Response to Jeffrey Keefe's review of "Assessing the Compensation of Public School Teachers."

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In a recent paper, "Assessing the Compensation of Public School Teachers," Jason Richwine and I concluded that public school teacher salaries are roughly comparable to private sector levels but that teacher benefits – in particular, retirement benefits – are significantly more generous.¹ We are confident that our conclusions will stand up to scrutiny, which we welcome.

However, Jeffrey Keefe's review of our paper does not come close to meeting the standards that readers of NEPC products have the right to expect. His review is replete with errors, omissions, and mischaracterizations, only some of which we can address here.

A large number of Keefe's points take the form of "Richwine and Biggs failed to consider X..." when in fact we did consider X. Accounting for hours worked by teachers outside the classroom? Controlling for work conditions between public and private teachers? Small sample sizes? Summer vacation shorter than expected? Teachers being laid off recently? Papers from the Center for State and Local Government Excellence? Reports by the Economic Policy Institute that contradict our results? A debate between financial economists and government actuaries on pension discount rates? All of these issues are addressed in our report, sometimes in significant detail, but Keefe treats them as his own devastating rebuttals. It's frustrating to see our research read so carelessly and misrepresented so brazenly.

Keefe also layers his review with insinuations about our alleged lack of objectivity and attention to the literature. He sets the tone early, saying:

"The report cites studies primarily conducted by think tanks. Academic peer-reviewed citations are sparse, consisting mainly of articles authored or co-authored by Michael Podgursky." (p. 3)

A quick count of our substantive cites indicates that roughly 15 came from peer-reviewed journals; three from academic working paper series (e.g., the National Bureau of Economic Research); four from think tanks; 10 from government sources (e.g., Congressional Budget Office, pension plan actuarial reports); and seven from professional journals or miscellaneous (e.g., Education Next, the Kaiser Family Foundation, Pew Center on the States, etc.). Four of the cited papers—a far cry from "mainly"— are authored by professor Michael Podgursky of the University of Missouri, which shouldn't be surprising given that Podgursky is one of the nation's leading experts on teacher compensation.

¹ Jason Richwine and Andrew G. Biggs. "Assessing the Compensation of Public School Teachers." Heritage Foundation Center for Data Analysis. November 2011.

Regarding our wage analysis, Keefe has little to say about our result showing that teachers who switch to private sector jobs receive salary cuts while private sector workers switching to teaching receive pay increases – a finding that other research supports, and which is precisely the opposite of what you would expect if teachers were highly underpaid.

Keefe instead concentrates on our regressions using the National Longitudinal Survey of Youth, in which we show that controlling for a cognitive ability score rather than years of education suggests no wage penalty for teachers. In arguing against our specification, Keefe never seriously addresses our fundamental point about the inadequacy of education as a skill measure.

Keefe continues to believe that controlling for educational attainment introduces no biases into a regression focused on teacher pay, even when confronted with evidence that: (a) education majors score lower on cognitive tests like the SAT, the GRE, the ACT, and the AFQT, (b) education classes are less rigorous than other classes, (c) education majors acquire less knowledge than other students, and (d) advanced degrees have no discernable impact on teacher quality.

It has long been known, contra Keefe, that the AFQT is not racially biased.² And his claim that the AFQT is a weak predictor of wages is misleading: Everything, *including education*, is a "weak" predictor of wages in the sense that wage regressions leave much variance unexplained. This does not imply that AFQT, education, or any other control variable is inherently flawed or unhelpful.

The other technical criticisms of our NLSY regressions are also without merit.³

With regard to the value of teachers' shorter work year, Keefe says:

"...The report calculates what the authors call a "work year leave benefit" worth an additional 28.8% of teacher salaries.... This generous leave estimate is arrived at by double counting. Teacher compensation is already computed based on the shorter teacher work year.... Also, by using 52 weeks as the denominator, the analysis assumes that other professions do not provide for vacations." p. 6-7

We conclude that teachers' *total annual salaries*— not salaries pro-rated or adjusted in any way for a shorter work year—are roughly at market levels. As we make clear in the report, we

² For a rigorous treatment of test bias and the AFQT, see *Performance Assessment for the Workplace*, Ed. Alexandra K. Wigdor and Bert F. Green, National Academies Press, 1991, chapter 8, at *http://www.nap.edu/catalog.php?record_id=1862*

³ For technical-minded readers, we used cluster-robust standard errors to adjust for repeated observations of the same person in the NLSY. (None of our conclusions from the NLSY data rest on assuming small standard errors anyway.) We also ran thousands of regressions based on smaller samples (generated randomly) with no repeat observations to check for stability in the coefficients and standard errors. Finally, far from a "major" problem, it matters not at all for our conclusions whether we measure education as a linear variable or as a set of discrete dummies.

address paid leave only in the benefits section, by subtracting vacation time and other paid time from a 52-week year. For summer vacations, we rely on the BLS assumption that the standard teacher work year is 185 days, but we also illustrate results using longer work years assumed. There is no double-counting of vacation time for teachers or exclusion of vacation time for non-teachers.

Regarding how to account for the value of defined benefit pensions, Keefe states:

"According to the calculations made in the report, teacher pensions' accounting costs add 32% to wage costs. However, the Department of Labor disagrees and reports a figure of 8.4% for teachers in the ECEC. ECEC states that the private-sector cost is 6.2%." p. 6

A central argument of our paper is that, due to accounting differences between public and private pensions, simple comparisons of employer pension contributions are inadequate for comparisons of future employee benefits. As the Bureau of Economic Analysis points out, "If the assets of a defined-benefit plan are insufficient to pay promised benefits, the plan sponsor must cover the shortfall. This obligation represents an additional source of pension wealth for participants in underfunded plan."⁴ One of the explicit goals of our analysis is to account for these differences.

To claim that the BLS "disagrees" with us is simply disingenuous. The BLS ECEC series does nothing other than report employer contributions. If, for instance, a state failed to make a pension contribution in a given year the BLS would accurately report that fact, but that in no way implies that teachers earned no pension benefits in that year. Likewise, if a public sector pension assumes a higher rate of return on its investments, it can lower the annual contributions it must make. That also has absolutely no impact, legally or financially, on the benefits accruing to workers in a given year. BLS nowhere does or would claim otherwise.

Our paper includes a complete discussion of the distinction between employer contributions today and benefits received in the future—a distinction that drives some of our paper's main conclusions but which receives little attention from Keefe. Our approach to valuing deferred compensation is consistent with both economic theory and the peer-reviewed academic literature, which we cite. This approach has been mirrored in reports from the Center for State and Local Government Excellence, the Bureau of Economic Analysis, and the Congressional Budget Office.⁵ (Note that the CSLGE paper referenced here is one of the papers that Keefe says we "ignored," even though it explicitly draws on our own previous work and is cited twice in our teacher paper.)

⁴ Marshall Reinsdorf and David Lenze. (Bureau of Economic Analysis.) "Defined Benefit Pensions and Household Income and Wealth" *Survey of Current Business* 89 (August 2009): 50–62.

⁵ Congressional Budget Office, "Comparing the Compensation of Federal and Private-Sector Employees," January 2012. Alicia H. Munnell, Jean-Pierre Aubry, Josh Hurwitz, and Laura Quinby, "Comparing Compensation: State–Local Versus Private Sector Workers," Center for State and Local Government Excellence, September 2011. Reinsdorf and Lenze (2009).

With regard to the value of retiree health coverage, Keefe says:

"The U.S. General Accounting Office estimated that retiree health benefits cost states approximately 2% of employee salary...." p. 6.

Here Keefe divides state spending on health care for retired public workers by wages paid to current public employees, which is a meaningless figure that he nevertheless will not stop using. The correct figure is the value of the future retiree health benefits accruing to teachers today, which we calculate based upon financial disclosures from local governments that are designed to measure precisely this implicit compensation. The Congressional Budget Office and the Center for State and Local Government Excellence use our accrual approach, because that's the correct way to do it.

Keefe likewise states that:

"Only 36.4% of state and local governments provide health insurance to retirees under the age of 65, with 25.4% providing health insurance to retirees over age 65." p. 6.

This is a highly misleading statistic, which should be obvious to Prof. Keefe. Because most state and local employees work for larger governmental units and larger units are more likely to offer coverage, far more than 36 percent of *employees* are eligible. A Pew Center study notes that 82 percent of public employees in units of 200 or more workers are eligible for retiree health coverage. ⁶ Looking only at *full-time* employees, who were the focus of our study, the figure is certainly higher. Robert Clark of North Carolina State University, one of the nation's leading academic experts on public sector benefits, notes that retiree health insurance plans "cover *virtually all* full-time public sector employees."⁷ This cite is in our original report—but no comment from Keefe.

Finally, regarding job security, Keefe presents a straw man argument, claiming that we portray job security as a job *guarantee*. As we make clear, job security is a gradation that reflects a lower probability of becoming unemployed relative to similar workers. We show that public school teachers have significantly lower unemployment rates than workers in occupations that the left-leaning Economic Policy Institute claims to be comparable. Economists since Adam Smith have argued that greater or lesser job security should result in a compensating wage differential, which we seek to estimate. Doing so from survey data is problematic for reasons outlined in the academic literature that we cite, so we work from a stylized model that is well-grounded in financial economics. Keefe has essentially nothing to say about our actual approach.

Public school teacher compensation is an important topic for taxpayers, teachers, and the students they serve. This topic deserves far better examination than was provided by Keefe in his review. We appreciate the chance to offer this corrective but wish it had never been necessary.

⁶ Pew Center on the States. "Promises With a Price. Public Sector Retirement Benefits." December, 2007.

⁷ Robert Clark and Melinda S. Morrill, "The Funding Status of Retiree Health Plans in the Public Sector," National Bureau of Economic Research Working Paper 16450, October 2010.

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