West	13.8	13.8	13.5	13.2	13.8
<i>In-state student</i>					
Yes, Public	60.1	58.5	58.1	61.5	61.2
Yes, Private	22.0	22.5	21.8	22.2	21.9
No	17.9	19.1	20.1	16.3	16.9
<i>Major</i>					
Unknown	6.7	2.3	2.5	1.5	0.8
Humanities	13.9	12.6	13.2	12.5	13.7
Social Sciences	14.6	17.3	16.8	15.5	14.7
Life Sciences	4.8	10.0	7.2	6.6	9.5
Physical Sciences/Math	1.8	3.7	2.4	2.6	2.4
Computer Science	2.3	2.5	4.4	5.3	2.4
Engineering	7.1	6.1	4.8	5.3	6.3
Education	7.8	8.8	9.2	10.3	8.2
Business	22.5	19.5	20.1	20.5	20.7
Health	8.9	9.4	9.0	6.9	7.7
Other	9.7	8.0	10.4	13.0	13.6

NOTE: Statistics use population weights and are for domestic students graduating with a bachelors degree in the year indicated. Attendance pattern refers to the final year of enrollment. Years to degree refers to the difference between the calendar year of first postsecondary enrollment and the graduation year indicated. In-state students attend an institution in their state of legal residence.

Appendix Table 2A: Recentered Influence Function Decompositions of Borrowing: 1996–1990, Using Tuition

	Mean		50 th percentile		75 th percentile		90 th percentile	
Difference (000s \$2012)	2.01	(0.49)	0.58	(0.47)	6.35	(0.97)	4.55	(0.92)
<i>Composition effects due to:</i>								
Age/dependency status	0.13	(0.13)	0.66	(0.20)	0.92	(0.27)	0.43	(0.24)
Sex, marital status, ethnicity	0.12	(0.06)	-0.02	(0.09)	-0.06	(0.11)	-0.11	(0.12)
Parental education	-0.07	(0.07)	0.16	(0.13)	0.16	(0.16)	0.13	(0.17)
Location, in-state status	-0.24	(0.20)	-0.55	(0.32)	-0.40	(0.40)	-0.24	(0.49)
School sector, attendance, major	-0.11	(0.23)	0.54	(0.64)	-0.23	(0.47)	-0.14	(0.55)
Expected family contribution	0.25	(0.09)	0.72	(0.17)	0.88	(0.21)	0.98	(0.22)
Tuition and grants	1.14	(0.33)	0.72	(0.52)	1.65	(0.51)	0.44	(0.84)
<i>Total</i>	<i>1.22</i>	<i>(0.40)</i>	<i>2.23</i>	<i>(0.57)</i>	<i>2.92</i>	<i>(0.75)</i>	<i>1.49</i>	<i>(1.06)</i>
<i>Structural effects due to:</i>								
Age/dependency status	0.52	(0.67)	1.99	(0.55)	1.63	(1.36)	-3.12	(1.30)
Sex, marital status, ethnicity	-1.90	(2.75)	-3.44	(1.72)	-2.44	(5.09)	-3.83	(4.11)
Parental education	0.29	(0.55)	-0.23	(0.49)	0.18	(1.01)	1.60	(1.07)
Location, in-state status	0.68	(0.81)	0.32	(0.59)	-0.21	(1.39)	-0.05	(1.55)
School sector, attendance, major	1.88	(1.86)	-0.57	(4.95)	5.60	(3.44)	3.36	(3.44)
Expected family contribution	-3.72	(0.85)	-1.23	(0.72)	-5.22	(1.62)	-1.13	(1.41)
Tuition and grants	2.92	(2.07)	-1.76	(2.20)	7.31	(4.27)	9.98	(4.07)
Constant	0.14	(3.78)	3.25	(6.14)	-3.42	(7.98)	-3.76	(6.69)
<i>Total</i>	<i>0.79</i>	<i>(0.50)</i>	<i>-1.65</i>	<i>(0.55)</i>	<i>3.43</i>	<i>(0.95)</i>	<i>3.06</i>	<i>(1.33)</i>

Notes: Each column refers to the later period less the earlier period. The recentered influence functions and quantiles are calculated with sample weights; the decompositions are based on coefficients from the base period reference and are estimated via OLS (without sample weights). Bootstrapped standard errors (100 replications) are in parentheses. Borrowing is from all sources except friends and family and excludes loans taken out by parents (PLUS loans).

Appendix Table 2B: Recentered Influence Function Decompositions of Borrowing: 1996–1990, Using Cost of Attendance

	Mean		50 th percentile		75 th percentile		90 th percentile	
Difference (000s \$2012)	2.01	(0.49)	0.58	(0.47)	6.35	(0.97)	4.55	(0.92)
<i>Composition effects due to:</i>								
Age/dependency status	0.13	(0.11)	0.63	(0.19)	0.76	(0.24)	0.25	(0.23)
Sex, marital status, ethnicity	0.18	(0.07)	-0.02	(0.09)	-0.07	(0.12)	-0.13	(0.14)
Parental education	-0.06	(0.07)	0.17	(0.14)	0.15	(0.17)	0.14	(0.18)
Location, in-state status	-0.26	(0.20)	-0.54	(0.31)	-0.50	(0.41)	-0.32	(0.50)
School sector, attendance, major	0.09	(0.19)	0.12	(0.28)	-0.15	(0.45)	0.12	(0.57)
Expected family contribution	0.27	(0.10)	0.71	(0.18)	0.89	(0.21)	0.95	(0.22)
Attendance cost and grants	0.40	(0.19)	0.94	(0.28)	0.80	(0.41)	0.19	(0.42)
<i>Total</i>	<i>0.73</i>	<i>(0.38)</i>	<i>2.00</i>	<i>(0.52)</i>	<i>1.88</i>	<i>(0.74)</i>	<i>1.19</i>	<i>(0.80)</i>
<i>Structural effects due to:</i>								
Age/dependency status	0.65	(0.67)	1.89	(0.55)	1.73	(1.34)	-3.21	(1.32)
Sex, marital status, ethnicity	-3.02	(2.97)	-4.04	(1.72)	-4.43	(5.37)	-5.87	(4.50)
Parental education	0.39	(0.56)	-0.17	(0.48)	0.42	(1.02)	1.69	(1.09)
Location, in-state status	0.68	(0.84)	0.19	(0.60)	-0.40	(1.39)	-0.25	(1.57)
School sector, attendance, major	0.02	(1.69)	1.54	(1.56)	1.36	(3.46)	-1.73	(3.46)
Expected family contribution	-3.75	(0.85)	-1.58	(0.71)	-6.15	(1.59)	-2.22	(1.43)
Attendance cost and grants	0.72	(2.77)	-9.79	(3.30)	2.93	(6.41)	5.66	(5.47)
Constant	5.60	(4.27)	10.54	(4.09)	9.00	(9.07)	9.30	(7.89)
<i>Total</i>	<i>1.28</i>	<i>(0.49)</i>	<i>-1.43</i>	<i>(0.50)</i>	<i>4.47</i>	<i>(0.96)</i>	<i>3.36</i>	<i>(1.11)</i>

Notes: Each column refers to the later period less the earlier period. The recentered influence functions and quantiles are calculated with sample weights; the decompositions are based on coefficients from the base period reference and are estimated via OLS (without sample weights). Bootstrapped standard errors (100 replications) are in parentheses. Borrowing is from all sources except friends and family and excludes loans taken out by parents (PLUS loans).

Appendix Table 3A: Recentered Influence Function Decompositions of Borrowing: 2000–1996, Using Tuition

	Mean		50 th percentile		75 th percentile		90 th percentile	
Difference (000s \$2012)	5.12	(0.46)	8.45	(0.60)	6.78	(0.83)	9.41	(0.86)
<i>Composition effects due to:</i>								
Age/dependency status	0.04	(0.12)	0.01	(0.04)	-0.05	(0.15)	-0.12	(0.31)
Sex, marital status, ethnicity	0.13	(0.14)	0.07	(0.06)	0.05	(0.21)	0.01	(0.15)
Parental education	-0.04	(0.15)	-0.06	(0.09)	0.08	(0.33)	-0.10	(0.29)
Location, in-state status	0.11	(0.17)	-0.08	(0.15)	0.31	(0.46)	0.03	(0.39)
School sector, attendance, major	0.37	(0.16)	0.35	(0.17)	0.07	(0.53)	0.70	(0.52)
Expected family contribution	-0.32	(0.18)	-0.43	(0.11)	-1.12	(0.31)	-0.68	(0.20)
Tuition and grants	-0.12	(0.32)	-0.52	(0.25)	-0.83	(0.86)	-0.54	(0.85)
<i>Total</i>	<i>0.18</i>	<i>(0.51)</i>	<i>-0.67</i>	<i>(0.33)</i>	<i>-1.50</i>	<i>(1.12)</i>	<i>-0.70</i>	<i>(1.02)</i>
<i>Structural effects due to:</i>								
Age/dependency status	-1.06	(0.63)	-2.65	(0.67)	-1.58	(1.23)	-3.59	(1.21)
Sex, marital status, ethnicity	0.05	(2.69)	1.21	(1.61)	1.38	(4.68)	-0.57	(4.29)
Parental education	-0.02	(0.47)	1.55	(0.49)	-0.92	(0.75)	-1.37	(0.83)
Location, in-state status	-0.39	(0.68)	0.71	(0.82)	0.18	(1.33)	-1.33	(1.43)
School sector, attendance, major	-0.78	(1.46)	-4.91	(1.44)	-3.65	(2.75)	-2.64	(2.69)
Expected family contribution	2.12	(0.88)	-5.55	(0.88)	5.85	(1.62)	1.13	(1.42)
Tuition and grants	-0.31	(1.96)	8.59	(2.09)	-8.68	(3.98)	-2.51	(3.61)
Constant	5.33	(3.58)	10.17	(3.05)	15.69	(7.18)	20.99	(6.40)
<i>Total</i>	<i>4.94</i>	<i>(0.48)</i>	<i>9.13</i>	<i>(0.62)</i>	<i>8.28</i>	<i>(1.13)</i>	<i>10.10</i>	<i>(1.11)</i>

Notes: Each column refers to the later period less the earlier period. The recentered influence functions and quantiles are calculated with sample weights; the decompositions are based on coefficients from the base period reference and are estimated via OLS (without sample weights). Bootstrapped standard errors (100 replications) are in parentheses. Borrowing is from all sources except friends and family and excludes loans taken out by parents (PLUS loans).

Appendix Table 3B: Recentered Influence Function Decompositions of Borrowing: 2000–1996, Using Cost of Attendance

	Mean		50 th percentile		75 th percentile		90 th percentile	
Difference (000s \$2012)	5.12	(0.46)	8.45	(0.60)	6.78	(0.83)	9.41	(0.86)
<i>Composition effects due to:</i>								
Age/dependency status	0.01	(0.12)	0.02	(0.05)	0.01	(0.13)	-0.07	(0.28)
Sex, marital status, ethnicity	0.15	(0.14)	0.08	(0.06)	0.10	(0.20)	0.03	(0.15)
Parental education	-0.07	(0.15)	-0.08	(0.09)	-0.03	(0.34)	-0.16	(0.29)
Location, in-state status	0.13	(0.18)	-0.13	(0.16)	0.11	(0.46)	-0.15	(0.40)
School sector, attendance, major	0.39	(0.15)	0.42	(0.16)	0.39	(0.50)	0.78	(0.51)
Expected family contribution	-0.31	(0.18)	-0.45	(0.12)	-1.19	(0.33)	-0.73	(0.21)
Attendance cost and grants	0.21	(0.35)	-0.37	(0.25)	-0.61	(0.87)	-0.30	(0.82)
<i>Total</i>	<i>0.51</i>	<i>(0.53)</i>	<i>-0.52</i>	<i>(0.35)</i>	<i>-1.22</i>	<i>(1.13)</i>	<i>-0.59</i>	<i>(1.04)</i>
<i>Structural effects due to:</i>								
Age/dependency status	-1.09	(0.63)	-2.23	(0.65)	-1.97	(1.18)	-3.40	(1.20)
Sex, marital status, ethnicity	0.57	(2.88)	1.55	(1.59)	2.11	(4.97)	0.16	(4.56)
Parental education	-0.15	(0.48)	1.39	(0.49)	-1.18	(0.76)	-1.56	(0.83)
Location, in-state status	-0.32	(0.70)	0.87	(0.83)	0.61	(1.32)	-0.92	(1.46)
School sector, attendance, major	-0.80	(1.48)	-6.45	(1.37)	-2.76	(2.94)	-2.31	(2.60)
Expected family contribution	1.61	(0.86)	-5.99	(0.86)	6.10	(1.59)	0.63	(1.45)
Attendance cost and grants	2.58	(2.91)	21.80	(4.11)	-2.13	(5.85)	5.49	(5.57)
Constant	2.21	(4.28)	-1.98	(4.47)	7.20	(8.24)	11.91	(7.62)
<i>Total</i>	<i>4.61</i>	<i>(0.49)</i>	<i>8.97</i>	<i>(0.63)</i>	<i>8.00</i>	<i>(1.12)</i>	<i>10.00</i>	<i>(1.12)</i>

Notes: Each column refers to the later period less the earlier period. The recentered influence functions and quantiles are calculated with sample weights; the decompositions are based on coefficients from the base period reference and are estimated via OLS (without sample weights). Bootstrapped standard errors (100 replications) are in parentheses. Borrowing is from all sources except friends and family and excludes loans taken out by parents (PLUS loans).

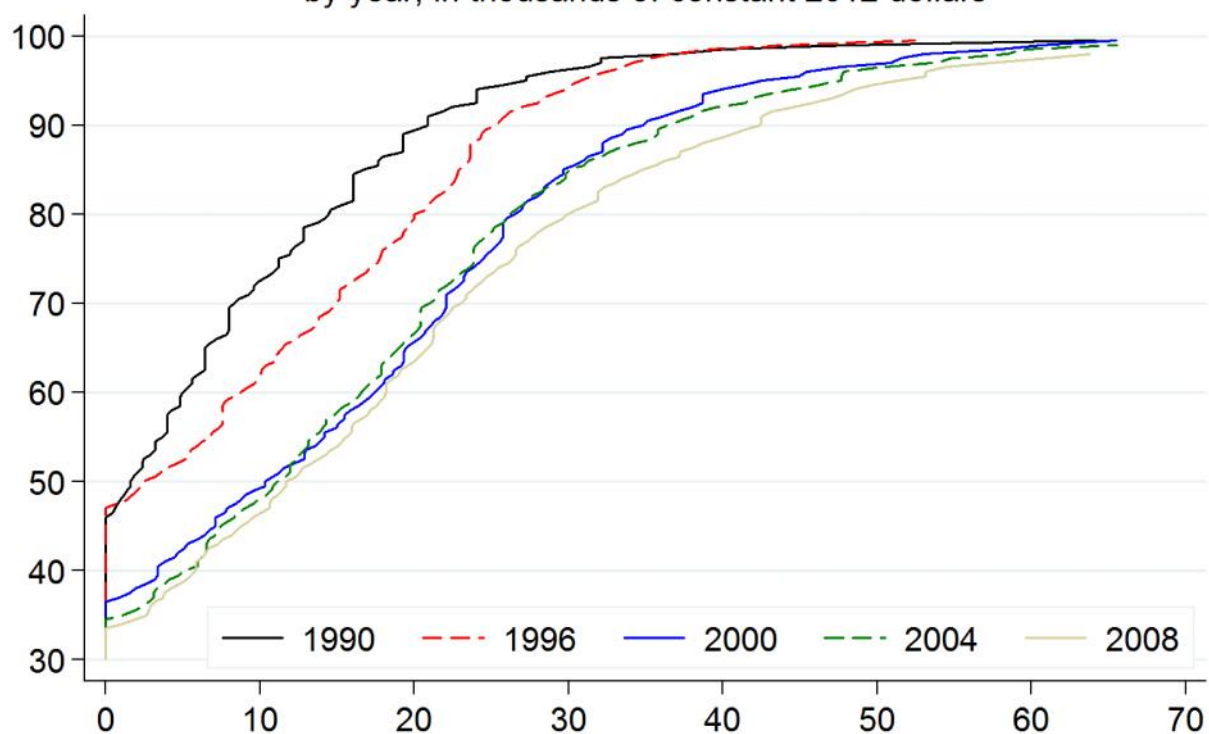
Appendix Table 4: Sample Sizes

	1990	1996	2000	2004	2008
College Graduates	3,270	1,340	12,230	5,170	23,340
Weighted: College Graduates	724,000	897,000	1,217,000	1,448,000	1,822,000

NOTE: College graduates are oversampled in 1993, 2000, and 2008, as these years represent sampling frames for the Baccalaureate and Beyond longitudinal studies. Sample sizes are rounded to the nearest 10 (thousand for weighted numbers) to comply with disclosure restrictions.

Figure 1

**Cumulative borrowing distribution among college graduates
by year, in thousands of constant 2012 dollars**



Sources: NPSAS, respective years

All calculations use sample weights and include student-level borrowing from all sources EXCEPT friends and family. Borrowed amounts are self-reported in 1990; for other years, the federal component is from administrative data and other borrowing is self-reported.

Figure 2

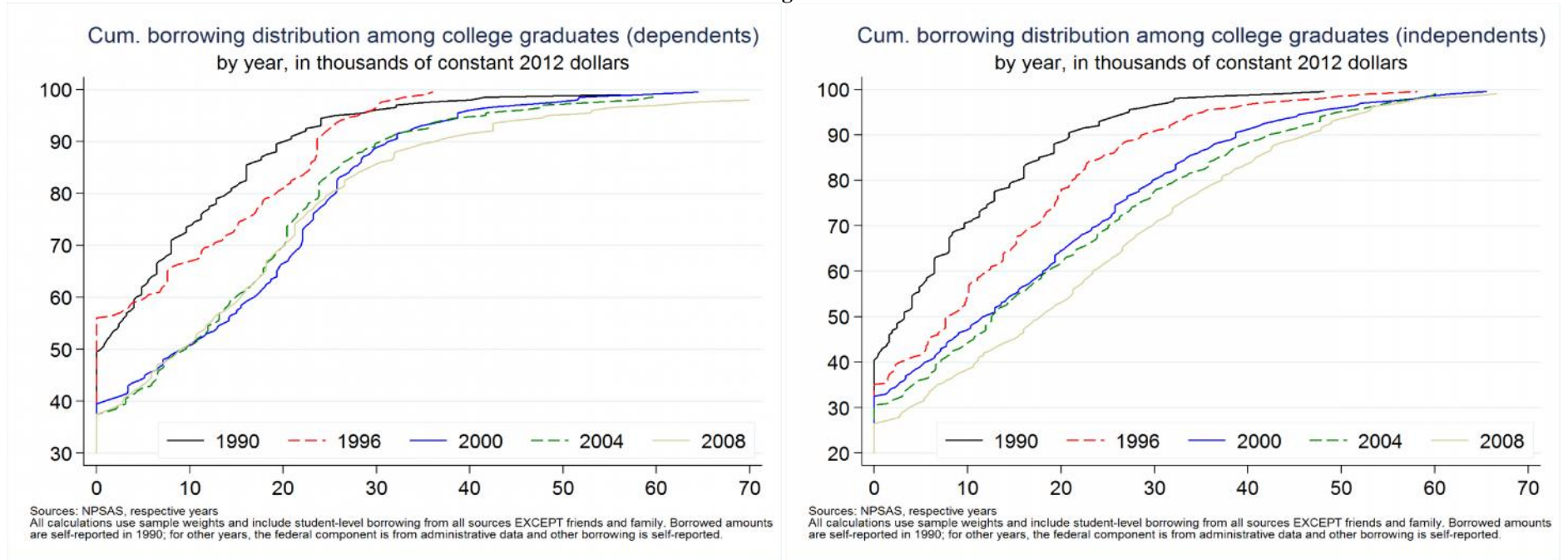


Figure 3

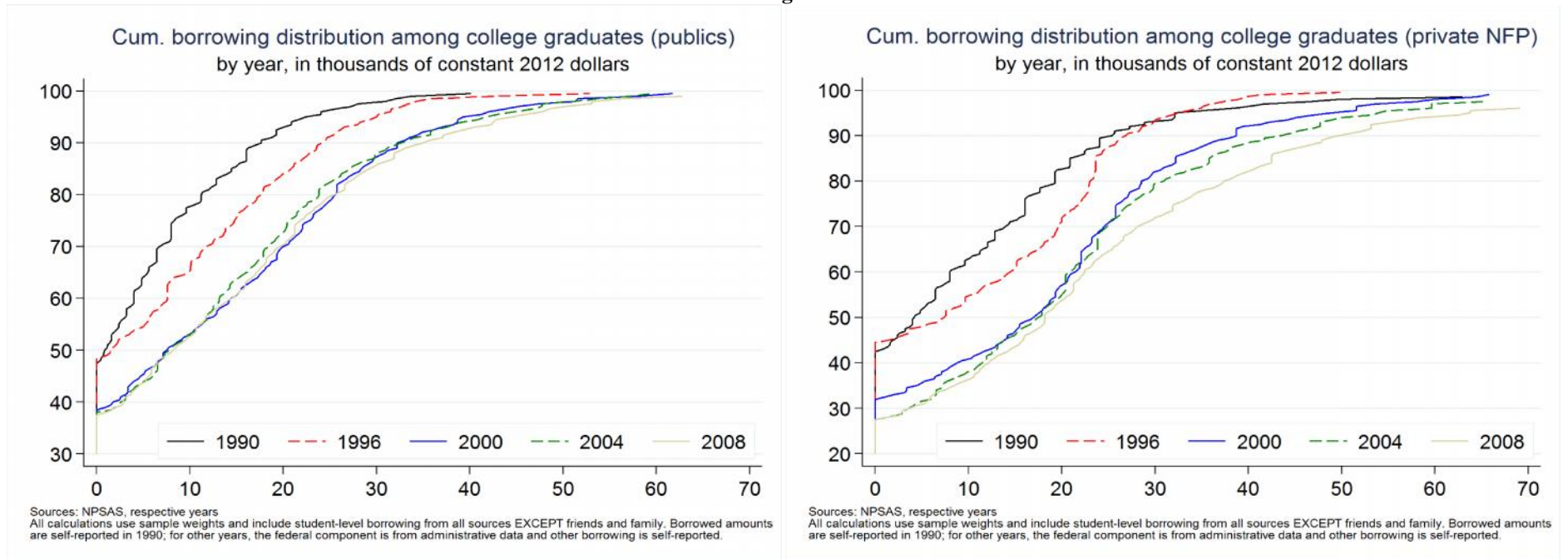


Figure 4

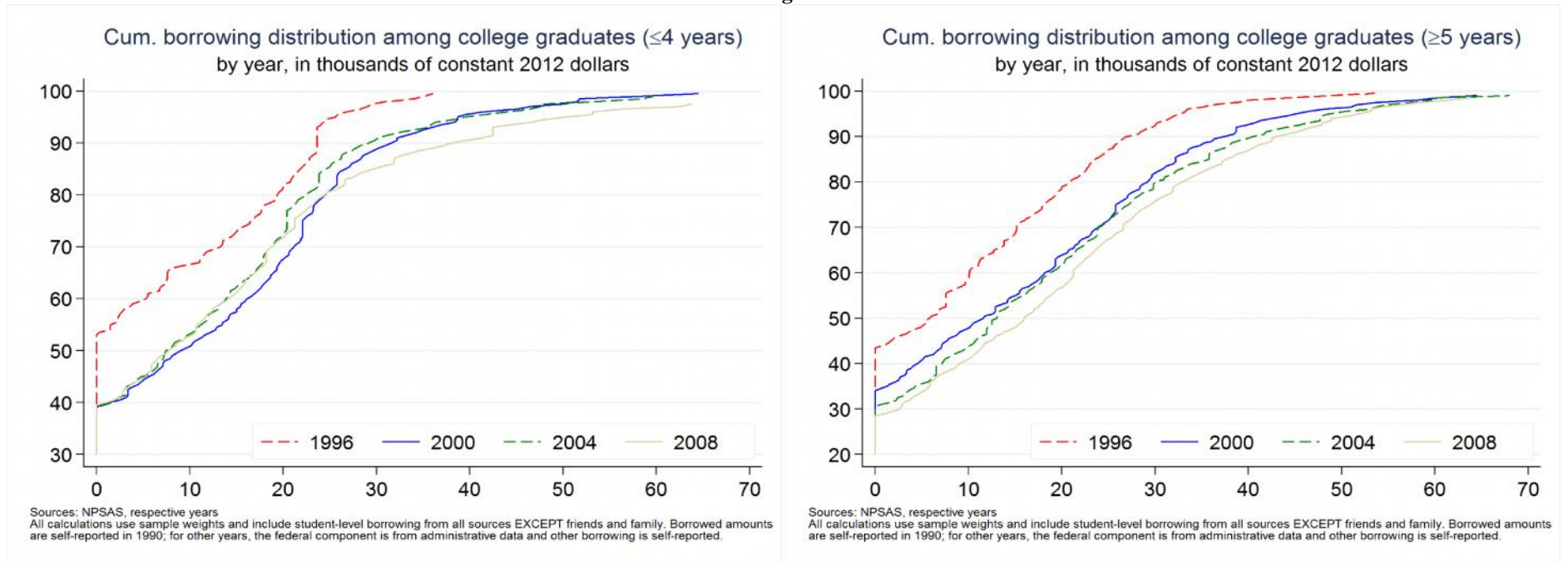


Figure 5

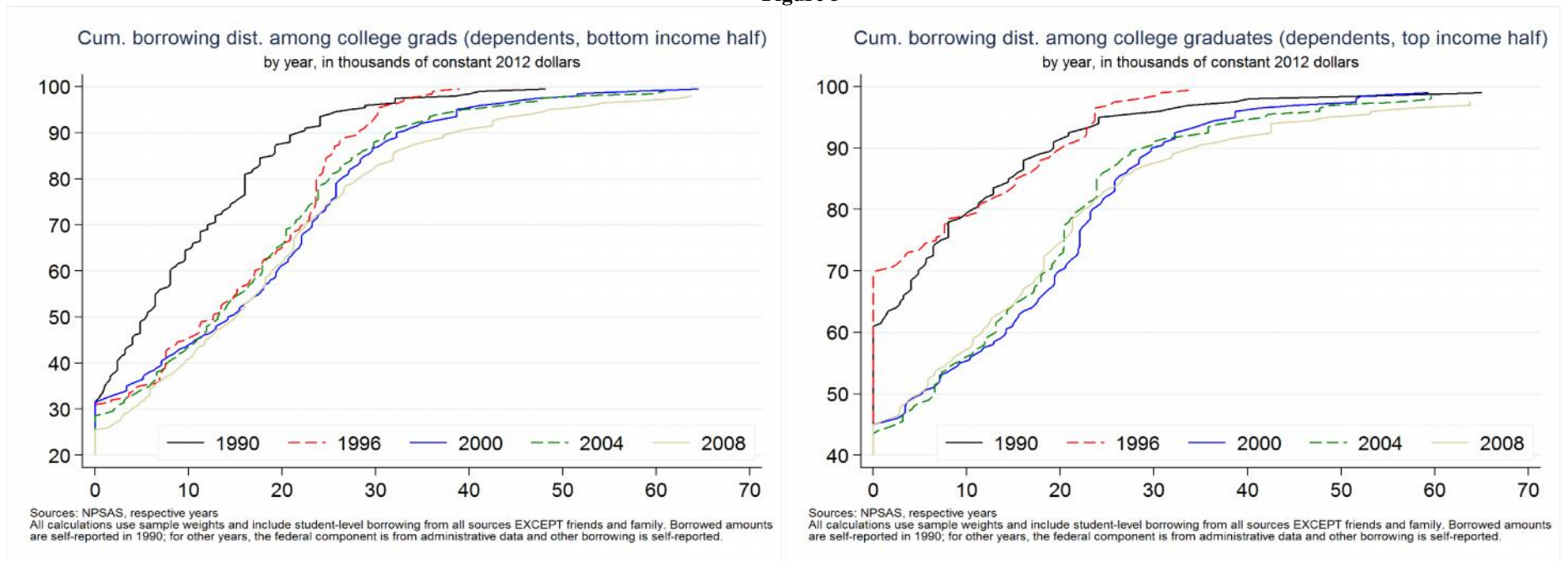
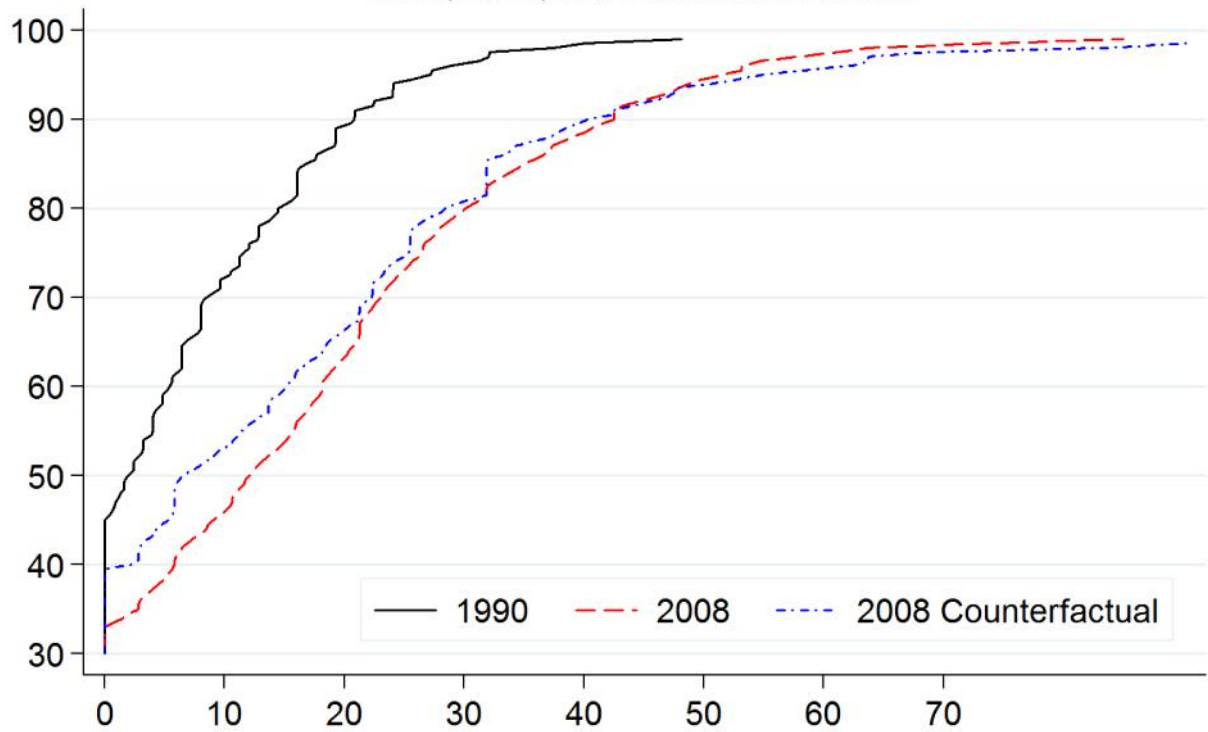


Figure 6

**CDF of borrowing among college graduates in 000s of \$2012
1990, 2008, and counterfactual 2008**



The DFL (1996) reweighting procedure is used to create a counterfactual distribution for 2008, assuming the distribution of covariates was the same as in 1990. See text for set of covariates. Student-level borrowing is from all sources except friends and family. Sources: NPSAS, respective years.

Figure 7

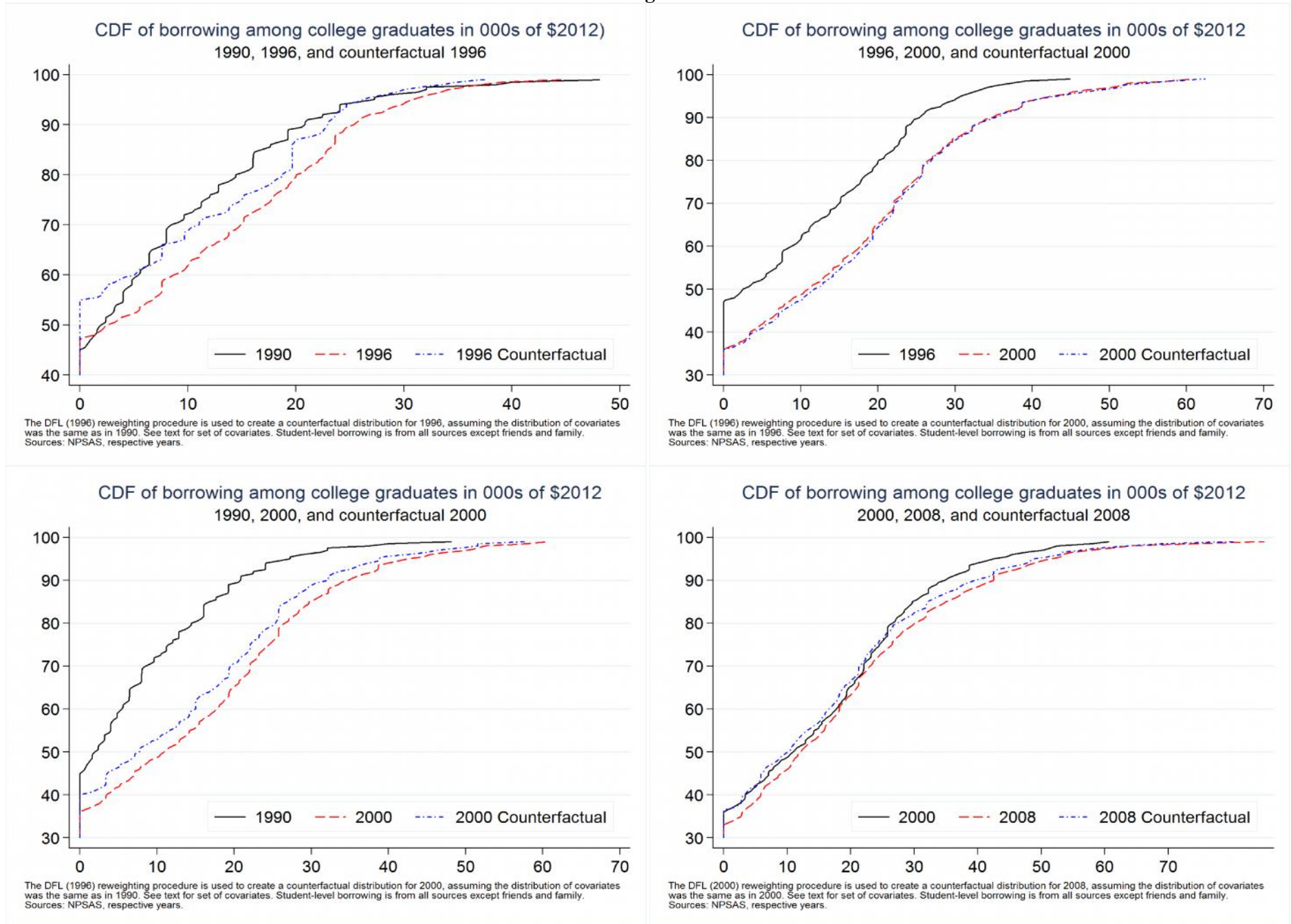


Figure 8

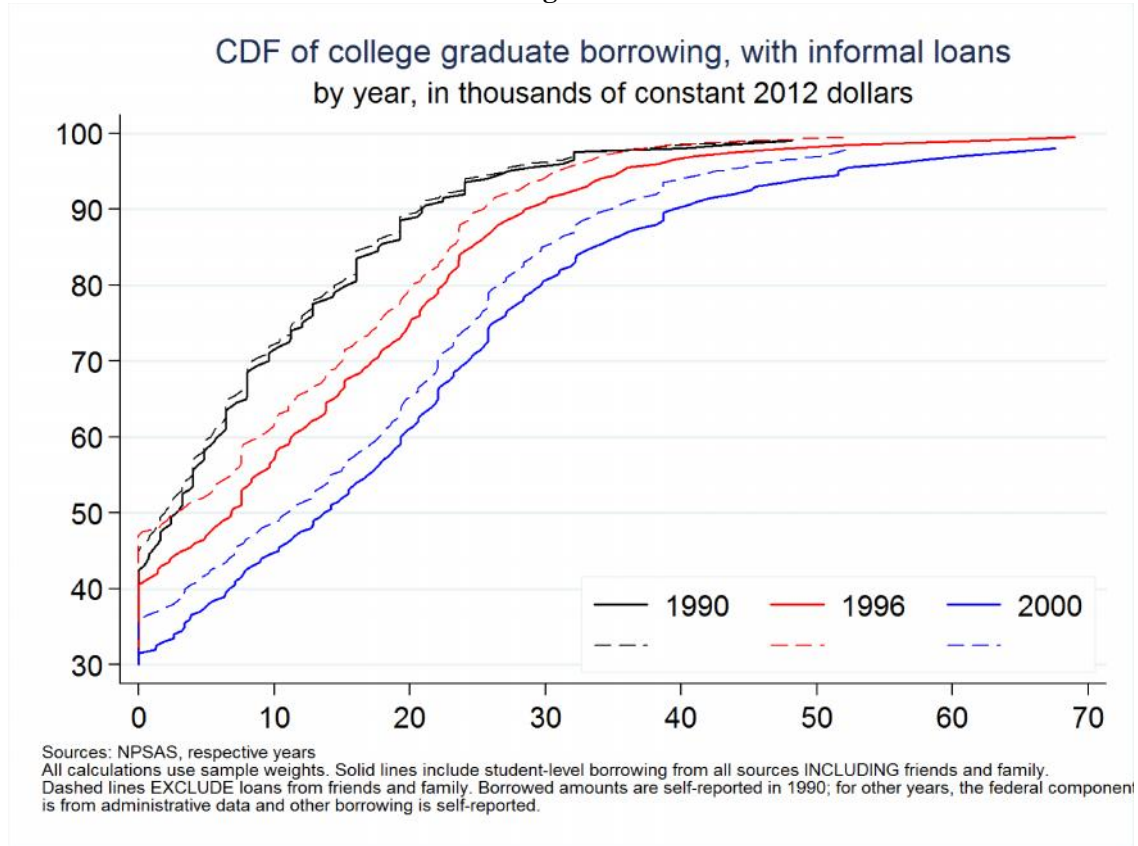


Figure 9

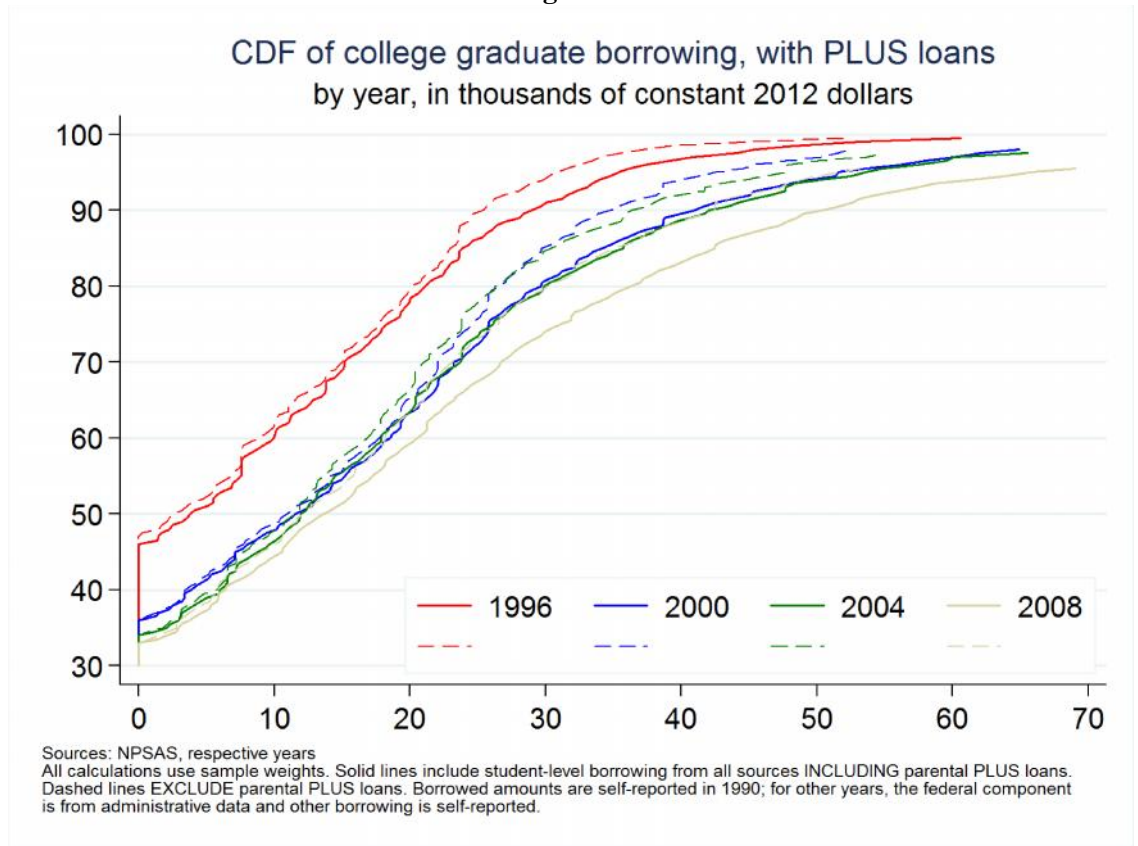
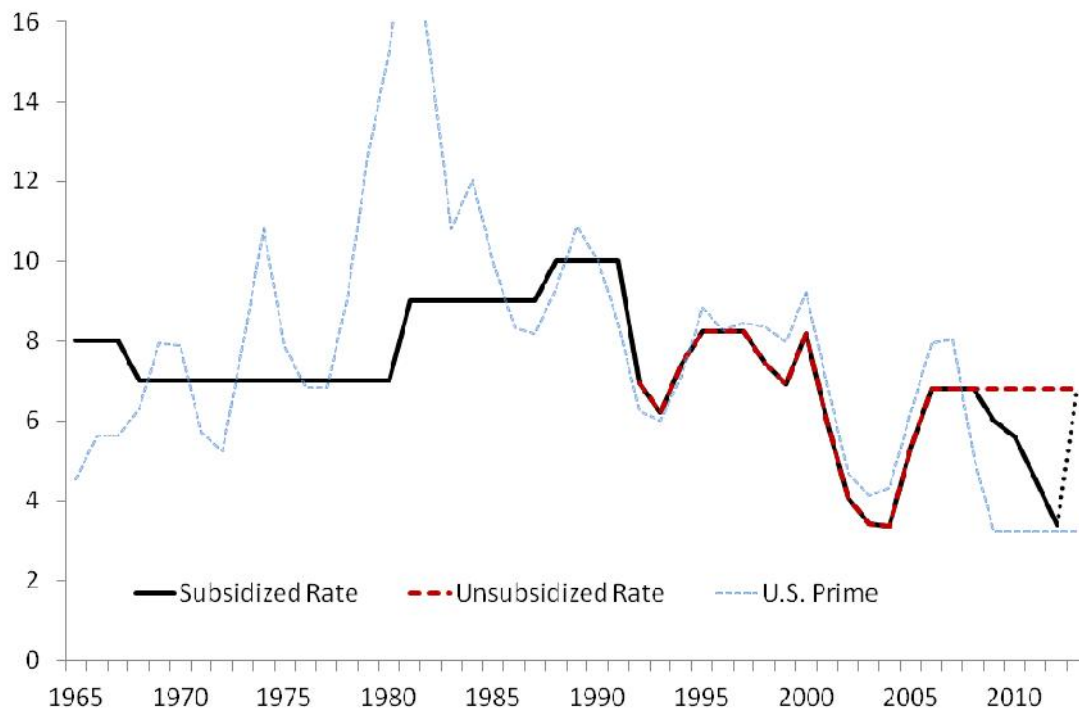


Figure 10
Interest Rates on New Undergraduate Stafford Loans, 1965–2013

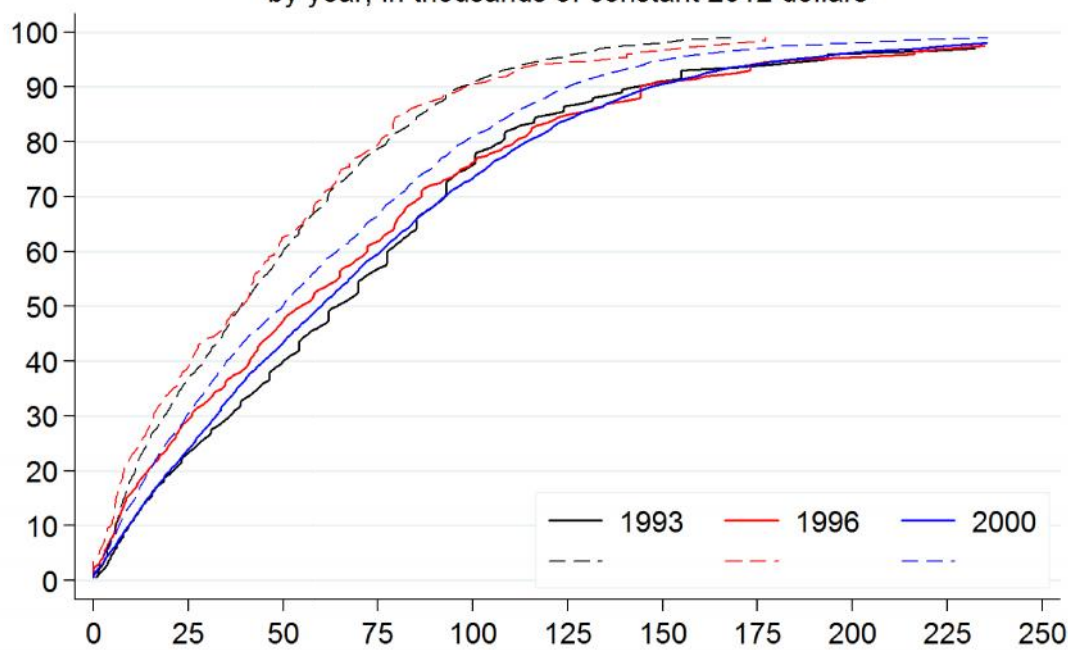


Sources: U.S. Senate Budget Bulletin, August 4, 2006; <http://www.finaid.org/loans/historicalrates.phtml>

Note: All federal loans were subsidized until 1992, when unsubsidized loans became available.

Figure 11

CDF of family income, All and Stafford borrowers
by year, in thousands of constant 2012 dollars

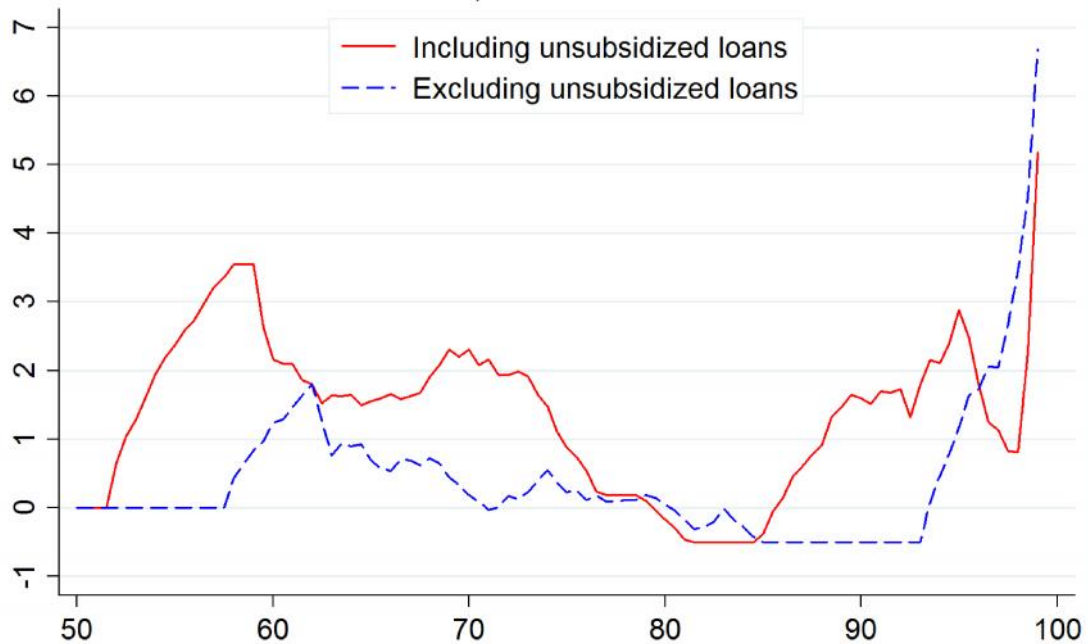


Sources: NPSAS, respective years

All calculations use sample weights. Solid lines include all graduates; dashed lines include ONLY students who took out a Stafford loan their senior year.

Figure 12

Difference in senior year borrowing CDFs, w/ and w/o unsubsidized loans
Between 2000 and 1996, in thousands of constant 2012 dollars

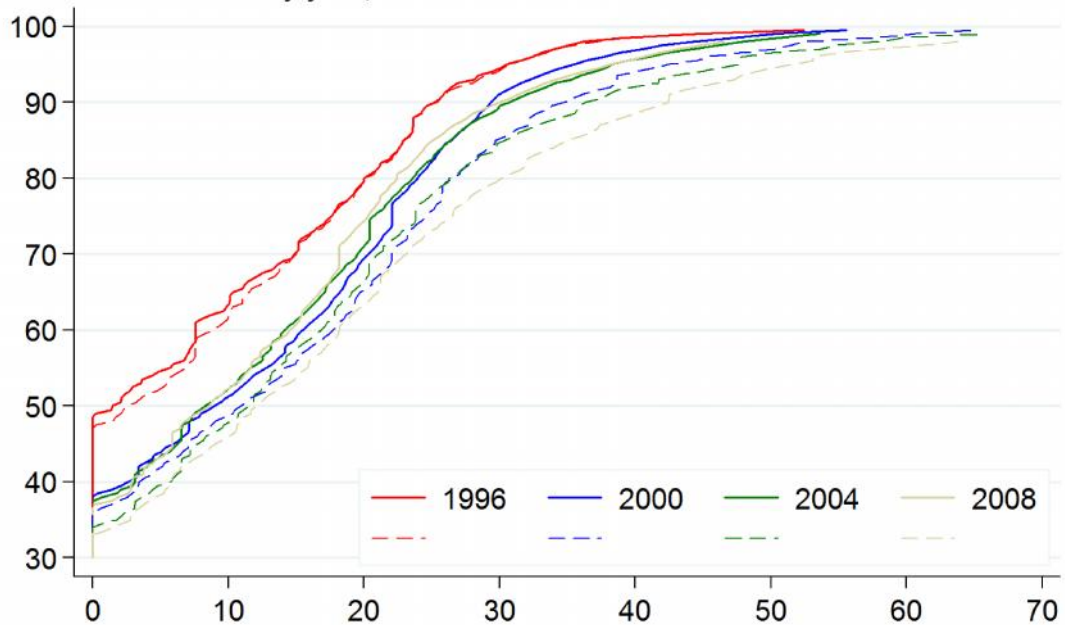


Sources: NPSAS, respective years

All calculations use sample weights. Solid lines include all formal student-level borrowing in senior year. Dashed lines exclude unsubsidized Stafford loans. The federal component of borrowing is from administrative data and other borrowing is self-reported.

Figure 13

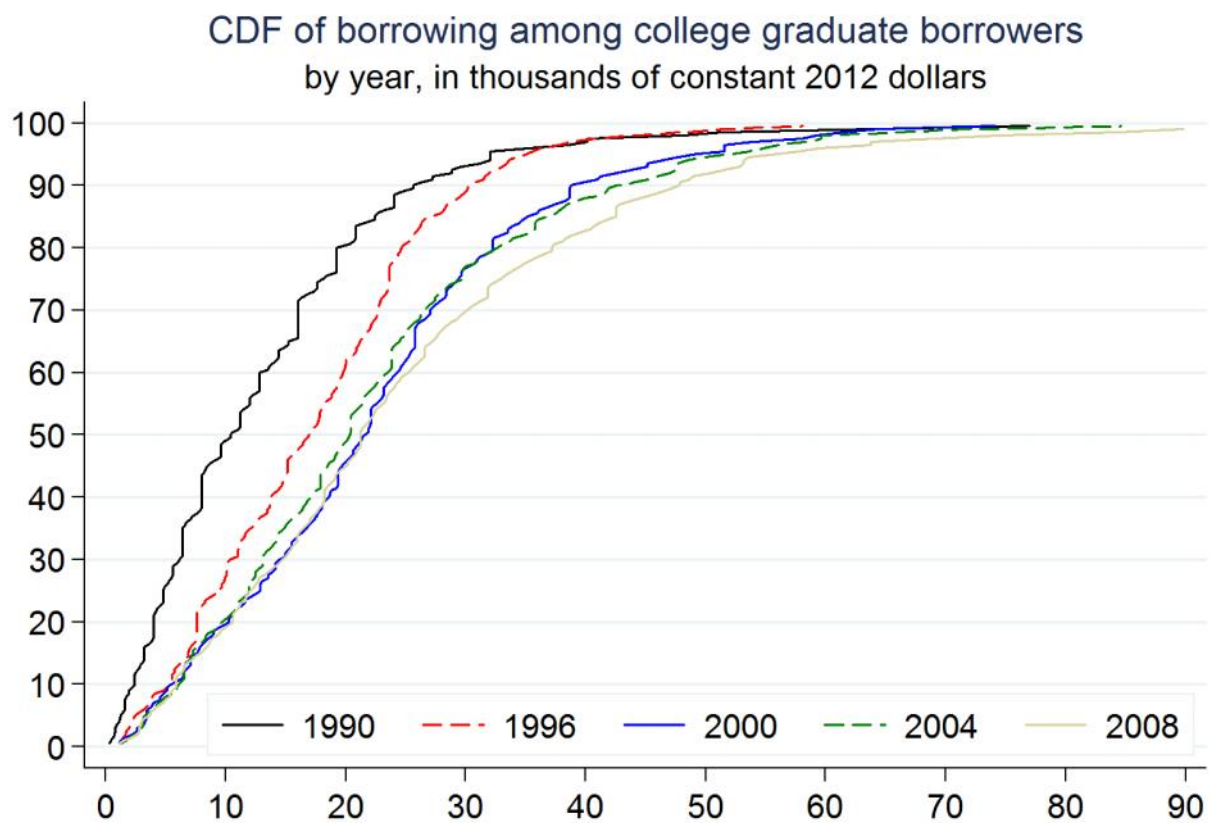
CDF of college graduate borrowing, federal loans
by year, in thousands of constant 2012 dollars



Sources: NPSAS, respective years

All calculations use sample weights. Solid lines include student-level borrowing from federal loans only. Dashed lines include student-level borrowing as in Figure 1. Borrowed amounts are self-reported in 1990; for other years, the federal component is from administrative data and other borrowing is self-reported.

Appendix Figure 1

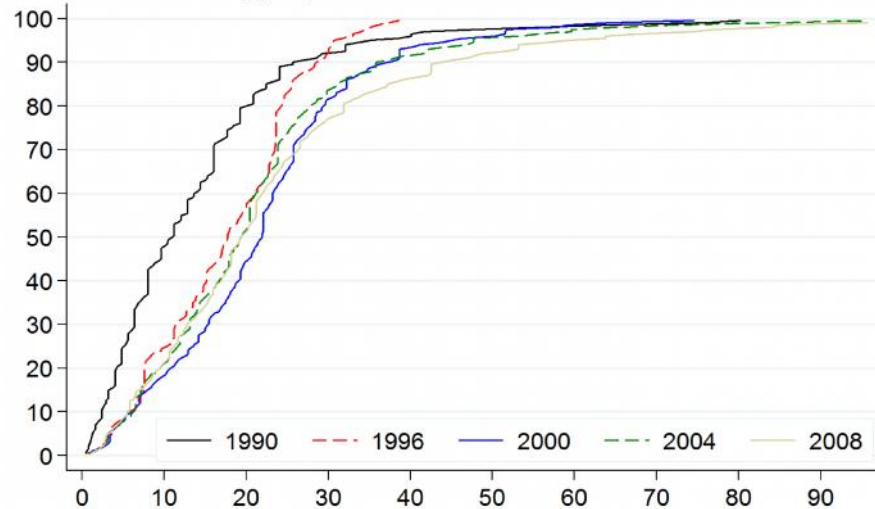


Sources: NPSAS, respective years

All calculations use sample weights and include student-level borrowing from all sources EXCEPT friends and family. Borrowed amounts are self-reported in 1990; for other years, the federal component is from administrative data and other borrowing is self-reported.

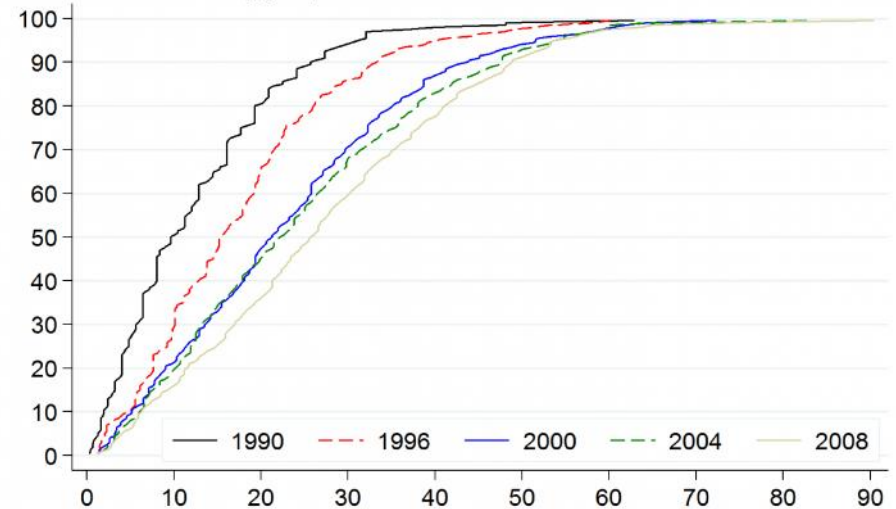
Appendix Figure 2

CDF of borrowing among college graduate borrowers (dependents)
by year, in thousands of constant 2012 dollars



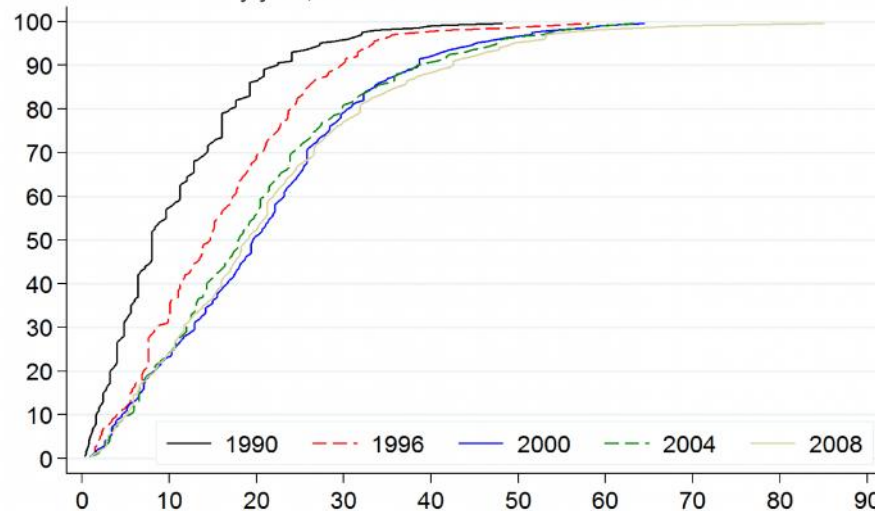
Sources: NPSAS, respective years
All calculations use sample weights and include student-level borrowing from all sources EXCEPT friends and family. Borrowed amounts are self-reported in 1990; for other years, the federal component is from administrative data and other borrowing is self-reported.

CDF of borrowing among college graduate borrowers (independents)
by year, in thousands of constant 2012 dollars



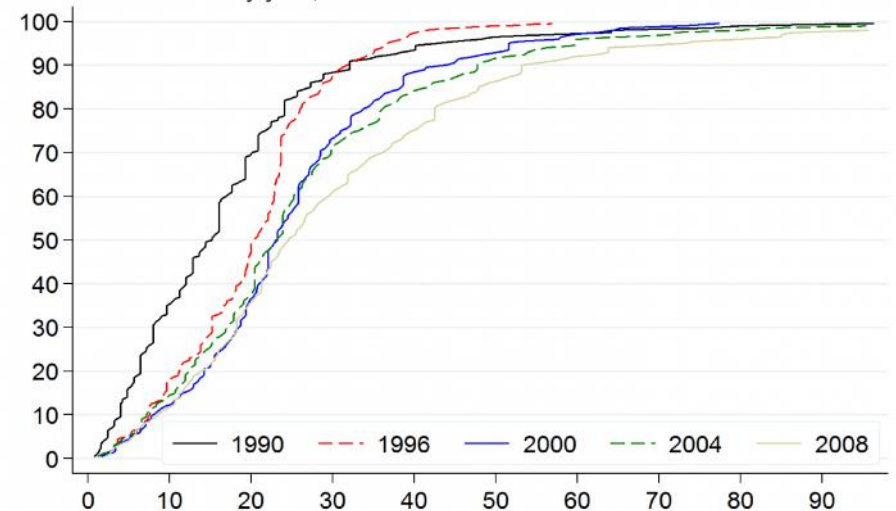
Sources: NPSAS, respective years
All calculations use sample weights and include student-level borrowing from all sources EXCEPT friends and family. Borrowed amounts are self-reported in 1990; for other years, the federal component is from administrative data and other borrowing is self-reported.

CDF of borrowing among college graduate borrowers (publics)
by year, in thousands of constant 2012 dollars



Sources: NPSAS, respective years
All calculations use sample weights and include student-level borrowing from all sources EXCEPT friends and family. Borrowed amounts are self-reported in 1990; for other years, the federal component is from administrative data and other borrowing is self-reported.

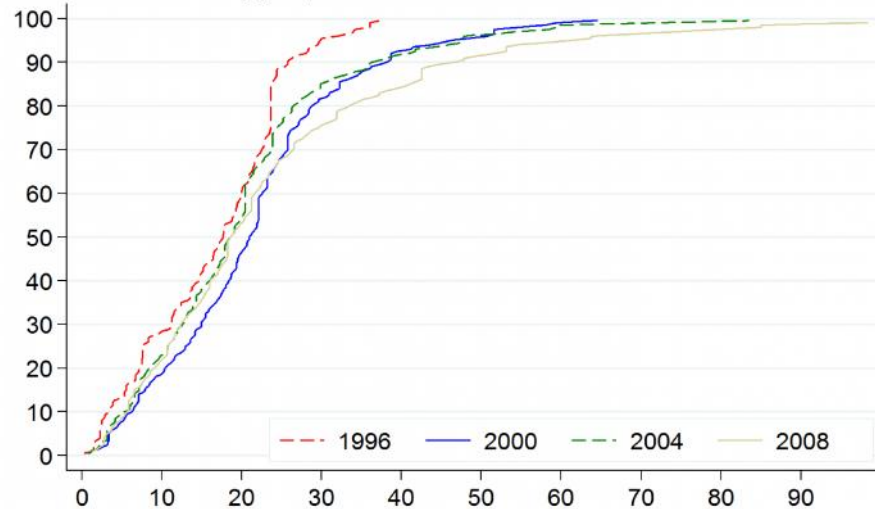
CDF of borrowing among college graduate borrowers (private NFP)
by year, in thousands of constant 2012 dollars



Sources: NPSAS, respective years
All calculations use sample weights and include student-level borrowing from all sources EXCEPT friends and family. Borrowed amounts are self-reported in 1990; for other years, the federal component is from administrative data and other borrowing is self-reported.

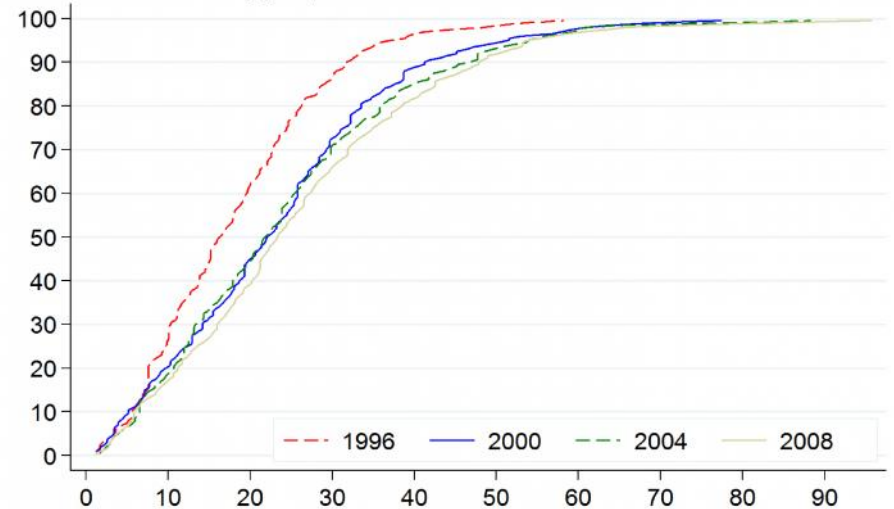
Appendix Figure 3

CDF of borrowing among college graduate borrowers (≤ 4 years)
by year, in thousands of constant 2012 dollars



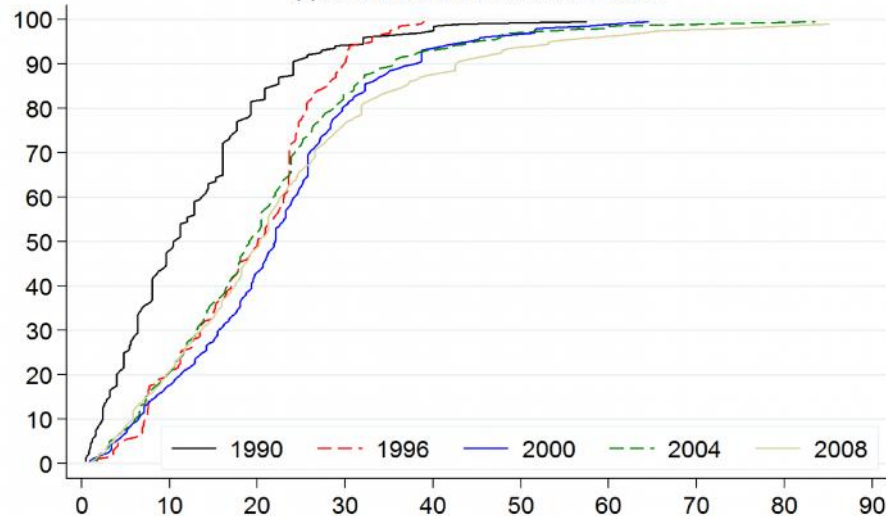
Sources: NPSAS, respective years.
All calculations use sample weights and include student-level borrowing from all sources EXCEPT friends and family. Borrowed amounts are self-reported in 1990; for other years, the federal component is from administrative data and other borrowing is self-reported.

CDF of borrowing among college graduate borrowers (≥ 5 years)
by year, in thousands of constant 2012 dollars



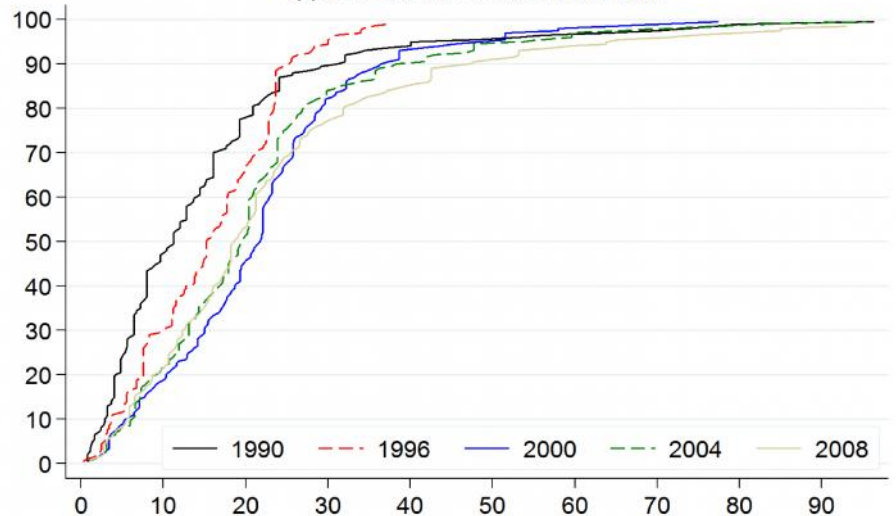
Sources: NPSAS, respective years.
All calculations use sample weights and include student-level borrowing from all sources EXCEPT friends and family. Borrowed amounts are self-reported in 1990; for other years, the federal component is from administrative data and other borrowing is self-reported.

CDF of borrowing among college graduate borrowers (deps., bottom income half)
by year, in thousands of constant 2012 dollars



Sources: NPSAS, respective years.
All calculations use sample weights and include student-level borrowing from all sources EXCEPT friends and family. Borrowed amounts are self-reported in 1990; for other years, the federal component is from administrative data and other borrowing is self-reported.

CDF of borrowing among college graduate borrowers (dependents, top income half)
by year, in thousands of constant 2012 dollars



Sources: NPSAS, respective years.
All calculations use sample weights and include student-level borrowing from all sources EXCEPT friends and family. Borrowed amounts are self-reported in 1990; for other years, the federal component is from administrative data and other borrowing is self-reported.