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Selling a Better Future for Profit: Examining the Prospects of “Good Jobs” for Graduates of For-Profit Colleges

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Introduction

The proportion of the US population that attends college has grown exponentially since the middle of the 20th Century. Particularly in the most recent thirty years (NCES 2014). This great expansion in the US higher education system can partly be attributed to the rise of for-profit colleges and universities (FPCUs from this point forward) over the past few decades (Blumenstyke 2011; Deming, Goldin and Katz 2012; Beaver 2009). FPCUs have been present in the US system of higher education since before the US itself was a country (Beaver 2009); But given that these FPCUs historically focused on narrow vocational skills training and not liberal arts education, they did not compete with more traditional non-profit and public institutions for most of their existence. However, in the 1990s and 2000s, FPCUs became competitors of traditional colleges and universities (TCUs from this point forward) in the market for 2-year degrees by offering traditional educational programs and seeking regional accreditation (Morey 2004).

FPCUs typically seek out and enroll students who are underrepresented in traditional higher education. Specifically, racial minorities and first-generation college students. Women are also more likely to enroll at FPCUs (Hentschke, Lechuga, and Tierney 2010, Ruch 2001, Beaver 2009, Center for Analysis of Postsecondary Education and Employment 2013). Even though most historically Black colleges and universities (HBCUs) are TCUs, the for-profit sector of higher education still enrolls a greater proportion of Black students and other students of color than traditional higher education (NCES, 2014). FPCUs are often effective at enrolling their target demographics by conducting to “working adults” who are older than traditional college age. Racial minorities, first-generation college students, and women are all more likely to enroll in college later in life (NCES, 2014), and FPCUs frequently offer features like wholly online degrees, work experience-based credit, and lax policies on continuous enrollment to cater to the lives of working adults (Ruch 2011, Beaver 2009). FPCUs have recently become viable competition for American community colleges, the other segment of higher education that specializes in granting two-year degrees and serving a more diverse, older demographic (Deming, Goldin, and Katz 2012; Center for Analysis of Postsecondary Education and Employment 2013). Though there has been significant growth for community colleges and for-profit colleges alike as associate’s degree conferral grew 38% in merely the five year span from 2008 to 2013. The degrees have proven a good investment, as associate’s degree holders generally can expected to make more than \$10,000 per year more than their state’s median per-capita income (Schneider 2015).

Supporters of FPCUs argue that these schools provide credentials and skills to at-risk and underserved populations that will help their chances in the labor market. Opponents see FPCUs as status reproducers that take advantage of at-risk

subgroups and saddle them with high amounts of student loan debt without providing a quality education or decent career prospects (Beaver 2009; Cellinni and Chaudhary 2014; Chung 2008; Morey 2004). While the debate surrounding for-profit colleges comes to a head in public discourse (especially on Capitol Hill) due to allegations of fraud and growing student debt and default rates, Cellini and Chaudhary (2014) pose that both sides of the debate over these schools rely heavily on anecdotal evidence and simple cross-institutional comparisons to make their arguments. The paucity of research on FPCUs is due in part to the sudden expansion of these schools (Beaver 2009) and data availability constraints (Kinser 2006).

The research that does exist demonstrates that FPCUs graduates typically can expect to earn less once they enter the job market (Chung 2012; Deming, Goldin and Katz 2011; Lang and Weinstein 2012) and have higher unemployment rates (Deming, Goldin and Katz 2011) than their more traditional non-profit counterparts. FPCU graduates are also demonstrated to be more likely to default on their federal student loans and carry a greater amount of aggregate student debt after graduation (Deming, Goldin, & Katz 2012; Shinoda 2014; National Center for Education Statistics 2014) than their traditional counterparts. What is absent in the literature is an analysis of the indicators of overall job quality between FPCU and TCUs graduates. This research intends to build on the previously established literature regarding FPCU graduate employment outcomes by examining previously unexplored, more nuanced indicators of job quality for these graduates.

Review of Literature: The Controversial Rise of For-Profit Colleges and Universities

The for-profit sector of higher education has seen exponential growth over the past three decades (Beaver 2009, Ruch 2001, Deming, Goldin, & Katz 2012). By 2005, one in ten college students enrolled in the United States attended a college or university that operated on a for-profit basis (Blumenstyk 2005). This growth coincides with overall college enrollments spiking by 32% from 2001 to 2011 (NCES 2013). Daniel Bell (1976) argued that the post-industrial economy we live in today demands more and more workers who are highly skilled and educated. Conversely, he posed that the low proportion of college educated workers in the United States would be insufficient to meet the needs of the evolving postindustrial economy we see today. The manufacturing sector would be gradually replaced by a rising professional class of highly skilled workers. With Bell's framing of the economy in mind, the growth of FPCUs can be viewed as one mechanism for growing an educated work force while improving the standard of living for the underclass. The neo-liberal policy makers that have both cheered and aided the rise of FPCUs have generally espoused a post-industrial economic narrative similar to that of Bell's (Beaver 2009). As previously noted, FPCUs typically enroll students who are "non-traditional" college students, meaning they are older, lower-SES, and

more racially diverse than average college students. Proponents of FPCUs claim that these schools educate portions of the population that historically have not attended college – providing them with tools to participate in a 21st century knowledge-based economy that demands a greater percentage of the workforce be college educated (Hentschke, Lechuga, Tierney 2010, Ruch 2001, Beaver, 2009, Center for Analysis of Postsecondary Education and Employment 2013). This rhetoric does intellectually fit with contemporary evidence that employers are increasingly demanding employees be college educated (Sigelman 2014; Jankowski, Hutching, Ewell, Kinzie, & Kuh 2013).

Despite the rapid growth these universities have seen and the countless more Americans they have brought into the fold of the higher education, their success has not been universally lauded. For-profit colleges and universities have been a frequent source of controversy as many scholars, progressive law-makers, and other social commentators have claimed the value of the education they provide is questionable, as is the prospects of upward social mobility for their graduates. (Deming, Goldin, & Katz 2012, Beaver 2009, Kinser 2007). A disproportionate number of their former students default on federal student loans compared to what is typically seen from TCU graduates (Deming, Goldin, & Katz 2012; Shinoda 2014; NCES, 2014). The high defaults rates have been said to be the result of few quality job prospects for FPCU graduates (Deming, Goldin, & Katz 2012; Lang & Weinstein 2012), the schools themselves enrolling students who are not prepared or able to succeed academically (Shinoda 2014), and an overall poor quality of education provided at these schools (Kinser 2007; Ruch 2001; Beaver 2009; Deming, Goldin, Katz 2012). It has been demonstrated that once they enter the job market, FPCU graduates can typically expect to earn less than graduates of a more traditional institution (Chung 2012; Deming, Goldin and Katz 2011; Lang and Weinstein 2012).

Burton Clark (1960) saw a substantial schism in the dynamics of all democratic societies. Modern democracies have become increasingly predicated on an egalitarian ideology that prizes open access and advancement based on merit, but in practice social origin dictates social mobility and placement. Widespread acceptance of the liberal idea of meritocracy is a prerequisite of a functioning modern democratic society, but this ideology in most ways does not reflect the inherent reality of class structure and social mobility in such a society. To put it simply: democratic societies including the United States are nowhere near the meritocracies they are commonly thought to be by their citizens, but maintaining that delusion is essential for people to accept the class structure's legitimacy. While Burton Clark did not live to write extensively about the explosion of for-profit higher education in the United States, it is our contention that his theory concerning the hidden “cooling out” function higher education is directly applicable to this phenomenon.

The cooling out theory of higher education poses that colleges that have a non-selective “open-door” policy, as is the case for the vast majority of for-profit schools (Hentschke, Lechuga, & Tierney 2010; Ruch 2001), actually feeds off of the desire of low-SES students to move up the economic ladder. These students are under the impression that obtaining a degree, even from a for-profit institution, will provide them credentials that will improve their chances to succeed in the US market economy. However, what these students actually get is a degree that has little real-world value and leads to poor outcomes in the job market. The whole process is what Burton Clark described as “cooling out” of student expectations, as student are led to believe they were given a shot, they just did not make the most of it. This argument aligns with the findings from the work of Denning, Goldin, and Katz (2012) and Lang and Weinstein (2012) that demonstrates that FPCU graduates receive lower pay and have higher student debt than TCU graduates in the year immediately after graduation. These kind of poor employment outcomes combined with the traditionally low-SES populations FPCUs serve, could be considered evidence of such a cooling out function at these schools.

Purpose: Examining Indicators of Job Quality

While debate persists about the overall function of FPCUs and whether they may meet the needs of an emerging postmodern economy, the contemporary discussion in the media and among legislators continues to revolve around the low wages and high student debt that follow graduates from these institutions (Denning, Goldin, and Katz 2012). If looking solely at wages and debt, the narrative supports Clark’s theoretical framework. This narrative suggests that FPCUs reproduce inequality by either placing graduates into “bad” jobs where economic success is limited or by decreasing their odds of obtaining a job altogether. However, there are aspects of jobs, beyond wages, that impact the worker experience that need to be considered before concluding that jobs associated with FPCU graduation are definitely bad for those who enroll. Regardless of the debate occurring nationally and the connection with low wages and high debt, these schools continue to enroll large numbers students with the promise of social mobility.

Thus, the purpose of this research is to assess the impact of FPCUs on other non-economic indicators of job experience. While we reassess the impact of FPCUs on wages and student debt, we focus primarily on 1) benefits, including health insurance, and pension benefits, 2) relevance of degree earned to the respondent’s job, and 3) overall satisfaction with various elements of a college graduate’s job. Kalleberg, Reskin, Hudson (2000) pose that “bad” jobs are characterized by more than just low wages. Bad jobs also limit access of the vital benefits and lack key features that ensure worker satisfaction. Accordingly, before we can define jobs obtained by FPCU graduates as “bad,” a more thorough understanding of these jobs and what they offer is required.

Over the course of the previous two decades, there have been a litany of studies which show that having a job relevant to one's college degree is associated with both increased income and greater overall job satisfaction (Holland 1997; Robst 2007, Wolniak and Pascarella 2005). Much of this research is rooted in the conceptual framework of "person-job fit." Person-job fit, as described by Edwards (1991), is the congruency between an individual's skills, abilities, and knowledge with the demands of their job. Given the established link between person-job fit and job satisfaction and the fact that job satisfaction has been shown to be a major predictor of overall life satisfaction (Lent & Brown 2008), person-job fit can be viewed a key value to be pursued in any modern labor market. As well, various authors (Wallraven 2009; Dekker, Barling, and Kelloway 1996; Witte 2004) also find both material benefits like life insurance, health insurance, and unemployment insurance along with intangible benefits such as personal and professional autonomy also significantly impact overall job satisfaction. In other words, workers will sacrifice pay if it means more peace of mind, time off, or the ability to take part in decisions at the work place. These results aligning with the common-sense notion that people enjoy both a safety net and significant degree of control over their work and home life.

While there is not a universally agreed upon definition of holistic job quality, there is consensus across disciplines that it is a multi-dimensional concept that extends well beyond just monetary income (Warhurst, Carre, Findlay, & Tilly 2012). Despite this, the majority of studies claiming to explore overall job quality are disproportionately reliant on easily quantifiable indicators related to pay (Clark 2005). Warhurst, Carre, Findlay, and Tilly (2012) identified some of the more holistic factors that have contributed to previous research on job quality. These factors include, "labour contract type, job security, training and progression opportunities, employee voice and social dialogue, task discretion, management style, fairness, working hours flexibility, and work-life balance" (p. 7). Pay may not even be the most important element of job quality. Sutherland (2011) found a litany of job characteristics that respondents ranked as more important than overall pay when it came to determining job quality. These include: job security, the ability to utilize their abilities, personal autonomy in work, and doing forms of work that they find enjoyable.

Comparative international labor studies have found a substantial degree of inequality in job quality both between and within national borders (Green 2009; McCall 2001). The greatest degree of intra-national disparity in job quality tends to occur in liberal market economies like that of the United States and other countries with limited government intervention in employment practices. Centrally coordinated market economies generally see less inequality between holistic job quality (Crouch 2009).

With that said, the negative outcomes for FPCU graduates related to wages, loan amounts, and default rates may not necessarily reflect in other non-economic metrics and overall levels of job satisfaction. Simply relying on wages and debt load as indicators of “good” or “bad” jobs may obscure other factors that may improve the lived experience of college graduates. In beginning this study, we anticipated that findings of Denning, Goldin, and Katz (2012) on the lower pay and higher debt load of FPCU graduates would be echoed in more nuanced indicators of job quality we would explore. We set out to test three specific hypotheses when comparing FPCU graduates to their TCU counterparts after accounting for their demographic differences:

H₁: FPCU graduates will receive fewer job benefits associated with their post-graduation job.

H₂: FPCU graduates will experience less satisfaction with key elements of their post-graduation job.

H₃: FPCU graduates will find their degree less useful in their post-graduation job.

Methods

This study utilizes longitudinal data to compare short-term career outcomes for students who graduated with an associate’s degree or from a TCU versus those with the same degree from a two-year degree granting FPCU. Bachelor’s degrees were excluded from this research as they only represent a small portion of degrees granted from FPCUs. Bachelor’s degrees comprised less than 10% of total degrees conferred from FPCUs in 2009 (NCES 2014). That figure is too small to meaningfully compete with TCUs in granting bachelor’s degrees or provide a useful sample of bachelor’s degree graduates in the BPS 03/09.

Both bivariate and multivariate analysis was conducted to draw conclusions about respondent job quality that offer a new perspective on the body of research on FPCU graduate professional outcomes. As well, a small collection of outcomes concerning income and student loan debt were also analyzed to compare with what has been published in previous research in the area. The source of data, measures, and analytical strategy for this research is described in detail below.

Data

The data that is being used for analysis is drawn from the restricted-use Beginning Secondary Survey 2003-2009 (BPS: 03/09). The BPS: 03/09 was collected by The National Center for Education Statistics (NCES), a division of the United States Department of Education. The survey examines a target population that consists of students who entered a postsecondary institution of education for the first time in the 2002-2003 academic year in one of the fifty U.S. states, The District of Columbia, or Puerto Rico. To be included, students must have attended an

institution that was eligible to receive federal aid authorized by Title IV of the Higher Education Act. Data was collected on respondents' education and employment during the first six years after they enrolled at a postsecondary institution for the first time. Data was collected on respondents via official transcripts, matching of administrative records, and interviews.

The BPS 03/09 data was the culmination of a three-stage process of data collection that utilized the National Postsecondary Student Aid Survey 2003 (NPSAS: 03) to develop the initial cohort, then subsequently performed follow-ups in 2006 (BPS: 03/06) and 2009 (the aforementioned BPS: 03/09 survey). The NPSAS: 03 drew from a universe that includes all students attending Title IV funded institutions who were "enrolled in either (1) an academic program, (2) at least one course for credit that could be applied toward fulfilling the requirements for an academic degree, or (3) an occupational or vocational program that required at least 3 months or 300 clock hours of instruction to receive a degree, certificate or another formal award." The universe excluded students who were enrolled in high school or a General Educational Development (GED) program at the same time they were also enrolled in courses for postsecondary credit. The final SPSAS: 03 sample, from which the BPS09 sample was drawn, included 101,010 eligible students and obtained data using student interviews, institutional records, and other administrative data sources.

The first follow-up study, the BPS: 03/06, constructed an initial sample that include 23,090 first time beginner (FTB) post-secondary students drawn from the broader SPSAS: 03 sample. The third and final follow up was performed in 2009 to provide a final sample of 18,640 students for the BPS: 03/09 data. Both follow-ups utilized interviews that were broken into four sections. (1) *Enrollment History*: This section established the greater narrative of a student's academic experience including a student's persistence and degree attainment. (2) *Enrollment Characteristics*: This was a section of questions that gathered information on student's experience while enrolled including employment during enrollment, financial aid, major, and life obligations outside of education. This also included questions relevant to student's personal goals for their education and rationale for pursuing their degree. (3) *Employment*. This section gathered data on a student's status of employment, job description, job satisfaction, earnings, and other relevant aspects of a respondent's working life at the time of the 2009 follow-up. (4) *Background*. The survey was administered either in-person, via phone, or online. Each form of interview administration averaged approximately 20 minutes in length to complete. The BPS: 03/09 also was able to collect transcripts from 16,960 of the FTB students who were part of the final sample.

Measures

Type of Institution Attended. In order to be included in the sample for this research, respondents must have completed an associate's degree from a FPCU or

TCU school and been employed by the time of the final 2009 follow-up of the BPS survey. Student who transferred between more than one institution were excluded from the sample, as many of these students had spent time at both types of school. Lastly, TCU students who attended a four-year school were excluded, so results for FPCUs could be compared against 2-year “community” college graduates. These parameters meant the samples differed somewhat from the enrollment demographics at FPCUs and TCUs writ large. Most notably, there were more men in the FPCU sample of only graduates with jobs. Once samples were established through the described criteria, those who graduated from an FPCU were coded a “1” as the treatment group and those who graduated from a TCU were coded “0” as the control group.

Indicators of Job Benefits. All of the indicators of job benefits are simple self-report, binary variables in which the respondent affirms or denies that their current employer provides a given benefit. Respondents were included in this line of questioning if they were employed, but not self-employed. The first variable simply asked if their “current employer provided life insurance” (JBEN09A). The second ask if their current employer “provided medical insurance and/or other health insurance such as dental or vision” (JBEN09B). Lastly, respondents were asked if their current employer “offered retirement or other financial benefits, such as a 401(k)/403(b)” (JBEN09C). For each of these variables, cases were coded 1 to indicate that the respondent did indeed receive the given benefit from their employer and 0 if they did not.

Indicators of Degree Professional Relevance. Four binary self-report variables were used that each in different ways indicate how relevant the respondent’s earned degree was to the job they held after graduation in 2009. The first simply asked if the respondent feels that their “job is related to their coursework” (JOBRCR09). The second consists of two variables that are originally separate into BPS09 collapsed into a single variable. These two variables asked if the respondent had “the same or a similar job to their current job before enrollment” (JOBSBE09) and “during enrollment” (JOBSIM09) respectively. Given the substantial overlap in the respondents that answered yes to both of these questions and the focus of this analysis toward examining post-graduation employment outcomes, the two variables were collapsed to account for respondents who had the same or a similar job either before or during enrollment (jobb4grad). The third variable related to degree relevance indicates if the respondent thought their “undergraduate education helped advance their career” (JOBUG09). The final variable in this set indicates if the respondent felt their “current job would be difficult to get without their undergraduate coursework” (JOBdif09). These questions were posed to students who were employed, but not self-employed. For each of these variables, cases were coded 1 if the respondent affirmed the statement and coded 0 if they did not affirm the statement.

Indicators of Job Satisfaction. Indicators of job satisfaction were measures which addressed different elements of the respondent's current job starting with the common root question: "Are you satisfied with the following at your current job...?" Respondents then were given the following list of job features to indicate they were or were not satisfied with (JOBS09A through JOBS09G): fringe benefits, importance and challenge, job security, opportunity for future training, opportunity for promotion, opportunity to use education, and pay. Similar to the previous groups of job-related indicator variables, respondents were included who were employed as of 2009, but not self-employed. For each job satisfaction measure, cases were coded 1 if the respondent affirmed that they were satisfied with the given aspect of their job associated with a variable. If this is the respondent was not satisfied, the respondent was coded 0.

Post-Graduation Income. We also reassess the impact of FPCUs on post-graduation income, which has been the focus of national debate and research (Denning, Goldin, and Katz 2012, Lang and Weinstein 2012). This time though we used a more limited sample of just AA graduates who never transferred. The first indicated the respondent's annual before tax income from their primary job as of June 2009 (INCRE09). This measure is a ratio variable in which zero indicates the absence of income and there is no theoretical upper-limit. Cumulative federal loan amount as of 2009 was established via the variable (4XOW09). This established the total amount of money the student owed through Stafford (both subsidized and unsubsidized), Perkins, or PLUS forms of federal loans. The final variable indicates the percentage of the respondent's personal income that went toward their personal student loan repayments (EDPCT09). This does not include repayments of other individuals within the household, such as student loans that are held by a spouse. Given that it is measured as a percentage, there is a valid range of between 0 and 100.

Covariates. For multivariate analysis a litany of covariates was used. These include the respondents' age at the baseline of the study, the number of dependents under the age of 18 the respondent had, dummy variables for respondent sex and respondent race (White, Black, Hispanic, Other), and the respondent's income percentile as of the 2003 baseline. For students who filed for federal financial aid as a dependent, their family's income percentile was used. For those who filed as independents students, their personal income percentile was used.

Analytical Strategy

There are three main portions of analysis for each outcome variable. First, bivariate analysis was conducted to compare FPCU and TCU graduate outcomes using either χ^2 or T-tests depending on if the given outcome variable was binary or had multiple possible outcomes. Multivariate analysis was then done using standard unmatched OLS regression with above discussed covariates. Given that FPCU and TCU

graduates have been shown to be demographically different, even among those pursuing the same degrees (Deming, Goldin, & Katz 2012; Shinoda 2014), the second form of multivariate analysis uses the quasi-experimental statistical technique called propensity score matching. Propensity score matching is a method that has historically been used as a means of overcoming selection bias, specifically with demographically different samples (Rosenbaum & Rubin, 1983). This is done by reducing a series of background characteristics to a single variable- the propensity score (Rubin, 1997). This procedure then compares each case to the two “nearest neighbor” cases from the opposite sample. Thus, the outcomes observed after propensity score matching are what would be expected if groups of FPCU and TCU students with similar covariate values were compared to each other, rather than the more demographically different groups in the unmatched sample.

Results

Similar studies that have included bachelor’s degree holders in their analysis have shown students at for-profit schools to be substantially different in terms of demographics when compared to their non-profit counterparts (Chung 2012; Deming, Goldin and Katz 2011; Lang and Weinstein 2012). Our specific samples of associate’s degree holders showed students that are more similar. This was not surprising considering that students enroll in a 2-year college degree program tend to be more racially diverse, older, lower-SES than those who enroll in a 4-year degree program (Wang 2013). Despite many similarities, there were still key differences that make the matching procedure useful. The specific differences between FPCU graduates and TCU graduates can be seen below (Table 1). The “Unmatched” statistics indicate what the sample looked like before the matching procedure, and the “Matched” statistics describe the sample after similar cases were matched.

(Table 1 About Here)

It is the case that FPCU students are older, lower income, more demographically diverse, and have more dependent children, but on each of these key covariates the difference is only marginal compared with what would be expected for bachelor’s degree holders. The largest unmatched difference is for the covariate of respondent’s sex. There were fewer females in the sample of graduates from a FPCU. Propensity score matching produced a sample in which the difference in sex is largely accounted for. Likewise, FPCU students and TCU students were more similar after matching in terms of age, income, number of dependents, and proportion of Hispanic graduates. The difference in the number of Black students actually grew after matching. This was done for the sake of getting better case-matching between the other five covariates.

The results of both bivariate and multivariate analysis can be seen both condensed into Table 2 below. Graduates from FPCUs and TCUs were actually not dissimilar in terms of the job benefits they were receiving as of 2009. The two groups were within what would be expected for the null hypothesis for life insurance and retirement benefits. Both χ^2 bivariate analysis and multivariate analysis suggested FPCU graduates are actually more likely to be offered health insurance by their employer. This difference only becomes starker after propensity score matching.

(Table 2 About Here)

Respondent's satisfaction with various elements of their 2009 job was approximately the same between FPCU and TCU graduates. None of the bivariate tests indicated a significant difference and the expected difference in multivariate analysis, both matched and unmatched, indicated a difference that was within or near the standard error. The differences between FPCU and TCU students were much more pronounced regarding the overall relevance of the respondent's degree to their current job. Bivariate analysis indicated that significantly more FPCU graduates had a job that was the same or similar to the job they had before or during college enrollment. Multivariate analysis confirms this. This may explain results with other variables, which will be discussed in the next section. Multivariate analysis also indicates that FPCU students were less likely to think their current job would be difficult to get without their undergraduate education. It also indicated that FPCU graduates were less likely to believe that their undergraduate education helped their career.

Yearly income was approximately the same between the two kinds of graduates. FPCU graduates made a greater annual income, but there is not enough of a difference to consider this more than a chance statistical anomaly. What is obviously substantial though, is the difference in debt load. FPCU graduates carried more federal student debt. After the matching procedure, FPCU graduates were expected to carry almost \$8,000 more in debt than TCU graduates. For graduates who average approximately \$30,000 per year in annual income, this is a substantially larger debt burden. Naturally, multivariate analysis after matching also indicated that FPCU graduates paid more of their monthly income toward student loans. Given federal "Pay as You Earn" and "Income Based" repayment programs, it is expected that a larger debt load will be associated with only a marginally higher monthly repayment, but a repayment period that is substantially longer to service the higher debt load.

Discussion

The results of this research were more nuanced than most previous research on career outcomes of FPCU students. One result though does seem to emphatically confirm previous research: FPCUs compare poorly to TCUs when considering a cost/benefit analysis of career outcomes for graduates versus their debt load. Even if many of the pay-related and more holistic outcomes of job quality are similar between the two types of graduates, the additional expected debt certainly suggest that FPCU graduates take on an unnecessary burden after graduation.

Regardless of debt, many of the indicators of job quality for associate's degree holders are similar between the two institution types. Analysis even found, somewhat unexpectedly, that students who graduated from an FPCU were slightly more likely to be offered health insurance by their employer. This though, may be a function of another variable that differed between the two groups: FPCU graduates were more likely to have a similar or the same job in 2009 as the one they had before or during college enrollment. This means they may be more likely to have been offered health insurance due to longer tenure at their current job. There is a clear relationship between job tenure and increased benefits that has been demonstrated in the past (Dey & Flynn 2005), even if this relationship is not as durable as it was in previous decades (Schrager 2009).

FPCU and TCU graduates seem to have similar levels of satisfaction concerning most aspects of their job. The most obvious exception to this is satisfaction with the "importance of challenge" they experience at their job. Also, after propensity score matching, it was demonstrated that FPCU graduates were less likely to be satisfied with their job security. If FPCU graduates are working the same job or a similar one to the job they had prior to graduation, it would make sense they are less satisfied with the importance of the challenge of their work. It is counterintuitive though that they would be less satisfied with job security.

The starkest difference in terms of job quality was found on the measures of degree usefulness or professional relevance. As already stated, FPCU grads were more likely to be working the same or a similar job to what they were working before graduation. They were also substantially less likely to think their current job would have been difficult to get without their degree or believe that their undergraduate education helped their career. Both of these results would seem to indicate these graduates' current job situation was more a product of their previous employment history, and not any unique benefit granted from their degree gained at a for-profit school.

While these results are more nuanced than being an absolute indictment of FPCUs, the results were in line with previous findings. Both Lang and Weinstein (2012) and Deming, Goldin, and Katz (2012) concluded that for-profits were likely bad investments for students when compared to the alternative of non-profit

institutions. Both found that pay was marginally less for FPCU graduates with an associate's degree, but student debt was substantially greater. These results were largely confirmed. This additional analysis provided by this research also finds that an associate's degree from a for-profit institution is likely to be less relevant to a graduate's career. This certainly does not support the narrative espoused by Bell and the political proponents of FPCUs that these schools are facilitating a postmodern economy by preparing the lower class to join a more-skilled 21st Century labor market. Given the fact that FPCU graduates were much less likely to see their degree as helping their career or necessary for their current job – which was frequently the same or similar to the job they had before graduation – it is substantially easier to make the argument that these institutions play the “cooling out” role that is described by Clark and the opponents of FPCUs.

Limitations and Future Research

Perhaps the most substantial limitation of this research stems from BPS: 03/09 blind spot concerning employment prior to and during enrollment. We know that FPCU students are much more likely to have full-time employment at the time of enrollment and maintain that employment throughout enrollment. Maintaining a full-time job while concurrently completing a degree surely impacts post-graduation outcomes, perhaps providing better outcomes than would be obtained from the degree alone. We know that older students in particular derive positive post-graduation benefits from having a full-time job concurrent with enrollment (Georgetown University Center on Education and The Workforce 2015). Additionally, the unique economic circumstances of 2009, the height of the “great recession,” may not provide the most representative insight into what can be expected from employment outcomes during less volatile economic times.

Future research may be better served by a more contemporary timeframe and by the addition of additional covariates concerning job tenure. As is discussed above, FPCU graduates may be performing better on some of the indicators, especially job benefits, because their graduates never left the jobs that they had before graduating. As well, inclusion of bachelor's degree holders using similar measures of job quality would continue to significantly improve literature FPCU graduates. Unfortunately, the BPS03/09 data set may not be adequate for this as there are too few FPCU graduates with a bachelor's degree and employment in 2009 that made it through to the final wave of the survey. Any additional data collection FPCU graduates that can generate a meaningful sample of bachelor's degree holders who are employed would greatly improve that ability to conduct analysis on the overall efficacy and value of for-profit higher education.

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Tables

Table 1: AA Graduates Covariate Descriptives and Matching Balance Table

Covariate	Unmatched			Matched		
	FPCU	TCU	t	FPCU	TCU	t
	N=98	N=633		N=98	N=633	
Age When Starting College (2003)	23.36	22.16	1.36	23.36	23.79	-0.33
Income Percentile When Starting College (2003)	45.51	48.68	-1.03	44.11	47.86	0.79
Number of Dependents (2009)	0.79	0.63	1.24	0.79	0.82	-0.18
Respondent is Black	8.51%	7.87%	0.21	8.51%	15.96%	-1.56
Respondent is Hispanic	14.89%	9.67%	1.55	14.89%	12.23%	0.60
Respondent is Female	47.87%	58.53%	-1.94	47.37%	45.75%	0.29

*p>0.05;**p>0.01;***p>0.001

Table 2: AA Graduates Bivariate and Multivariate Analysis

Job Benefits Offered:	All	TCU=0	FPCU=1	χ^2	Unmatched Difference for FPCUS (SE)	Matched Difference for FPCUS (SE)
	N=704	N=610	N=94			
Life Insurance	62.64%	62.62%	62.77%	0.0007	+0.14% (5.37%)	-0.53% (6.65%)
Health Insurance	81.82%	80.66%	89.36%	4.15*	+8.70% (4.27%)	+10.10% (4.89%)
Retirement	70.74%	70.98%	69.15%	0.13	-1.83% (5.05%)	-2.23% (6.32%)
If Respondent is Satisfied with:	All	TCU=0	FPCU=1	χ^2	Unmatched Difference for FPCUS (SE)	Matched Difference for FPCUS (SE)
	N=704	N=610	N=94			
Fringe Benefits:	69.74%	69.02%	74.37%	1.15	+5.45% (5.09%)	+4.79% (6.04%)
Importance of Challenge	77.70%	78.85%	70.21%	3.51	-8.64% (4.61%)	-11.70% (5.93%)
Job Security	79.26%	79.84%	75.53%	0.92	-4.30% (4.50%)	-8.51% (5.58%)
Opportunity for Future Training	70.17%	70.66%	67.02%	0.51	-3.63% (5.07%)	-4.26% (6.40%)
Opportunity for Promotion	61.08%	61.97%	55.32%	1.51	-6.65% (5.40%)	-6.91% (6.75%)
Pay	63.07%	63.93%	57.45%	1.47	-6.49% (5.35%)	-1.60% (6.78%)
Degree Usefulness	All	TCU=0	FPCU=1	χ^2	Unmatched Difference for FPCUS (SE)	Matched Difference for FPCUS (SE)
	N=338	N=263	N=75			
Job is Related to Coursework	54.73%	56.65%	48.00%	1.76	-8.65% (6.51%)	-8.67% (8.34%)
Current Job Difficult to Get w/o Undergrad Education	44.19%	44.87%	39.80%	0.88	-5.07% (5.39%)	-12.24% (6.81%)
Had the Same or Similar Job Before Enrollment	74.83%	73.46%	83.67%	4.70*	+10.21% (4.70%)	+7.14% (5.50%)
Undergrad Education Helped Career	60.47%	61.61%	53.06%	2.59	-8.55% (5.31%)	-13.78% (6.76%)
Income:	All	TCU=0	FPCU=1	t	Unmatched Difference for FPCUS (SE)	Matched Difference for FPCUS (SE)
	N=731	N=633	N=98			
Yearly Income from Current Job (2009)	\$32,164	\$32,307	\$31,241	0.59	-\$1,670 (\$1,953)	-\$2,385 (\$2,417)
Cumulative Federal Loan Amount (2009)	\$5,524	\$4,049	\$12,977	10.69***	+\$8,928 (\$835)	+\$7,700 (\$1,324)
Student Loan Payment as % of Monthly Income	3.11%	2.86%	4.70%	0.31	+1.85% (1.80%)	+2.63% (0.90%)

*p>0.05;**p>0.01;***p>0.001