

# College Costs and Financial Constraints: Student Borrowing at For-Profit Institutions

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Conference on Student Loans  
University of Michigan  
October 24-26, 2013

## Motivation

For-profit (FP) postsecondary education has grown tremendously over the last decade.

- In 2000, enrolled 4% of undergrads
- In 2011, enroll 11% of undergrads = 2 million students!

FPs are seemingly dependent on federal student aid.

- 90% of FP students get federal aid.
- 74% of FP revenue from federal aid programs.

FP student default rates are higher than in other sectors.

- 22% cohort default rate vs. 8.4% for community colleges.

New “gainful employment” regulations may restrict federal aid

eligibility for many for profits

## Overview

Explore trends in student borrowing in the for-profit sector over the last decade.

- National Postsecondary Student Aid Study (NPSAS)

How do borrowing patterns of FP students compare to patterns found in other sectors?

- Are differences related to:
  - Student demographics?
  - College cost?
  - Student financial resources?
  - Aid application?
  - Work behavior?

## Related Literature: FPs & Federal Aid

### Deming, Goldin, & Katz (2012)

- FPs receive 26% of fed loan disbursements.
- Enroll more disadvantaged students: women, minority, single parents, GED recipients.

### Cellini & Goldin (forthcoming)

- Federal aid-eligible institutions charge 78% more than ineligible institutions for similar programs.

### L. Turner (2013)

- FPs capture around 20% of Pell Grant aid, but no different than non-selective non-profits.

### Darolia (2013)

- Loss of federal aid leads to declines in enrollment around 16%.

Returns to FPs: 2.4% per year of education

# Data

## National Postsecondary Student Aid Study (NPSAS)

- Nationally-representative, repeated cross-section, student-level data with detailed info on college financing.
- Stratified sample of students in federal aid-eligible schools, with oversample of for-profit students.

## 4 waves

- 1995-96, 1999-00, 2003-04, 2007-08
- 2011-12 may be added in coming months

## Sample size

- 41,000 to 105,000 undergraduate students per wave.

# Data

## Classification:

- For-profit, any level
  - 32% Certificate, 40% AA, 27% BA, 1% no program
- Public, two-year or less
  - 8% Certificate, 79% AA, 2% BA, 11% no program
- Public, four-year
  - 0% Certificate, 4% AA, 91% BA, 2% no program
- Non-profit, any level
  - 2% Certificate, 4% AA, 92% BA, 1% no program

# Sample Sizes

**Table 2. Sample Summary**

	<u>For- Profit</u>	<u>Public ≤2-yr</u>	<u>Public 4-yr</u>	<u>Private Nonprofit</u>
	(1)	(2)	(3)	(4)
<i>Panel B: Sample size (unweighted)</i>				
1995-1996	5,380	7,190	16,070	12,890
1999-2000	4,620	8,770	20,330	11,120
2003-2004	8,900	22,830	19,230	14,200
2007-2008	14,200	31,980	36,880	21,660

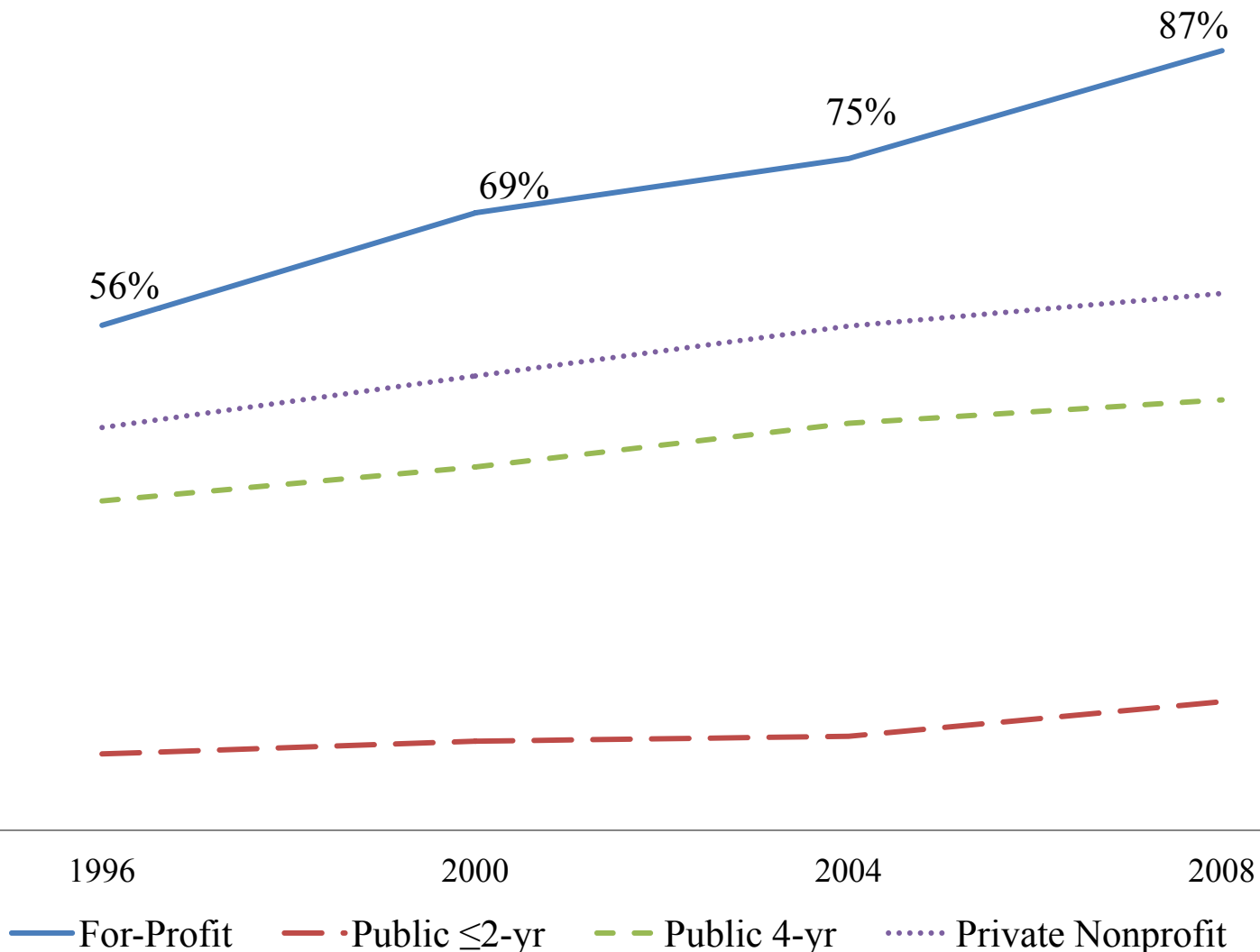
## Borrowing

**Table 1. Incidence of Borrowing, by Sector (2007-2008)**

	<u>For-Profit</u>	<u>Public</u> <u>≤2-yr</u>	<u>Public</u> <u>4-yr</u>	<u>Private</u> <u>Nonprofit</u>
	(1)	(2)	(3)	(4)
<i>Panel A: Rates of student borrowing</i>				
any loans	87%	14%	48%	60%
federal loans	81%	11%	43%	56%
non-federal loans	41%	5%	15%	25%
with federal and non-federal loans	36%	2%	10%	21%
federal loans, but not non-federal	45%	9%	33%	34%
non-federal, but not federal loans	6%	3%	5%	4%



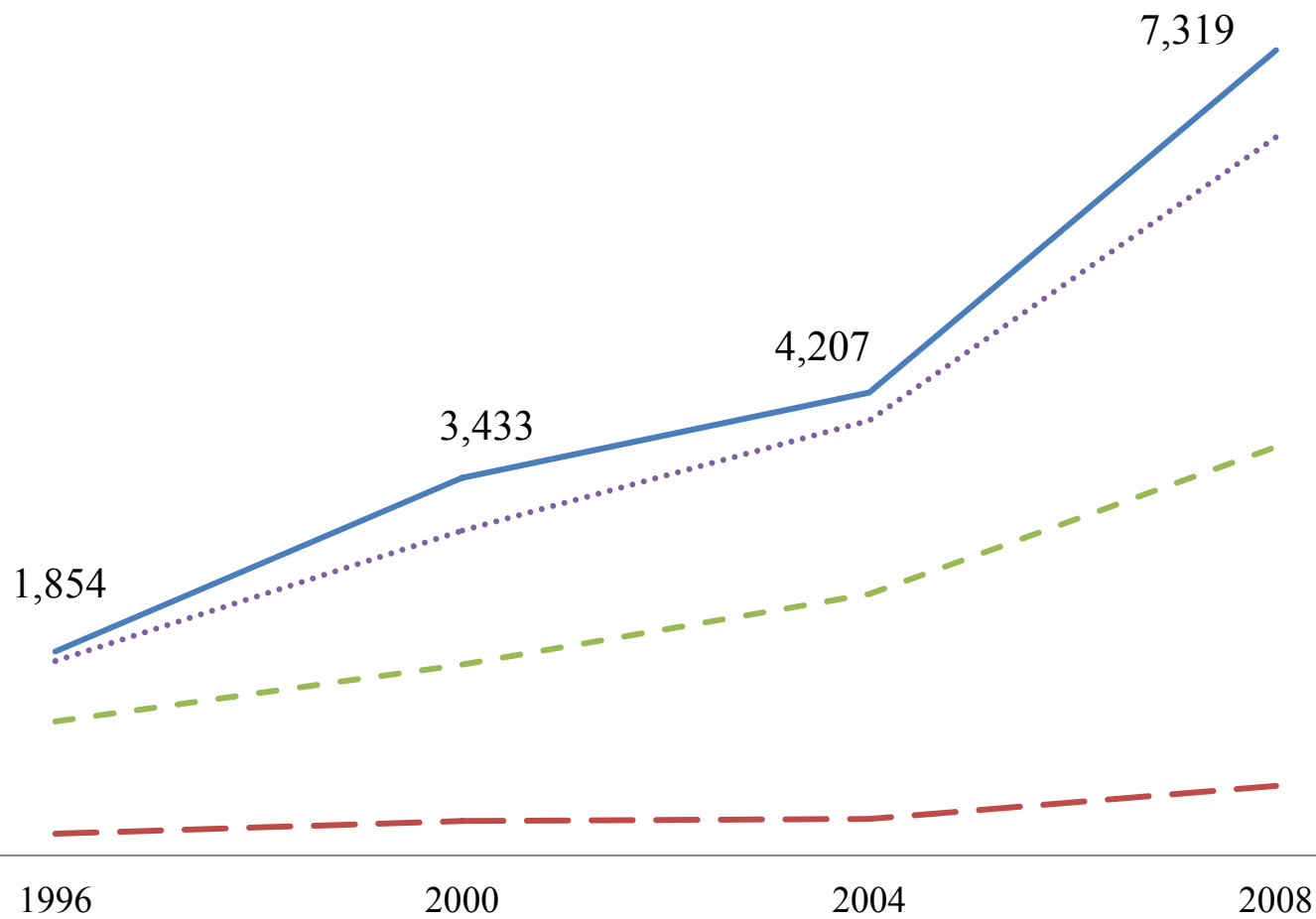
**Figure 1**  
**Percentage of Students Borrowing**



**Table 1. Average Student Borrowing (2007-2008)**

	<u>For-Profit</u>	<u>Public</u>	<u>Public</u>	<u>Private</u>
		<u>&lt;2-yr</u>	<u>4-yr</u>	<u>Nonprofit</u>
	(1)	(2)	(3)	(4)
<i>B: Average per student borrowing (including all students)</i>				
loans	7,319	632	3,713	6,530
al loans	4,842	457	2,793	4,227
dized federal loans	2,256	253	1,350	2,007
PLUS loans	485	23	570	1,190
federal loans	2,477	175	920	2,303
e loans	2,423	172	856	2,210
<i>C: Average loan amount for those who borrow each loan type</i>				
loans	8,457	4,424	7,769	10,955
al loans	5,975	4,053	6,454	7,602
dized federal loans	2,888	2,768	3,870	4,214
PLUS loans	9,099	7,073	9,558	13,657
federal loans	6,026	3,586	6,156	9,087
e loans	5,990	3,652	6,142	9,225

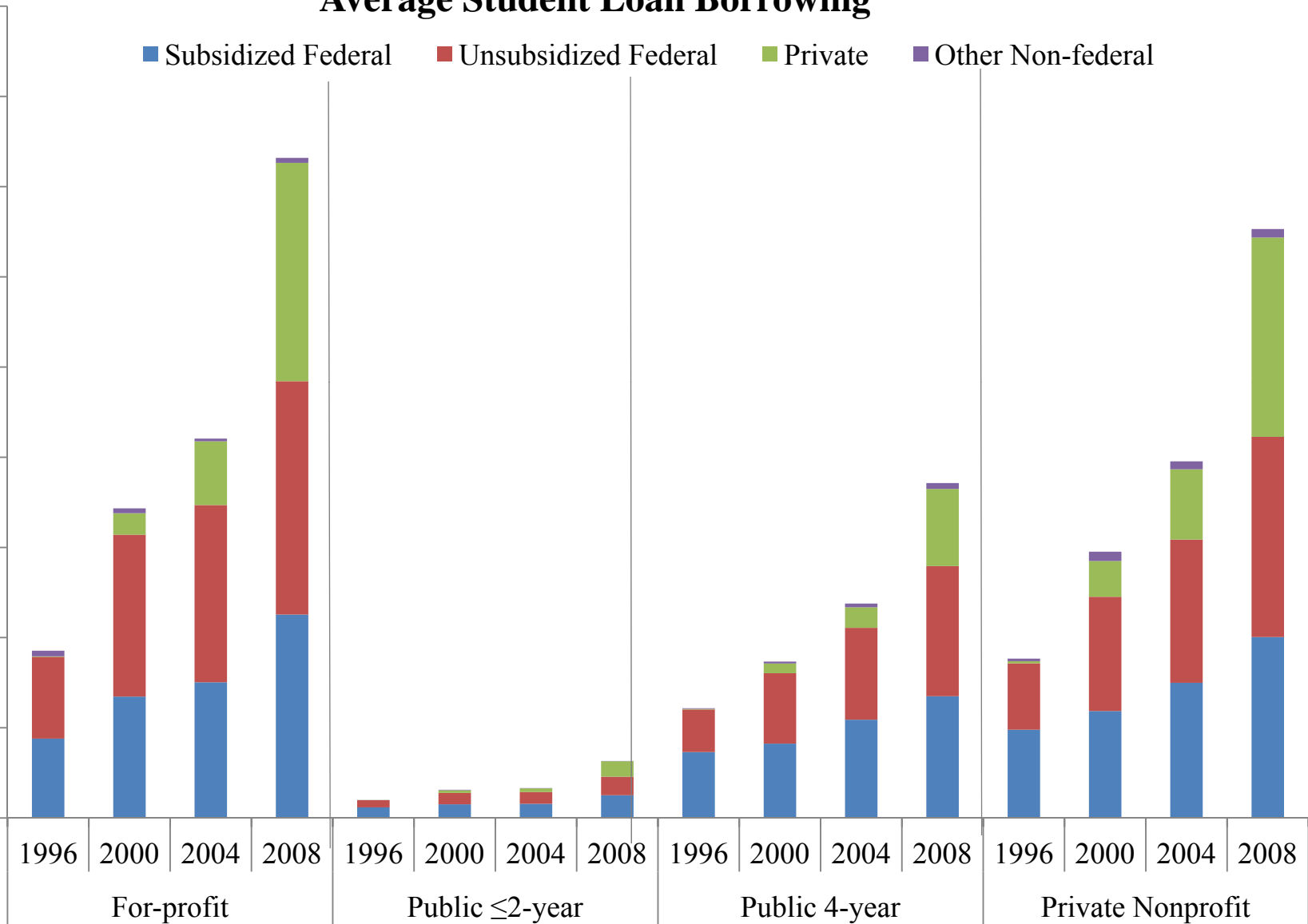
**Figure 2**  
**Loan Amount per Student (\$2008)**



— For-Profit    - - - Public  $\leq$ 2-yr    - - - Public 4-yr    ····· Private Nonprofit

**Figure 3**  
**Average Student Loan Borrowing**

■ Subsidized Federal   ■ Unsubsidized Federal   ■ Private   ■ Other Non-federal



## Borrowing Summary

FP students have a much higher incidence of borrowing than students in other sectors (87% vs. 60%).

The incidence has climbed more dramatically than in other sectors between 1996 and 2008 (30pp vs. 15pp).

Per-student annual loan amounts are similar in level and trend to the non-profit sector (but are likely lower overall due to fewer years in school).

Federal loans make up the largest portion of FP borrowing, but private loans showed largest increase between 1996 and 2008, but may decline in 2012.

## Demographic Differences

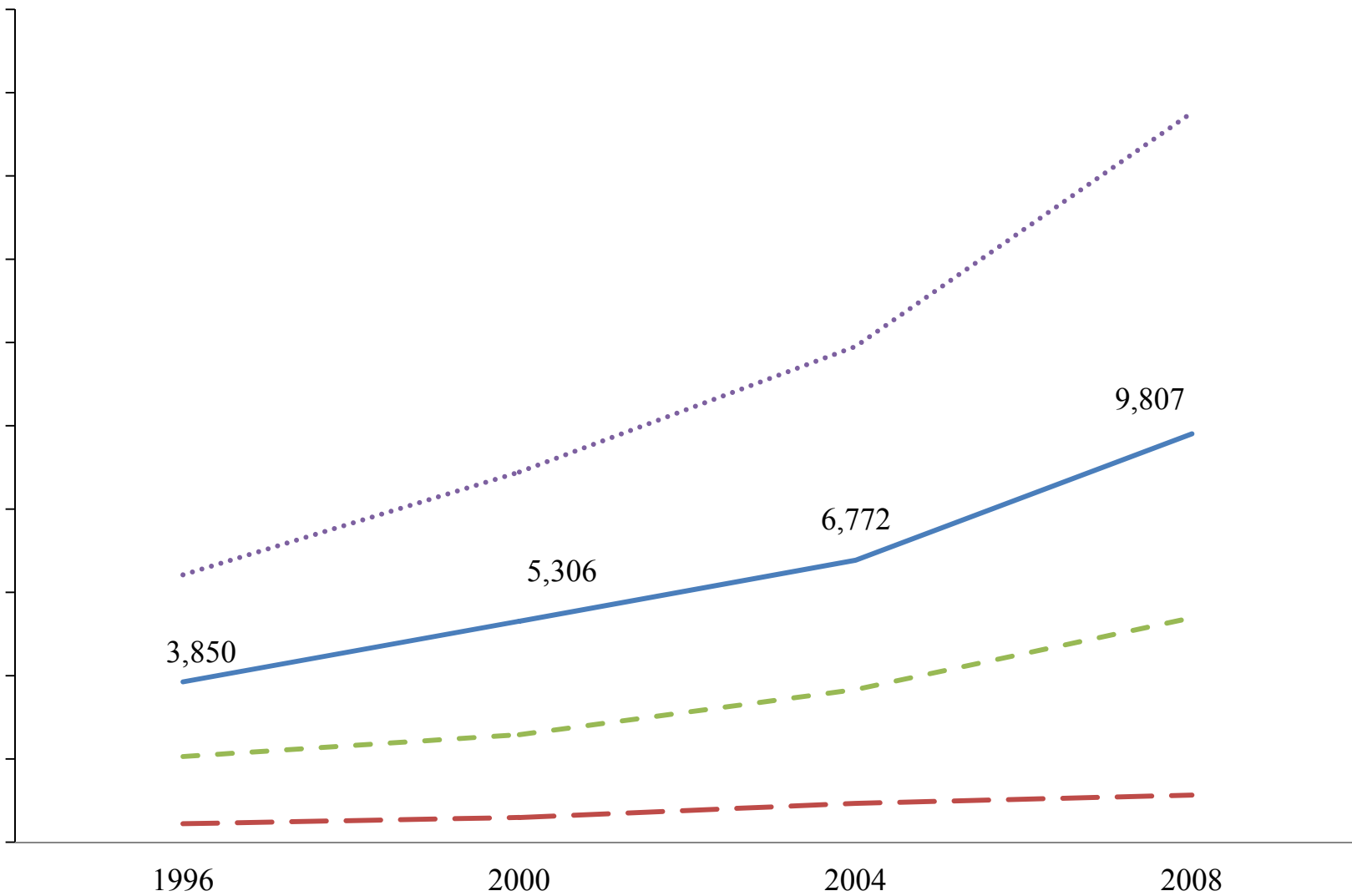
	<u>For- Profit</u> (1)	<u>Public ≤2-yr</u> (2)	<u>Public 4-yr</u> (3)	<u>Private Nonprofit</u> (4)
<i>Panel A: Student characteristics (2007-2008)</i>				
Male	33%	44%	46%	43%
Female	67%	56%	54%	57%
Minority	53%	40%	34%	33%
Age at time of survey	28.3	27.7	23.5	24.4
Age at the start of college	22.7	21.4	19.3	19.7
Years delayed entry into college	3.6	2.6	0.8	1.2
First generation immigrant	11%	12%	9%	7%
Second generation immigrant	14%	14%	13%	13%
Current or past military service	7%	5%	3%	4%
Parent(s) completed HS or higher	83%	87%	94%	94%
Parent(s) completed BA or higher	19%	30%	48%	52%
Independent	76%	57%	33%	34%
Single parent	30%	17%	7%	8%
Number of dependents	0.9	0.6	0.2	0.3
Risk index (7=high risk, 0=low risk)	2.9	2.7	1.3	1.3

## College Costs & Grant Aid

### Table 3. Average per student costs, grant aid, and institutional aid (2007-2008)

	<u>For-Profit</u>	<u>Public</u> <u>≤2-yr</u>	<u>Public</u> <u>4-yr</u>	<u>Private</u> <u>Nonprofit</u>
	(1)	(2)	(3)	(4)
Tuition & fees	9,807	1,133	5,391	17,519
Tuition & fees minus grants	7,814	700	3,447	10,252
Grants	2,091	878	2,733	7,629
Federal grants	1,456	504	838	964
State grants	141	139	681	792
Institutional grants	119	77	811	5,069
Other grants (private & employer)	374	159	403	804
Other aid	61	57	619	2,414
VA and DOD aid	208	93	138	146
Total institutional aid	181	89	899	5,232

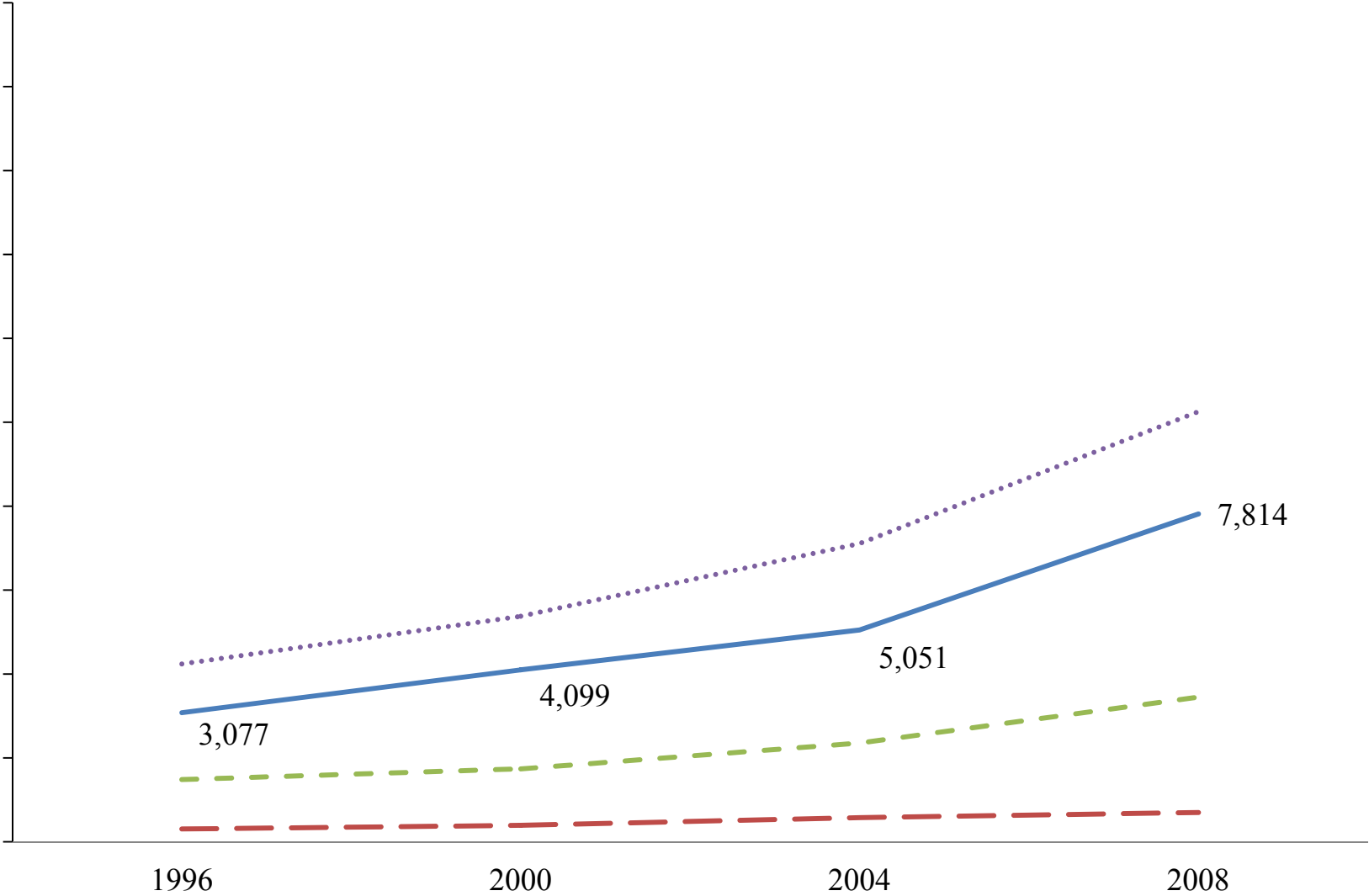
**Figure 4**  
**Average Gross Tuition & Fees (\$2008)**



— For-Profit    - - - Public  $\leq$ 2-yr    - - - Public 4-yr    ····· Private Nonprofit

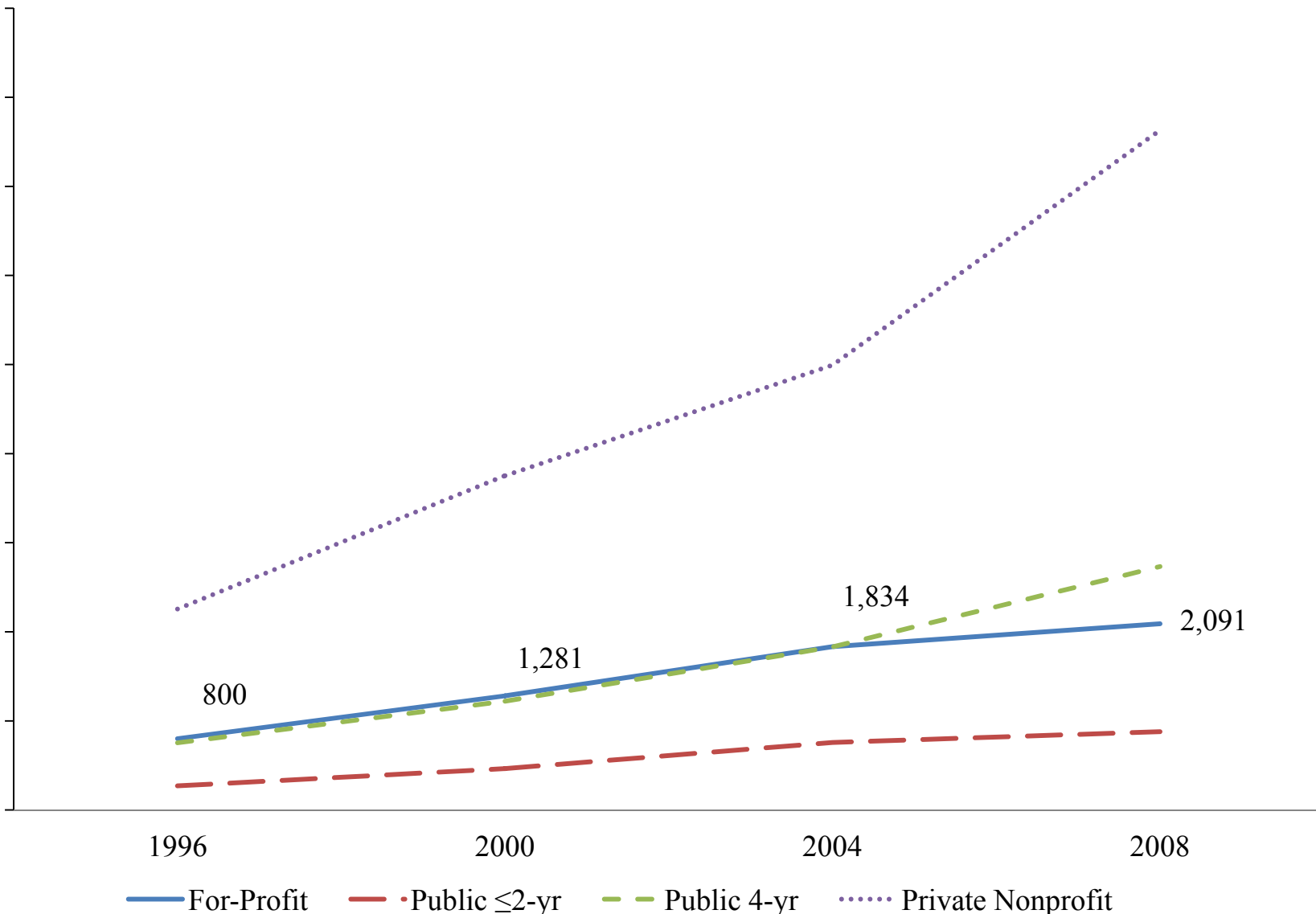


**Figure 7**  
**Average Tuition, Net of Grants (\$2008)**

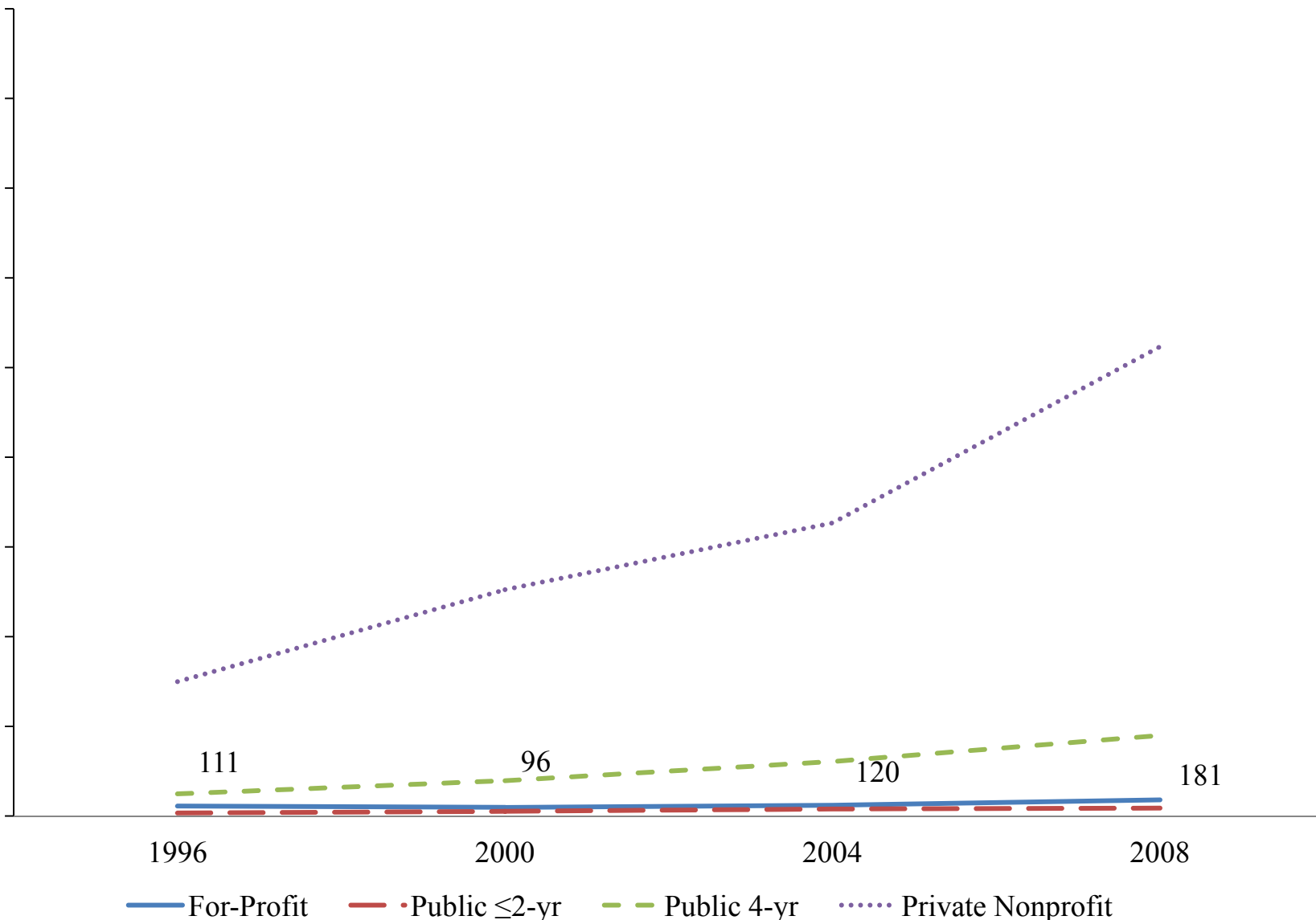


— For-Profit    - - - Public ≤2-yr    - - - Public 4-yr    ····· Private Nonprofit

**Figure 5**  
**Average Total Grants**



**Figure 6**  
**Average Institutional Aid**

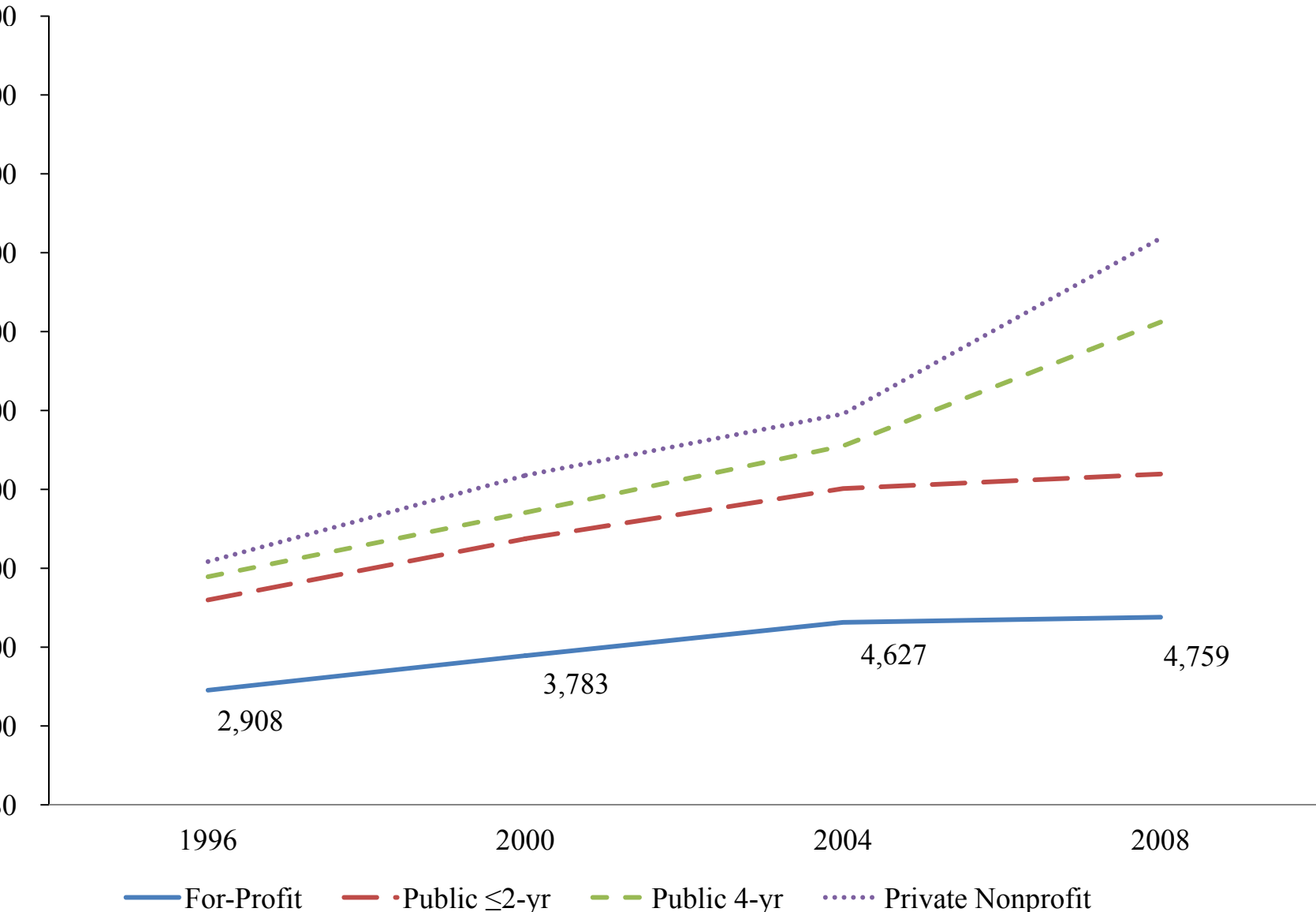


## Student Need & Financial Resources

**Table 4. Average per student need and resources (2007-2008)**

	<u>For-Profit</u>	<u>Public</u> <u>≤2-yr</u>	<u>Public</u> <u>4-yr</u>	<u>Private</u> <u>Nonprofit</u>
	(1)	(2)	(3)	(4)
family contribution	4,759	8,387	12,243	14,367
budget minus EFC	15,822	3,423	7,480	16,678
budget minus EFC & grants	13,782	2,681	5,188	9,865
gross income	31,739	46,225	63,401	72,180
of the poverty Line	198%	283%	350%	387%
and/or student own a home	46%	63%	73%	76%
and/or student own > \$10K in investments	9%	18%	24%	27%
help from parents: tuition and fees	47%	51%	63%	74%
help from parents: other ed expenses	42%	49%	59%	66%
help from parents: housing	75%	79%	71%	74%
help from parents: other living expenses	61%	61%	66%	73%

**Figure 8**  
**Average Expected Family Contribution (\$2008)**



# Aid Application

**Table 5. Financial aid application (2007-2008)**

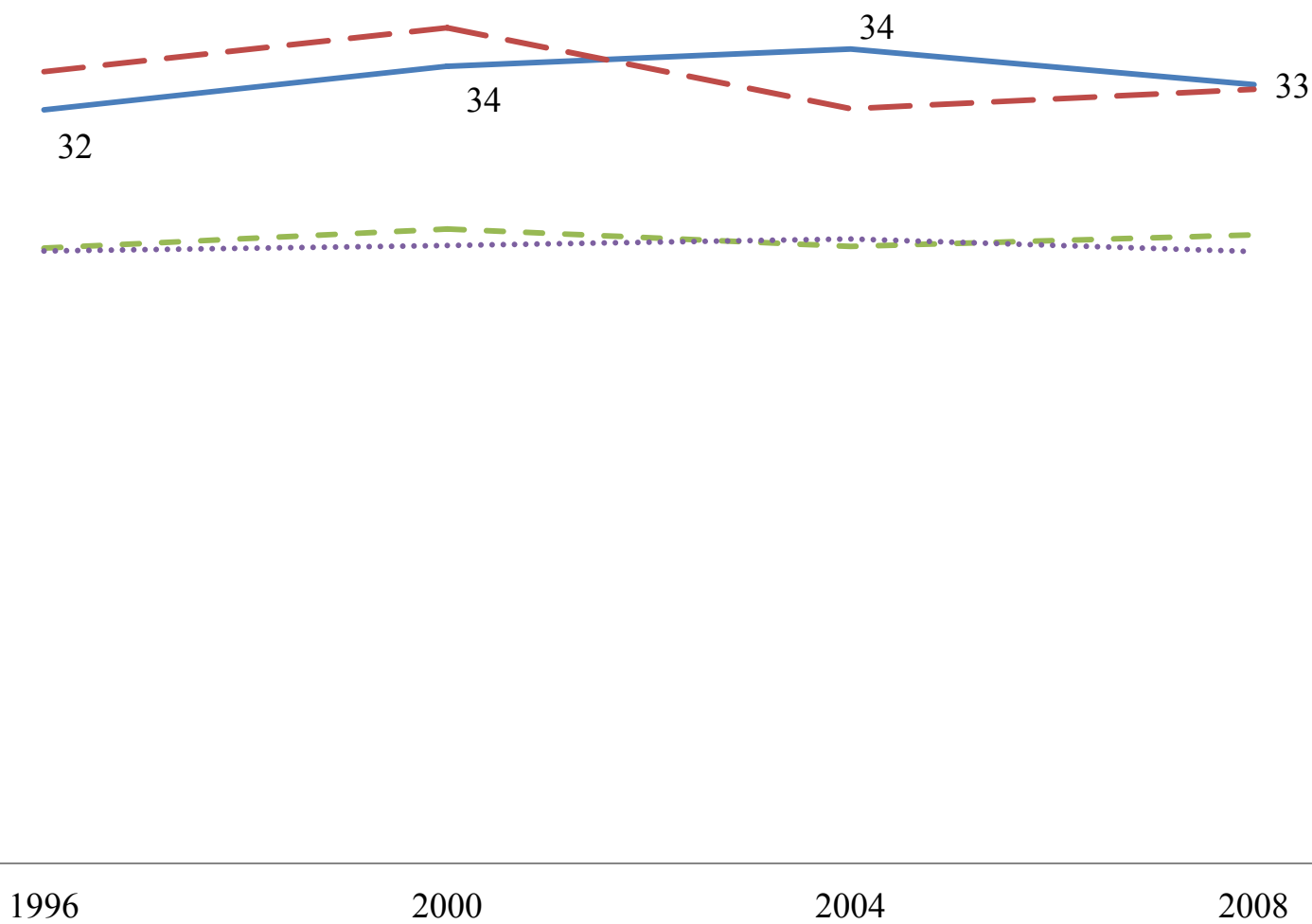
	<u>For-Profit</u>	<u>Public</u> <u>≤2-yr</u>	<u>Public</u> <u>4-yr</u>	<u>Private</u> <u>Nonprofit</u>
	(1)	(2)	(3)	(4)
Applied for any aid	96%	59%	79%	87%
Applied for federal aid	91%	43%	62%	70%
Spoke with staff about financial aid	71%	42%	45%	51%
Shared financing decisions with family/friends	52%	54%	71%	70%
Used financial aid on the internet	35%	34%	45%	45%
Used lender options	30%	14%	25%	30%
Did not apply for aid: Did not want to take on debt	39%	40%	42%	36%
Did not apply for aid: Forms too much work	15%	19%	19%	18%
Did not apply for aid: No information on how	16%	24%	21%	17%
Did not apply for aid: No need	55%	48%	54%	62%
Did not apply for aid: Thought ineligible	53%	60%	63%	64%

## Work Behavior

**Table 6. Average per student employment and work (2007-2008)**

	<u>For- Profit</u>	<u>Public ≤2-yr</u>	<u>Public 4-yr</u>	<u>Private Nonprofit</u>
	(1)	(2)	(3)	(4)
Works while enrolled	76%	83%	76%	76%
Works full-time while enrolled	41%	43%	24%	26%
Earnings from work while enrolled	16,258	16,859	11,429	13,271
Hours worked per week while enrolled	33	33	26	26
Works off campus while enrolled	71%	78%	64%	56%
Job is related to coursework or major	28%	31%	25%	27%
Can afford school without working	30%	31%	42%	44%
Reason for working: Minimize debt	51%	48%	47%	44%
Reason for working: Pay ed expenses	64%	72%	68%	66%
Reason for working: Pay living expenses	85%	80%	78%	71%
Reason for working: To send money home	8%	7%	6%	6%
Job limits access to campus facilities	35%	43%	38%	32%
Job limits class schedule	42%	63%	53%	41%
Job limits number of classes	34%	58%	45%	34%
Job limits choice of classes	26%	47%	30%	20%

**Figure 9:  
Average Hours Worked**



— For-Profit    - - Public ≤2-yr    - - Public 4-yr    ..... Private Nonprofit



## Estimations of Debt (2007-08)

	<u>Total Loans</u>		<u>Fed Loans</u>	<u>non-Fed Loan</u>
	(1)	(2)	(3)	(4)
For-profit	6,568*** (64)	4,118*** (68)	2,883*** (52)	1,235*** (43)
Public 4-year	1,255*** (77)	985*** (74)	1,032*** (57)	-47 (47)
Private Nonprofit	4,171*** (84)	890*** (91)	737*** (70)	153*** (58)
Independent	-454*** (52)	-179*** (57)	49 (44)	-228*** (36)
Single parent	-177*** (59)	-398*** (57)	-225*** (44)	-174*** (36)
Tuition & Fees (000s)		275*** (3)	140*** (3)	135*** (2)
Grants (000s)		-63*** (4)	19*** (3)	-82*** (3)
EFC (000s)		-23*** (1)	-17*** (1)	-6*** (1)
Parent(s) and/or student own a home		40 (41)	-8 (32)	48* (26)
Parent(s) and/or student own > \$10K in in		-1,219*** (42)	-738*** (33)	-481*** (27)
Works while enrolled		355*** (43)	177*** (33)	178*** (27)
Earnings from work while enrolled (000s)		-8*** (1)	-7*** (1)	-1 (1)
Program (AA, BA, certificate, none) FE	Yes	Yes	Yes	Yes

## Summary

FP students borrow at the highest rates and levels.

Borrowing in the FP sector has increased more than other sectors.

Why?

- College costs have increased steeply.
- Unlike the non-profit sector, FP tuition hikes were not met with increases in institutional aid.
- FP students are more disadvantaged and have fewer resources than students in other sectors.
- But, student need and hours worked have not changed in the FP sector.
- Even after controlling for resources and costs, FP debt still higher.

## Discussion & Conclusions

Why are disadvantaged and financially constrained students attending high-cost FP institutions? Still not sure.

- Especially concerning since average returns to FP education may be lower than in other sectors (Cellini & Chaudhary 2013, Deming, Goldin, & Katz 2012, N. Turner 2013, Lang & Weinstein 2013).

Students are making rational decisions based on full information.

- FPs have scheduling, classes, student services, or other unobservables that students value.
  - FP class schedules are most amenable to work.
  - Potential policies: current approach of licensing, accreditation.
- Public institutions are capacity constrained.
  - Need to look into this further.

## Discussion & Conclusions

Student decisions are NOT based on full information.

- Students are misled about aid and/or returns.
  - FP students most likely to talk to staff about aid, least likely to talk to family.
  - Potential policies: independent loan counselors, “know before you owe,” effective financial literacy training
- Students are simply confused/misinformed.
  - Unaware of their options, process is “opaque.”
  - FP students least likely to have parents with BA.
  - 50% of students at FPs in NLSY97 incorrectly identified whether the institution is public or private.
  - Potential policies: information disclosure, college scorecards, gainful

## Conclusions & Next Steps

Policy recommendations and implications for students depend on which of these mechanisms are at work.

- Much more work to do to sort out causal relationships to distinguish between these hypotheses.

Next steps:

- Add 2011-12 data.
- Examine additional temporal patterns in student financial resources, aid application, policy, etc.
- Additional regressions or decomposition.
- Other ideas?

**Thanks!**