Introduction

The National School Lunch Program (NSLP) provides subsidized lunches to more than 30 million children each school day. The program is means-tested; schools must obtain income data from households to certify students as eligible for free or reduced-price meals. The Access, Participation, Eligibility, and Certification (APEC) study found that one in five children certified for free or reduced- price meals in school year (SY) 2005-2006 was erroneously certified or incorrectly denied benefits (Ponza et al. 2007).

This study builds on APEC with three objectives:

- Develop an econometric model to identify indicators of local education authorities (LEAs) with high risk of certification error.
- Identify the key relationships between certification error and local characteristics.
- Provide a Web-based monitoring tool that will apply model parameters to annual Verification Summary Report (VSR) data.

Methodology

Using data from a variety of sources – including APEC, the Regional Office Review of Applications (RORA), the Verification Summary Report (VSR), Common Core of Data (CCD), Census Small Area Income and Poverty Estimates (SAIPE), and Bureau of Labor Statistics Local Area Unemployment Survey (LAUS) – this project estimated several statistical models linking local characteristics to levels of certification error.

An LEA was classified as *high-risk* if the value of estimated certification error was greater than $50,000, *medium-risk* if between $25,000 and $50,000, and *low-risk* if less than $25,000. These threshold values were adjusted by the ratio of State median enrollment to national median enrollment to account for the size of each State. Because large districts can exceed the high-risk

dollar threshold even if they have low error rates, the analysis establishes a *rate floor* – a minimum rate below which districts are not classified as high-risk.

Findings

The model successfully identifies a set of districts accounting for a disproportionate share of national erroneous payments due to certification error. As shown below, the 16 percent of districts identified as potentially high-risk are estimated to account for 68 percent of the national certification error in 2009.[1]

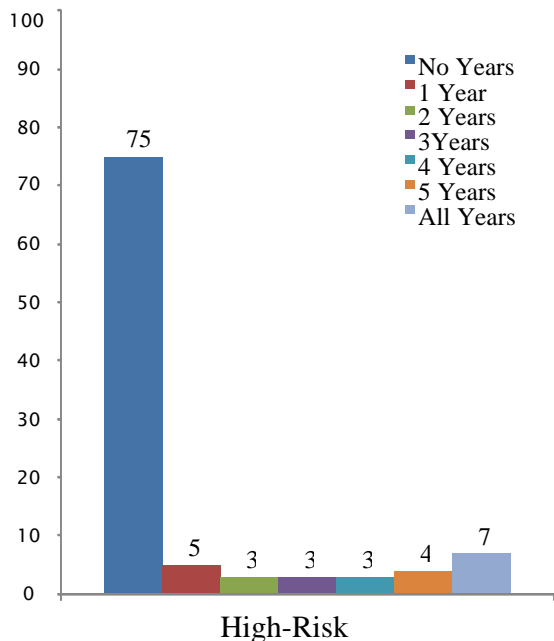**Figure 1. Percent of Districts and Erroneous Payments in 2009, by Risk Category**
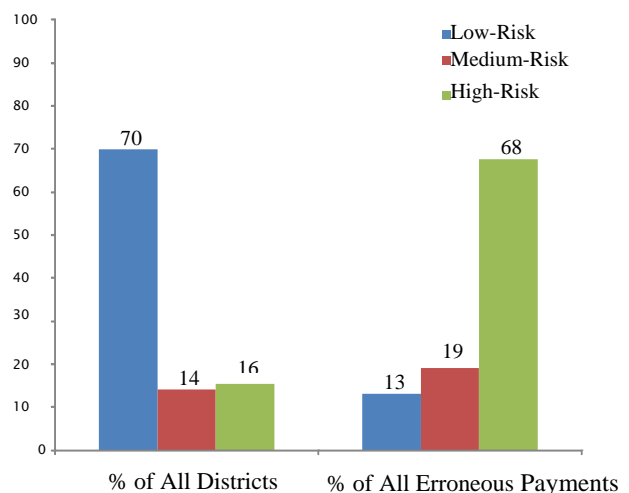
The model performs well even when local characteristics change. The model appears to be responsive to local characteristics that change over time; the model does not identify the same set of districts as high- risk in every year.[2] For the 6-year period examined, most districts were never classified as high-risk, and few were classified as high-risk every year (see Figure 2).

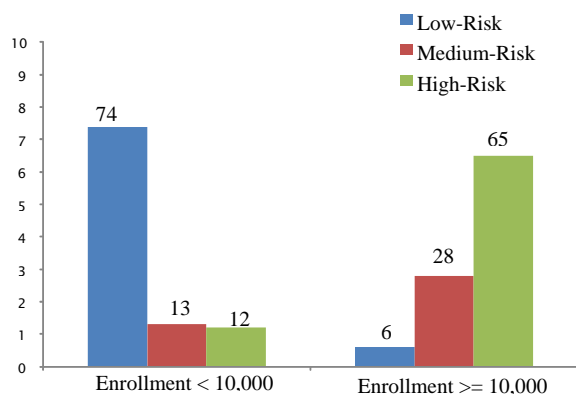[1] The data presented in all of the figures in this summary is based on a 5-percent rate floor.
[2] The model was applied to 6 years of VSR data.

Figure 2. Number of Years Districts Identified as High-Risk, 2004-2009

The model performs well on benchmark tests. Predicted certification error estimates from VSR data match well with estimates derived using APEC and RORA data.

Conclusion

- Verification results are strongly associated with certification error. For all three measures of certification error examined, there is a significant relationship between certification error and verification results for districts not using random verification samples.

- The statistical models produce overall certification error estimates that can be used to categorize district-level certification risk in a way that is simple, targeted, and responsive to time-varying local characteristics.

- The Web-based monitoring developed by this study provides a platform for consistent application of criteria by State agencies when selecting local education agencies for additional administrative reviews.

Sixty-five percent of districts with more than 10,000 students are categorized as high-risk. In contrast, 74 percent of districts with less than 10,000 students are categorized as low-risk and only 12 percent as high-risk (see Figure 3 below). The average enrollment in low-risk districts is less than 1,000; increasing to about 5,100 for medium-risk districts and to 11,900 for high-risk districts. Another striking difference is in the nonresponse rate for verification (12 percent for low-risk districts, 22 percent for medium-risk, and 31percent for high-risk).

Figure 3. Distribution of Risk by Enrollment Category, School Year 2009-2010