



Financing Graduate Education: Current Trends, Future Concerns

CGS Annual Meeting
December 6-9, 2006
Washington, D.C.



Background

- The number of students seeking master's and doctoral degrees is expected to rise 12% from 2006 to 2014.
- Much of the increase in enrollment will come from women and persons of color.
- From 1995 to 2004, the cost of graduate education increased more than 60%.
- Students' ability to pay for graduate education has become more difficult, especially for underrepresented students of color.
- Student loans have become the fastest growing source of aid.



Questions to Consider

- How are graduate schools going to fund all the new students entering graduate schools? What resources do graduate students currently use to pay for education? Do these sources vary substantially by race/ethnicity?
- Do trends in student loans differ between minority and majority students?
- What are the implications of current financing trends and differences among racial/ethnic groups for future student enrollment and degree completion, particularly for students in Science, Technology, Engineering, & Mathematics (STEM) fields?



At Both the Master's and Doctoral Level, the Average Price of Attendance Increased More Than 50% from 1995 to 2003

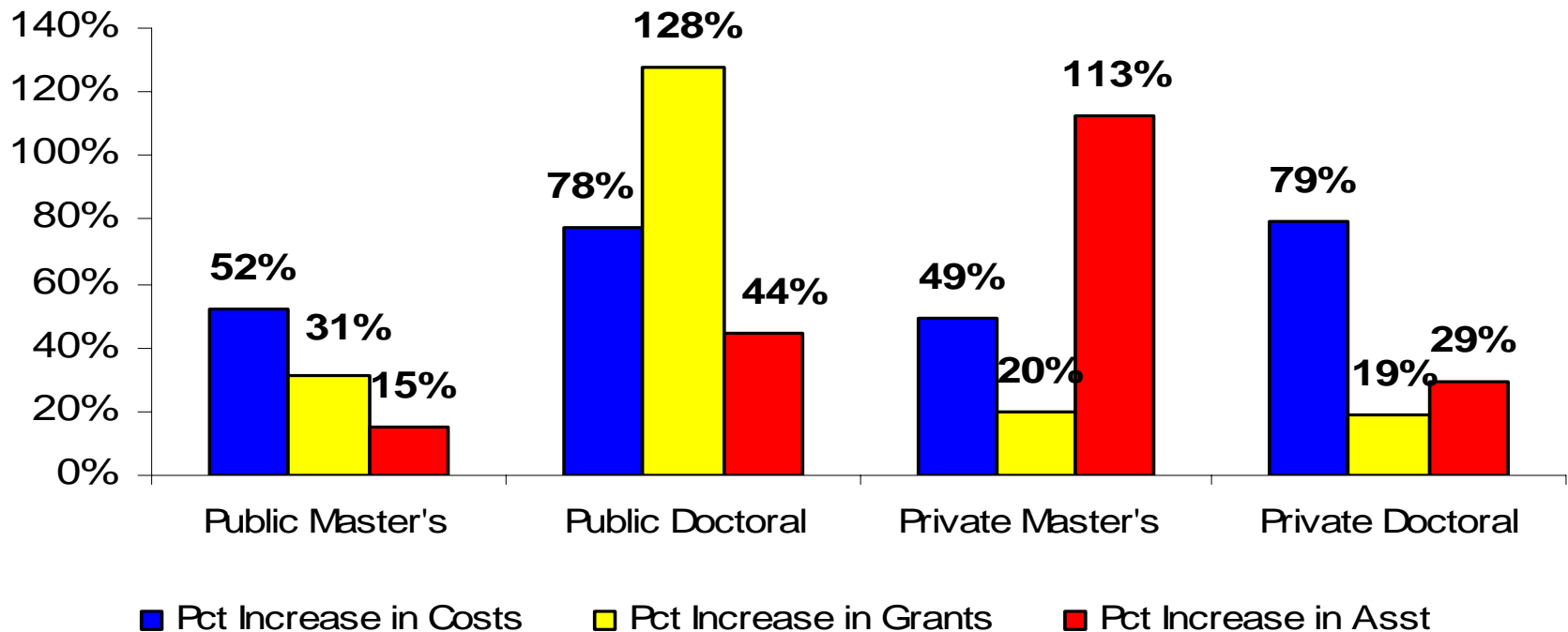
	Avg. Price of Attendance, 1995-1996	Avg. Price of Attendance, 2003-2004	Percentage Change
Public Master's	\$8,605	\$13,045	52%
Private Master's	\$12,033	\$21,458	78%
All Master's	\$9,272	\$14,825	60%
Public Doctoral	\$12,832	\$19,153	49%
Private Doctoral	\$16,631	\$29,703	79%
All Doctoral	\$13,423	\$20,903	56%

Sources: National Center for Education Statistics, 2000 and 2004 National Postsecondary Student Aid Study, February 2005 and August 2006.



Increases in Financial Aid from Traditional Sources Generally Failed to Keep Pace With the Rise in Educational Expenses

Pct Increase in Grants and Assistantships Compared With Pct Increase in Total Educational Costs, 1995-96 to 2003-04

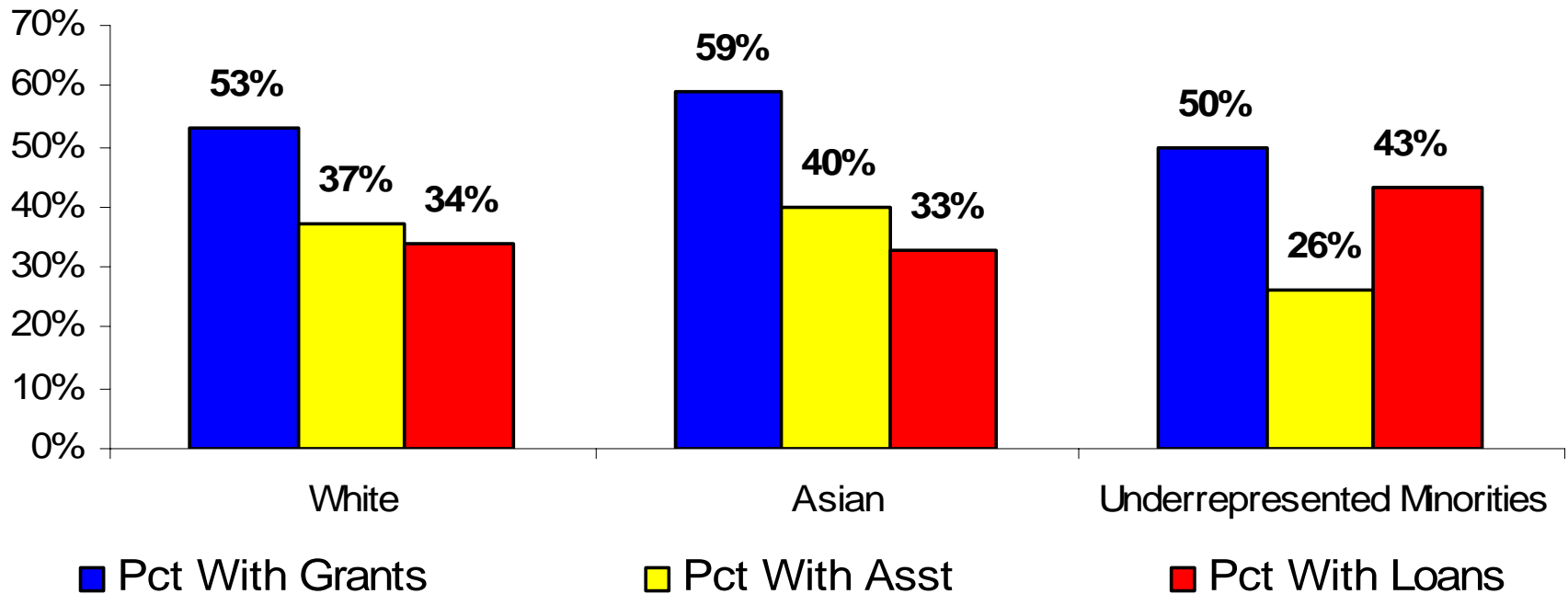


Sources: National Center for Education Statistics, 2000 and 2004 National Postsecondary Student Aid Study, February 2005 and August 2006. All data include U.S. citizens and permanent residents only.



Minority Students Were Less Likely Than Others to Receive Grants and Assistantships, Especially at the Doctoral Level

2003-2004 Pct of Doctoral Candidates With Financial Aid, by Type of Aid and Race/Ethnicity



Source: National Center for Education Statistics, 2004 National Postsecondary Student Aid Study, August 2006.

*Underrepresented minority students include African Americans, Native Americans, Latinos, and persons of more than one race. All data include only students who were U.S. citizens and permanent residents.



Increases in Costs and Slower Growth in Grants and Assistantships Led to An Increase in Borrowing, Especially Among Minority Students

	% With Loans, 1995-1996	% With Loans, 2003-2004	Avg. Loan, 1995-1996	Avg. Loan, 2003-2004	% Change in Avg. Loan
White Students in Master's Programs	22%	37%	\$10,125	\$12,921	28%
Underrepresented Minority Students* in Master's Programs	29%	53%	\$9,515	\$13,701	44%
White Students in Doctoral Programs	21%	34%	\$9,291	\$17,987	94%
Underrepresented Minority Students* in Doctoral Programs	25%	43%	\$10,654	\$19,103	79%

Sources: National Center for Education Statistics, 2000 and 2004 National Postsecondary Student Aid Study, February 2005 and August 2006.

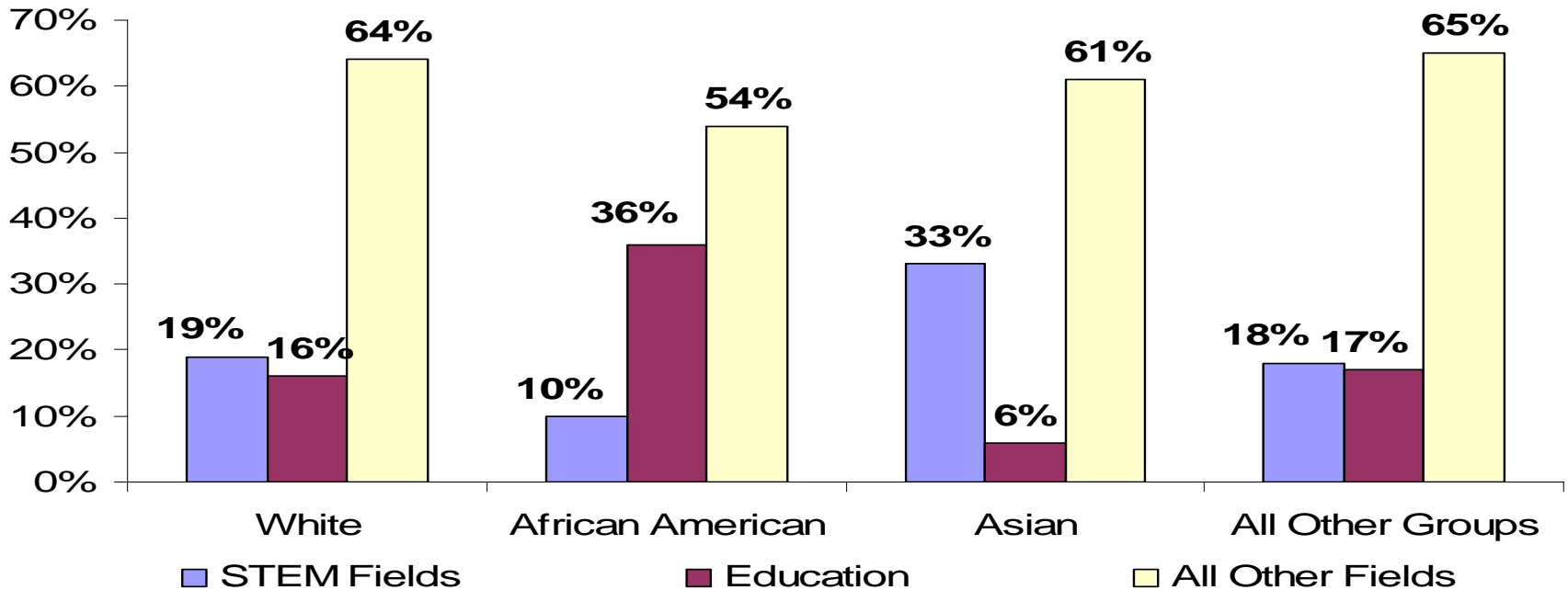
*Underrepresented minority students include African Americans, Native Americans, Latinos, and persons of more than one race.

All data include U.S. citizens and permanent residents only.



African Americans and Other Minority Groups Were Underrepresented in STEM* Fields

Distribution of Doctoral Degree Candidates in 2003-2004 by Race/Ethnicity**



Source: National Center for Education Statistics, 2004 National Postsecondary Student Aid Study, August 2006.

* Science, Technology, Engineering, & Mathematics. **Data include only students who were U.S. citizens and permanent residents.



Even Though They Are Underrepresented in STEM Fields, African American Doctoral Students Were Less Likely to Receive Aid Than Any Other Group in 2003-2004

	% With Any Aid	% With Grants	% With Assistantships	% With Loans
White	89%	69%	60%	18%
African American	82%	71%	42%	24%
Asian	89%	72%	58%	18%
All Other Groups**	92%	73%	66%	15%

Source: National Center for Education Statistics, 2004 National Postsecondary Student Aid Study, August 2006.

*Underrepresented Minority Groups. **Data include only students who were U.S. citizens and permanent residents.



Minority Degree Recipients Were More Likely Than Their Peers to Have High Amounts of Student Loan Debt

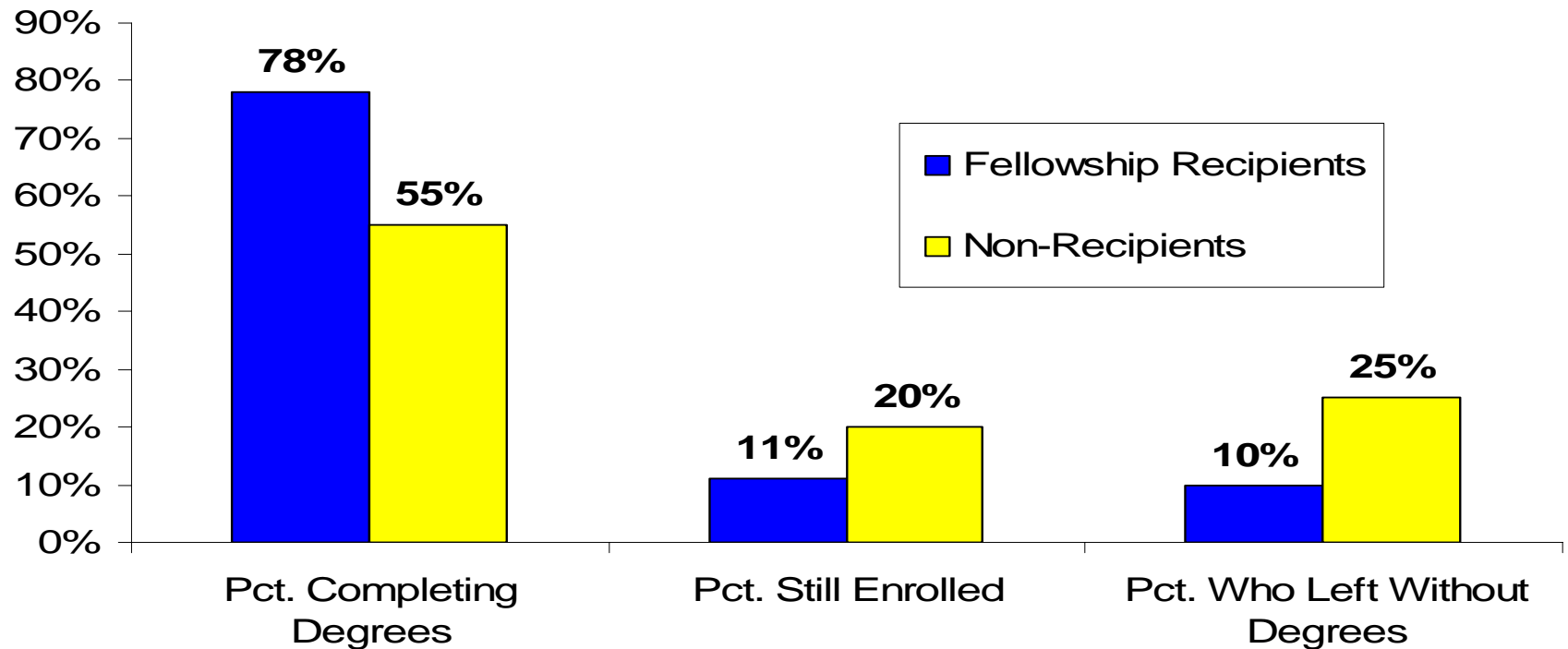
	% of Master's Degree Recipients With Debt in 2003-04	Avg. Cumulative Debt for Master's Recipients	% of Doctoral Degree Recipients With Debt in 2003-04	Avg. Cumulative Debt for Doctoral Recipients
White	65%	\$28,869	58%	\$51,648
Underrepresented Minority Groups	78%	\$33,792	65%	\$51,263
Asian	57%	\$29,097	50%	Low N*
All Degree Recipients**	67%	\$29,997	59%	\$51,850

*Survey sample size is too low to generate a reliable estimate. **Includes U.S. citizens and permanent residents only.
 Source: National Center for Education Statistics, National Postsecondary Student Aid Study, August 2006.



The Decline of Minority Students Who Receive Fellowships Might Lower Rates of Degree Completion

Graduate Degree Attainment* for Underrepresented Students of Color, by Receipt of Fellowships Sometime During Their Graduate Programs



Source: National Center for Education Statistics, 1993/2003 Baccalaureate and Beyond Longitudinal Study, September 2006. *Includes students who completed master's and doctoral degrees and post-baccalaureate certificates.



The Growth in Borrowing Might Also Adversely Affect the Percentage of Students Who Attended Graduate Programs Full-Time

	1999-2000	2003-2004
% Full-Time, Master's Programs	25%	20%
% Full-Time, Doctoral Programs	51%	49%
% Full-Time, STEM Doctoral Programs	68%	57%
% Full-Time, All Graduate Programs*	29%	25%

Source: National Center for Education Statistics, 2004 National Postsecondary Student Aid Study, August 2006.

*All data include only students who were U.S. citizens and permanent residents.



Summary & Implications

- Increases in grant and assistantship support have not been enough to cover the 50% growth in average educational prices.
- More students, particularly underrepresented students of color, have had to borrow to make up for gaps between rising costs and aid from grants and assistantships.
- Borrowing has affected minority students more than others because they are very underrepresented in STEM fields. Increasing the representation of minorities in STEM disciplines might actually *lower* the incidence of borrowing among minority students.
- The growth in borrowing and cumulative debt might adversely affect degree completion rates and time to degree, as a greater share of students attend part-time.