Exhibit 9

REPORT OF DR. CHARLES DIAMOND AND DR. DANIEL MILLIMET IN RESPONSE TO DOE PROPOSED REGULATORY CHANGES, FILED SEPTEMBER 9, 2010.

TABLE OF CONTENTS

EXPERT CREDENTIALS	2
EXECUTIVE SUMMARY	3
INTRODUCTION	3
CONCEPTUAL ISSUES WITH THE JUSTIFICATIONS FOR THE PROPOSED	
REGULATIONS	4
CONCEPTUAL PROBLEMS WITH THE PROPOSED MEASURES OF GAINFUL	
EMPLOYMENT	11
PROPOSED DEFINITION OF GAINFUL EMPLOYMENT WILL HAVE UNINTENI	DED
CONSEQUENCES	21
CONCLUSION	25
	EXPERT CREDENTIALS EXECUTIVE SUMMARY INTRODUCTION CONCEPTUAL ISSUES WITH THE JUSTIFICATIONS FOR THE PROPOSED REGULATIONS CONCEPTUAL PROBLEMS WITH THE PROPOSED MEASURES OF GAINFUL EMPLOYMENT PROPOSED DEFINITION OF GAINFUL EMPLOYMENT WILL HAVE UNINTENI CONSEQUENCES CONCLUSION

I. EXPERT CREDENTIALS

Charles Diamond is a Managing Director at FTI Consulting, Inc., a firm primarily engaged in providing economic and statistical consulting, as well as forensic support, in the context of litigation. He holds a Ph.D. in Economics from Texas A&M University ('84). In addition to his Ph.D., he holds a M.A. in Economics from Clemson University ('75) and a B.A. in Political Science from Clemson University ('74). He is experienced in preparing economic and statistical assessments for class actions and other litigation. He has been qualified as an expert in cases involving employment practices, lost corporate profits and opportunities, and product liability. His academic research has been published in the Journal of Labor Economics, Journal of Econometrics, and Journal of Development Studies. For over 16 years, he taught both graduate and undergraduate courses in labor economics, econometrics, managerial economics, and microeconomics. Prior to joining FTI Consulting, he was a vice president at Analysis Group, Inc., and before that an associate professor at the American University in Cairo, Egypt. He has taught at Texas A&M University, Utah State University, Clemson University, and University of Louisville. Prior to returning to graduate school in 1981, he worked at Fluor-Daniel International Corporation, as a Senior Site Consultant from 1980 - 1981; Pickens County, SC Planning and Development Commission as Executive Director from 1978 - 1980; and South Carolina Appalachian Council of Government as Industrial Development Specialist from 1975 – 1978. His qualifications are summarized in his curriculum vitae, appended in Appendix A-1. This appendix includes a list of all publications he authored within the preceding ten years and a list of all cases in which he testified as an expert at trial or by deposition within the last four years.

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Neither author has any financial interest in the outcome of this regulation.

II. EXECUTIVE SUMMARY

The Higher Education Act requires certain programs at private sector, public sector, and vocational schools to provide training sufficient to prepare students for "gainful employment" in a recognized occupation in order to be eligible for Title IV funds (20 U.S.C. § 1002(b)(1)). To date, however, "gainful employment" has not been defined. The Department of Education (the "Department") now proposes to amend 34 C.F.R. § 668.7 to specify two new metrics that will be used to determine whether educational programs are in compliance with the "gainful employment" standard.

The justifications for this proposal center on its alleged benefits for taxpayers and consumers, as well as its purported effects on the quality of postsecondary education in the U.S. While elimination of tax inefficiencies, protection of consumer welfare, and removal of inferior postsecondary programs are laudable goals, the proposed rules will likely *worsen*, not improve, the situation.

As detailed in this comment, the proposed metrics are flawed in concept and in practice. Conceptually, they are based on an erroneous, narrow-sighted definition of "gainfulness" from an economic perspective. The proposed definition encompasses too short of a time horizon, ignores many salient private and social returns to educational investments, and ignores the uncertainty and risk associated with any type of investment. As a result, quality educational programs will be deemed ineligible for Title IV funds, and the educational opportunities for consumers will be unnecessarily restricted. In practice, the proposed rules will have potentially disastrous consequences on taxpayers due to foregone tax receipts from elimination of quality educational programs, the higher cost to taxpayers from students attending public institutions, and the negative impact on tax-paying proprietary institutions. The proposed rules will also have severe, negative consequences for individuals attempting to improve their economic situation, particularly females and minorities, thereby conflicting with President Obama's stated goal of having the highest percentage of college graduates in the world by 2020.

Instead of introducing further distortions into the U.S. system of higher education through the use of flawed metrics, attention should be focused on the direct monitoring of program quality to ensure a minimum level of adequacy in all postsecondary programs receiving Title IV funds. Fortunately, the infrastructure for this already exists: recognized accrediting agencies ensure a minimum level of quality for accredited schools thereby protecting both taxpayers and consumers. Thus, a properly functioning system of accreditation achieves the Department of Education's goals discussed above without incurring needless costs or unleashing unintended consequences.

III. INTRODUCTION

We appreciate the opportunity to comment on the notice of proposed rulemaking ("NPRM"). Unfortunately, the proposed gainful employment rules are seriously flawed. First, the justifications underlying the proposed rules are based on faulty logic. Second, the rules are based on an erroneous definition of gainful employment from an economic perspective. Third, even given the definition of gainful employment proposed rules are likely to have dire, unintended consequences, including: (i) Eliminating quality educational programs; (ii) Widening gender and racial gaps in educational attainment; (iii) Increasing income inequality in the U.S.; (iv) Failing to meet President Obama's goal of having the highest percentage of college graduates in the world by 2020.

We discuss each of these points in turn.

IV. CONCEPTUAL ISSUES WITH THE JUSTIFICATIONS FOR THE PROPOSED REGULATIONS

The NPRM discusses three rationales for the proposed "gainful employment" rules. Each is based on flawed logic or unsupported and unwarranted claims.

1. *Protect Taxpayers*. Because federal financial aid loans are guaranteed, there is no doubt that defaults could represent a cost to taxpayers. However, the net impact of the proposed rules on taxpayers requires an accurate comparison of *total* taxpayer liability under the current system to *total* taxpayer liability if the proposed rules are implemented. Nowhere does the NPRM contain projections concerning these numbers. Nonetheless, the proposed rules will certainly impose enormous costs on taxpayers if implemented.

First, public institutions are not as low cost as suggested in the NRPM. It is reported in the NPRM that between 69,000 and 126,000 students would transfer to other institutions (75 Fed. Reg. at 43,668). Assuming for a moment that this is accurate, and that many students transfer to public institutions with significantly lower costs *to the student*, this is seen as a benefit to the taxpayers. However, this is grossly mistaken as it ignores the reason why tuition costs are generally much lower at public institutions: those institutions receive generous local, state, and federal subsidies, that are themselves paid by taxpayers.

To illustrate this point, consider the following example. A student can enroll in a year-long program at a for-profit institution and pay \$10,300 completely covered by loans (\$7,300 in federal loans and the remainder in private loans). Alternatively, the student could enroll in a similar program at a public institution and pay \$2,900 completely covered by loans (\$2,300 in federal loans and the remainder in private loans).¹ If the student chooses the for-profit option and completely defaults on the loans, the taxpayer has lost \$7,300 (ignoring, for simplicity, issues associated with interest and discount rates). If the student chooses the public option, and we even assume that the student now does *not* default on the loans, the taxpayer still loses. Why? Because total aid alone is at about \$8,000 per year per full-time equivalent student at public institutions (see figure 1). Figure 2 shows that roughly \$7,100 is in the form of state and local aid. Moreover, figure 2 reveals that state and local aid per full-time equivalent student ("FTE") varies significantly across states, with several states receiving more than \$10,000 in state and local aid.

This aid is equivalent – from the taxpayers' perspective – to a student loan that has *zero probability* of being repaid. Thus, if the student has even a five percent probability of repaying the loan after attending the for-profit institution, then taxpayers are better off when the student attends the for-profit institution.² If the probability of default is greater than zero at the public institution, then the probability of repaying the debt incurred to attend the for-profit school can even be less than five percent and taxpayers will continue to be better off with students choosing the for-profit option.

¹ These figures are approximately equal to those reported in Table A-2 in the NPRM (75 Fed. Reg. at 43,649).

 $^{^{2}}$ The expected cost to taxpayers from the student attending the for-profit institution and having a 95 percent default rate is 0.95*\$7,300 = \$6,935.



Figure 1. State Tax Appropriations for Higher Education: 1972-1973 to 2008-2009.

Note: FTE = full-time equivalent students. Source: http://www.trends-collegeboard.com/college pricing/4 3 public appropriations b.html.

		2007-2008		Total state and local
		2007 2000		appropriations for
	Full-time equivalent	Educational	Educational	higher education as a
State	enrollment	appropriations (million	appropriations per full-	percent of state and
	(thousands)	dollars)	time equivalent	local tax revenue, 2005-
	(thousands)	donars)	enrollment (dollars)	2006
Total. 2008	10475.1	73940.7	7058.7	6.0
Alabama	186.3	1.413.1	7.586	11.0
Alaska	18.7	273.1	14.601	6.9
Arizona	223.9	1.704.4	7.614	5.4
Arkansas	107.4	696.2	6.481	8.6
California	1.731.8	12.429.5	7.177	6.3
Colorado	161.3	679.6	4,213	3.7
Connecticut	77.1	829.6	10,762	4.2
Delaware	31.6	228.5	7,226	6.0
Florida	537.9	3,487.5	6,483	5.2
Georgia	310.8	2,547.6	8,198	8.5
Hawaii	35.5	466.4	13,150	7.4
Idaho	44.0	381.9	8,685	8.1
Illinois	391.4	2,968.6	7,585	5.1
Indiana	229.3	1,245.3	5,430	6.2
Iowa	115.0	732.9	6,372	7.6
Kansas	129.7	794.7	6,125	7.4
Kentucky	142.4	1,088.2	7,643	8.9
Louisiana	165.8	1,284.5	7,748	8.2
Maine	35.5	241.8	6,804	4.2
Maryland	206.2	1,576.4	7,646	4.9
Massachusetts	144.6	1,258.5	8,705	4.0
Michigan	388.7	2,245.9	5,778	5.6
Minnesota	200.2	1,250.7	6,248	6.1
Mississippi	117.6	768.1	6,534	9.4
Missouri	179.4	1,082.0	6,032	5.2
Montana	35.6	175.6	4,940	5.7
Nebraska	75.5	575.1	7,622	8.3
Nevada	63.3	576.4	9,102	6.2
New Hampshire	34.1	120.7	3,541	2.6
New Jersey	238.0	1,894.7	7,960	4.3
New Mexico	85.2	817.8	9,598	12.0
New York	526.5	4,670.9	8,871	4.1
North Carolina	357.6	3,200.3	8,949	10.2
North Dakota	35.8	199.5	5,579	9.1
Ohio	391.7	1,957.9	4,998	5.0
Oklahoma	131.2	939.9	7,164	7.9
Oregon	129.3	730.2	5,647	5.0
Pennsylvania	339.0	1,995.6	5,886	4.2
Rhode Island	30.1	183.4	6,089	4.2
South Carolina	144.7	952.9	6,585	8.5
South Dakota	29.6	148.5	5,018	7.5
Tennessee	169.9	1,252.5	7,371	7.8
Texas	804.9	5,603.4	6,962	7.5
Utah	102.4	728.7	7,116	8.3
Vermont	20.0	63.2	3,167	3.0
Virginia	281.9	1,636.7	5,805	5.3
Washington	221.3	1,567.8	7,086	6.1
West Virginia	73.5	433.2	5,892	7.1
Wisconsin	219.0	1,491.5	6,810	5.1
Wyoming	23.1	349.3	15,151	9.4

Figure 2. State and Local Financial Support for Higher Education, by State: 2005-2008.

Source: State Higher Education Executive Officers, Boulder, CO (copyright). 2010 Statistical Abstract. (http://www.census.gov/compendia/statab/2010/tables/10s0281.pdf).

Second, if the proposed "gainful employment" rules reduce the number of students investing in postsecondary education, then taxpayers are harmed due to the loss of the social returns to education. In the NPRM, it is reported that between 16,000 and 30,000 students will leave programs without immediately enrolling elsewhere if the proposed rules are implemented. As discussed below, we believe this number will be much higher as it is unlikely that 69,000 to 126,000 students will transfer to new institutions as projected in the NPRM. Regardless, even given the NPRM's unsubstantiated and likely overly-conservative estimates, this represents a sizeable loss to taxpayers – as discussed in the next section – due to the foregone social benefits (e.g., lower tax receipts received from *both* students who complete their program *and* for-profit institutions).

2. *Protect Consumers.* The proposed rules are justified on the grounds that consumers allegedly need protection since there is a problem of asymmetric information: schools should know which programs are beneficial to which students, but students do not possess this information. As a result, institutions that "are legally obligated to make profitability for shareholders the overriding objective" seek to exploit consumers (75 Fed. Reg. at 43,618). In addition, the proposed rules are justified on the ground that they allegedly prevent the "over-supply" of credentialed workers (75 Fed. Reg. at 43,617).

There are several flaws to this argument. First, the fact that institutions receiving Title IV funding must be accredited by an agency approved by the Department of Education should ensure that any program attended by a student is of sufficient quality. Rather than injecting additional rules and inefficiencies in the U.S. educational system, a more direct approach to consumer protection is to ensure that accreditation standards are sufficient and enforced. This is the least intrusive and most comprehensive tool available to eliminate any sort of information deficit on the side of consumers.

Second, the proposed rules actually harm consumers by limiting opportunities for postsecondary education. As mentioned above, it is projected in the NPRM that between 16,000 and 30,000 students will exit schooling if the proposed rules are implemented. Indeed, much of the potential cost savings to taxpayers discussed in the NPRM is predicated on the decline in the number of students pursuing postsecondary education: "The estimated savings come from Federal loans and Pell Grants not taken by students who do not pursue an education in each scenario" (75 Fed. Reg. at 43,691).

However, the proposed rules will likely decrease the number of students pursuing postsecondary education by an even greater amount as many of the 69,000 to 126,000 students projected in the NPRM to switch to an alternative institution will simply forego the extra schooling. This belief is based on the indisputable fact that the U.S. has entered a period of significant contraction of student enrollments at many public institutions. Many schools now face binding capacity constraints on the number of students that may be enrolled. Ferrarri (2010) writes:

Across the nation, cash-strapped public universities have limited, capped or even reduced enrollment to cut costs. The 35,000-student University of Florida wants to shrink by 4,000 students. And the California State University system, with 23 campuses and 450,000 students, is trying to reduce enrollment by 40,000 students over two years.³

³ Accessed online at: <u>http://www.newsobserver.com/2010/05/29/505976/state-may-cap-uncs-growth.html</u>.

Given that the U.S. is currently in a period of shrinking enrollments at many public institutions, the NPRM's projections of 69,000 to 129,000 students being reallocated *every year* from for-profit to public institutions seems overly optimistic to say the least.

Even if such enrollment limits are relaxed in the future, one would expect the average subsidy per full time equivalent student to rise above the figures reported in figures 1 and 2. For example, additional funding will be necessary to build new classrooms and dormitories, hire additional faculty and support staff, etc. Thus, the assertion that the proposed rules will protect both taxpayers and consumers seems far-fetched.

By limiting students' opportunities to pursue postsecondary investments, the proposed rules preclude individuals from realizing the full private returns to education discussed in the next section: higher earnings over one's lifetime, other pecuniary benefits, more stable employment, etc. The flawed logic of the proposed rules is highlighted in the NPRM once it is admitted that many individuals may prefer to undertake an educational investment to secure a low-wage job rather than have no earnings at all. Despite this fact, a debt-to-earnings threshold of eight or twelve percent is rationalized as keeping students within a "manageable" debt burden (75 Fed. Reg. at 43,667, footnote 22). Thus, the implied effect of the proposed regulation would be to tell currently unemployed individuals, who want to better their employment prospects by attending school, that their current situation is more "manageable" than it would be if they obtained a low-wage job accompanied by some loan obligations.

This is a clear case of government over-stepping its boundaries. Few would disagree that zero earnings is less "manageable" than a low-wage job with a, say, 15 or 20 or even 50 percent debt burden. How can eliminating these job prospects be for the good of the consumer? Consumers do not think it is. A survey conducted in October 2009 by Americans for Democratic Action found that 60 percent of respondents disagreed with the notion that the growth of the for-profit educational sector should be curtailed.⁴ In addition, the same logic applies to low-wage workers who enter an educational program seeking higher-wage employment.

Finally, the argument proposed in the NPRM that consumers are protected against an "over-supply" of individuals with postsecondary credentials is not supported by the data nor economic rationale. To begin, despite the large expansion of the for-profit sector in higher education and occupationally specific training at other institutions (nearly tripling from 673,000 to 1.8 million students between 2000 and 2008), the private returns to education continue to grow.⁵ Figure 3 plots relative earnings by education levels over the past four decades. Panel A plots median weekly earnings; Panel B uses average hourly wages. The premium for some college or an associate degree relative to a high school diploma has risen slowly over the past three decades, while the return to a college degree has risen sharply. Thus, at this point, concern about an over-supply of workers with college credentials causing a rapid decline in the market value of postsecondary degrees is unwarranted.

⁴ See <u>http://nexusresearch.org/1/NexusStudy8-31-10.pdf</u>.

⁵ See 75 Fed. Reg. at 43,617; <u>http://www.washingtonpost.com/wp-dyn/content/article/2010/06/13/AR2010061304605.html</u> accessed online on September 5, 2010.



Figure 3. Relative Earnings by Education, 1973-2009





Panel B

Source: <u>http://economix.blogs.nytimes.com/2010/05/17/the-value-of-college-2/?ref=business</u> (Panel A): Lemieux, T. (2008), "The Changing Nature of Wage Inequality," *Journal of Population Economics*, 21, 21-48 (Panel B).

Moreover, this line of thinking is not supported by economic rationale. The problem is that it fails to properly compare the current income distribution of *all* workers in the U.S. to the income distribution that would result if the proposed rules are implemented. In particular, even if earnings of individuals with higher education fall (or rise less steeply) in the future under the current system due to an increase in supply of workers with at least some postsecondary education, this increase in supply *reduces* the supply of workers in the economy with only a high school degree, thereby *raising* earnings (or leading to a less significant decline) for individuals who continue to invest in postsecondary education, but it does so at the expense of individuals with only a high school degree. Thus, the proposed rules are not a "win-win" for all consumers, but rather redistribute earnings from one class of individuals to another. Specifically, this redistribution benefits those obtaining a postsecondary degree after the implementation of the proposed rules at the expense of those with only a high school degree, leading to greater income inequality in the U.S.

3. *Eliminate Low Quality Educational Programs or Provide Incentives for Improvement.* It is hypothesized in the NPRM that the proposed rules will provide incentives for low quality programs to improve and/or reduce prices. Programs that do not will be eliminated (or, at least eliminated from Title IV eligibility). While these are worthwhile goals, the proposed rules will not achieve them. Even if they would, the proposed rules are not the most efficient means of doing so.

First, as stated above, a more direct mechanism already exists to eliminate low quality programs: accreditation. Taxpayer resources are better spent ensuring a rigorous accreditation process, rather than spent trying to determine program quality through complex, imprecise, back-door measures. Moreover, using accreditation as a tool to ensure program quality (as well as protect taxpayers and consumers) avoids the discriminatory nature of the proposed "gainful employment" rules. The proposed rules would only apply to for-profit institutions and select programs at other institutions. In the NPRM, it is stated that the inability to apply the "gainful employment" rules to other programs at public and private not-for-profit institutions is due to the original wording of the statute, but this should not prevent enforcement of the "regulation at the institutions where it can" (75 Fed. Reg. at 43,658). If the goal of the proposed rules is truly not to single out the for-profit sector, but eliminate all low quality educational programs, then accreditation should be the policy tool used.

Second, the argument that the proposed rules are needed to improve the quality of educational programs being offered ignores the incentives currently provided in the marketplace for institutions to offer quality programs at competitive prices. The recent growth cited above in the number of students in the for-profit sector along with a commensurate increase in the number of institutions and programs implies a competitive market. Thus, the "invisible hand" of competition properly incentivizes institutions to offer quality programs at prices equal to marginal costs.

Finally, the argument that many for-profit institutions "will adjust prices to attempt to bring programs into compliance" is flawed (75 Fed. Reg. at 43,672). The assumption that prices in the for-profit sector can be lowered without compromising quality is predicated on a comparison of profit margins and prices of programs at for-profit institutions relative to other institutions. However, the competitive nature of the industry discussed above suggests that *economic* profits are not high. More importantly, direct

comparisons of program prices at for-profit institutions and public institutions are flawed since they ignore state and local aid given to public institutions. For example, Table A-2 in the NPRM indicates that the average *annual* debt for a student obtaining a bachelor's degree from a for-profit school is roughly \$8,000 (\approx \$31,678/4); it is \$3,100 at a public school (\approx \$12,321/4). Yet, public schools also receive at least \$7,000 per full-time equivalent student in state and local aid according to figures 1 and 2. Thus, even using this conservative \$7,000 estimate concerning state appropriations to public institutions – and not even mentioning the fact that for-profit schools must *pay corporate taxes* for which public institutions are exempt – the for-profit school is already operating with less revenue per student than public institutions.⁶ It is simply not reasonable to expect for-profit institutions to lower prices if the proposed rules are implemented *and* continue to offer quality programs.

V. CONCEPTUAL PROBLEMS WITH THE PROPOSED MEASURES OF GAINFUL EMPLOYMENT

The proposed rules purport to measure gainful employment using two metrics: one based on debt-toearnings (where earnings may represent annual income or discretionary income) and one based on repayment rates. Even assuming such metrics could measure gainful employment much less "preparation for gainful employment," both metrics are conceptually flawed.

Let us focus on the first measure, debt-to-earnings. To evaluate this measure, it is very helpful to understand the classical economic model of investments in education.⁷ The model is extremely useful in clarifying the exact nature of the costs and benefits of educational investments, as well as the relevant time horizon over which these costs are incurred and the benefits are accrued.

In the classical model, individuals undertake an investment in postsecondary education if the *lifetime* benefits more than offset the *short-run* costs.⁸ For now, let us measure the lifetime benefits as simply the difference in earnings associated with the postsecondary investment; as discussed below, the benefits to schooling are much more extensive than differences in earnings. The costs reflect not only the monetary costs of the investment (tuition plus interest), but also the opportunity cost of the investment (i.e., the foregone wages that could have been earned by working instead). Because the benefits occur in the future and the costs are incurred immediately, to compare apples-to-apples, we must compare the discounted present value of the additional stream of earnings realized due to the investment relative to the discounted present value of the costs of the investment.

This comparison is illustrated in figure 4, where *H* represents the annual direct costs of the investment, w_{HS} represents annual earnings with only a high school diploma, w_{PS} denotes annual earnings with the postsecondary investment, the investment is undertaken immediately after high school (at age 18), and *T* is the length of the program. While the student is in the training program, the costs accruing are *H*, the direct program costs paid by the student, plus the area above *H* to the line marked w_{HS} , the earnings foregone while participating in the training program. The entire rectangle corresponds to the upfront costs to the student of entering and completing the training program.

⁶ Figure 14 indicates that state appropriations per full-time equivalent student are roughly \$8,000 in 2008-2009.

⁷ See, for example, Borjas, G.J. (2010), <u>Labor Economics</u>, Fifth Edition, McGraw-Hill/Irwin or Kaufman, B.E. and J.L. Hotchkiss (2006), <u>The Economics of</u> <u>Labor Markets</u>, Seventh Edition, Thomson South-Western.

⁸ For instance, Rubinstein and Weiss (2006, p. 39) summarize the near universality of this approach, stating: "Huge research effort, based on twin data, natural experiments, and using variety of instrumental variables methods has tried to identify the causal effect of schooling. These studies generally follow Becker's scheme and assume that the individual level of schooling is determined by equating the marginal lifetime benefits of schooling with the marginal costs of financing it." See Rubinstein, Y. and Y. Weiss (2006), "Post Schooling Wage Growth: Investment, Search, and Learning," in E. Hanushek and F. Welch (eds.) *Handbook of the Economics of Education*, Vol. 1, Elsevier B.V.



Figure 4. Classical Model of Educational Investments

In the figure, several simplifying assumptions are made purely for expository purposes. First, all workers are assumed to retire at age 65. Second, wages are assumed to be fixed over one's lifetime within each education group. Third, individuals are assumed to undertake the postsecondary investment immediately following high school. None of these simplifications alters the fundamental implications discussed below.

The model makes it clear that the benefits to the investment are given by the area between the solid red and black lines, from age 18+T until retirement. The costs are reflected by the area between the solid black and red lines, from age 18 until 18+T. If the discounted present value of the former is greater than the discounted present value of the latter, it is optimal for an individual to undertake the investment. Notice that it will be considerable time before the benefits will exceed the costs according to figure 4. By focusing only on short time horizons, the NPRM does not account for this reality.

The proposed rules do not evaluate the "gainfulness" of programs by comparing the costs and benefits depicted in figure 4. Instead, the proposed metric uses annual debt-to-earnings ratios for students no more than six years removed from the program and in most cases only three years removed from completion. Using the Department of Education's assumed ten-year window on loan repayments, this is equivalent to (i) computing the *ratio* of the area in the red rectangle to the area in the purple rectangle in figure 5 during each year within this time horizon and (ii) comparing this ratio to an *arbitrary* threshold. The red rectangle depicts one-tenth of the monetary costs of the postsecondary investment; the purple rectangle depicts annual earnings with the investment.



Figure 5. Illustration of Proposed Debt-to-Earnings Rule

The proposed debt-to-earnings measure is vastly different from the common sense, economic measure of the returns to an investment in postsecondary education depicted in figure 4. Among other differences, the costs of the investments are incurred over a much shorter window than that over which the benefits are reaped; see chart F in the NPRM (75 Fed. Reg. at 43,666). Thus, comparing one year of costs to one year of returns biases the measure against a finding of gainfulness.

It is important to realize that this bias occurs even assuming that the income gap between postsecondary schooling and only a high school degree remains constant over the lifecycle. In the NPRM, the fact that average differences in income across educational groups are roughly constant over the lifecycle is used to justify the proposed measures focus on only the first six years (see 75 Fed. Reg. at 43,666). However, the fact that the gaps are *constant* is not relevant; the relevant fact is that the gap is *strictly positive* even after six years has elapsed. While the income gaps are nearly constant over the lifecycle, that they are *not zero* implies the existence of benefits to educational investment over a worker's *entire* lifetime.

Beyond the flawed economic rationale for the proposed debt-to-earnings measure, there are other significant issues with the proposed measure based on the annual debt-to-earnings ratio.

1. Validity of Income Measure. The proposed rules call for income to be obtained from the Social Security Administration. This measure of income will miss many of the benefits implicitly incorporated into w_{PS} in the economic model discussed above (see figure 4). First, reported income will not reflect pre-tax deductions such as health insurance, dependent care allocations, contributions to health expenditure accounts, and contributions to retirement accounts. Second, reported income is notoriously unreliable as a measure of earnings for individuals who are self-employed. For example, Pissarides and

Weber analyze UK tax data and find that reported self-employed income must be multiplied by 1.55 to yield an accurate measure of earnings.⁹ In a U.S. context, Eisenhauer (2008, p. 59) writes: "[B]ecause there is no third-party withholding of their income tax, the self-employed clearly have ample opportunity to evade, especially in light of the low audit probabilities they face."¹⁰ A 1994 GAO report concludes that while sole proprietors account for 13 percent of individual tax payers, they account for 40 percent of the total underreported income in the U.S.¹¹ This is particularly problematic for the current proposed rules because empirical evidence indicates that individuals with some college education or a two-year degree are the most likely to be self-employed. The proposal makes no adjustments for these realities.

2. *Failure to Account for the Full Private Returns to Education*. The U.S. Bureau of Labor Statistics finds that between 30 and 35 percent of a worker's total compensation is derived from fringe benefits.¹² Moreover, economists have long recognized that individuals investing in higher education earn greater fringe benefits such as contributions to retirement accounts, subsidized insurance, paid vacations, etc.¹³ As a result, the proposed debt-to-earnings ratio ignores a sizeable component of the private returns to education. Haveman and Wolfe (1984, p. 377) warned long ago that such omissions dramatically undervalue the private returns to education:

Standard estimates of the economic value of additional schooling, based on earnings differences associated with differences in the level of schooling attained, cover only a portion of the total effects of education that are valued by citizens. We first identify a catalog of nonmarketed effects, many of which have been recently studied by economists, and then propose a procedure for estimating a willingness-to-pay value for these effects. Using empirical estimates of the magnitude of a selection of these effects found in the literature, we calculate willingness-to-pay values using our proposed procedure. These illustrative calculations suggest that standard estimates of the benefit of incremental schooling substantially understate the full value of such investments.

Moreover, the "full value" of investments in education must also account for the significantly greater employment stability enjoyed by those with higher education. For example, the most recent U.S. Bureau of Labor Statistics data finds individuals with an associate degree had an unemployment rate two percentage points lower than those with only a high school diploma (7.7 percent versus 9.7 percent) in August 2010; for individuals with a bachelor's degree or higher, the unemployment rate was only 5.0 percent in August 2010.¹⁴

3. *Failure to Account for the Social Returns to Education*. Economists have long recognized the fact that an individual's decision to invest in one's own schooling yields benefits to the rest of society. Such external benefits arise from a number of sources, but perhaps the most relevant and immediately felt are the facts that better educated individuals earn higher wages, are more likely to work full-time, and have more stable employment. As a result, taxes paid by individuals increase significantly with

⁹ Pissarides, C.A. and G. Weber (1989), "An Expenditure-Based Estimate of Britain's Black Economy," Journal of Public Economics, 39, 17-32.

¹⁰ Eisenhauer, J.G. (2008), "Ethical Preferences, Risk Aversion, and Taxpayer Behavior," *Journal of Socio-Economics*, 37, 45-63.

¹¹ U.S. General Accounting Office (1994), Tax Administration: IRS Can Better Pursue Noncompliant Sole Proprietors, GAO/GGD-94-175.

¹² See <u>http://www.bls.gov/news.release/pdf/ecec.pdf</u>.

¹³ See, e.g., Smeeding, T. (1983), "The Size Distribution of Wage and Nonwage Compensation: Employer Cost versus Employee Value." In J. Triplett (ed.) <u>The Measurement of Labor Cost</u>, University of Chicago Press; Lucas, R.E.B. (1977), "Hedonic Wage Equations and Psychic Wages in the Returns to Schooling," *American Economic Review*, 67, 549-558; Duncan, G.J. (1976), "Earnings Functions and Nonpecuniary Benefits." *Journal of Human Resources*, 11, 464-483; Haveman, R.H. and B.L. Wolfe (1984), "Schooling and Economic Well-Being: The Role of Nonmarket Effects," *Journal of Human Resources*, 19, 377-407; Wolfe, B.L. and R.H. Haveman (2003), "Social and Nonmarket Benefits from Education in an Advanced Economy," in Y. Kodrzycki, (ed.) *Education in the 21st Century: Meeting the Challenges of a Changing World*, Boston: Federal Reserve Bank of Boston, 2003.

¹⁴ See ftp://ftp.bls.gov/pub/suppl/empsit.cpseea17.txt.

education. Moreover, as a further consequence of higher earnings and more stable employment, better educated workers are less likely to rely on government transfers (e.g., welfare, food stamps, subsidized school meals for children) and less likely to engage in criminal behavior.

4. *Failure to Account for Uncertainty.* The model presented in figure 4 ignores the fact that lifetime earnings with and without the investment are unknown at the time an individual is deciding whether to undertake an educational investment. Thus, individuals must compare the *expected* benefits of the investment to the *expected* costs (which are also uncertain – though roughly calculated – since they depend on a variable interest rate) to decide if it is optimal to undertake an investment in postsecondary education. The proposed rules likewise ignore this uncertainty. The proposal will (attempt to) determine whether an investment decision was sound – and thus resulted in something the Department of Education purports to call "gainful employment" - by comparing realized costs with (a portion of) *realized* benefits. As a result, it should be clear that investments that were warranted at the time an enrollment decision was made, based on the best possible forecasts of future benefits and costs, may be viewed unfavorably in hindsight if realizations differ significantly from expectations. In other words, if the *ex post* costs and benefits differ from the *ex ante* costs and benefits, an education program that was a wise investment at the time the decision was made may not yield immediate employment despite the program having prepared the student for "gainful employment" in a recognized occupation. Such deviations may occur, for example, due to adverse and unexpected changes in macroeconomic conditions, individual health, family circumstances, or from a host of other unexpected "shocks" to an individual's earnings capabilities, not to mention changes in technology, trade policy, or other aspects of the labor market that lead to changes in demand for workers with particular skill sets. It should be obvious that none of these events speaks to program quality.

For instance, let us focus on just one aspect of uncertainty: future labor demand. Shellenbarger (2010) summarizes the difficulty in forecasting future demand for workers with particular skills.¹⁵ She notes that even the Department of Labor's "Occupational Outlook Handbook," which forecasts the hot jobs over the coming decade, can lead students astray. She writes:

The forecasts have limitations. The Labor Department's macroeconomic model works on two noteworthy assumptions—that the economy will rebound to long-term growth and that there won't be any more big shocks like the 2007-2008 recession. Thus its forecasts don't predict the big job-market swings or sudden changes in the supply of workers that can easily happen in a volatile economy.

That means you could pick a job from the Labor Department's 'fastest-growing' list when you enter college, only to find the field in a slump by the time you graduate. For example, a 2006 high-school graduate eyeing the government's 2004-2014 forecast for nursing at that time would have read about excellent job prospects, with 'thousands of job openings' predicted because experienced nurses were expected to retire.

While that forecast is likely to hold for the long term, the job market for students graduating from college this year is headed in the opposite direction: Thousands of experienced nurses who had been inactive or retired have been re-entering the work force because of the recession.

Similarly, a high-school grad in 2000 might have picked computer programming—No. 8 at the time on a government list of fast-growing, high-paying jobs—only to graduate to the aftermath of the dot-com collapse.

¹⁵ Shellenbarger, S., "What Will Be the Hot Jobs of 2018?" *Wall Street Journal*, May 26. Accessed online at:

 $[\]underline{http://online.wsj.com/article/SB10001424052748704026204575266342935418962. \underline{html?KEYWORDS=hot+jobs+of+2018.}$

And finally, no economic model can forecast growth in jobs that are still evolving. While the government's latest handbook contains a supplement on 'green occupations' in emerging industries such as biofuels and wind energy, it has no data on many of the jobs these industries are creating, such as fuel-cell technologists.

'Right now, all the projections we have are about a world that existed' in the past, says David Passmore, director of The Pennsylvania State University's Institute for Research in Training & Development. 'We are sitting on the precipice of the next big transformation' in energy production, 'and no one in the occupational-projections area knows how to handle that.'

Underscoring this point, Lacey and Wright (2009, p. 98) state:

In projecting occupational growth and decline, BLS makes assumptions about the size and makeup of the labor force, the size of the economy, demand for goods and services, and other factors that affect levels of employment. Changes in laws, business and consumer preferences, and technology may alter the BLS projections over time.¹⁶

Despite the difficulty in forecasting future labor demand, the proposed metrics concerning "gainful employment" do not allow such uncertainty. Thus, educational programs will be penalized based on the current labor market situation for graduates. This is especially problematic if the long-term employment prospects in a profession exceed current employment prospects. For example, despite the current labor market for nurses mentioned in the quote above, few would advocate eliminating nursing programs today on the basis of a failure to prepare students for "gainful employment." This perverse consequence of the proposed rules arises from the narrow time horizon upon which the metrics are based.

5. *Arbitrary Usage of Summary Statistics of Distributions*. The proposed measures of debt-toearnings ratios are based on the median annual loan payment of program completers, but average annual earnings of program completers. This inconsistency is discussed briefly, but unsatisfactorily in the NPRM (75 Fed. Reg. at 43,667). We are of the firm conviction that the proposed rules are explicitly designed to have the most adverse impact on the for-profit industry. Support for this conclusion is provided in Figures A-1 and A-2 in the NPRM (75 Fed. Reg. at 43,647-50). In these tables, there is little difference in mean and median debt among completers of programs at for-profit institutions, but mean debt is significantly higher than median debt at public and private not-for-profit institutions. For example, in 2007-08 the median federal debt of completers of an undergraduate certificate was \$0, \$0, and \$7,145 for students attending public, not-for-profit, and for-profit institutions, respectively. Average debt, however, was \$2,292, \$5,145, and \$7,317, respectively. Thus, the decision to use median debt has little effect on the "gainfulness" of programs in the for-profit sector, but paints many programs in other sectors in a much more favorable light.

The use of *average* annual earnings of program completers to construct the debt-to-earnings ratios is also problematic in that it ignores other information in the *distribution* of earnings among completers. Specifically, the focus on average earnings ignores the fact that there is substantial variation in earnings even among individuals with the same educational background. Thus, while a particular educational program may appear to not lead to "gainful employment" using average earnings to compute debt-to-earnings ratios, the fact that a meaningful proportion of program completers do succeed in entering "gaining employment" may be obscured by the use of average earnings. The fact that earnings are

¹⁶ Lacey, T.A. and B. Wright (2009), "Occupational Employment Projections to 2018," Monthly Labor Review, 82, 82-123.

highly variable (and that this variability has increased over time) even *within* education levels – referred to by economists as within-group inequality – has been consistently documented by labor economists.¹⁷

To be precise, our objection here is not that the use of median versus mean is better or worse when measuring debt or earnings, but rather that the inconsistent usage of the two appears to be for the sole benefit of having the largest adverse effect of the for-profit sector. Moreover, *any* metric that uses only a single statistic to summarize a vast distribution of outcomes – whether that statistic is the mean or the median – obscures the diversity in student experiences and outcomes, thereby judging the quality of programs on the basis of insufficient information.

6. *Arbitrary Definition of the Appropriate Sample of Students.* The proposed debt-to-earnings ratios are based on average income for all program completers regardless of whether they use loans to cover the costs of the program. However, students incurring debt and those not incurring debt in order to attend a program do not constitute a homogeneous group. Obviously, they differ in the fact that one group can afford the costs of the program without resorting to loans. More importantly for the proposed rules, students not incurring debt to attend a program may be enrolled in the program for self-fulfillment and not its earnings potential. As a result, these individuals may not seek employment upon completion of the program. If a sufficient number of non-borrowers are included in a sample, the outcome will biased toward a determination of "non-gainful employment." Further study should be carried out to determine the implications of aggregating borrowers and non-borrowers in the determination of "gainful employment."

7. *Arbitrary Inclusion of Private Loans.* The proposed debt-to-earnings ratios measure debt as inclusive of both private and public loans to students. The fact that private institutions are willing to loan money to students to cover (a portion of) the costs of the program reveals valuable information about the "gainfulness" of the educational investment as determined by the private sector. The proposed metric ignores this market signal. Indeed, it arguable turns a clear market signal that a program does prepare students for gainful employment into an indication that the program does not do so.

The discussion to this point has focused on the proposed debt-to-earnings measure of "gainful employment." The measure based on repayment rates is equally, if not more, troubling. As with the debt-to-earnings measure, there are several issues with the proposed measure.

1. *Repayment Rates Depend on a Multitude of Factors.* Repayment rates reflect not just earnings or employment or, better yet, "gainful employment," but also other sources of income that are independent of program quality such as family wealth, marital status and spousal attributes, etc. In addition, repayment rates have been shown to depend on personal attributes and post-graduation life-style choices that have little to do with the economic value of the educational investment. The crucial point is that these other factors have enormous influence on repayment rates, yet institutions have no control over them.

The NPRM addresses this point by citing the study by Guryan and Thompson (2010) and interpreting the results from this study as finding that "only about half of the difference in defaults could be explained by student characteristics" (75 Fed. Reg. at 43,654).¹⁸ This interpretation is *incorrect*. The *correct* interpretation is that the few observable student attributes included in the analysis –

¹⁷ See, e.g., Couch, K.A. and M. Daly (2004), "The Improving Relative Status of Black Men," *Journal of Income Distribution* (Fall-Winter 2003-2004), 56-78.

¹⁸ Guryan, J. and M. Thompson (2010), "Report on Gainful Employment: An Executive Summary," Charles River Associates, March 29.

race/ethnicity, gender, program persistence and completion status, Pell Grant receipt, family welfare receipt, parent or own income, and dependency status – explain about half of the difference in default rates. A host of *other* student attributes – that have nothing to do with the quality of the educational program attended – are not included in the analysis and could possibly explain much of the remaining difference in default rates. Examples include student attributes such as age at matriculation, marital status, number of children, prior employment history, prior educational background, work ethic, determination, responsibility, computer skills, communication skills, immigration status, English language proficiency, parents' educational background, etc. that are not included in the authors' multivariate analysis.

For example, while not included in their regression analysis, Guryan and Thompson (2010) document significant differences in age at matriculation, the percentage of single parents, and parents' educational background of students entering various types of institutions. See figures 6, 7, and 8.



Figure 6. Average Age at Which Students First Enroll in Postsecondary Education, 2008

Source: Guryan and Thompson (2010). Original data from the National Postsecondary Student Aid Study, 2008.

However, even ignoring these other student attributes that may differ across students at for-profit and public/private not-for-profit schools and that very well may explain additional differences in default rates, the fact that even *half* of the difference in defaults (and *more than half* of the total number of defaults of students from for-profit institutions) can be attributable to student attributes in the study by Guryan and Thompson (2010) implies that the proposed "gainful employment" rules based on repayment rates are largely determined by factors beyond the control of institutions of higher education. If loan repayment behavior is largely driven by factors beyond schools' control, how can loan repayment be considered a valid measure of "gainful employment"?



Figure 7. Percent of Students Who Were Single Parents Prior to Matriculation, 2008

Source: Guryan and Thompson (2010). Original data from the National Postsecondary Student Aid Study, 2008.



Figure 8. Percent of Students Whose Parents Attended at Least Some College, 2008

Source: Guryan and Thompson (2010). Original data from the National Postsecondary Student Aid Study, 2008.

Given the importance of the findings in Guryan and Thompson (2010) in evaluating the proposed "gainful employment" regulation, similar evidence from other studies would be comforting. Fortunately, Guryan and Thompson's (2010) findings are not unique; the predictive power of student attributes in statistical analyses of loan defaults has been documented for several decades. Knapp and Seaks (1992) analyze default rates on federal student loans, concluding that student attributes swamped institutional attributes in terms of importance in explaining defaults. The authors (p. 404) state:

Based on a probit model of default for two thousand guaranteed student loans, we find that individual characteristics (including parents' income, presence of two parents at home, student's graduation, and student's race) have a significant impact on default rates, while institutional characteristics (four year vs. two year college, private vs. public, school size, and individual school dummies) have little significant effect. The results imply that proposals to penalize colleges with 'high' default rates are premature.¹⁹

Volkwein and Szelest (1995) combine data from three national databases, concluding:

Our findings erode the basis for current national policies and proposed SPRE legislation that hold institutions accountable for the loan defaults of former students. Loan repayment and default behavior can be substantially predicted by the precollege, college, and postcollege characteristics of individual borrowers . . . In both populations (all borrowers and proprietary), we find virtually no evidence of a direct link between default behavior and type of institution or higher degree offered.²⁰

In a subsequent study, Volkwein et al. (1998) explore more deeply differences in student loan default rates across racial groups. Again, the authors (p. 224-5) find little role for institutional characteristics in explaining these differences:

Despite the demise of in loco parentis, colleges and universities are widely believed to exert considerable influence on the personal actions of their students, not only while the students are on campus pursuing their degree programs, but also after they cease attending the institution and leave the campus. Current student loan policy and national legislation is based substantially on this belief [W]e find only modest evidence that type of institution attended has an impact on student loan default. Rather, the effects of institution type appear to be outweighed by the level of degree earned by the borrower. Indeed, the small impact of institution type appears important only for White borrowers, but not for Blacks or Hispanics or other minorities . . . [B]orrowers in every racial and ethnic group who have similar earned degrees, marital status, and family size exhibit almost identical records of earned income and loan repayment. The borrower's socioeconomic status, type of institution attended, grades earned, and choice of major appear to be less important than whether he or she has completed a degree, is married or single, and has dependent children or not. Blacks and Hispanics in this study, compared to Whites, have lower levels of degree attainment, lower levels of academic achievement, almost twice the number of dependent children, and almost twice the rate of separation and divorce. These circumstances, rather than race/ethnicity, appear to be the reasons for their repayment and default behaviors.²¹

¹⁹ Knapp, L.G. and T.G. Seaks (1992), "An Analysis of the Probability of Default on Federally Guaranteed Student Loans," *Review of Economics and Statistics*, 74, 404-411.

²⁰ Volkwein, J.F. and B.P. Szelest (1995), "Individual and Campus Characteristics Associated with Student Loan Default," *Research in Higher Education*, 36, 41-72.

²¹ Volkwein, J.F., B.P. Szelest, A.F. Cabrera, and M.R. Napierski-Prancl (1998), "Factors Associated with Student Loan Default Among Different Racial and Ethnic Groups," *The Journal of Higher Education*, 69, 206-237.

In line with these findings, Flint (1997) provides an in-depth review of studies conducted to that time.²² The author finds that many studies *fail* to find any effect of postcollege income on the probability of default. *Thus, the very premise of the proposed use of default rates to measure the quality of educational programs is flawed given the, at best, tenuous link between postsecondary earnings and repayment rates.*

Moreover, the author (p. 342-3) performs his own analysis of default, and finds:

Though student background characteristics are strongly related to default, very little additional predictive success is contributed by any of the blocks of variables entered after student background characteristics . . . Two blocks of variables make no significant contribution to the performance of the model: institutional choice and exit counseling characteristics. Thus, none of the variables within those blocks – including institutional sector, selectivity, enrollment, exit counseling sources and timing, or repayment support from others – contributes to the prediction of these default cases.

In sum, a number of studies have assessed the relative importance of student versus institutional attributes on default rates. The totality of the evidence indicates that student characteristics swamp institutional variables in terms of predictive power

2. *Failure to Account for Post-Default Repayment.* Volkwein et al. (1998) find that two-thirds of students who defaulted on their student loan in the 1987 National Postsecondary Student Aid Study resumed payments on their loans, and almost one-third had completely repaid the loan.²³ This astounding fact implies that reaching firm conclusions on the quality of educational programs based on default rates at a particular point in time is premature and unwarranted. As suggested in the model depicted in figure 3, only a long-term (preferably lifetime) perspective is capable of properly assessing the merits of educational investments.

3. *Failure to Account for Uncertainty*. As in the preceding discussion regarding the flaws in the debt-to-earnings ratio, investments in education are undertaken despite the fact that future benefits (due to economy-wide shocks and individual-specific shocks) and costs (due to variable interest rates) are uncertain. While the decision to undertake an investment may be optimal at the time the decision was made, as with any investment, there is risk. As a result, default may occur due to unforeseen "shocks" (e.g., recession, poor health, changes in family circumstances, changes in characteristics of the labor market, etc.) despite the educational program being sound. The proposed measure based on default rates, however, penalizes institutions on the basis of hindsight.

In sum, the proposed "gainful employment" rules are deeply flawed. Most importantly, they do not measure the realized economic costs and benefits of educational investments, and they especially do not measure the expected economic costs and benefits of educational investments at the time enrollment decisions are made. They possess very little connection to whether students have secured, or more importantly whether they have been prepared to secure, gainful employment in a recognized occupation.

VI. PROPOSED DEFINITION OF GAINFUL EMPLOYMENT WILL HAVE UNINTENDED CONSEQUENCES

²² Flint, T.A. (1997), "Predicting Student Loan Defaults," The Journal of higher Education, 68, 322-354.

²³ Volkwein, J.F., B.P. Szelest, A.F. Cabrera, and M.R. Napierski-Prancl (1998), "Factors Associated with Student Loan Default Among Different Racial and Ethnic Groups," *The Journal of Higher Education*, 69, 206-237.

Many of the goals of the proposed rules are laudable. However, any change in the rules must consider the incentives created. Edward Glaeser, an economics professor at Harvard University, recently echoed this sentiment:

Perhaps the single most important policy-related insight in economics is that changes in policies lead to behavioral responses . . . [I]nterventions that create an offsetting behavioral response can push the world in the wrong direction.²⁴

Unfortunately, the proposed rules are likely to have unintended consequences and "push the world in the wrong direction."

First, the proposal will result in many quality educational programs no longer being eligible for Title IV funding. Programs that are "gainful" in terms of providing combined private and social returns that outweigh the costs will be ruled ineligible for Title IV funds if the "benefits" considered by the proposed rules do not outweigh the "costs" considered by the proposed rules (see figure 5). In addition, as discussed above, the proposed rules judge the "gainfulness" of programs in hindsight, ignoring the fact that programs may have been a wise investment at the time the enrollment decision was made, and are based on arbitrarily chosen single summary statistics of heterogeneous student experiences. Eliminating Title IV eligibility for quality education programs is particularly damaging since it will preclude many individuals from being able to undertake postsecondary education (given the difficulty of switching to public institutions discussed previously). Thus, President Obama's goal of having the highest percentage of college graduates in the world by 2020 will be difficult to obtain if the proposal is implemented.

Second, the proposed rules will have dire consequences for the racial and gender composition of students enrolled in postsecondary programs. As discussed above with respect to determinants of student default rates, the proposed measures of "gainful employment," as flawed as they are, confuse "low quality" programs with financial outcomes of high-risk and nontraditional students that are largely determined by choices and factors that are beyond an institution's control. In the study by Guryan and Thompson (2010) cited in the NPRM, half of the default differential across sectors of higher education is explained by the *small set* of observable student attributes the authors include in their regression analysis. Even stronger evidence is provided in Knapp and Seaks (1992, p. 404), who find that institutional characteristics "have little significant effect."²⁵ In short, individual student characteristics and choices drive default rates. Lowering default rates will therefore require increased institutional focus on individual characteristics that are significant predictors of future repayment rates. Accordingly, the type of efforts institutions might engage in to improve program quality are unlikely to be the same as those that are likely to improve programs' performance on the Department's proposed repayment metric.

Furthermore, the link between the "gainful employment" measures and student attributes is not confined to the repayment metric. Women and minorities have historically earned lower labor market returns to education investments, and women are more likely to exit the labor force for family reasons. Thus, programs with a higher concentration of female and minority students are less likely to meet either of the proposed "gainful employment" measures.

²⁴ See http://economix.blogs.nytimes.com/2010/08/24/when-good-policy-goes-bad/.

²⁵ Knapp, L.G. and T.G. Seaks (1992), "An Analysis of the Probability of Default on Federally Guaranteed Student Loans," *Review of Economics and Statistics*, 74, 404-411.

For instance, Bailey et al. (2004, p. 7) write:

The pattern is unmistakable: Employment outcomes improve as individuals complete more years of education. For example, sub-baccalaureate students are more likely to be employed, work full-time, and have higher pay rates than high school graduates. However, at similar levels of education, men enjoy a clear advantage over women. At the sub-baccalaureate level, nearly 97 percent of men are currently employed whereas 85 percent of women are. In terms of pay rate, sub-baccalaureate men earn \$3 more per hour than women.²⁶

With respect to race, the authors (p. 10) state: "Black men earn on average 38 percent less than white men irrespective of level of education."

More recent data confirms these findings. According to the U.S. Bureau of Labor Statistics ("BLS"), "In 2009, women who were full-time wage and salary workers had median weekly earnings of \$657, or about 80 percent of the \$819 median for their male counterparts."²⁷ In terms of racial differences, the BLS reports:

Hispanics and Blacks have considerably lower earnings than Asians and Whites. In 2009, the median usual weekly earnings of full-time wage and salary workers were \$541 for Hispanics and \$601 for Blacks, compared with \$757 for Whites and \$880 for Asians. The earnings of Black men (\$621) and Hispanic men (\$569) were 65 and 60 percent, respectively, of the earnings of Asian men (\$952). Among women, the median earnings of Black women (\$582) and Hispanic women (\$509) were 75 and 65 percent, respectively, of the earnings of Asian women (\$779). The median earnings for White men and women were 89 and 86 percent of their Asian counterparts in 2009."²⁸

In light of these statistics, institutions are likely to shift the composition of students toward a higher concentration of white males. The adverse effect on college enrollments for minorities is particularly troubling since these groups already significantly lag behind whites. Figure 9 displays trends in college enrollment rates for whites, blacks, and Hispanics age 18-24. The figures indicate that whites are roughly ten percent more likely to attend college than either minority group. Moreover, it was only just recently that the rate of college enrollment exceeded the rate of high school dropouts among Hispanics.

²⁶ Bailey, T., G. Kienzl, and D.E. Marcotte (2004), "The Return to a Sub-Baccalaureate Education: The Effects of Schooling, Credentials, and Program of Study on Economic Outcomes," National Assessment of Vocational Education, U.S. Department of Education.

²⁷ See <u>http://www.bls.gov/cps/cpswom2009.pdf</u>.

²⁸ See <u>http://www.bls.gov/cps/cpsrace2009.pdf</u>.



Figure 9. Percentage of 18-24-Year-Olds by Race and Educational Attainment.

Note: From 2003 onward white refers to those who identified as white alone. Source: U.S. Census Bureau (October Current Population Survey data)

Panel A (Whites)



Note: From 2003 onward black refers to those who identified as black alone. Source: U.S. Census Bureau (October Current Population Survey data)

Panel B (Blacks)



Source: U.S. Census Bureau (October Current Population Survey data).

Panel C (Hispanic)

Source: Fry, R. (2009), "College Enrollment Hits All-Time High, Fueled by Community College Surge," Pew Research Center, October 29.

Finally, as discussed above, the proposed rules are likely to increase income inequality in the U.S. by limiting the postsecondary educational opportunities of individuals due to the displacement of the 16,000 to 30,000 students that will not enroll elsewhere (as conceded in the NPRM) and the 69,000 to 126,000 students that we do not believe will enroll elsewhere (as discussed previously). The resulting increase in the relative supply of workers with only a high school diploma will depress earnings for this group of workers while raising the returns to postsecondary education for those fortunate to obtain such a degree. The consequence will be a reallocation of earnings capabilities from the less educated to the more educated, thereby widening of the rich-poor gap in the U.S.

VII. CONCLUSION

In conclusion, the proposed rules regarding "gainful employment" are flawed on many grounds.

Conceptually, they fail to consider the proper counterfactual when designing the metrics and evaluating the pros and cons of the proposed rules. In terms of the metrics, "gainfulness," even assuming it can be properly measured by repayment and debt-related statistics, is not measured in the NPRM based on a complete characterization of the costs and benefits to not only the student, but also society, over a student's lifetime. In terms of the costs and benefits of the proposed rules, many salient factors are ignored. First, the tax ramifications are not based on a complete assessment of the tax receipts collected under the status quo versus what they would be under the proposed rules. In particular, the tax implications of a reduction in for-profit institutions, an increase in enrollment in public institutions (if displaced students are, in fact, served by public institutions), and a decrease in employment prospects for individuals who fail to undertake postsecondary investments are ignored. Second, the impact of the proposed rules on the composition of the student body in postsecondary institutions is not assessed. Finally, the effect of the proposed rules on the distribution of income is ignored. While the effects of an

increase in the supply of credentialed workers are discussed, there is no evidence of any over-supply of such workers, and even if there were, the proposal fails to address the ramifications of addressing any such over-supply for non-credentialed workers.

Aside from conceptual issues, the proposed rules are inefficient and likely to have unintended consequences. First, the proposed rules discriminate against the for-profit sector and certain other programs, are needlessly complex, and are burdensome to the industry and the government. In essence, the proposed rules attempt to reinvent the wheel, but manage only an inferior version. What is the wheel that currently exists to achieve the goals the Department of Education seeks? Accreditation. This is the most efficient and direct means to ensure that consumers are protected from "sham" programs. If the Department of Education is worried that accreditation is not adequately monitoring the quality of programs, regulations should focus on improving the accreditation process. Proposing new metrics that are, at best, tangentially related to program quality, as well as costly to compute, is a poor use of public resources.

Second, due to the fact that the metrics are tangentially related to program quality, the proposed rules will eliminate many quality educational programs. This, at best, weak relationship between the proposed measures arises from the failure of the Department to account for the wide range of student experiences after completing schooling, the impact of a whole host of student attributes on repayment rates, and the effects of volatility and uncertainty in labor demand.

Finally, the proposed rules will fundamentally alter the composition of students undertaking postsecondary investments. Women and minorities, groups that have made enormous strides in enrollment over the past several decades, would suffer disproportionately as a result of the proposed changes due to their lower labor force participation rates and returns to education.

Thank you.

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September 9, 2010 New York City, NY