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Allowing local schools to make more decisions may work in developed countries but is questionable in developing countries

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We are increasingly told that school decisions are best made by head teachers who have a better knowledge of the demands on schools and the capacity of their staff. This column presents new research suggesting that local autonomy can indeed work, but only in countries where public examinations can help to keep teachers on their toes.

Support for local autonomy in educational decision-making can be found in both developed countries (*eg* Ouchi 2003) and developing countries (*eg* World Bank 2004). The argument is indeed appealing. Local decision-makers have better knowledge than central bureaucrats, and this knowledge allows them to provide better educational outcomes. But the tradeoff is that local decision-makers – outside the watchful eye of central authorities – may be tempted to make decisions that implicitly favour themselves and that do not lead to better school outcomes.

The evidence on local school autonomy is actually quite mixed. In attempting to resolve some of the questions, Bruns *et al* (2011) suggest that the evaluation methodology may have an important effect on evaluations of programmes and on the conclusions from research.

Developing new international evidence

Our recent work (Hanushek *et al* 2011) is motivated by two facets of the evaluation of school autonomy that might affect the research conclusions. First, within any given country, it is difficult to separate the outcomes of autonomous decision-making from the selection of the array of schools that have such latitude. Second, the impact of autonomy may vary directly with the level of development of a country and its schools and with the existence of complementary institutions such as centralised examinations.

We provide evidence on school autonomy from a study that makes unique use of

international school achievement information. Because the OECD has now conducted its Programme for International Student Assessment (PISA) of international performance of math and science multiple times over the past decade (OECD 2010), it is possible to track student performance in many countries over time. In the first study to exploit the panel aspect of PISA, we construct a microdata set covering 42 countries and four waves that span a time period of ten years (2000–09). To account for influences of background factors at the individual and school level, we perform our regression analyses at the level of over one million individual students, but the identification of the autonomy effects comes from changes in average autonomy at the country level (see the review in Hanushek and Woessmann 2011).

Intriguingly, the data show that – perhaps due to the existing mixed evidence on the impact of autonomy – some countries have significantly increased local decision-making while others have significantly reduced it.

With the panel data on country performance, we can trace the impact of greater or less autonomy on the overall national outcomes, thus avoiding the possible contamination of policies aimed at a selective number of schools within countries. Specifically, we use a statistical approach that builds on the panel feature of the data to measure the impact of policy reforms focused on autonomy within individual countries over time (by including fixed effects for countries and years). Moreover, even though more heavily weighted toward the developed countries in the OECD, the data provide observations across a wide range of countries in terms of national income and overall school performance. This sample allows us to compare results of school autonomy along with the development of complementary societal institutions.

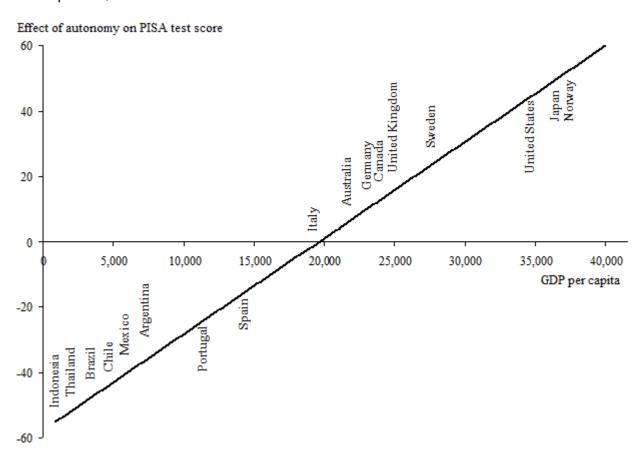
What is autonomy?

Decision-making at schools can cover a range of different areas. While standardisation may be important in decisions on academic content, it may not be as important in decisions on process operations and personnel-management (Bishop and Woessmann 2004). Thus, local decision-making over basic issues of standards such as course offerings or course content might have a negative effect of autonomy when the whole system is dysfunctional. But even in such a system, local decision-making over hiring teachers and budget allocations may not be as negative. In our international study, we investigate the range of potential decisions that can be made locally.

Clearer results about autonomy

Our statistical analysis provides one overarching result: Local autonomy has an important impact on student achievement, but this impact varies systematically across countries, depending on the level of economic and educational development (Figure 1). In the simplest terms, countries with otherwise strong institutions gain considerably from decentralised decision-making in their schools, while countries that lack such a strong existing structure may actually be hurt by decentralising decision-making. An extensive series of robustness and specification tests corroborate the central finding.

Figure 1. The effect of autonomy reforms on student performance by level of development, 2000–09



Notes: Effect of academic-content autonomy (scaled 0-1) on PISA math test score (scaled with std. dev. 100) depending on initial GDP per capita (in 2000), estimated in a panel model of PISA tests 2000–09. Example countries illustrate initial level of GDP per capita. See Table 4 in Hanushek et al (2011) for details. *Source:* Own depiction based on Hanushek *et al* (2011).

The basic result holds across different decision-making areas but is generally stronger with regard to matters of academic content (curriculum, texts, etc.) and weaker with regard to budgetary decisions. In particular, the negative effect in developing countries is less pronounced for autonomy in the areas of personnel and budgets and emerges most clearly for autonomy in areas relating to academic

content.

In looking deeper at this result, there is an indication that local decision-making works better when there is also external accountability that limits any opportunistic behaviour of schools. (This interaction was previously noted in Hanushek et al 1994 and Woessmann et al 2009). Further, having generally well-functioning schools, indicated by initial performance levels, appears complementary with autonomy. Nonetheless, these specific issues require further research and confirmation.

Generalisations about education policy

Our results indicate that the impact of school autonomy on student achievement is highly heterogeneous, varying by the level of development of a country. This overall result may have broader implications for the generalisability of findings across countries and education systems. It suggests that lessons from educational policies in developed countries may not translate directly into advice for developing countries, and vice versa.

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