Over the past 30 years, there has been significant progress in the educational advancement of women in the United States and New England. Nationally, the percentage of adult women with four-year college degrees shot from 8 percent in 1970 to 24 percent in 2000. Women closed the gap with men in college completion, as the female-to-male ratio in percentages of Americans with four-year college degrees went from below 60 percent to 85 percent. But economically, women have made less significant progress as measured by the ratio of income for full-time female workers to that of full-time male workers. (See Figure 1.)

In many respects, New England is a leader in the education of women. In all the New England states, the percentage of adult women with a four-year college degree is at the U.S. average or higher, and the ratio of female adults with college degrees to male adults with college degrees in all six New England states is higher than the U.S. average. (See Figure 2.) Connecticut and Massachusetts rank in the top five of the 50 states in the percentages of females with four-year college degrees, and Vermont is one of only three states where the percentage of women college graduates actually exceeds the male percentage.

The greatest progress for women in higher education occurred in the 1970s. This was the decade when baby boomers reached college age and when the women's movement, legal battles and legislative victories opened doors to higher education for women. In New England, female college enrollment increased by 75 percent at both public and private institutions during the ’70s while male enrollment inched up only 3 percent at private campuses and 19 percent at public ones. What started in the ’70s continued through 2000, as women went from a little over one-third of all students enrolled in private institutions to a majority in 2000 and from 45 percent of students in public institutions to nearly 60 percent.

By 2002, women accounted for 58 percent of bachelor’s and 60 percent of master’s degree recipients at New England institutions.

Yet women’s progress in higher education over the past 30 years has not translated into proportionate economic advancement in the workplace. In 1970, full-time working women nationally earned about 60 cents for every $1 earned by full-time working men. By 2000, that had grown to 76 cents—equal to only two-thirds the increase in educational attainment. And since 1990, progress has slowed.

In New England, women earn a low of 69 cents on the men’s dollar in New Hampshire to a high of 78 cents in Vermont.

All six New England states have female-to-male education ratios at least 3 percentage points above the U.S. average. But only two—Vermont and Massachusetts—have female-to-male earnings ratios 3 percentage points above the U.S. average. (See Figure 3.)

In all states except Massachusetts, the return to education ratio—as measured by the full-time working female-to-male earnings ratio divided by the full-time working female-to-male education ratio—is below the U.S. average of 86 percent. In other words, the economic returns to a college degree for women relative to men in New England is below the U.S. average.

Why does this economic disparity remain so pronounced, even with the significant advancement of female students in higher education? How might institutions of higher education advance the economic status of women?

Consider the case of New Hampshire, where the earnings disparity is the largest in New England and the
fifth largest in the nation, and the return to education for women compared to men is among the lowest.

In the Granite State, educational attainment only minimally explains earnings differentials between women and men. In fact, full-time male workers get significantly greater monetary returns from education at almost all levels of educational attainment. For example, full-time working women with four-year college degrees earn only 69 cents for each $1 earned by their male counterparts. This is the lowest such ratio in New England and well below the U.S. average of 74 percent.

There are a few explanations as to why women in New Hampshire earn so much less than males even at the same levels of educational attainment. These include: gender roles in family responsibilities, gender-based occupational and industry segregation and pay differentials.

The women’s movement of the 1970s had a limited impact in New Hampshire on female household responsibilities. In New Hampshire, marriage is a distinct economic advantage for males, but not for females. The median annual income of full-time married men was one-quarter higher than the median annual income for full-time working unmarried men, and close to one-third higher than the income of full-time working married women.

During their childrearing years, women at all educational levels in New Hampshire tend to shift to part-time work and leave career tracks, while very few men do this. In New Hampshire, two-thirds of women without children are employed full-time, compared with less than one-half of women with children under age 6. Men’s full-time employment is greater for men with children than for men without children. Life-cycle earnings data indicate that family responsibilities (manifested in withdrawals from the full-time workforce) have a cumulative negative impact on the earnings of women in New Hampshire relative to men. The New Hampshire experience furthermore supports the view that public policies and corporations in our country, in general, do not compensate or help females fulfill family leadership roles without significant personal economic loss. Females in some other nations do better economically, most notably in the Scandinavian countries, which do a better job of supporting families and working parents and ensuring that taking on family responsibilities does not come with significant penalties in the workplace.

As for the role of occupation and industry of employment, New Hampshire female-dominated and male-dominated occupations and industries are consistent with traditional gender stereotypes of women as caretakers and men as decision-makers and physical laborers. Female-dominated occupations and industries (where 60 percent or more of workers are women) in New Hampshire pay significantly less than male-dominated ones, even where education requirements and work demands are similar.

Median annual income for the top five female-dominated occupations (secretaries and administrative assistants, accounting and bookkeeping clerks, nurses, home health aides and customer service representatives) is one-eighth lower than for the top five male-dominated occupations (carpenters, truck drivers, janitors, freight and stock movers and chief executives). In addition, three of the top five female-dominated industries (retail stores, nursing care facilities, banking) are low-income with median incomes in the bottom third of all New Hampshire industries; none of the top five male-dominated industries are.

Gender differences in occupation and industry reflect decisions made in college about which fields of study to pursue. The most recent data on what freshmen are studying at New England institutions suggests that occupational and industry of employment differences are likely to continue. For example, females comprise nearly 80 percent of education majors, but only 16 percent of higher-paying, high-demand engineering majors and fewer than 50 percent of business and
physical science majors. It is unclear whether any field women enter in large numbers will necessarily become low-paying, but it is very clear that the fields that females are concentrating in currently are low-paying.

So what can be done?

Colleges and universities can help females enter male-dominated, well-paying occupations and industries by supporting enrollment and achievement in fields such as engineering and the physical sciences. And while college may be late in life to significantly increase sensitivity among male students, colleges can promote the importance of sharing family responsibilities. There is strong evidence that networking and mentoring among female workers at the workplace and in the professions would also be beneficial. Colleges can encourage and support networking and support systems among female alumni. Colleges can host events nationally and seminars on campus targeted for female graduates and professionals. Universities can also help to promote careers and entrepreneurship among women at business and engineering schools, with the expansion of internship opportunities for female students. At the University of New Hampshire, there are now events targeted to female alumni in New Hampshire, Boston and New York City. In addition, a high technology internship course, which places business students in entrepreneurial ventures, boasts female enrollment consistently at or near 50 percent of the class.

And finally, colleges can help to improve the system and culture for working families by being role models in their organizational practices. That may mean, at least, providing employees with flexible scheduling, family leave and meaningful child care and health care benefits.

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### Loan Rangers

#### Higher Education’s Indebted Future

THOMAS D. PARKER

In colorful testimony before Congress a few years ago, Williams College economics professor Gordon Winston aptly compared college presidents to car salesmen. He was referring partly to the fact that both rely heavily on customer willingness to go into debt to buy their products.

Many college presidents are presiding over institutions where the operating budget is 50 percent or more derived from money borrowed by students and their parents. The fact that borrowing for higher education has skyrocketed in recent years and that the imbalance between loans and grants has widened is well-documented. Student loan volume grew by more than 200 percent over the past 10 years, while outright grant aid rose by 135 percent, according to the College Board.

One of the most striking trends in family borrowing for education is the very rapid growth in borrowing from outside the federal loan programs.

To date, the lion’s share of education borrowing in America has been subsidized by the federal government through the Federal Family Education Loan Program (FFELP). Outstanding FFELP volume now stands at nearly $400 billion and is increasing by approximately $60 billion per year.

But even Uncle Sam cannot write loan checks fast enough to keep up with rising higher education costs. Limits on need-based, subsidized federal loans have been stuck since 1992 at $5,500 for third- or fourth-year dependent undergraduates and less for underclassmen, while total charges at four-year institutions have grown by around 70 percent to approach $12,000 at publics and $28,000 at private campuses nationally (and