

**Il Dipartimento di Economia  
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**PREDICTION ERRORS AND SCHOOL RANKINGS**

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Abstract: School rankings based on value-added (VA) estimates are subject to prediction errors. This follows from VA being defined as the difference between predicted performance and actual performance. We compare the accuracy of predictions from conventional VA estimators to more flexible 'random forests' (RF), rooted in the machine learning literature, and assess the stability of rankings under both predictions. Our findings indicate that school rankings are very sensitive to prediction errors, especially for schools ranked in the bottom and top quartiles. RF estimators provide a low-cost way to increase the accuracy of predictions, resulting in more concordant rankings, and larger achievement gains if used as a basis for policy decisions.

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La partecipazione è aperta a tutti gli interessati