Retention by Expected Family Contribution (EFC)

This report explores first-year retention rates by Expected Family Contribution (EFC) for full-time, first-time (FTFT) freshman cohorts and is organized into four sections. The first section reviews longitudinal retention trends among the most recent five FTFT cohorts. The second section explores the income distributions of the same five cohorts. These first two sections use broad EFC groupings that are applicable across all five cohorts. The final two sections of this report explore overall and subgroup retention for the FA13 FTFT only and provide more detailed look at EFC groupings specific to current financial aid packaging criteria.

Executive Summary

- Across the most recent 5 cohorts there is a positive association between EFC and retention.
  - Low-income students have retention rates that fall below the overall cohorts’ rate.
  - Middle income students typically have rates that are similar to the overall cohorts’ rate.
  - Upper income students typically have rates that exceed the overall cohorts’ rate.
- About a quarter of each FTFT cohort is low income and nearly half of each freshman cohort is middle income; therefore, low and middle income students make up nearly 75% of each cohort and their retention rate significantly impacts the overall cohort’s rate. This income distribution has been relatively stable over the five most recent freshman cohorts.
- There is a positive association between CTC receipt and retention.
  - Among students with a CTC eligible income, retention is highest for those who receive CTC compared to those who do not. For instance, the retention among FA13 CTC recipients is higher than those students who are income eligible but did not receive the CTC (85.2% and 80% respectively).
  - The positive association between CTC receipt and retention is not as strong for the half CTC recipients. For instance, the retention among half CTC recipients in FA13 is 81.1% compared to 85.2% for full CTC recipients. However, even half CTC is better than no CTC. Compared to resident students with an equivalent income who do not receive the half CTC award has a retention rate of 71.4%.
- There are some interesting differences in retention by EFC for first-generation and minority students compared to the overall cohort.
  - The positive association between CTC receipt and retention seen in the entire cohort is even more pronounced for first-generation and minority students.
    - First-generation (FG) and minority CTC recipients have retention rates that exceed the overall rate for their subgroup. For instance, FG CTC recipients have a retention rate of 83.8% which is 2.8 PP higher than the overall FG rate of 81%; minority CTC recipients have a retention rate of 85.8% which is 1.5 PP’s higher than the overall minority rate of 84.3%.
  - Among the FA13 cohort, an EFC of 15,000+ is associated with a retention rate that exceeds the overall rate for the cohort. This trend generally holds true for both residents and non-residents; however, this trend does not hold for minority or first-generations students. Among these subgroups an EFC of 35,000+ is associated with a retention rate that exceeds the overall rate.
January 2015

Broad Longitudinal Trends

For a broader longitudinal perspective, the FA09-FA13 cohorts are categorized into one of four EFC groups based on current income requirements for the Commitment to Colorado (CTC) grant. The CTC program began with the FA11 cohort; however, low income students in the FA09 and FA10 cohorts (prior to CTC) were eligible for the Land Grant Award, which had a similar, although more limited, eligibility structure. For this analysis, the four groups are:

- **CTC income eligible**: includes all students who have an EFC and adjusted gross income (AGI) that renders them eligible for CTC award (full or half); however, not all students in this group received the CTC for a variety of reasons (nonresidents, residents that are over met with other grants/scholarships or veteran’s benefits, or did not meet other financial aid criteria such as deadlines or further verification).
- **Middle income**: includes students that are above CTC income eligibility but could be eligible for some types of need based aid (EFC between 15,000 and 55,000).
- **Upper income**: includes students who are generally not eligible for need based aid (EFC > 55,000).
- **Non-filers**: include students who did not file a FAFSA. The income level for non-filers is unknown; however, without completing the FAFSA these students are not eligible for need based aid.

Figure 1 displays the FTFT retention rates for the FA09-FA13 cohorts by broad EFC group. The FA13 overall retention rate is represented on the graph to provide context for each EFC group.

Figure 1.

### Retention Trends by EFC Group

- **CTC Income Eligible**
- **Middle Income**
- **Upper Income**
- **Non-Filers**

Compared to the FA09 cohort all EFC groups, except the non-filers, have increases in their retention rates. The CTC eligible students show a gain of about 2PP. The middle income group shows a more modest gain and the largest gain is seen in the upper income group (about 3PP). In FA13 and FA12, only non-filers had retention that fell below the overall rate. The importance of this is subsequently explored.
Income Distribution among Cohorts

To assess the impact of an EFC group's retention rate on the overall retention rate, it is also important to look at the proportional distributions of EFC groupings by cohort. Figure 2 displays the proportion of each cohort in each EFC group. The CTC income eligible group is referred to as the low income group in figure 2 and is partitioned into CTC recipients and income eligible non-recipients for the FA11-FA13 cohorts.

Figure 2.

The income distribution by cohort has been relatively stable over the last five cohorts. About a quarter of students are low income and just under half of students are middle income. From an overall retention rate perspective, it is important to note that close to 75% of CSU's freshman cohorts are low or middle income students. In other words, the retention rates of low and middle income students have a significant influence on the overall retention rate. Over the last five years there has been a slight downward trend of non-FAFSA filers and a slight upward trend of upper income students.
FA13 Financial Aid Recipient Groups

The EFC grouping for the broad range of cohorts in figure 1 masks some important differences within more specific financial aid recipient groups, which is the focus of this part of the report. The more specific financial aid recipient groups are as follows:

- **Full CTC** includes the lowest income students who are Pell eligible and received the CTC award;
- **Pell-no CTC** includes the lowest income students who have a Pell eligible EFC but did not get a CTC award;
- **Half CTC** includes students who are above Pell eligibility but have an AGI that is below Colorado’s median (57,000) and received the CTC award;
- **Low income- no CTC** includes students who did not receive the CTC award but have an EFC and AGI that are equivalent to the Half CTC group;
- **No CTC** includes students who have a CTC eligible EFC (less than 15,000), but come from families with an AGI that is above 57,000 making them ineligible for CTC;
- The remaining EFC groups are grouped into ranges by 10,000;
- **Non-filers** are kept as a separate group because their income level is unknown.

Figure 3 displays the FA13 FTFT retention rate by financial aid recipient group as well as the overall rate for comparison.

Figure 3.

Students with an EFC above 15,000 have retention rates that are above the overall rate and account for 56% of the cohort. The retention of non-filers also exceeds the overall rate; that group accounts for 20% of the cohort. Full CTC students have a retention rate that is similar to the overall rate and exceeds the retention rate of all other low income (EFC less than 15,000). The retention rates for low income students appear to be negatively associated with need. Students with low EFC but relatively higher AGI have higher retention than students of low income who receive either no CTC or half CTC and have a lower AGI. Otherwise stated, the FA13 retention rates show a positive association between receipt of CTC and first year retention evidenced by the gap in retention for Pell eligible students with and without the CTC award.
The more specific financial groups presented in the previous section are used to look at retention by EFC grouping among demographic subgroups in the FA13 cohort. Figures 5 and 6 present this information by residency.

**Figure 5.**

**FA13 Resident Freshman Cohort: One-Year Retention**

The trends for both residents and non-residents are similar to the overall trends. Students with an EFC of 15,000 and greater have retention rates that are higher than their overall subgroup rate and low income (EFC<15,000) have rates that are below the overall rate. Among residents, those who receive a CTC award typically have a higher retention rate compared to students with a similar income that don’t receive the award; although, the half CTC recipients have retention rate that is somewhat similar to the Pell-no CTC rate.
Institutional Research

January 2015

Figures 7 and 8 presented the retention by specific EFC group among minority and first generation students in the FA13 cohort.

Figure 7.

[Chart: FA13 Minority Freshman Cohort: One-Year Retention]

Figure 8.

[Chart: FA13 First Generation Freshman Cohort: One-Year Retention]

Trends among first generation and minority students have some important differences compared to the overall trends. First, Full CTC recipients have retention rate that exceed the sub-group’s overall rate. Additionally, the association between higher EFC groups exceeding the overall rate does not begin until the EFC is above 35,000 (15,000 among all students).
In regards to CSU’s interest in increasing the overall retention rate, the retention of low and middle income students is particularly important. Nearly three quarters of all entering freshmen cohorts are low or middle income; therefore, the retention of these students heavily influences the overall rate. This data suggests that need based financial aid could have a positive impact on CSU’s overall first-year retention rate.