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Federal Pell Grant Eligibility and Receipt: Explaining Nonreceipt and Changes to EFC Using National and Institutional Data

By Brent J. Evans, Tuan D. Nguyen, Brent B. Tener, and Chanell L. Thomas

In examining national data on Federal Pell Grant eligibility in the National Postsecondary Student Aid Study (NPSAS), we were puzzled to discover that many students who appear to have eligible Expected Family Contributions (EFCs) do not receive the award. We use institutional data from a large public university to understand and enumerate changes from initial Free Application for Student Financial Aid (FAFSA) EFC to final Pell Grant EFC and explore why EFC changes occur. We determine that the nonreceipt of Pell Grant observed in NPSAS is likely due to NPSAS not reporting final Pell Grant EFCs. We examine how the verification process results in changes to EFC and describe how nearly half of students who experienced a change in EFC during the award year were not asked to verify. We also observe that selection for Quality Assurance verification and EFC changes varied based on students' demographics characteristics. The paper concludes with discussion of improving the verification process.

Keywords: *financial aid, Federal Pell Grant eligibility, verification, Expected Family Contribution*

In 2014, the federal government spent \$30.3 billion to provide need-based grant aid to college students, and the vast majority of that investment is in the form of Federal Pell Grants (U.S. Department of Education, 2016). Evidence indicates that grant aid improves collegiate outcomes such as enrollment and persistence (Angrist, Autor, Hudson, & Pallais, 2014; Castleman & Long, 2016; Deming & Dynarski, 2009, 2010; Dowd, 2004; Dynarski & Scott-Clayton, 2013; Hossler, Ziskin, Gross, Kim, & Cekic, 2009). Although the evidence on the specific effects of Pell Grants is mixed, there is at least some evidence that receiving Pell Grants leads to increased persistence (Alon, 2011; Bettinger, 2004). Receiving the award is important; however, there are many students who initially appear eligible for a Pell Grant but do not receive the money. Although this issue of nonreceipt by apparently eligible applicants has been noted previously (Evans & Nguyen, 2017; Marx & Turner, 2017; Turner, 2014), there is not robust literature on why many students who appear initially Pell Grant eligible do not actually receive the Pell Grant award. This paper outlines and examines this puzzle.

Our study identifies a substantial disconnect between Pell Grant eligibility and eventual receipt of the award in nationally representative data among students who matriculate in Title IV eligible institutions. We consider several explanations for this disconnect and employ administrative data from a public four-year college to examine those explanations. While identifying and understanding the difference between initial Pell Grant eligibility and receipt in national data is useful, the limited data elements available in the National Postsecondary Student Aid Study (NPSAS) national dataset preclude a full analysis of Pell Grant eligibility and receipt. The NPSAS data include only one measure of the Expected Family Contribution (EFC), a federally determined numerical estimate of the parents' and/or student's ability to contribute to

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postsecondary expenses. Moreover, a large portion of the EFC in the NPSAS data is imputed and not actually observed. We therefore turn to institutional administrative data to fill these data gaps and focus our examination on changes to students' EFC from the initial EFC determined by responses submitted on the Free Application for Federal Student Aid (FAFSA) to the final EFC an institution uses to disburse Pell Grant awards.

We document that a substantial number of students (more than one-third in the institution we examine) experience changes to their EFC over the award year. Our study examines several reasons for these EFC changes, including issues related to verification, the process by which selected students provide documentation to financial aid administrators to confirm information submitted on the FAFSA. We also consider other nonfinancial reasons students can lose Pell Grant eligibility, such as not maintaining satisfactory academic progress (SAP) toward program completion and not being an eligible recipient for Title IV assistance in general. Although, after allowing for these factors, the percentage of remaining nonreceipt is low, this percentage corresponds to tens of thousands of students across the nation. Finally, we examine whether the observed changes in EFC and eligibility are related to demographic characteristics of individual students to determine if there are inequities in the eligibility and provision of Pell Grants, which is important for low-income and minority students who rely on aid to enroll in postsecondary education.

Our paper makes three substantial contributions to the literature. First, it examines and explains a puzzle of Pell Grant eligibility and receipt observed in national data (NPSAS). Second, it uses institutional data to examine in-depth how EFC changes from initial FAFSA EFC to final Pell Grant EFC. Third, it provides a better understanding of how verification affects Pell Grant eligibility at a four-year college, adding to the literature that has previously examined the issue only at two-year colleges.

Our study of issues of nonreceipt of Pell Grants has implications for students and financial aid professionals. We identify and discuss most, if not all, of the reasons students who appear eligible to receive a Pell Grant based on their initial FAFSA EFC do not actually receive the award.

Our collaboration between researchers and financial aid professionals also provides suggestions for financial aid professionals on how to reduce the incidence of Pell Grant nonreceipt, specifically focusing on issues of verification. These suggestions include best practices in corresponding with students, such as frequent contact with aid applicants in requesting the required documents to complete the verification process, the process by which a student's financial information is confirmed prior to aid receipt. The verification process can be confusing to the low-income students served by the Pell Grant program, and extra effort is often required to break down the barriers that exist in helping students provide the necessary documentation required for the school to provide Pell funding (MacCallum, 2008). Given that Pell Grants represent a vital component in making a postsecondary education financially affordable for millions of students, enhancing efforts by institutions to ensure the maximum number of eligible Pell recipients ultimately receive funding is crucial for students and institutions alike.

Context and Potential Explanations for Pell Eligibility Nonreceipt

Steps to Receive Pell Grants

To be eligible to receive a Pell Grant, students must complete the FAFSA. The federal government uses the data provided on the FAFSA to determine a student's EFC and provides the student with a Student Aid Report (SAR) summarizing their Pell Grant eligibility and providing the student with an initial EFC. Institutions subsequently use this information to provide a financial aid award notification to admitted

applicants. Students may seek to correct or update information they submitted on the FAFSA at any time after receiving their initial EFC, up to and after matriculating.

Students may be selected for verification by either the federal government or by their institution. To comply with verification, students must provide documentation that confirms data provided on the FAFSA. The verification process may cause changes to information provided on the FAFSA resulting in an updated EFC. For students required to comply with verification, disbursement of Pell Grants and other forms of financial aid only occurs after they complete the verification process.

Prior to the 2017-18 year, institutions had the option to participate in the Quality Assurance Program (QA). Through QA, institutions could develop their own verification program tailored to meet their unique needs (U.S. Department of Education [USDE], 2016). Instead of verifying the students selected by the federal government, the institution selected students who met these institution-defined criteria. In addition, QA institutions determined which data elements to verify and defined the acceptable documentation required to comply with the request. The U.S. Department of Education terminated the QA program effective with the end of the 2016-17 award year.

Potential Explanations for Nonreceipt of Pell Grant

Since a large portion of our data analysis focuses on students' nonreceipt of Pell Grant despite appearing financially eligible, we outline several reasons students may have an EFC that would initially suggest eligibility to receive Pell, but ultimately would not receive the award. Our data analysis below considers five possible causes of the nonreceipt we observe among those who initially receive a Pell-eligible EFC.

General eligibility of the student, program, and institution. Regardless of the EFC an applicant receives, the student, program of study, and institution must meet the general federal financial aid eligibility requirements in order for the student to receive Pell. For the student, these criteria include, but are not limited to, being a U.S. citizen or eligible non-citizen (primarily permanent residents), being registered for selective service (if male of appropriate age), and not being in default on a federal student loan (USDE, n.d.). Students convicted of a drug offense while receiving federal student aid are also ineligible. Students can only receive Pell Grant funds if they are enrolled in a degree or certificate program at an institution eligible to distribute Title IV funds (USDE, n.d.).

Satisfactory academic progress (SAP). After students have started their postsecondary education, they must maintain satisfactory academic progress toward degree or certificate completion in order to maintain eligibility for federal student aid (USDE, n.d.; Schudde & Scott-Clayton, 2016). The determination of SAP is an institutional decision based upon federal parameters; therefore, it can be defined differently across institutions, but it generally includes a minimum GPA and a minimum ratio of credits earned to credits attempted to make progress towards degree completion (Federal Student Aid, n.d.). Students who are financially eligible for a Pell Grant, as reflected by the EFC, will nonetheless not receive the award if they do not maintain SAP

EFC changes Student-provided answers on the FAFSA determine the initial EFC, but, for a variety of reasons, this EFC can change before the Pell Grant is ultimately disbursed. For example, students may voluntarily correct the information on the FAFSA resulting in an updated EFC; the federal government or an institution (through the QA process) may select the student for verification, and the documents provided may change FAFSA answers resulting in a recalculation of the EFC; or, an institutional financial aid administrator may adjust financial components of the inputs to the EFC calculation in a process called professional judgment (USDE, n.d.; McPherson & Schapiro, 2002). In each of these cases, it is possible that the initial Pell-eligible EFC will change such that the student's updated EFC is no longer Pell eligible or vice-versa.

Noncompliance with verification. Students requested to verify information on the FAFSA by either the federal government or institution can lose eligibility for the Pell Grant if they fail to comply with the verification request. In this way, a student who would otherwise be eligible to receive a Pell Grant will not receive the funds (Cochrane, LaManque, & Szabo-Kubitz, 2010). The federal government regulates which items are required to adhere to federal verification, but individual institutions may ask for additional information. For example, federal regulations do not require verification of dependency status; however, an institution may ask for documentation of dependency status, especially if conflicting information calls into question a student's reported dependency status.

Lifetime eligibility limits. Students are only eligible to receive six full years of Pell Grant funding over their lifetime, so students who may appear eligible on financial and academic metrics may have reached the lifetime limit of Pell Grant receipt and will not receive additional Pell Grant money (USDE, n.d.).

Data and Methods

We rely on two sources of data for our descriptive quantitative analysis examining the nonreceipt of initial Pell Grant EFC eligibility. The first is the NPSAS, a nationally representative repeated study of a cross-section of college students. NPSAS uses stratified clustered sampling, first randomly selecting institutions from different sectors of higher education, then randomly sampling students within institutions (Wine, Bryan, Siegel, & Hunt-White, 2012). Our sample includes the four most recent NPSAS waves: 2000, 2004, 2008, and 2012. We use the final sample weights in our analysis to make the observations from NPSAS nationally representative. The dataset contains students' demographic characteristics; parents' education level; initial EFC; Pell Grant receipt; and the exact amount of aid received, including grants and loans from multiple sources. These data allow us to examine whether students are eligible to receive the Pell Grant based on EFC and whether they actually receive the Pell Grant. Although NPSAS includes a limited number of data elements, it provides data related to understanding eligibility and receipt of the Pell Grant. The benefit of using NPSAS is that it provides data on the scope of the problems we discuss. The NPSAS datasets are also widely used in academic and policy research on financial aid, so they are important to better understand the anomalies of Pell Grant eligibility and receipt noted in these datasets by previous studies.

The second data source is administrative data from a Title IV-eligible, selective, public four-year institution in the western United States, which we refer to as West Coast University (WCU). We observe all financial aid applicants who enrolled at the university during the 2012-13, 2013-14, 2014-15, and 2015-16 academic years. The data include demographic characteristics, initial FAFSA EFC, final Pell Grant EFC, the amount of Pell Grant disbursed, additional eligibility criteria, whether professional judgment was applied, and whether the student was selected for and complied with verification (WCU is a QA verification institution). The institutional data are longitudinal panel data, allowing us to observe the same students in multiple years if they enrolled and applied for federal student aid in multiple years.

Using these institutional data enables a deeper examination of changes to EFC and potential explanations of that change than the national data. For example, we can determine if nonreceipt with initial Pell Grant eligibility is driven by changes to EFC due to the results of verification or noncompliance with verification. Such issues are impossible to identify with the nationally representative data. However, we acknowledge the limitation that findings at one four-year institution may not widely apply to all four-year institutions.

For both sets of data (national and institutional), we limit the analysis only to students who applied for federal financial aid and enrolled in a Title IV institution, immediately eliminating some potential factors for not receiving a Pell Grant despite appearing eligible based on initial EFC. For the NPSAS sample, we exclude all students who are noncitizens and non-permanent residents, as they are ineligible for federal student aid. We observe the C-flag code for students in the institutional dataset, which may indicate

ineligibility due to non-citizenship status, selective service, default on a federal student loan, owing an overpayment on a federal grant or loan, unusual enrollment history, or having a drug conviction. Although we cannot determine the exact reason an individual student received the C-flag in the data, we examine this C-flag code as a potential explanation for nonreceipt below.

Table 1 provides the descriptive information of the students in the pooled NPSAS samples for four-year and two-year institutions and at WCU to demonstrate the substantial differences between these samples. At WCU, only 13% of students were White and 5% were Black relative to 62% and 16% nationally at four-year institutions, while 40% were Hispanic and 35% were Asian at WCU compared to 13% and 5% nationally. In terms of parental education, parents of students at WCU had lower levels of formal education than their peers at four-year institutions. In particular, only 50% had some college or beyond relative to 66% at four-year institutions nationally. In summary, due to the location of WCU, the student population is more heavily Hispanic and Asian with lower parental education than their peers at four-year institutions nationally.

To identify students with Pell-eligible EFCs who did not receive Pell Grant, and to examine potential explanations of that nonreceipt, we employ a variety of quantitative data analytic strategies, including descriptive statistics and multivariate regression analysis. For each academic year, we use the information from the Pell Grant schedule to determine the EFC cutoff for Pell Grant eligibility.

Table 1

Descriptive Statistics: Demographics and Pell Receipt

Variable	(1) NPSAS 4-year	(2) NPSAS 2-year	(3) WCU
Female	0.58	0.63	0.54
White	0.62	0.53	0.13
Black	0.16	0.21	0.05
Hispanic	0.13	0.17	0.40
Asian	0.05	0.04	0.35
Other	0.04	0.05	0.06
Parents' education: None or unknown	0.02	0.05	0.08
Parents' education: Middle school	0.05	0.10	0.10
Parents' education: High school	0.27	0.36	0.33
Parents' education: College or beyond	0.66	0.49	0.50
Pell Grant receipt	0.46	0.57	0.67
Pell Grant amount	1501.16 (1955.30)	1582.37 (1802.93)	2983.81 (2420.06)
Actual observations	121,200	66,790	58,128
Population observations	24,435,210	15,717,130	58,128

Note. NPSAS includes the 2000, 2004, 2008, and 2012 waves. WCU includes 2012-13, 2013-14, 2015-16, and 2016-17 years. We used NPSAS weights to make the sample nationally representative. Parents' education is the highest level of education reached by either parent. Reported values are means of continuous variables and proportions of binary variables. Standard deviations are in parentheses. Dollar amounts are in constant 2012 dollars. All observation numbers for NPSAS have been rounded to the nearest 10 per IES compliance.

Results

EFC Eligibility and Pell Grant Receipt in National and Institutional Data

We begin by presenting the puzzle observed in nationally representative data from NPSAS. The first two columns in Table 2 display the number of students who received and did not receive Pell Grants when determined to be ineligible or eligible based on the NPSAS reported EFC for students who filed the FAFSA and enrolled at either four-year or two-year institutions. The puzzle is that about 6% of students at four-year and 14% at two-year colleges appear to be Pell Grant eligible based on their EFC but did not receive the award. Based on the data file documentation (Wine et al., 2012), the reported NPSAS EFC is derived from several different data sources. For most students, the NPSAS EFC is most likely the adjusted EFC after verification and adjustments have been made, as it is collected in the spring of every wave. However, the NPSAS EFC data come from several different sources, including the Pell Grant record in the National Student Loan Data System (NSLDS), the primary EFC from the FAFSA, the reported EFC by the NPSAS institution, and potentially the imputed¹ EFC if the students did not receive any federal aid. Therefore, some of the reported NPSAS EFCs may be the initial FAFSA EFC or the imputed EFC, neither of which are the final adjusted Pell Grant EFC. We explore the implications of this issue further below.

At both four-year and two-year institutions in the pooled NPSAS sample, there were only a handful of students who received Pell Grants despite appearing ineligible based on their NPSAS-reported EFC (between 0 and 10 at each type of institution, representing less than .01% of students). This suggests extremely little shift in status from ineligible to eligible. However, when examining the students who appear eligible based on the NPSAS EFC, a sizable percentage did not receive Pell Grants. Specifically, we observe a level of nonreceipt of 11.5% (6% out of 52.1% of those eligible) at four-year institutions and 20.0% (14.3% out of 71.6% of those eligible) at two-year institutions.

Since the NPSAS EFCs may be imputed if the students did not receive any federal aid, we examine the number of students in the four NPSAS waves who were Pell eligible based on reported NPSAS EFC but did not receive a Pell Grant, Federal Supplemental Educational Grant (FSEOG), or Direct Subsidized Loan. About 3,700 students at four-year institutions, representing almost a million students, and 5,280 students at two-year institutions, representing about two million students, fell into this category. Using an indicator that the EFC was imputed, we find that 11.1% and 8.1% of these students at four- and two-year institutions respectively had their EFCs imputed and not actually observed. This indicates that there were still students who appeared eligible for Pell based on EFC but did not receive the grant.

The limitations with NPSAS data are that we do not know if the reported EFC is the initial FAFSA EFC and the final EFC. Additionally, we cannot observe how EFC changes from initial to final Pell Grant EFC. Administrative data from WCU enables us to know both the initial and final EFC, and it allows us to examine the ways EFCs can change and the rate of Pell receipt nonreceipt using the final Pell EFC.

We use data in the final two columns of Table 2 to report the number of students in each Pell eligibility group at WCU as a comparison to the national data. The third column reports Pell Grant eligibility and receipt based on initial FAFSA EFC and the final column reports eligibility and receipt for the final Pell EFC after adjustments.

Based on initial EFC, 5.3% of students (950 out of 17,967) were ineligible but did receive Pell, and 5.3% of students (2,129 out of 40,161) were eligible but did not receive Pell. Using the final Pell EFC, however,

¹ Imputation is a method of estimating missing values of a variable using a predictive model. In this case, NPSAS likely uses non-missing demographic and financial aid data to estimate a student's EFC when the actual EFC cannot be determined from any other data source. It is a last measure to estimate a student's EFC.

Table 2

Compliance of Pell Eligibility Based on EFC and Pell Receipt

Pell eligibility based on EFC	NPSAS 4-year	NPSAS 2-year	WCU initial EFC	WCU adjusted EFC
Pell ineligible				
Did not receive Pell	0.479	0.284	0.293	0.324
Received Pell	0.000*	0.000*	0.163	0.000
Total	0.479	0.284	0.309	0.324
Pell eligible				
Did not receive Pell	0.060	0.143	0.366	0.005
Received Pell	0.461	0.574	0.654	0.671
Total	0.521	0.716	0.691	0.676
Actual observations	121,200	66,790	58,128	58,128
Population observations	24,435,210	15,717,130	58,128	58,128

Note. NPSAS weights were used to make the sample nationally representative. All observations for NPSAS have been rounded to the nearest 10 per IES compliance. 0.000* indicates that the proportion is less than .0001.

solves almost all of this nonreceipt. Based on the final EFC, there were no students who were ineligible that received Pell and only 0.8% (331 out of 39,313) who were eligible but did not receive Pell, which is substantially lower than the nonreceipt rate at the national level. This finding further supports the conclusion that many NPSAS EFCs are not the final Pell Grant EFC. This finding also raises the questions of how initial EFCs can be adjusted, how many EFCs change, and by how much. We turn to these questions next.

Descriptive Changes in EFC

Figure 1 provides two panels summarizing the changes in EFC between initial and final EFC at WCU. The left panel includes no changes from initial to final EFC at WCU; the right panel includes only students with changes from initial to final EFC at WCU. A substantial portion (36.9%) of students' EFCs changed. Excluding the zero changes, we observe that the distribution of the change is nearly symmetric with the vast majority experiencing small changes of less than few thousand dollars in either direction. For instance, there were 3,469 students whose EFC increased by \$500 or less and 3,521 students whose EFC decreased by \$500 or less. However, about 3,800 students experienced substantial changes in EFC of \$2,000 to \$5,000 in either direction. Moreover, these changes often happen around the Pell Grant eligibility threshold in the EFC distribution as shown by Figure 2, which provides a histogram of EFC changes for students' EFCs around the Pell eligibility threshold of a \$5,000 range.

Additionally, Figure 3 shows the distribution of initial FAFSA EFC for students whose EFC changed from initial to final Pell Grant EFC at WCU. This figure shows that the majority of students whose EFCs changed were needier students, particularly those at or just above zero EFC. Fewer students at high initial EFCs experienced a change. Taken altogether, these two figures suggest that needier students and students around the Pell eligibility threshold are likely to experience EFC changes.

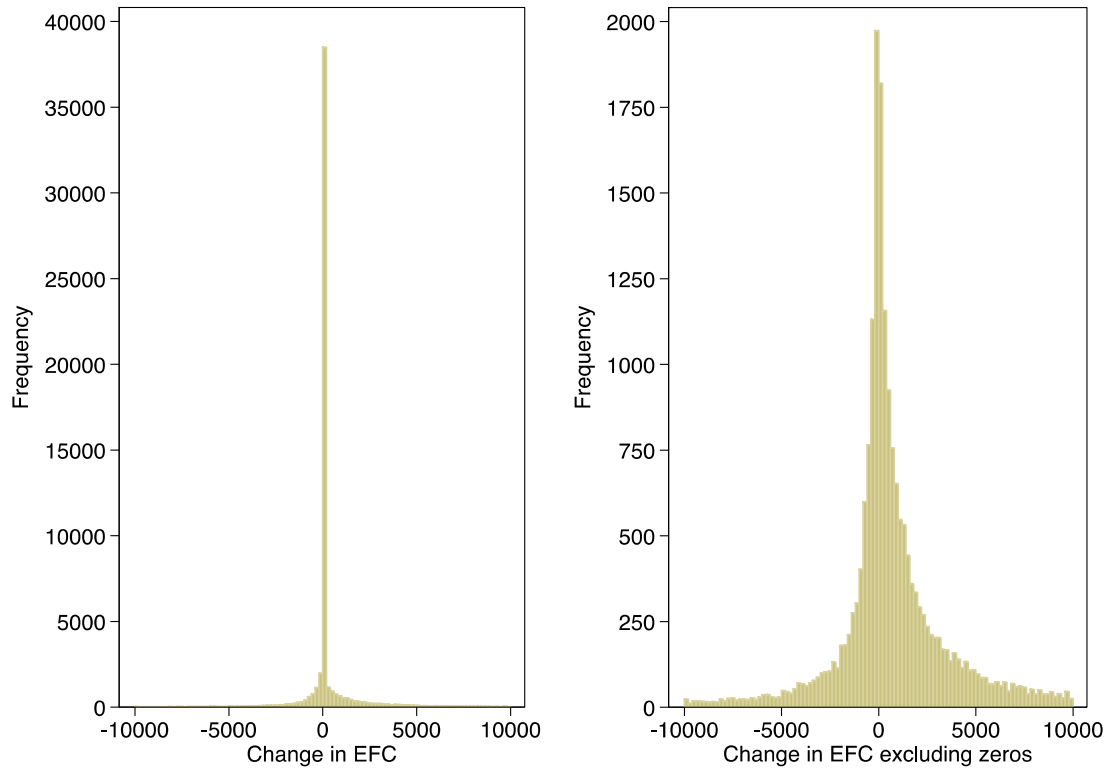


Figure 1. Histograms of changes in EFC from initial FAFSA EFC to final Pell Grant EFC for students at WCU.

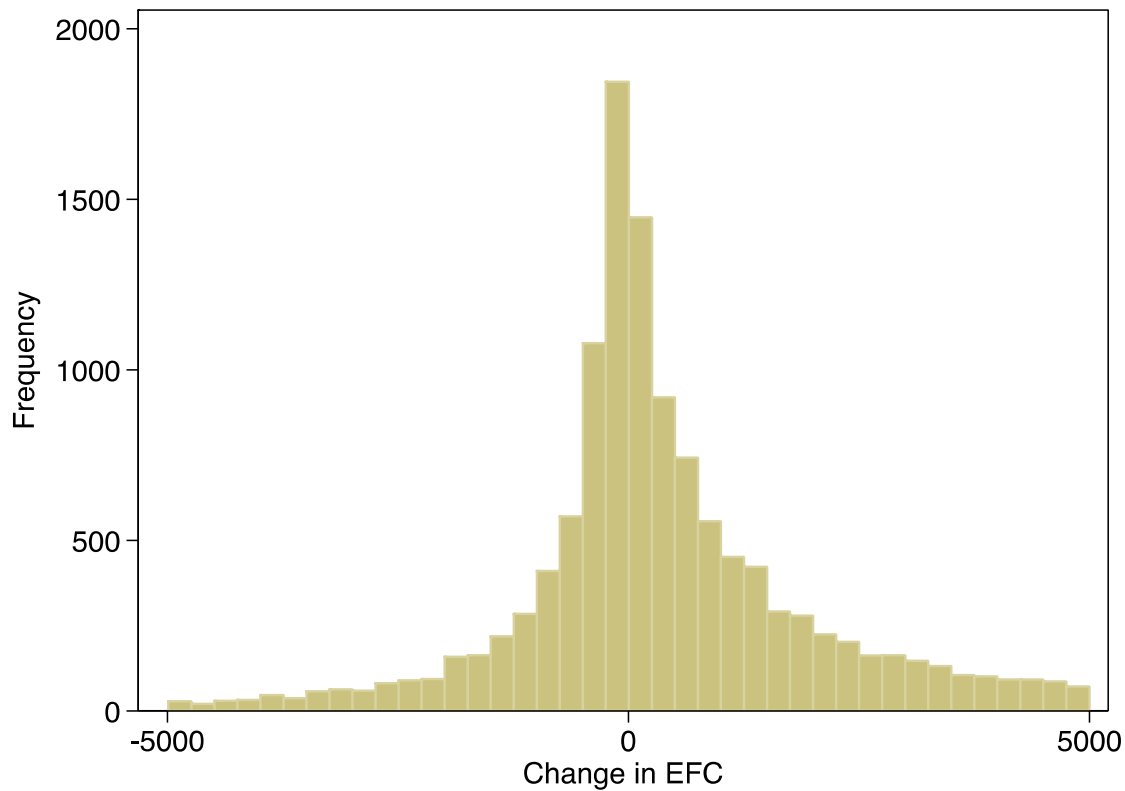


Figure 2. Change in EFC from initial FAFSA EFC near the cutoff for Pell eligibility for students whose EFC changed at WCU.

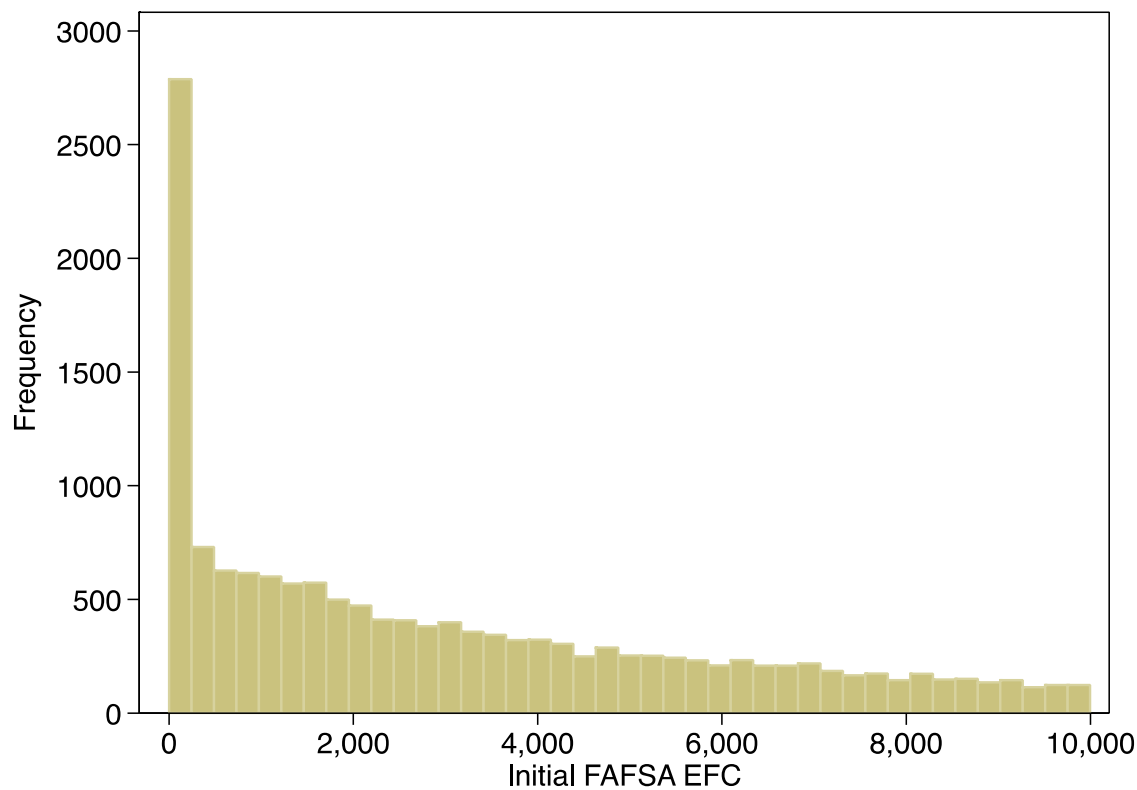


Figure 3. Distribution of initial FAFSA EFC for WCU students whose EFC changed from initial to final EFC.

Examining How the EFC Can Change

We outlined several ways in which initial EFCs can change above. In this section, we use student data from WCU to provide evidence about the frequency of those cases. The institutional administrative data provide more detail about changing EFCs than is available using national data. We consider three main reasons that EFCs change: Students voluntarily change their FAFSA information, verification requires students to provide documentation to financial aid administrators which may result in EFC changes, and professional judgment.

We begin by considering professional judgment. Due to data limitations, we do not have complete information on the application of professional judgment at WCU for all cohorts; however, the process appears to be rare. Of the more than 58,000 enrolled students who applied for aid across all four years, only a tiny fraction had professional judgment alterations to their FAFSA responses. Unfortunately, professional judgment is not recorded in NPSAS data, so we cannot identify whether WCU is broadly representative of four-year colleges. Regulations grant financial aid administrators great latitude in deciding how to apply professional judgment (USDE, n.d.; McPherson & Schapiro, 2002), and it is likely that different institutions have varying rates.

A second way students' EFC may change is due to the verification process. As discussed above, a student may be selected for federal verification and/or institutional verification. During the years of data we observe, WCU participated in the QA program. This program enabled WCU to ignore the request for federal verification and select students for verification based on the institution's criteria. When students comply with verification, the information they provide may alter inputs into the EFC calculation resulting in

an adjusted EFC. Of the 58,128 students observed at WCU over the four-year period, 22,732 students (39.1%) were chosen for QA verification.²

Verification results in many EFC changes. Of the 22,732 students who were asked to verify, 32.2% increased their EFC by an average amount of \$4,438, 19.4% decreased their EFC by an average amount of \$2,916, and 48.4% had no change in EFC. Just over half of the students who were asked to verify changed their EFC, and they were more likely to have their EFC increase than decrease.

The final explanation for why EFCs can change is that students or institutions voluntarily adjust data reported on the FAFSA even when they are not asked to verify. Of the 21,458 students whose EFC changed at WCU, 54.6% of them were selected for QA verification, implying that 45.4% of students whose EFC changed were not selected for QA verification. This suggests a substantial number of students are making changes to their FAFSA answers themselves or working with a high school guidance counselor or college financial aid administrator to make corrections that result in an updated EFC. We cannot observe this process directly, but given the large number of students whose EFC changes even if they were not asked to complete verification (and given that the rate of professional judgment is low at this institution), we can conclude this happens frequently.

We also examine the direction and magnitude of EFC changes among students who were not asked to verify: 15.9% increased their EFC by an average amount of \$4,454; 11.6% decreased their EFC by an average amount of \$6,423 and for 72.5%, the EFC did not change. We believe it makes sense that the decreases would be larger among this set of students, as students are more likely to want to voluntarily adjust their data if it reduces their EFC by a large amount.

We turn to examining where these two methods of EFC changes take place in the EFC distribution. Figure 4 shows the initial FAFSA EFC distributions among EFC changers for those who were and were not selected for QA verification. In other words, Figure 4 takes the distribution from Figure 3 and divides it into verified and non-verified students. These figures show that students whose EFC changed at the lower end of the initial EFC distribution were more likely to be QA verified students, while a larger number of the EFC changers who were not asked to verify had EFCs above 20,000.

The difference between these two distributions led us to examine the subset of students whose initial EFCs were \$8,000 or less to determine whether these changes are important around the Pell eligibility threshold. Under this restricted sample, there are 25,648 students who were not asked for QA verification and 18,487 who were. Among those who were asked for QA verification and whose initial EFCs were \$8,000 or less, 29.2% increased their EFC by an average amount of \$3,765, and 16.0% decreased their EFC by an average amount of \$885, with 54.8% not changing. Among those who were not asked to verify and whose initial EFCs were \$8,000 or less, 13.3% increased their EFC by an average amount of \$2,805 and 8.5% decreased their EFC by an average of \$878 with 78.2% not changing. These results are similar in percentages to the full sample, with the key difference in the average EFC decrease, particularly for students who were not asked to be QA verified. The decrease in EFC of \$878 in the restricted sample for non-QA verified students compared to the decrease in EFC of \$6,423 in the full sample for non-QA verified students indicates that much of the decrease in EFC is happening for students with high initial EFCs. This result reinforces what we observe in Figure 4, where there is a much higher density of students whose EFC changed among non-verified students at high levels of initial EFC (above \$20,000). Presumably, these non-QA verified students and their families observed high initial EFCs and worked with their institutions to verify and eventually decrease their EFC.

² At WCU, 23,584 students were selected for federal verification. However, since WCU is a QA school, it can decide to select a different set of students for QA verification. WCU selected about half, 11,015 students, of those selected for federal verification for QA verification. In addition to those students, WCU also selected an additional 11,717 students to be QA verified who were not selected for federal verification. This result suggests that WCU had criteria for verification that did not match those the federal government uses to select students for federal verification.

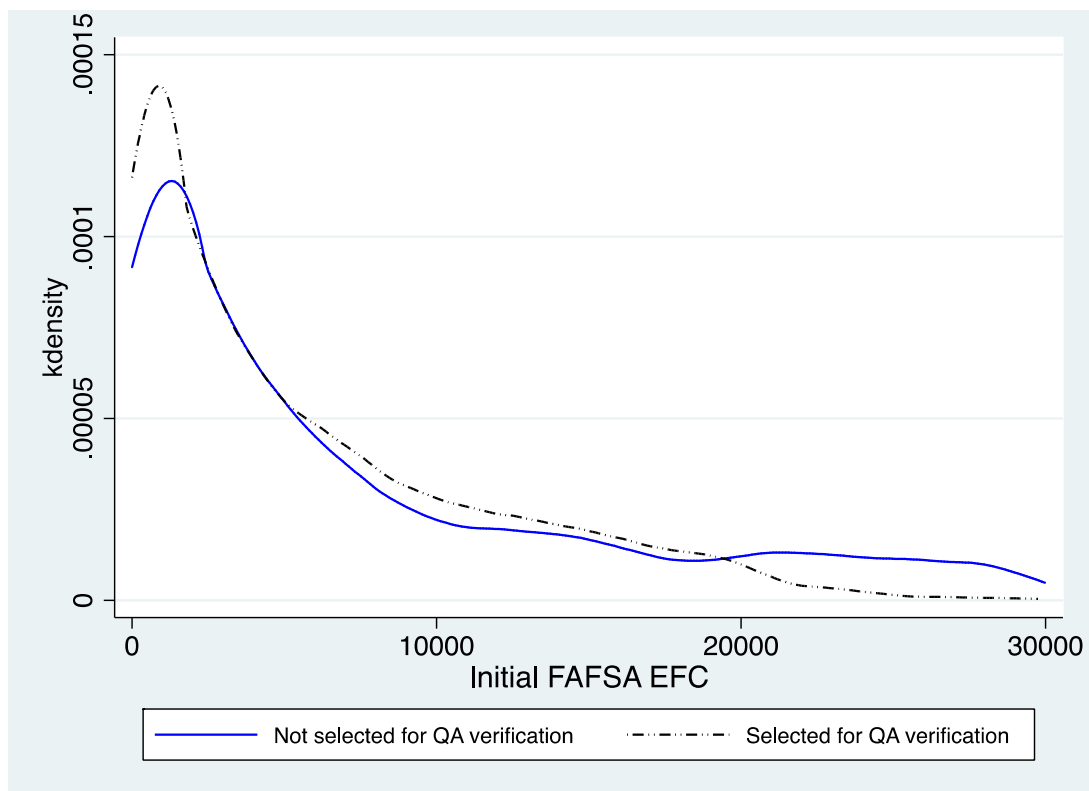


Figure 4. Distribution of initial FAFSA EFC based on QA verification selection for WCU students whose EFC changed from initial FAFSA EFC to final Pell EFC.

The difference between these two distributions led us to examine the subset of students whose initial EFCs were \$8,000 or less to determine whether these changes are important around the Pell eligibility threshold. Under this restricted sample, there are 25,648 students who were not asked for QA verification and 18,487 who were. Among those who were asked for QA verification and whose initial EFCs were \$8,000 or less, 29.2% increased their EFC by an average amount of \$3,765, and 16.0% decreased their EFC by an average amount of \$885, with 54.8% not changing. Among those who were not asked to verify and whose initial EFCs were \$8,000 or less, 13.3% increased their EFC by an average amount of \$2,805 and 8.5% decreased their EFC by an average of \$878 with 78.2% not changing. These results are similar in percentages to the full sample, with the key difference in the average EFC decrease, particularly for students who were not asked to be QA verified. The decrease in EFC of \$878 in the restricted sample for non-QA verified students compared to the decrease in EFC of \$6,423 in the full sample for non-QA verified students indicates that much of decrease in EFC is happening for students with high initial EFCs. This result reinforces what we observe in Figure 4, where there is a much higher density of students whose EFC changed among non-verified students at high levels of initial EFC (above \$20,000). Presumably, these non-QA verified students and their families observed high initial EFCs and worked with their institutions to verify and eventually decrease their EFC.

To summarize our findings as described thus far, the lack of nonreceipt between EFC eligibility and Pell Grant receipt observed in NPSAS is partly explained by the possible use of initial FAFSA EFC, instead of the adjusted Pell EFC and the imputed EFC, for students who do not receive any federal financial aid. However, even after accounting for EFC changes, there are still students who appear Pell eligible given their EFC but who did not receive Pell. According to our institutional data, EFC changes are common, as more than one-third of students experience a change. Changes are most commonly caused by adjustments made during the verification process or due to students voluntarily providing updated information that alters their EFC calculation.

Understanding Remaining Pell Grant Eligibility and Nonreceipt

Although updated EFCs remove most of the instances of nonreceipt between initial FAFSA EFC eligibility for Pell Grant and Pell Grant receipt (Table 2), we still observe a small number of students (331) at WCU who appear eligible but do not receive the award. We consider several potential explanations for this remaining unexplained nonreceipt: QA verification noncompliance, exceeded lifetime Pell limits, C-flag ineligibility, and satisfactory academic progress (SAP).

QA verification noncompliance. The first potential explanation is that students selected for QA verification may not have provided the documentation necessary to comply with the verification requirements. We call these students QA noncompliant. Students who were selected for QA verification and provided the necessary documentation are called QA compliant. We examine the extent to which QA noncompliance explains why some students who appear eligible for the Pell Grant based on their final Pell EFC did not receive the award.

Table 3 breaks down the number of students at WCU who are QA compliant and QA noncompliant across final Pell EFC eligibility and actual Pell Grant receipt for freshmen and returning students whose grade status is non-freshmen. As the last row of the table indicates, the vast majority of students who were chosen for QA verification complied with verification; only 191 students, or 0.8%, were QA noncompliant. Of those 191 students, 130 students did not have Pell-eligible EFCs. Of the 61 remaining QA noncompliant students with Pell-eligible EFCs, 50 did not receive a Pell Grant and 11 did receive a Pell Grant. Separated out by student status, we observe that 88% of the 50 students who were eligible but did not receive Pell were non-freshmen. This suggests that there may be other factors that influence nonreceipt for non-freshmen, which we will explore toward the end of this section. We have no explanation for the 11 students who failed to complete QA verification but were given an award. For those who were QA compliant, 105 students, a small 0.7%, were Pell eligible but still did not receive a Pell Grant.

Table 3

Pell Eligibility Based on EFC and Pell Receipt for QA Verification Compliance

Pell eligibility based on adjusted EFC	Freshmen		Returning students	
	QA compliant	QA noncompliant	QA compliant	QA noncompliant
Pell ineligible				
Did not receive Pell	415	9	6,365	121
Received Pell	0	0	0	0
Total	415	9	6,365	121
Pell eligible				
Did not receive Pell	9	6	96	44
Received Pell	1,150	1	14,506	10
Total	1,159	7	14,602	54
Observations	1,574	16	20,967	175

Note. This subsample for WCU contains only students who were chosen for QA verification.

At WCU, noncompliance with verification is a much less common issue than we expected. Relative to two-year community colleges in which verification is an enormous challenge (Cochrane, LaManque, & Szabo-Kubitz, 2010), we do not observe verification compliance to be a substantial obstacle to Pell Grant receipt for eligible students at this institution.

In summary, of the 331 students whose final Pell EFC suggested they were eligible to receive the reward but they did not, 155 were asked to complete verification and 105 complied with QA verification while 50 did not. QA noncompliance explains only 50 of the 331 students. It does not explain the 105 students who complied with verification and the 176 students who were not asked to verify, both of whom have the necessary final Pell EFC to receive the award but do not. We observe that non-freshman status may influence nonreceipt and turn to additional explanations that may explain why these students did not receive the grant.

Exceeded lifetime Pell limits. Students labeled as seniors comprise 75% of the remaining unexplained group. Given our ability to link records across years, we identified a substantial portion of these students (46%) as repeating seniors, that is, they were seniors in a prior year. This suggests the lifetime limits of Pell receipt, essentially six years of receiving the award, may deter students who appear otherwise eligible from receiving the award. We are unable to observe exactly how many terms each student received an award, so we cannot definitively state how many students were denied Pell due to the lifetime cap, but, based on our data, it appears as if roughly half of the remaining unexplained lack of Pell receipt falls into this category.

C-flags. Another possible explanation of Pell Grant eligibility and nonreceipt is the C-flag. This is an indicator that a student may not meet the eligibility requirements for federal student aid. When we explore this indicator for Pell eligibility and receipt at WCU, we find that it does not perfectly explain why students did or did not receive Pell Grant assistance since about half of the C-flag students eventually received a Pell Grant. This was likely due to the code being resolved by the student submitting additional information, but the code not being updated on the Institutional Student Information Record data record once acceptable documentation was received. Of the 331 students who had final Pell-eligible EFCs, 150 had a C-flag code that prevented them from receiving aid, so this may explain nearly half of the remaining nonreceipt with Pell eligibility based on EFC.

Satisfactory academic progress (SAP). Our final potential explanation is that students who appear eligible according to their EFC do not receive the award because they do not meet SAP (Schudde & Scott-Clayton, 2016). This would only apply to non-freshmen, as initial disbursement does not consider SAP. At WCU, students must meet a 2.0 GPA threshold and complete a minimum number of their attempted credits. Unfortunately, we do not observe academic measures in our data, so we cannot eliminate the proportion of students who did not receive Pell due to this academic requirement. We can conclude it is likely small given the prior explanations, which explain a large portion of why apparently eligible students do not receive the award.

Demographics Differences in QA Verification and Pell Nonreceipt

We have shown the importance of QA verification in the students' financial aid process because it results in EFC changes in more than half of the students who are verified and because noncompliance with verification can preclude the receipt of aid. As such, we consider whether selection for QA verification and changes in Pell eligibility status are uniform across students based on their demographics characteristics. We explore this issue in Table 4, which reports results using WCU data in a multiple regression analysis regressing several verification and EFC change outcomes on race, and gender variables using year fixed effects and controls for parental education and grade level.

Table 4

QA Verification, EFC Change, and Pell Eligibility Change by Student Demographics

Variables	Selected for QA verification	Verification complete	EFC changed	Change in Pell eligibility
Female	0.00094 (0.00352)	-0.00114 (0.00124)	0.00486 (0.00385)	0.00162 (0.00177)
Black	0.01574 (0.00966)	0.00827* (0.00350)	-0.04194** (0.01001)	0.00252 (0.00485)
Hispanic	-0.01347* (0.00603)	0.00760** (0.00266)	-0.00665 (0.00644)	-0.00212 (0.00295)
Asian	0.04877** (0.00592)	0.01035** (0.00257)	-0.01422* (0.00628)	0.00123 (0.00295)
Other	0.02374** (0.00903)	-0.00218 (0.00456)	-0.01385 (0.00950)	0.00499 (0.00464)
Initial FAFSA EFC (1,000)	-0.00299** (0.00030)	-0.00025* (0.00012)		
Selected for QA verification			0.27755** (0.00454)	0.06119** (0.00243)
Constant	0.80984 (0.01060)	0.99381 (0.00377)	0.09524 (0.01195)	-0.01101 (0.00557)
Observations	58,128	22,732	58,128	58,128

Note. Results are from linear probability models on all four binary outcomes. All models include year fixed effects and control for grade level and parental education. The reference group for the race variables is White. Heteroskedastic-robust standard errors are reported in parentheses.

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$

Generally, we do not see differential effects on gender but we do see them for racial minorities. In column 1 of Table 4, we observe that, *ceteris paribus*, some minority students are more likely to be selected for QA verification even after we control for initial FAFSA EFC. The negative coefficient on initial FAFSA EFC indicates wealthier students were less likely to be selected for QA verification. Asian students were 4.9 percentage points more likely to be selected for QA verification than White students, while Black students were 1.6 percentage points more likely to be selected, though its significance lies just outside conventional level at 10.2%. In contrast, Hispanic students were 1.3 percentage points less likely to be selected for QA verification than White students. While we cannot disclose the full selection criteria for QA verification at WCU, in our discussion with WCU staff, race/ethnicity was not mentioned as an explicit criterion for selection. Relatedly, the federal government does not disclose their verification selection criteria, but we believe it is other selection criteria correlated with race/ethnicity, rather than race/ethnicity itself, driving these results.

When we disaggregate the results into freshman and returning student status in Table 5, we find that the patterns are generally the same across the two groups, though there were a few differences. For instance, Hispanic students were 5.4 percentage points less likely to be selected for QA for freshmen but not significant for returning students. On the other hand, Asian students were 5.2 percentage points more likely to be selected for QA verification for returning students but not for freshmen.

Table 5

QA Verification, EFC Change, and Pell Eligibility Change by Student Demographics for Freshmen and Returning Students

Variables	Selected for QA verification	Verification complete	EFC changed	Change in Pell eligibility
Panel A: Freshmen				
Female	-0.00063 (0.01371)	-0.00339 (0.00508)	0.01251 (0.01507)	0.00439 (0.00741)
Black	-0.02504 (0.03500)	0.00102 (0.01188)	-0.03306 (0.03718)	0.00919 (0.01889)
Hispanic	-0.05418* (0.02544)	0.00721 (0.00941)	0.02592 (0.02673)	0.00928 (0.01312)
Asian	-0.00190 (0.02563)	0.00425 (0.00822)	-0.04237 (0.02625)	0.00945 (0.01295)
Other	-0.01001 (0.03423)	-0.05097* (0.02361)	-0.04555 (0.03659)	-0.00466 (0.01743)
Initial FAFSA EFC (1,000)	-0.00153* (0.00072)	-0.00012 (0.00017)		
Selected for QA verification			0.25643** (0.01761)	0.06455** (0.00957)
Constant	0.86222 (0.03335)	0.99133 (0.01398)	0.06312 (0.03797)	-0.01964 (0.01835)
Observations	3,912	1,590	3,912	3,912
Panel B: Returning students				
Female	0.00109 (0.00363)	-0.00099 (0.00127)	0.00584 (0.00399)	0.00172 (0.00182)
Black	0.01718+ (0.01007)	0.00868* (0.00365)	-0.04274** (0.01042)	0.00216 (0.00502)
Hispanic	-0.01121+ (0.00615)	0.00725** (0.00274)	-0.00454 (0.00665)	-0.00203 (0.00302)
Asian	0.05206** (0.00603)	0.01049** (0.00267)	-0.00613 (0.00648)	0.00192 (0.00303)
Other	0.02572** (0.00938)	0.00209 (0.00445)	-0.00730 (0.00987)	0.00667 (0.00482)
Initial FAFSA EFC (1,000)	-0.00323** (0.00029)	-0.00033* (0.00015)		
Selected for QA verification			0.27870** (0.00471)	0.06084** (0.00251)
Constant	0.80578 (0.00854)	0.99652 (0.00282)	0.07634 (0.00986)	-0.02114 (0.00443)
Observations	54,216	21,142	54,216	54,216

Note. Results are from linear probability models on all four binary outcomes. All models include year fixed effects and control for grade level and parental education. The reference group for the race variables is White. Heteroskedastic-robust standard errors are reported in parentheses.

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$

Returning to Table 4, column 2 displays whether students completed verification conditional on being asked to verify. We observe Black, Hispanic, and Asian students were about one percentage point more likely to complete their verification than White students, although the completion rate at WCU is extremely high for all students. According to Table 5, these differences appear driven by returning students.

The final two outcomes of Table 4 are binary measures of whether EFC changed or Pell eligibility changed, and they include verification selection as an independent variable. From column three, we observe Black students were 4.2 percentage points less likely to experience a change in EFC compared to White students. More significantly, there is a 27.8 percentage point increase in the probability that EFC changed if students were selected for verification. For changes in Pell eligibility status, there is a 6.1 percentage point increase in the probability that students change their Pell eligibility status if selected for QA verification. These results remain comparable when disaggregated into freshmen and returning students (Table 5). Overall, these results speak to the important role that verification plays in whether students' EFC and Pell eligibility changes.

Discussion

We began this analysis by observing a substantial disconnect between Pell-eligible EFCs and Pell Grant receipt in national NPSAS data. Even after accounting for imputed EFCs, we still observe nonreceipt of Pell Grant at both four- and two-year institutions. When we weight these results using nationally representative NPSAS weights, these rates of nonreceipt represent several hundred thousand students. To examine this issue further, we use administrative data from a selective public four-year institution on the West Coast. In contrast to the NPSAS data, we find a small rate of nonreceipt of 0.8% who were eligible but did not receive Pell, suggesting most of the Pell Grant nonreceipt issue arises from not observing the final adjusted Pell Grant EFC. This raises questions about the distribution of changes in EFC and how those changes occur.

We observe that more than a third of students' EFCs changed from initial FAFSA EFC to final Pell EFC, nearly the same rate as uncovered at community colleges in California (Cochrane, LaManque, & Szabo-Kubitz, 2010), and that needier students and students around the Pell eligibility threshold are likely to experience EFC changes. We consider three methods by which EFC can change. We find that professional judgment was not frequently used at WCU, but this is likely to vary among institutions. Instead, slightly more than half of the changes to EFC arise from the verification process with the remainder arising from students voluntarily changing their FAFSA answers after initial submission. Regardless of the method, the adjusted EFC removes most of the nonreceipt between the Pell eligibility based on initial FAFSA EFC and Pell receipt.

We examined several potential explanations for the remaining unexplained nonreceipt and focus on students failing to comply with the request for verification. At WCU, this is not a common issue, but prior literature establishes it as a substantial issue at community colleges. Cochrane, LaManque, and Szabo-Kubitz (2010) find that 31% of those selected for federal verification at California community colleges did not comply. Their result, combined with our discovery that being selected for verification is related to an increase in the chance of changing EFC by over 27 percentage points, highlights the importance of the verification process. Therefore, we turn to considering how institutions may be able to improve the verification process by considering the verification process at our own institution, Vanderbilt University. We note that Vanderbilt University is not the same institution as WCU, a pseudonym for the West Coast institution whose data we have analyzed above.

Verification Process

The verification process is designed to review the accuracy of the data provided on financial aid applications. Institutions must verify each student selected for verification by the U.S. Department of Education, or if the school participates in QA program, it must verify each student it selects. In addition to federal verification, institutional verification is another practice utilized by some institutions to determine eligibility for institutional financial aid. Although the percentage of institutional verification completed can vary among institutions, Vanderbilt completes 100% verification of undergraduate students who apply for need-based financial aid by requiring student and parent tax returns along with financial aid applications. As we discuss the verification process at Vanderbilt, we will focus on the federal verification of undergraduate students.

Vanderbilt's Verification Process

Vanderbilt is a well-resourced institution that verifies more than 3,000 undergraduate students each year with nearly 100% compliance with the verification requirement. There are 19 staff members in the office and seven of these positions review documents for verification. Each individual is trained yearly on the verification process and reviews the files of their assigned population as they are submitted. The verification process begins with the uploading of FAFSA data, which indicates a student's selection for verification by the U.S. Department of Education. If the student is awarded need-based federal aid, then the required verification documents are added to the student's checklist viewable in their Vanderbilt portal. For currently enrolled students, missing items on their checklist generates an email to their Vanderbilt email address once every two weeks alerting them that additional information is needed to complete their file. First-year admitted students receive emails sent to their personal email address from the summer until February. If students do not respond to email requests, then additional steps are taken to obtain compliance, such as individual and personalized emails sent to the student and follow-up phone calls by staff members.

When students receive their billing statements for the fall semester, anticipated financial aid is shown to provide the estimated balance due to Vanderbilt. Financial aid will not disburse to the student's account until verification is complete. Once disbursements begin, students with an incomplete verification status will appear on a failed authorization report indicating financial aid did not pay. The students' assigned counselor receives the failed authorization reports and reaches out directly to the student via email or a phone call. If a student does not complete verification by October 1, the anticipated aid will no longer show on the billing statement and a balance due will show for the amount of aid that was previously anticipated. In addition to dropping anticipated aid, students with a balance receive a hold on their student account and are not able to use their flexible spending account via their Vanderbilt-issued ID. These students are not able to make purchases such as printing documents and using the laundry facilities. However, they are still able to access their purchased meal plans. If this hold remains throughout the semester, the student will not be able to register for classes for the next term.

During the verification process, communication with students is frequent to ensure compliance. The type of communication with the student changes as the start of classes draws near to create a sense of urgency in completing the process. Each of the methods of communication is effective and prompts students to complete verification. We found that students respond more quickly when they are not able to access their Commodore Card funds or register for the upcoming term. Even though our verification process leads to nearly 100% compliance, there are potential difficulties that may arise during the verification process that may extend the process for a student or prevent a student from complying with the request.

Potential Difficulties of Verification Compliance

The verification process may not proceed as smoothly for some students due to unforeseen circumstances. Vanderbilt and other institutions experience the following difficulties that may prevent compliance:

- A dependent student's parents are married but both file their federal tax returns as head of household. Per federal guidelines, financial aid administrators must alert the family of the filing error. Usually in this situation, the parents are required to file an amended tax return to change the filing status. In some cases, parents may choose not to file an amended tax return, resulting in the loss of Pell Grant and other Title IV aid eligibility.
- A dependent student's parent(s) may refuse to provide the required tax information to complete the verification process.
- A student's dependency status determines which components of household information are used on the FAFSA and which pieces of information must be collected during the verification process. For example, parental information is not required if the student is independent. Although dependency status is not a part of the federal verification process, many institutions review the dependency status to determine if it is reported accurately. If a student is determined to be independent, institutions often request additional information and/or documentation to determine if the dependency status assessment is correct. This involves yet another step and potential hurdle for the student to move forward in the financial aid process, especially if the student is also selected for federal verification.
- The IRS Data Retrieval Tool (DRT) is a crucial tool available to help students complete the verification process. When completing the FAFSA, students and parents can use this tool to automatically retrieve the required tax information directly from the IRS. During the previous and current financial aid cycles, the IRS DRT has been unavailable due to security concerns. Recently, the U.S. Department of Education provided guidance that institutions can accept signed tax returns to meet federal verification requirements until the DRT is restored.
- The IRS website has a feature that allows students and parents to access their tax return transcripts online. In order to register and use this service, personal information is required from the following: credit card, mortgage, home equity loan, home equity line of credit, or car loan. It also requires a mobile phone with your name on the account. Low-income families may not have any of the information required to register for the service. If the IRS DRT is unavailable, this leaves the option to get the transcript by mail, which can take 5 to 10 days.
- Forms and tax return transcripts are accessible online and require the use of a computer to access the information. There are cases where parents either do not have access to a computer or do not know how to use their computer access to complete the process.

These situations are handled on a case-by-case basis to maximize the student's ability to comply with verification and receive financial aid. The requirements to complete verification can create anxiety for students, as the process is complicated for individual students depending on their circumstances and what information is needed for verification (Cochrane, LaManque, & Szabo-Kubitz, 2010). For instance, some students must only verify that they are enrolled in classes, which is straightforward, while others must provide documentation to verify their dependency status or parental income. These requests can be challenging to complete, particularly if students have estranged relationships with their parents. At Vanderbilt, one-on-one counseling is offered to help students navigate the verification process and ease concerns.

Completing Verification at Other Institutions

We reached out to financial aid administrators at public and private four-year institutions to learn how they complete the verification process and learned the process of getting students to comply varies amongst institutions. Some institutions do not make financial aid awards until the student completes the required verification process. This method is effective in that it encourages students to comply as quickly as possible in order to receive their financial aid award. However, the delay in receiving a financial aid award can have an impact on newly admitted students because the need for financial aid information is vital for many in making their college decision. Similarly, returning students need their financial aid awards to budget for the upcoming academic year.

Another difference is the number of staff resources devoted to the verification process. Responsibilities within a financial aid office may be assigned by tasks, so one person is responsible for the review of verification documents. This type of structure can provide consistency in the review process and minimize errors. Institutions with limited staff and a large student body may adapt this structure to maintain the flow of the financial aid process within their office. However, if an institution elects to wait until verification is complete to award financial aid to students and has only one staff person responsible, this could lead to a bottleneck effect that delays the process. Other institutions reported having up to five people with shared responsibility or a partial role in assisting with the verification process, to expedite reviewing documents and making financial aid awards. Outsourcing the review of verification documents to third-party vendor is an alternative that some institutions utilize within their verification process, allowing staff members to focus on other tasks essential to the office.

We found that institutions use similar methods to notify students of their selection and to get their attention to boost compliance. Most institutions utilize their school portal to communicate to students any missing items needed to complete their file. In addition, they send an email or letter to alert the student of missing items. The frequency of this communication varies from a notification that is one-time, weekly, or once every two weeks. Institutions also induce students to comply by taking actions such as dropping students from classes if they have not completed the verification process. These strategies stress the urgency of compliance.

As a profession, we want to ensure that we are not creating unnecessary barriers to higher education based upon business processes. Providing access to higher education is the primary focus and a delay in the verification process can deter a student's enrollment decision. It is important to place information into students' hands in the quickest way possible to help them enroll. In reviewing current verification processes at institutions, we find it may be necessary to change the way students are moved through this process. It is crucial to comply with federal regulations; however, verification can also be a complicating factor. We can learn from differences in how institutions process verification to develop our own best practices to ensure compliance.

How to Increase Verification Compliance with Limited Resources

Although providing additional personalized support to students in person or over the phone is likely to be the best way to increase verification compliance, we recognize that many higher education offices have limited resources. We suggest a few low-cost approaches to improving verification.

First, we encourage institutions to examine their communication plans. Employing innovative forms of communication to reach students who may not otherwise interact with the financial aid office can be an inexpensive method of delivering critical information about complying with verification. Currently popular forms of communication include text messaging, Twitter, and Facebook, but we should be aware that communication structures evolve over time. Although more time-consuming, live online chats may also

provide an easy way for students to ask questions and receive instant feedback. What is certain from our experience is that students are not likely to respond with one single communication attempt by the institution. It normally takes multiple contacts for a student to respond. And, even with multiple contact attempts, others still will not comply.

For that remaining cohort of students who are not responsive to communication, “last resort” measures may be necessary to induce students to complete verification. If the financial aid office can coordinate with other components of the administration, linking academic and student services with verification compliance may prove effective. Such a link enables the financial aid office to limit course registration, drop students from enrolled classes, prevent them from obtaining a parking permit, or remove access to recreational opportunities like sporting events.

Finally, we encourage institutions to consider whether they need to request additional information beyond what the government requires for federal verification. The simplest way to ease the verification process is to verify fewer elements. We greatly appreciate that financial aid administrators act as good stewards of financial resources, and identifying and correcting errors in the allocation of aid is an important goal. We ask only that institutions also consider the burden that requiring additional documentation imposes on students. In the cost-benefit analysis of requiring additional information, we fear some institutions err too far on the potential benefit side (catching and fixing possible errors) without fully considering the potential cost of students not being able to comply with verification and subsequently losing aid.

Conclusion and Policy Implications

Our study makes substantial contributions to the literature by using national and institutional data to examine the nonreceipt of Pell by Pell-eligible student at four-year institutions, providing detailed explanations of how nonreceipt occurs, and for whom and how verification affects Pell Grant eligibility. This work highlights an issue that has not been discussed in detail in the literature but is of interest to financial aid professionals, who are increasingly seeking and tracking Pell Grant recipients, as well as researchers who rely on EFCs and Pell eligibility status in their research.

For financial aid administrators, this study has implications for whom they select for verification (for those that verify a greater share than required by the federal government), their outreach to students for verification, and how they help students navigate the verification process. It also has implications for equity, ensuring the process is fair across student demographics and across the income distribution. We hope our analysis of institutional data will lead financial aid offices to conduct their own analyses using their institutional data and our recommendations will prove useful for improving aid receipt for students across the country.

For researchers, our study highlights the importance of understanding the nuances and limitations of using EFCs and Pell eligibility status in national datasets such as NPSAS. In particular, we note that national datasets may not reflect the final EFCs used to determine Pell eligibility status as they may be derived from several sources or imputed. This issue has strong implications, for example, in studies that use EFC as the running variable in a regression discontinuity framework. There are also potential issues if Pell eligibility is used as proxy for Pell receipt, since the rate of Pell nonreceipt can be quite high for two-year and four-year institutions.

Lastly, our study suggests that FAFSA simplification may alleviate burden on both students and schools, as others have suggested (Cochrane, LaManque, & Szabo-Kubitz, 2010; Dynarski & Scott-Clayton, 2006). Our study illustrates that, once the adjusted EFC is used in determining Pell eligibility, nonreceipt does not occur often and additional verification only affects a very small percentage of students, yet it can represent a

significant financial and time-consuming hardship for individuals and institutions, particularly ones with limited resources.

Even as we make substantial contributions to this literature, we recognize that there are limitations to our work. Our institutional data do not include academic measures, which limit our ability to determine the proportions of students who did not receive Pell due to academic requirements. More importantly, our empirical findings are limited to one four-year institution and thus may not widely apply to all four-year institutions. To address these limitations, future research should obtain academic measures to determine the effects of academic requirements on Pell receipt. Moreover, future studies should include multiple institutions, particularly two-year institutions.

In connection with our suggestion that the FAFSA be simplified, the effect of verifying dependency status on eligibility and receipt of Pell Grant deserves additional research. Verifying dependency status can be challenging for students from disadvantaged backgrounds. In some cases, students do not receive the aid for which they are eligible because family circumstances prevent them from verifying their status. We need to know the effect of dependency verification on eligibility and receipt as well as the challenges some students may face in complying with dependency verification.

Nexus: Connecting Research to Practice

- It is important for practitioners to understand all the reasons why a student who might initially be Pell Grant eligible based on EFC might not receive the award. This information is useful in advising students about their potential Pell receipt issues, setting institutional policy (for example relating to professional judgement and verification), and using Pell Grant data from national datasets or other institutions for comparison or benchmarking purposes.
- We hope this analysis serves as a call to financial aid administrators to consider issues of Pell receipt within their own institutions. For example, if a large number of students are losing Pell Grants due to not making satisfactory academic progress, the institution can take action and target academic resources to students just below this threshold.
- Our focus on the verification process suggests institutions should be intentional about who to verify and what elements to verify. While complying with federal regulations is essential, many institutions choose to verify additional students and data elements beyond federal requirements. These additional verification steps may deter some students from receiving Pell Grants.

Authors' Reflections on the Researcher-Practitioner Partnership

Researchers' Perspectives: In working through this project with two researchers and two financial aid administrators, we have gained valuable insight in how “the other side” operates. Professional contacts within the financial aid community are extremely valuable, and information regarding best practices, data, and methods have been freely exchanged between financial aid administrators and researchers throughout this endeavor. Several elements of this collaboration have proved effective. For example, the professionals’ institutional connections in the field of financial aid administration enabled the sharing of institutional data that is rarely available to researchers. We needed institutional data from a four-year institution that reflected other four-year institutions better than our own institution, and the collaboration made this possible. This unexpected benefit was highly appreciated.

Another beneficial aspect of this collaboration has been the constant dialog about theories that are spawned by reviewing data and sharing our results with our colleagues. The knowledge and expertise the financial aid professionals provided about technical details of federal regulations and how financial aid offices function in practice were invaluable in developing and testing the explanations for the Pell nonreceipt we observed. Many nuances in the administration of financial aid may go unnoticed when researchers simply look at large amounts of data. While there may not always be a definitive explanation for various findings in a body of research, financial aid administrators can describe how the practical administration of the programs, including the laws and regulations that guide the practice, impact the aggregate data that is reviewed.

From the beginning, we made efforts to meet with our financial aid colleagues in person to frequently discuss ideas, which resulted in a smooth collaboration. The greatest challenge we encountered was writing in a similar voice and style. The structure of the paper lent itself to a division of writing, and, as academics, we have a certain style of writing that is not regularly adopted in the real world. This made it challenging to make the paper sound like it was written in one voice throughout.

Financial Aid Professionals' Perspectives: From the financial aid professionals’ perspective, researchers who are not involved in the day-to-day minutia of administering financial aid programs can bring a fresh perspective in how these programs operate and their effectiveness. Aid administrators, historically, have focused on “keeping the trains running on time,” working to resolve the most recent student crisis while trying to remain compliant with federal regulations when administering financial aid programs. Researchers bring a larger perspective with the opportunity to look at the big picture and consider questions like, “Are the programs being administered by the financial aid administrators having the type of impact for which they are designed?” Both researcher and aid administrator perspectives are needed and are vital. Quality research can help guide and direct the everyday management of programs, while practitioners in the field can help direct where additional research is necessary to determine how aid programs can be more effective.

A benefit of working with our two researchers is their vast collective experience working in the higher education space. This experience has provided the opportunity to consider other areas of collaboration that can be mutually beneficial not only to Vanderbilt but the larger higher education community. Researchers can help to prove or disprove theories we have as practitioners, either with other published research or with new discovery. The challenge is to find the time for this work when there are many other pressing demands for our time that directly impact the delivery of financial aid to our students.

One of the significant challenges that we faced was the inability to obtain more data from our colleagues at other institutions. In hindsight, we should have “cast a wider net” in terms of the schools we approached and allowed for more time for schools to respond. Again, the challenge for aid administrators is finding the time for additional work with the added complexity of working through school governance structures to obtain the data.

Our collaboration has the potential to enhance teaching in our masters’ program in higher education administration. We offer a two-track sequence on enrollment management in which the first term is taught by researchers introducing students to the theories and published literature on enrollment management, and the second term is taught by practitioners working full time in the field. Our collaboration on this research project has spillover effects into informing our teaching across that course sequence.

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