For-profit colleges (FPCs) have expanded rapidly since the 1990s, rising to peak shares in 2012 and declining somewhat thereafter. The share of Associate’s Degrees awarded by FPCs peaked at 21 percent in 2011/2012, falling to 13 percent by 2014/2015; the share of BAs has remained roughly at 7 percent since 2012/2013; and the share of Master’s Degrees rose to 11 percent in 2011/2012, and was 9 percent by 2014/2015.

Part of the decline at FPCs is likely driven by changes in Title IV eligibility status, limiting government aid to their students. FPCs have higher tuition, debt burdens, and default rates than comparable public institutions (Cellini, 2012; Cellini & Turner, 2016; Deming et al., 2012). According to the National Postsecondary Aid Study survey of students in 2011/2012, 62 percent of for-profit two-year students had federal loans, compared to only 17 percent of public community college students; at four-year institutions, 48 percent of undergraduates had federal loans at public institutions, but 73 percent had federal loans at FPCs, higher even than the rate at private, non-profit institutions (60 percent).

Concerns about high borrowing and default led to the Department of Education’s Gainful Employment Program in 2011, tying Title IV eligibility to student loan repayment and debt-to-income ratios. Similarly, several states limit FPCs, with Maryland’s 2016 statute being one of the most restrictive.1

While aid restrictions may reduce default rates, they also limit options in higher education. In what follows, we summarize the empirical evidence to support the following claims:

1. FPCs serve students typically underserved by traditional colleges. They occupy unique niches, both in terms of student demographics and field of study.
2. The dissimilarity between FPC and traditional colleges, combined with the short time period during which FPCs have been significant players, makes it difficult to definitively assess outcomes. This is particularly true for BA and MA programs. Given the empirical challenges, there is still much unknown about how restricting aid will affect college access.
3. FPCs’ growth is linked to public higher education limitations, both in terms of overall resources, responsiveness to market change, and flexibility in serving nontraditional students.

1 State and federal regulations are still in flux. Several federal regulations have been struck down by the courts. For example, the proposed rule that FPCs obtain authorization from each state from which they had a student was struck down as overly burdensome, and the minimum loan repayment rate of 35 percent Gainful Employment Program was struck down as arbitrary. While some states have enacted stricter laws, several have created exemptions to federal regulation. For example, Georgia’s HR 792 allows FPCs to receive authorization if they have operated in the state for the last ten years, hold accreditation, and have no unresolved complaints or actions against them in the last 12 months.
Consequently, we conclude that caution is warranted when considering withholding federal aid entirely. Instead, students may be better served by strengthening public institutional capacities.

WHAT TYPES OF STUDENTS ARE MOST LIKELY TO ATTEND FPCs AND WHAT ARE THEIR ALTERNATIVES?

For-profit students’ profiles are much different from their counterparts at public or private non-profit institutions. Moreover, there are sizeable differences between students at two-year or certificate-granting institutions and at four-year or graduate programs. Table 1 reports differences in characteristics across degree programs and institutional control.2

At the Certificate or Associate’s level, the modal for-profit student is a non-white woman pursuing a degree in health or personal and consumer services. The vast majority of these students (85 percent) attend school full time. At public two-year institutions, in contrast, students are less likely to be in school full time (40 percent) and tend to pursue general education fields like social sciences, humanities, and general studies. Students at both types of institutions are of similar ages (a median of 24) and parental educational backgrounds.

Students at for-profit four-year schools differ both from their public counterparts and from for-profit two-year students. At four-year institutions, for-profit and public students are equally likely to attend full time (73 percent). However, for-profit students are much older (median age 30) than public four-year students (median age 21). More than half have dependents, and they are more than twice as likely to be working full time. They have relatively disadvantaged educational backgrounds: Less than 25 percent of their parents had a bachelor’s, compared to public BA students (48 percent). Roughly a third of these students are studying business (29 percent vs. 17 percent at public schools), while they are more likely to study computer and information science (10 percent vs. 3 percent), they are less likely to be in a STEM field (3 percent vs. 18 percent) than public students.

At the graduate level, 11.1 percent of all Master’s-seeking graduate students attended FPCs. Here the modal FPC student is a 36-year-old female with dependents, attending full time (often on-line) along with working full time. This is in contrast to her public counterpart who is younger and less likely to have dependents or to be working full time. Nearly all FPC students attend Master’s in Business Administration programs (62 percent) or education programs (30 percent) compared to students at public colleges who attend education programs (33 percent) or a STEM program (30 percent).3

Differences in student demographics may be related to innovations in the for-profit sector. For example, FPCs were the only institutions to offer online MBA programs during the 1990s and early 2000s. By 2012, 24 percent of for-profit MBA students enrolled in online programs.

WHAT DO WE KNOW ABOUT STUDENT OUTCOMES IN FPCs?

To the degree that the type of students who enroll in for-profits are constrained from optimal choices (either by credit or by other features that limit access to education at a traditional school), federal aid subsidies may be needed to counter

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2 Private non-profit students tend to be the most advantaged; for brevity, this table compares for-profit students only with their public counterparts.
3 STEM excludes medicine and dentistry.
Table 1. Comparison of students across degree level and sector.

<table>
<thead>
<tr>
<th></th>
<th>FPC certificate</th>
<th>FPC two-year</th>
<th>Public</th>
<th>FPC four-year</th>
<th>Public</th>
<th>FPC graduate</th>
<th>Public</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>76%</td>
<td>66%</td>
<td>56%</td>
<td>60%</td>
<td>54%</td>
<td>67%</td>
<td>59%</td>
</tr>
<tr>
<td>Nonwhite</td>
<td>61%</td>
<td>52%</td>
<td>44%</td>
<td>49%</td>
<td>38%</td>
<td>50%</td>
<td>35%</td>
</tr>
<tr>
<td>Attend full time</td>
<td>82%</td>
<td>85%</td>
<td>40%</td>
<td>73%</td>
<td>73%</td>
<td>70%</td>
<td>47%</td>
</tr>
<tr>
<td>Work full time</td>
<td>15%</td>
<td>20%</td>
<td>33%</td>
<td>47%</td>
<td>20%</td>
<td>62%</td>
<td>39%</td>
</tr>
<tr>
<td>Median Age</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>30</td>
<td>21</td>
<td>36</td>
<td>31</td>
</tr>
<tr>
<td>Has dependents</td>
<td>46%</td>
<td>42%</td>
<td>33%</td>
<td>56%</td>
<td>17%</td>
<td>53%</td>
<td>31%</td>
</tr>
<tr>
<td>Parents have BA</td>
<td>26%</td>
<td>23%</td>
<td>30%</td>
<td>22%</td>
<td>48%</td>
<td>69%</td>
<td>79%</td>
</tr>
<tr>
<td>Top fields by enrollment share</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal services</td>
<td>52%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health</td>
<td></td>
<td>Health 50%</td>
<td></td>
<td>Social science, humanities, general 27%</td>
<td></td>
<td>MBA 62%</td>
<td></td>
</tr>
<tr>
<td>Career</td>
<td></td>
<td>Manufact. Construct.</td>
<td>Health care 23%</td>
<td>Business 29%</td>
<td>Social science, humanities, general 27%</td>
<td>STEM 18%</td>
<td>Education 11%</td>
</tr>
<tr>
<td>Health 38%</td>
<td>Manufact. Construct. Transport 17%</td>
<td>Health care 23%</td>
<td>Business 17%</td>
<td>Business 17%</td>
<td>Law 5.3%</td>
<td>MBA 21.6%</td>
<td></td>
</tr>
<tr>
<td>Nonwhite</td>
<td>Manuf. Construct. Transport 17%</td>
<td>Personal services 14%</td>
<td>Business 13%</td>
<td>Protective services 13%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median Age</td>
<td>24</td>
<td>24</td>
<td>24</td>
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<td>79%</td>
</tr>
</tbody>
</table>

Source: National Postsecondary Student Aid Study, 2011/2012.
under-investments in human capital. The question then is, what is the return to the human capital acquired at a for-profit institution? Do the returns to these degrees signify valuable human capital and justify the higher tuition costs?

A growing literature compares outcomes at for-profit and other institutions. The following organizes this literature by degree type. First, certificate and two-year program FPCs appear to have higher completion rates than their public-sector counterparts (see Deming, Goldin, & Katz, 2012; Liu & Belfield, 2014). This is perhaps not surprising, given that the sub-baccalaureate level at FPCs is dominated by short-term certificate programs.

The literature on returns at this level is mixed. On the negative end of the spectrum, Deming, Goldin, and Katz (2012) find for-profit students have higher unemployment rates six years after entering their programs, and Denice (2015) finds a lower return for Associate’s Degree from FPCs than from not-for-profit schools. Other studies find negligible differences: Cellini and Chaudhary (2014) estimate statistically similar rates of returns at for-profit and community colleges. Likewise, both Darolia et al. (2015) and Deterding and Pedulla (2016) find similar employer callback rates for fictitious resumes of sub-baccalaureate students listing either for-profit or public community colleges. Lang and Weinstein (2013) also find no statistical difference in returns across institutional types, although the point estimate for for-profit certificates is negative.

Similarly, returns for four-year degree holders or graduate degrees are also mixed. Denice (2015) finds no difference for four-year degree holders across institution type, and Cellini and Turner (2016) find positive returns for MA students and for degree-completers at FPCs. Liu and Belfield (2014) find that community college students who transferred to four-year institutions by 2006 have lower wages after attending a for-profit college than a not-for-profit college. For four-year students, fictitious resumes for local for-profit and local public graduates had similar call back rates from employers, although call back rates were slightly lower for for-profit online students (Deming et al., 2016).

One interesting point from this literature is the difficulty of identifying the appropriate counter-factual return without rich data. Lang and Weinstein (2012, 2013) use nearly the same data in their two papers, but in the later published version that includes transcripts, they overturn their previous result of lower returns at FPCs. This result is related to their finding that returns by field are much more important than returns by college type in explaining returns; controlling for field accurately substantially affects the conclusions.

Consequently, the best studies capture rich individual characteristics of students. Studies using individual fixed effects (e.g., Cellini & Chaudhary, 2014) can control for differing permanent characteristics of students. However, it is still difficult to control for the potential possibility that FPCs educate students whose earnings’ trajectories would be lower at any institution. Furthermore, current waves of longitudinal studies have relatively young students (under 26, when the median for-profit four-year student is 31) and short windows after graduation. Furthermore, FPCs expanded rapidly through 2012, making it challenging to generalize from studies of the 1990s or early 2000s. Finally, the central identification problem is matching

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4 Liu and Belfield (2014) find that for-profit returns by age 26 are lower (in 2012) than public returns, but this aggregates across certificates, two-year, four-year degrees for for-profits, even though a disproportionate share of degrees at for-profits at the time were certificates.

5 Lang and Weinstein (2013) and Deming, Goldin, and Katz (2012) use Beginning Post Baccalaureate study, which ended at age 26 and therefore mostly captured traditional age students; Liu and Belfield (2014) use state administrative data following students up to four years after graduation; Cellini and Chaudhary (2014) use NLSY 97.
non-traditional FPC students with the relevant counterfactual. In many cases it may be non-enrollment, or enrollment in a different field of study, rather than enrollment in the same field at a traditional college. The mixed literature, combined with the empirical difficulties in rigorous identification, suggests a cautious policy approach until for-profits have experienced a longer period of study.

IF FPCs LOST FEDERAL STUDENT AID, WHAT WOULD THE CONSEQUENCES BE FOR COLLEGE ACCESS?

To reframe this question, is the public sector a good substitute for the type of students served by FPCs? In the most relevant study to date, Cellini, Dariola, and Turner (2016) find that student aid sanctions during the 1980s and 1990s at FPCs were correlated with increases in enrollment at public two-year institutions. As noted, however, two-year public and for-profit students have relatively similar characteristics. Four-year public and for-profit students are much more dissimilar, and four-year for-profit schools had yet to begin their rapid expansion during the sample period. This limits generalizability of the study to the current universe of FPCs. The period under study was prior to the expansion of broadband access and widespread online programs, which again limits generalizability to the current environment.

In addition, FPCs are now a much larger share of the market and public institutions have experienced a decline in state support since the 1990s. Do public institutions have the capacity to absorb most FPC students given current fiscal constraints? Goodman and Henriques (2015) find that one driver of the rise in FPCs during the 2000s was the decline in state higher education appropriations. Chung (2012) shows that higher community college tuition also drives FPC enrollment. Further concerns about the way public sector resources limit college access comes from Bound and Turner (2007), Berger and Kostal (2002), and Bound, Lovenheim, and Turner (2010). These studies all suggest that college attainment rates are limited by public supply-side resources. The relative attractiveness of FPCs when public higher education has lower public support raises concerns about restricting government aid at FPCs: If capacity at public institutions is not also increased at the same time, FPC restrictions may lead to lower college access.

Even supposing students can fully shift to public institutions, will they be able to acquire the same degrees? Studies suggest that FPCs respond more flexibly to labor market changes in their degree offerings than their public counterparts. Gilpin, Saunders, and Stoddard (2015) find that enrollment and degree completion in specific majors at FPCs increase in response to employment growth and wages in related occupations in the area. Majors at public institutions, in contrast, remain unresponsive. Similarly, Xia (2016) finds that after a regulatory change expanded the demand for dental assistants, FPCs rapidly expanded these programs while community colleges did not. Grosz (2016) and Gurantz (2015) further document concerns about caps and waitlists at community colleges, particularly in the high demand fields where FPCs have expanded rapidly. Part of the constraints at public institutions appears related to the inability to increase tuition and expand capacity relative to FPCs when demand increases (Xia, 2016). The limited ability of public institutions to respond to changing market conditions is also supported by Cellini (2010) and Cellini and Goldin (2014) who find that both tuition and enrollment capacity increase more rapidly at FPCs than community colleges when federal aid increases. This is not surprising—FPCs do not rely on government approval of budgets, tuition, or new programming. This flexibility permits responsiveness to changes in demand, while public institutions are more constrained.
IS THERE A ROLE FOR FPCs OUTSIDE OF THE FEDERAL STUDENT AID SYSTEM?

Graduate programs provide one opportunity to analyze higher education with less government education assistance (e.g., no Pell grants, work-study). As noted, 11 percent of all graduate students attend FPCs, higher than the share for bachelor’s degrees. Gilpin and Kofoed (2017) study MBA programs when workers have access to employer-sponsored education assistance (ESEA). Nearly 40 percent of all MA students at FPCs exercise ESEA, three times the proportion of students at public and private, non-profit institutions. Similarly, 26 percent of MBA students at FPC exercise ESEA, slightly less than their public counterparts (37 percent).

These data suggest that firms that offer ESEA find FPC programming to be of sufficient quality to finance their workers' education. Again, this is consistent with the call back rates similarities by employers for all programs except online for-profit four-year programs (Darolia et al., 2015; Deming et al., 2016). It is difficult to infer that firms are misinformed about the value of their workers' education they are financing.

CONCLUSIONS

The question of whether FPCs should be able to participate in federal aid is motivated by real concerns about higher tuition, higher default rates, and the mixed evidence on employment outcomes. Our review of the literature suggests that there is still much that we do not know about returns to FPCs, particularly at the four-year and graduate level. This suggests caution in entirely limiting aid at these institutions.

In addition, the evidence suggests that FPCs have grown due to (1) their ability to serve underrepresented students (especially full-time workers, minorities, and parents) by public institutions; (2) their ability to expand capacity when public resources are limited; (3) their innovations, such as online and distance learning; and (4) their rapid development of programs in emerging high-demand fields. This leads to a number of somewhat more speculative and ethical concerns, about which we have even less information. Would limiting FPCs reduce the competitiveness of the higher education sector? To the degree that FPCs have innovated in ways that have diffused through higher education (including the introduction of online learning or specific degree fields), limiting federal aid may reduce efficiencies provided by competitive pressures. Furthermore, limiting aid is a paternalistic response, one that assumes that students lack the information to make optimal decisions about their own education investments. There are certainly well documented informational failures in the student aid process, but these cross both public and private sectors. As described above, it is also the case that firms frequently pay the tuition costs for students enrolled at FPCs, particularly at the graduate level. Are these firms misguided? Finally, federal aid is not tied to field of study, although the return on investment to a degree and default rates vary more by major than by institution (Lang & Weinstein, 2013). Should we deny federal aid to majors where default rates are particularly high or returns are low?

Due to these practical and philosophical concerns, it is worth considering an alternative policy response, albeit one that is less direct: Increase resources at public institutions, their labor market responsiveness, and their flexibility in serving non-traditional students. To the degree that students have been attracted

6 See Stoddard, Urban, and Scmeiser (2017) for evidence on information and student aid choices and citations to additional literature in this area.
into FPCs for these reasons, a robust public sector could better compete with FPCs without imposing limitations that may have unanticipated deleterious consequences.

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