

# Spending for better results: Education



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Australian Government



THE WORLD BANK  
IBRD • IDA



KEMENTERIAN KEUANGAN  
REPUBLIK INDONESIA

Canada



EUROPEAN UNION



Swiss Confederation

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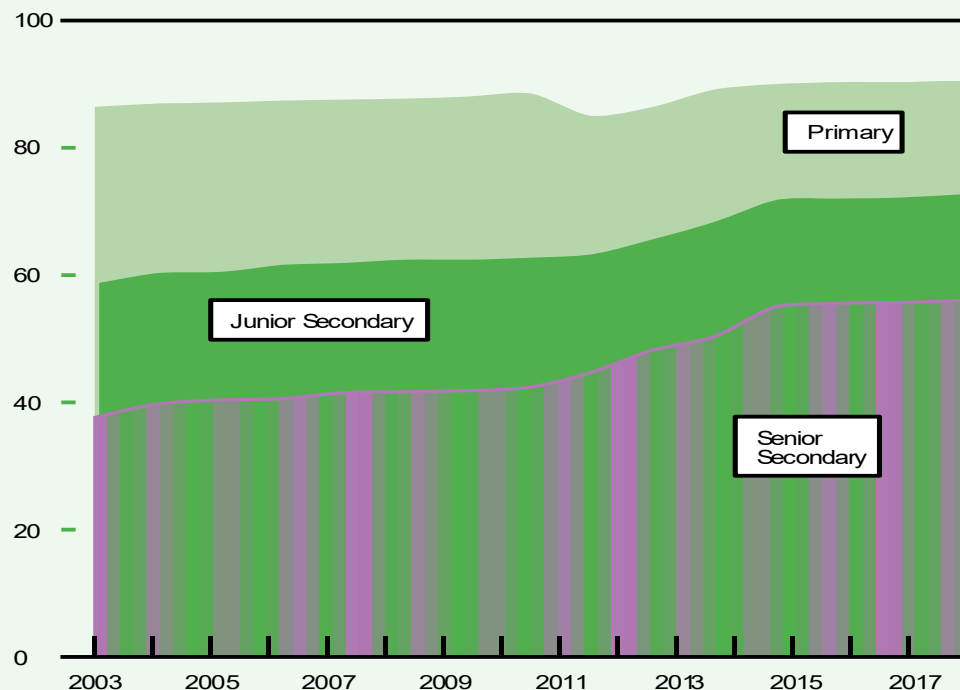
# Key Messages

## 01

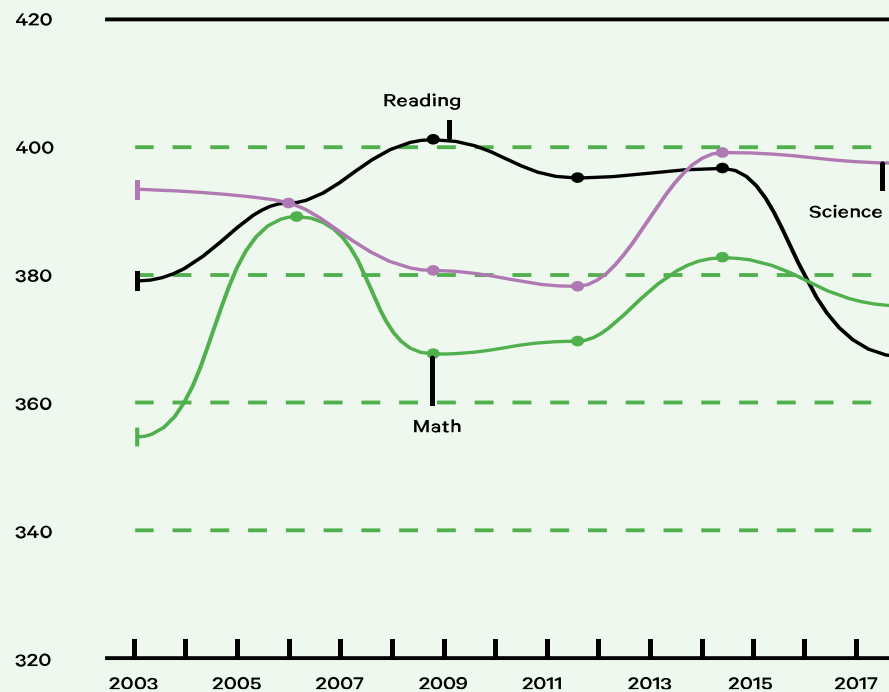
- Indonesia has undertaken several important reforms in the education sector over the past two decades, including mandating that **20 percent of the budget be spent on education**.
- Additional resources for education have financed a **significant expansion in student enrolment**, especially at the secondary level, **but quality is still lacking**.
- Despite the increase in resources, **not all schools are adequately equipped to provide a conducive learning environment for students**.
- **Subnational governments (SNGs), especially districts, account for the bulk of education spending**, but differ in their fiscal and administrative capacity to manage education performance.
- **Resources for education are inequitable** across subnational governments and levels of education. Early childhood education and development needs more attention.

# Indonesia has made important gains in secondary enrolment, but continue to achieve low learning outcomes

## Net Enrolment Rates



## PISA scores over time



Source: OECD PISA.

In PISA 2018, 70 percent of Indonesian student score below basic proficiency.

Indonesian can expect to complete 12.3 years of education by age 18. When years of schooling are adjusted for quality of learning, this is only equivalent to 7.9 years.

The Covid-19 now threatens the learning crisis to become even worse.

# Is Indonesia Spending Enough on Education?

02

*Indonesia is one of the biggest  
education spenders in  
the world if spending is  
measured as a share  
of total public  
expenditure*

*but not if  
spending is  
measured as a  
share of GDP*

# Education Expenditure (%)

Y-axis: Share of Gov. Expenditure



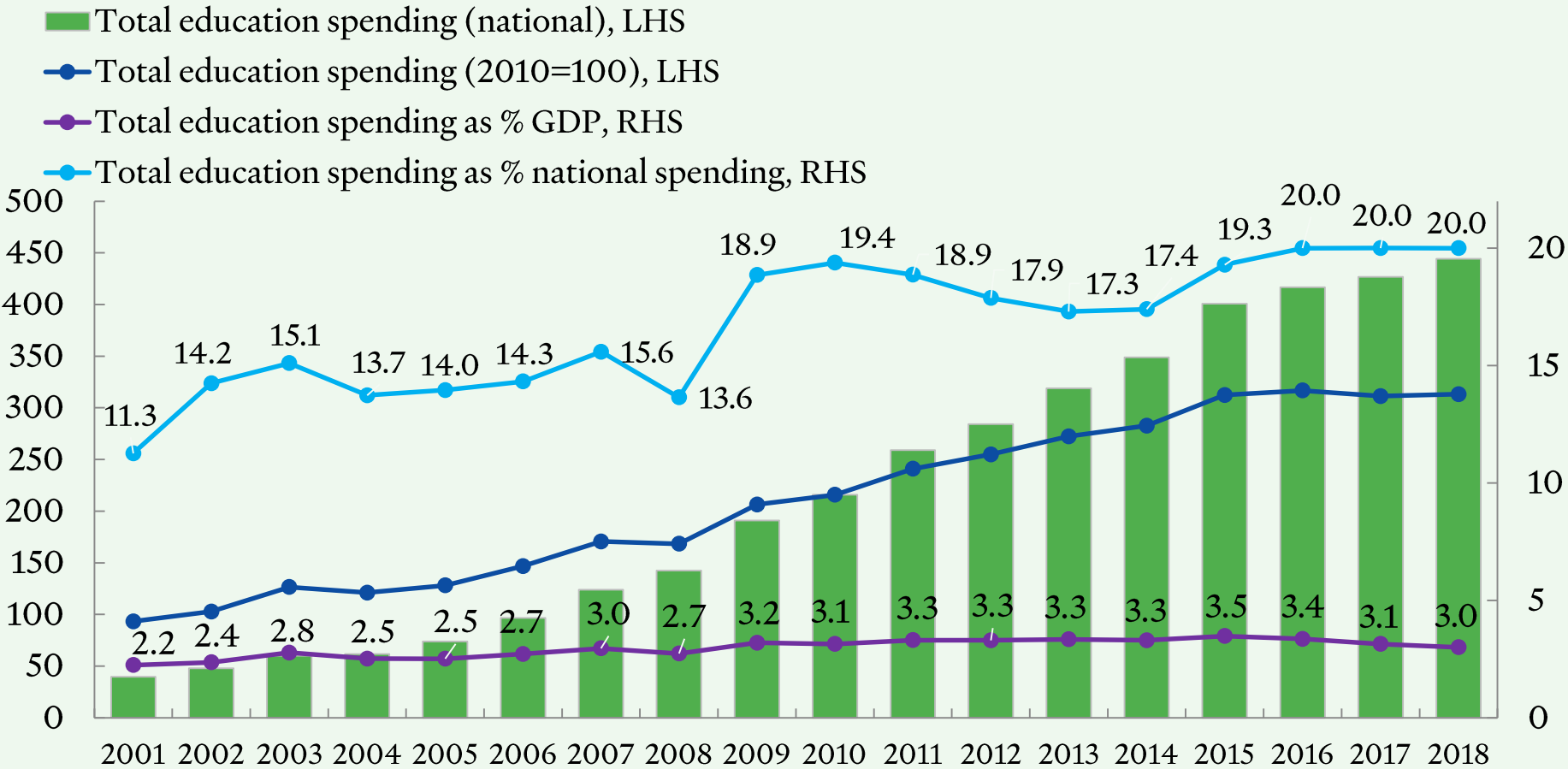
X-axis: Share of GDP

Note: Latest year of data available between 2011 and 2015.

Source: EDSTATS and World Bank WDI, World Bank staff calculations.

# General government spending on education has increased dramatically driven by the 20% Budget Rule

## Public Spending on Education



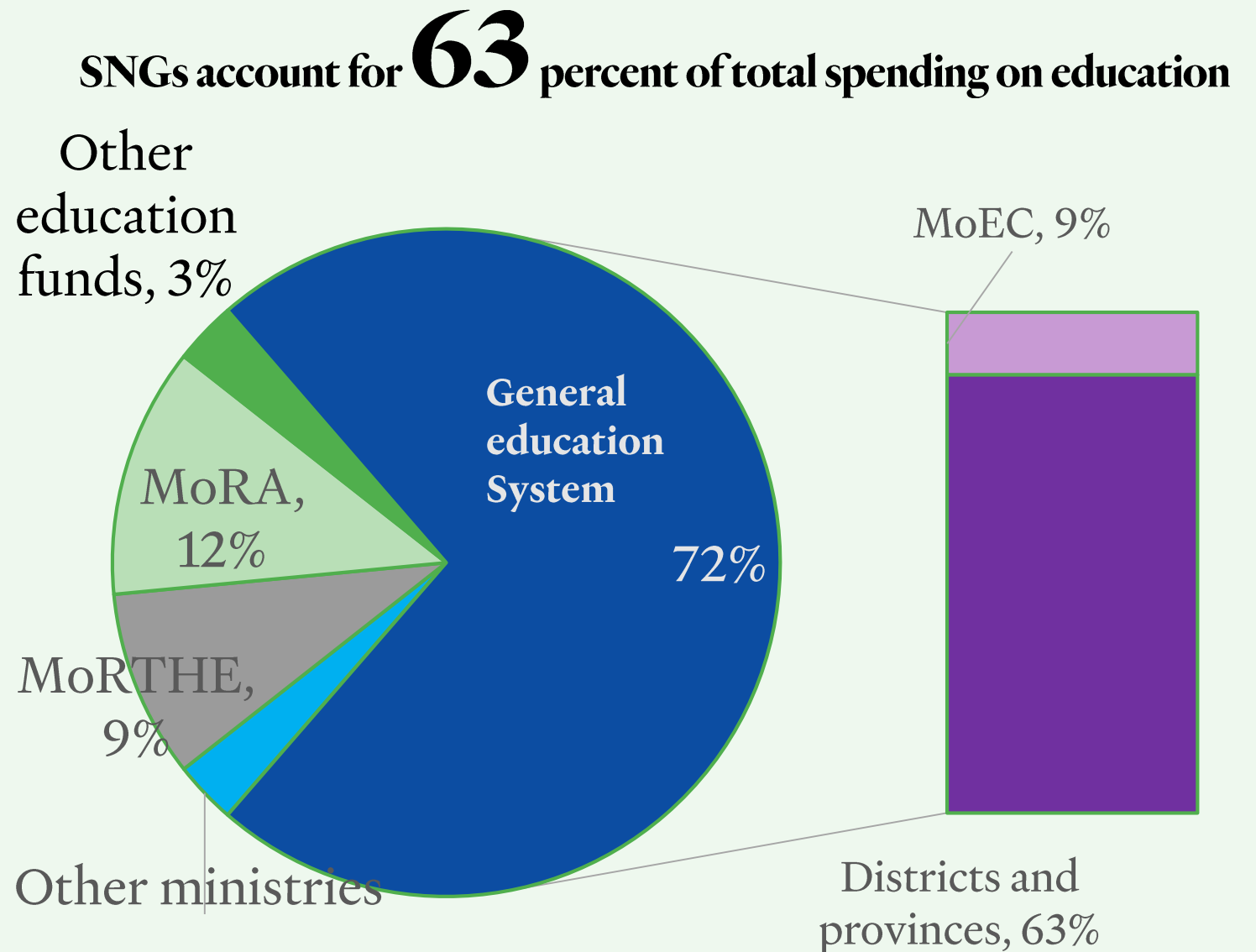
Note: Data refer to audited actual spending at the central government level from 2001 to 2017; 2018 refers to budgeted amount. Realized spending data at SNG level are available until 2014, so subsequent years utilized budgeted amounts. Realized spending data might not capture some SNG education spending if coded under the General Administration function (e.g., BOS, teacher salaries).

Source: World Bank COFIS database using MoF data and Presidential Regulation on budget details of respective years.



## Three main ministries spend on education—while Sub-National Govts (SNGs) are responsible for the bulk of public education spending

- In 2018, the central government only account for about **37 percent of total education spending**
- SNG spending on education comes mostly from central government transfers for general use (**Dana Alokasi Umum, DAU**) and transfers with specific mandates (**Dana Alokasi Khusus, DAK**)
- DAK funds are earmarked for funding school operational funds (**Bantuan Operasi Sekolah, BOS**), teacher professional allowances (**Tunjangan Profesi Guru, TPG**), and some school infrastructure



Source: World Bank COFIS database using MoF data, 2018

# Is Indonesia Spending Efficiently and Effectively on Education?

**Efficiency:** Has education spending been optimally allocated across schools and localities, and led to an increase in outputs in the sector?

03

*Despite increases in spending, allocation of education resources is suboptimal...*

# 1. Spending on ECED is lagging

- Directorate General of Early Childhood Education only receives 4.5 percent of the MoEC's budget, or about IDR 1.8 trillion.
- Additionally, although the GoI provided grants to ECED centers (Bantuan Operasional Penyelenggaraan PAUD, or BOP PAUD), only IDR 4.4 trillion was allocated for this purpose in 2019 (compared with IDR 51.2 trillion for total BOS).

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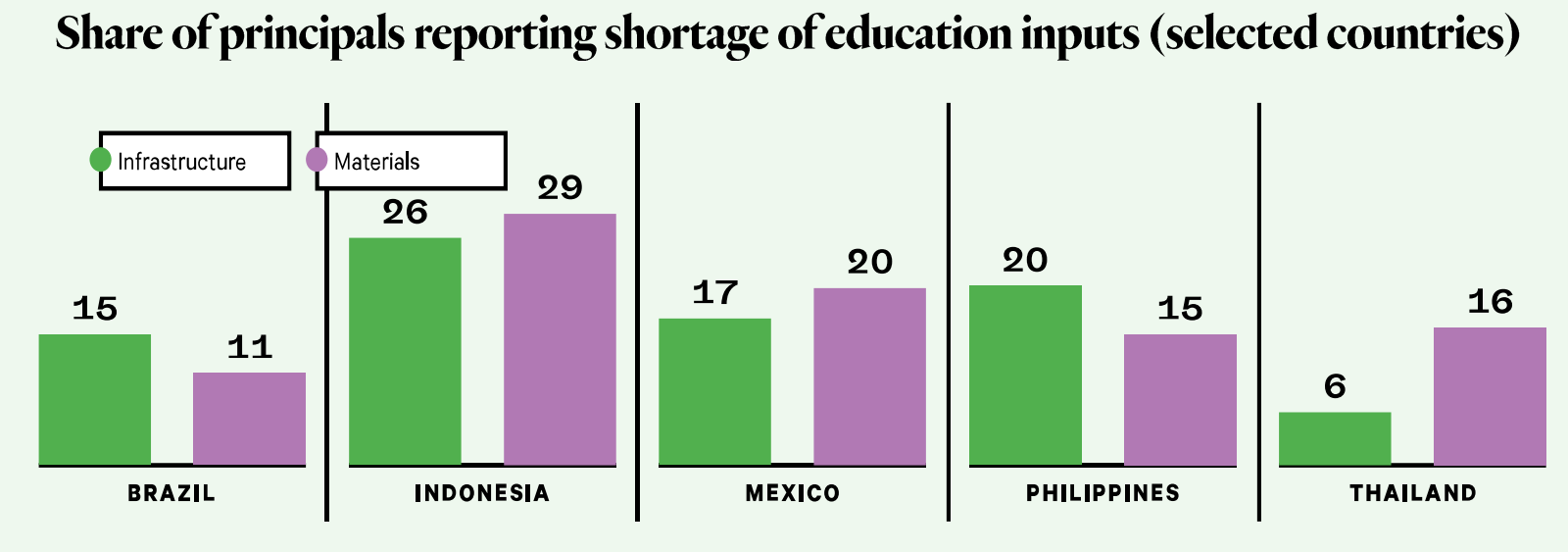
4.5%

of the MoEC's budget, or about IDR 1.8 trillion

# 2. Many schools still lack basic elements to support student learning

Note: Share of principals that indicated “a lot” as asked on the shortage of selected education inputs.  
Source: PISA 2015 (OECD, 2016).

Note: School socioeconomic condition is estimated by the number of students eligible for PIP (Program Indonesia Pintar, cash transfer program for poor students).  
Source: World Bank estimates using DAPODIK.



School characteristics by socioeconomic conditions						
Indicator	Basic Education			Upper secondary & vocational education		
	Top quintile	Bottom quintile	Total average	Top quintile	Bottom quintile	Average
Good classrooms (%)	36	19	25	52	31	40
Teacher with Bachelor's degree (%)	86	84	86	94	93	94
Student-teacher ratio	19	15	17	19	14	17
Schools with "A" Accreditation (%)	35	13	21	55	14	34

# Several reasons explain why allocation of education resources is suboptimal

Uneven distribution of transfers from central government to SNGs:

1

Allocation of DAK Fisik transfers is weakly related to infrastructure needs

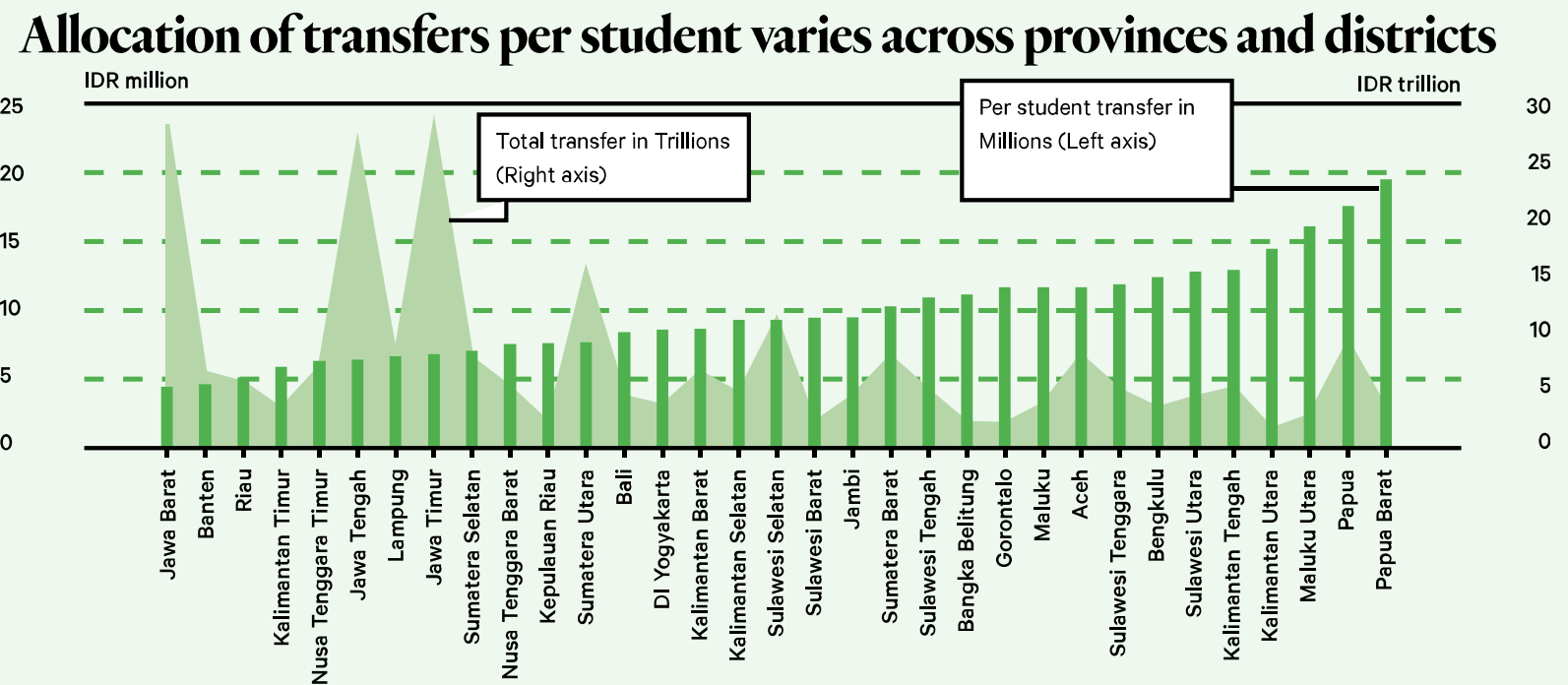
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Differences in district capacity to manage education

3

1

# Uneven distribution of transfers from central government to SNGs



Source: World Bank staff estimates based on SIMTRADA and Susenas (2018).

West Java receives IDR 29 trillion (IDR 4.4 million per student)

IDR 4.4 million

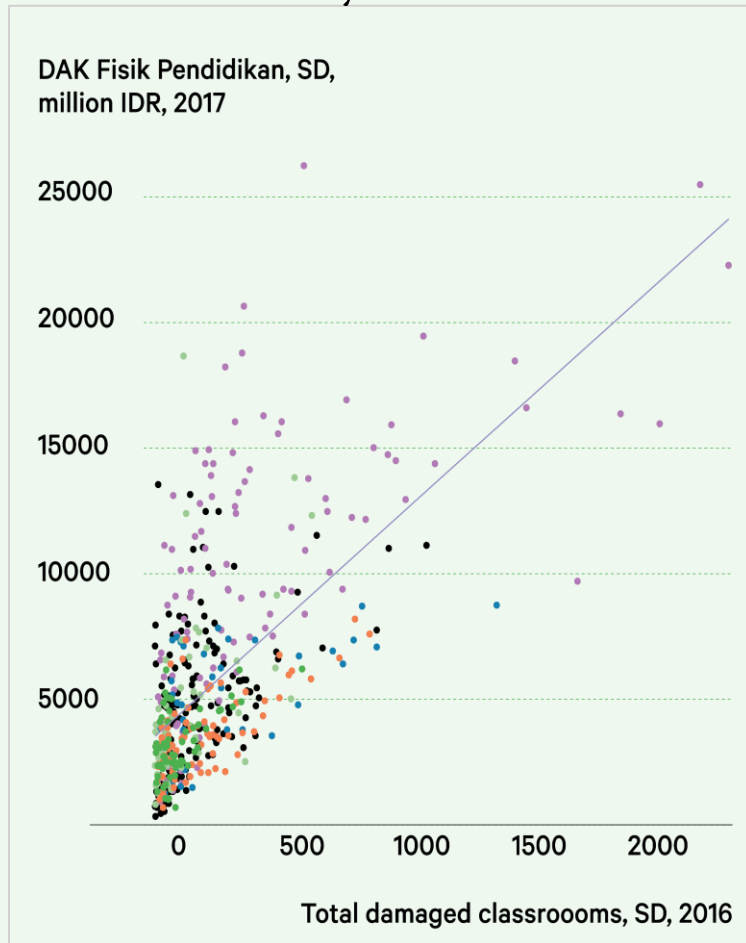
West Papua receives IDR 3 trillion (IDR 1.9 million per student)

IDR 1.9 million

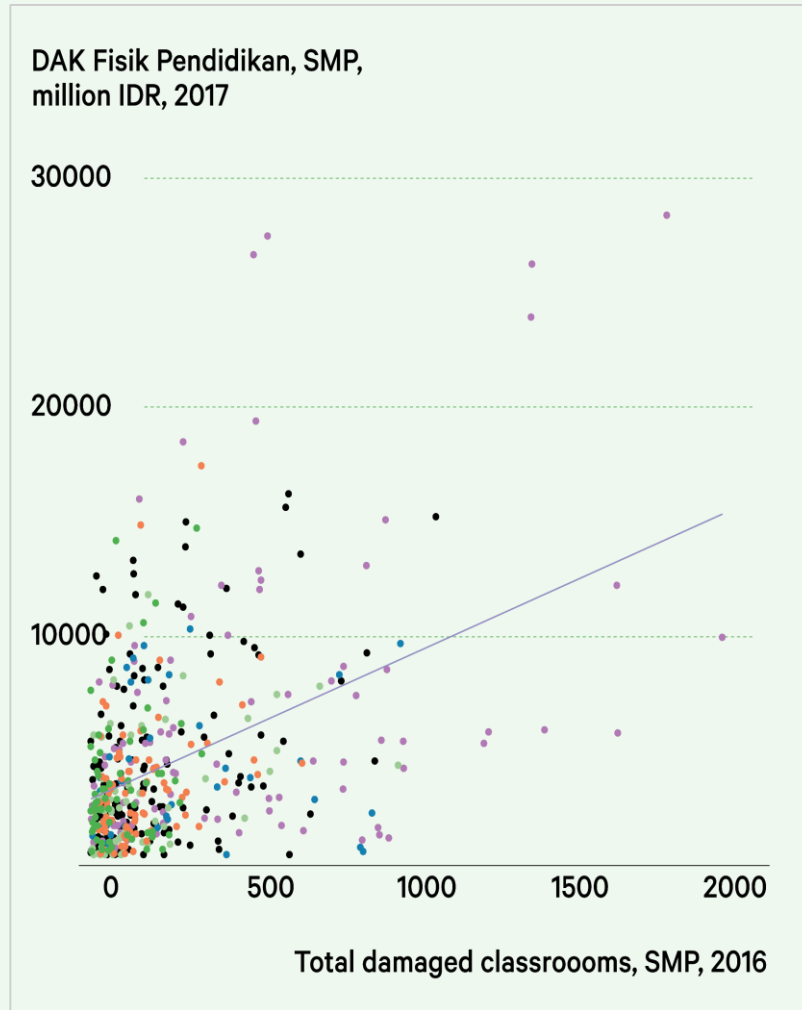
# 2

## Allocation of DAK Fisik transfers is weakly related to infrastructure needs

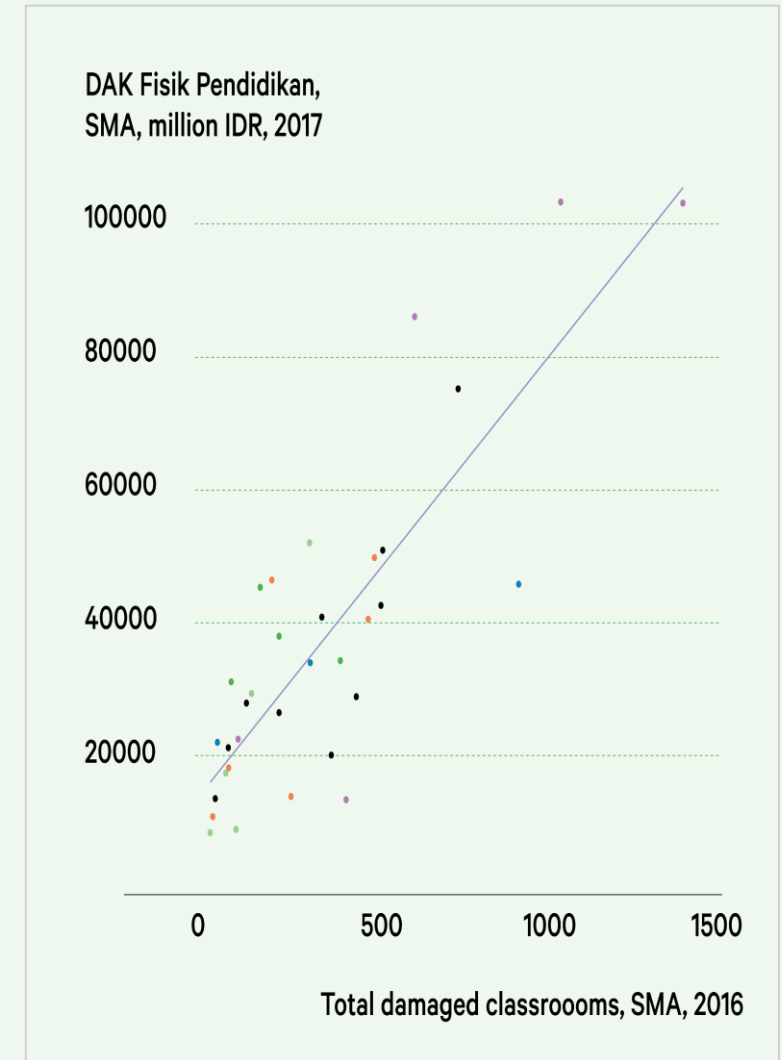
### Primary Education



### Lower Secondary Education



### Upper Secondary Education

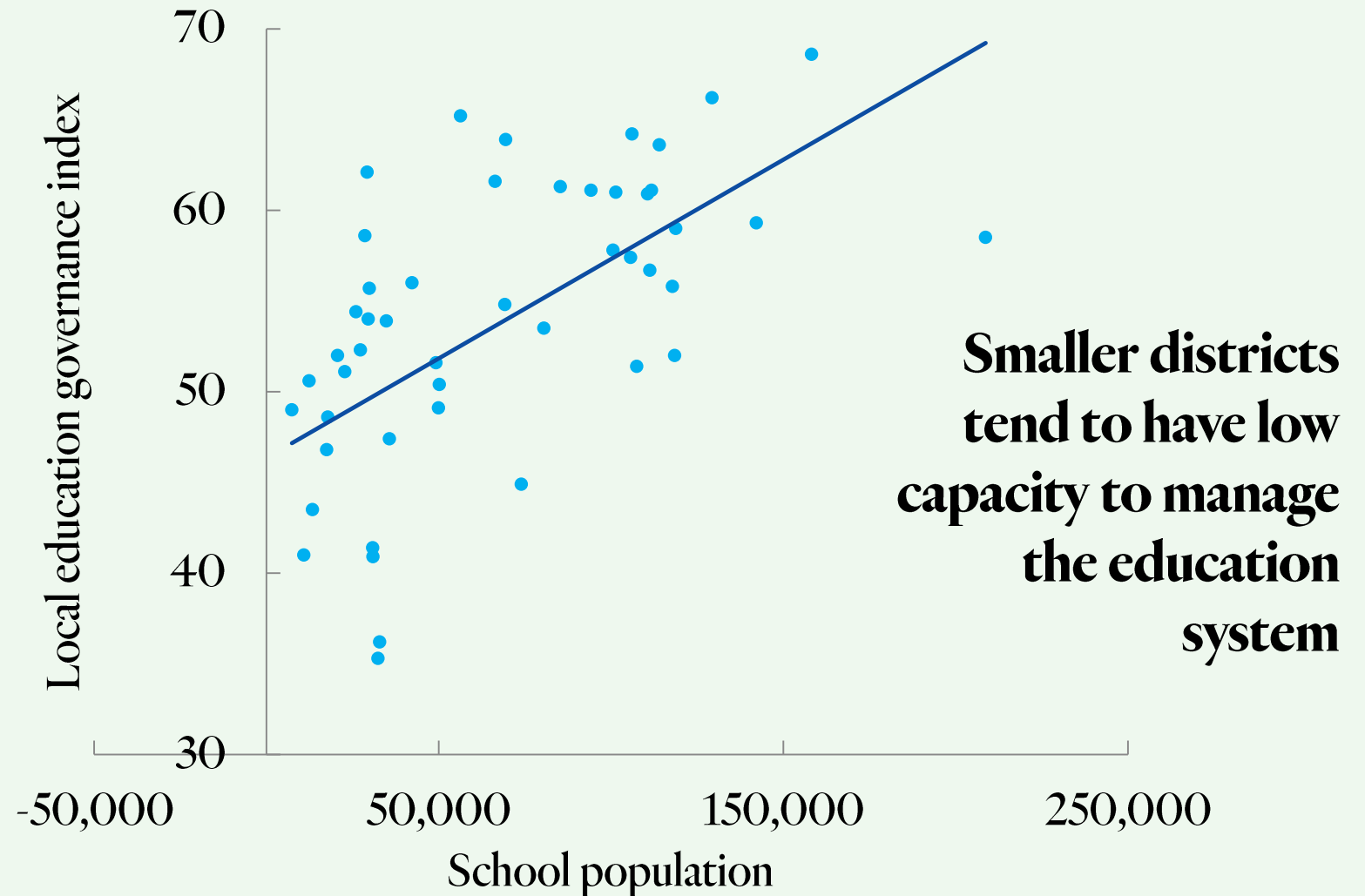


Source: MoF and MoEC data, World Bank staff calculations.



# 3

## Differences in district capacity to manage education



Note: Possible scores for the ILEG index range from 0 to 100. No schools received scores higher than 75. Scores below 45 are classified as low performance, 45-60 as average performance, and above 60 percent as high performance.

Source: Al-Samarrai et al. (2013) and Dapodik.

# Is Indonesia Spending Efficiently and Effectively on Education?

**Effectiveness:** Are students learning in school??

03

*Increase in teacher certification has not been accompanied by a significant improvement in teacher quality*

- Between 2003 and 2016, the share of teachers with at least a bachelor's degree increased from 37 percent to **90%**
- Most teachers are eligible for an allowance (TPG) on top of their basic salaries (requirements: must be both certified and have a university degree)

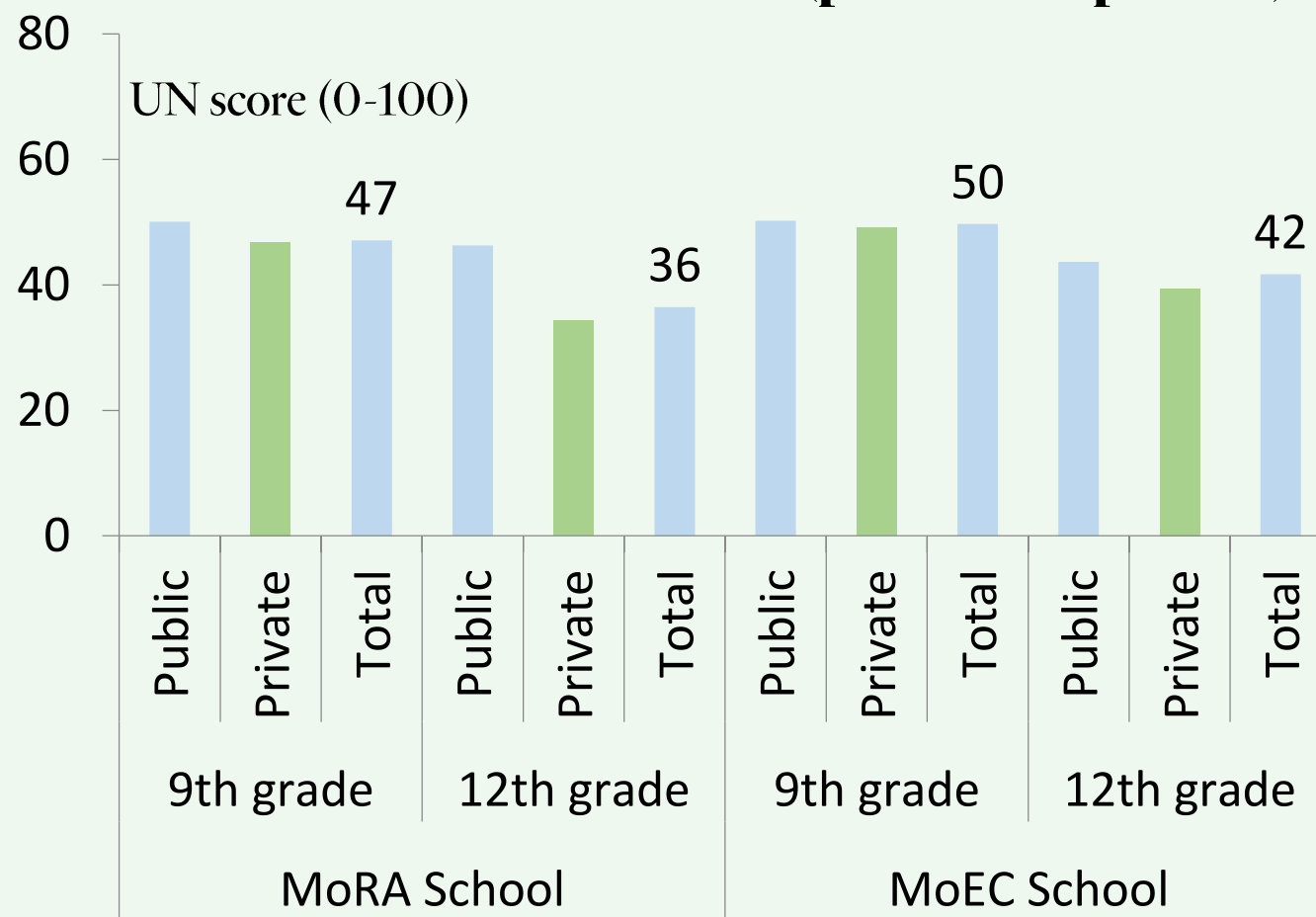


- On a 2015 MoEC study, teachers scored **53** out of 100 points on a test, with little difference between certified and non-certified teachers.
- Video study found that:
  - Teachers in Indonesia lack basic pedagogical competencies: rarely pose strategic and open-ended questions that require complex and specific student responses that would demonstrate student understanding (Ragatz et al., 2015)
- SDI (Service Delivery Indicator) study found that teachers stood at a **63%** minimum knowledge in Language and Math (World Bank, forthcoming).

*National assessments also demonstrate that Indonesian students are not learning enough*

- Average UN scores for MoEC schools are slightly higher than MoRA schools, especially at upper-secondary level, but scores are low overall, averaging **44** points out of 100 for public school
- Private schools score even lower than public schools regardless of whether they are in the MoEC or MoRA system, averaging **37** points out of 100.

### National Exam Scores for grade 9 and 12 for MoEC and MoRA schools (public and private)

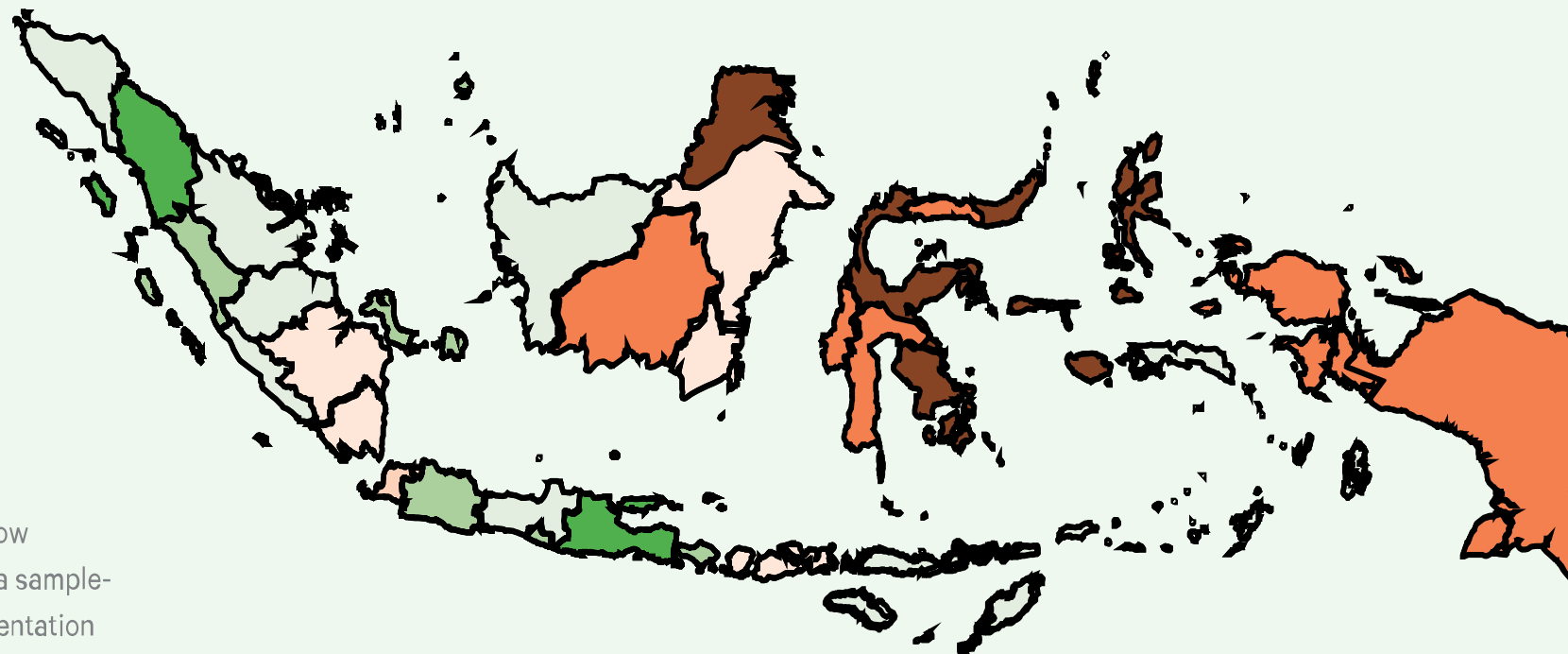
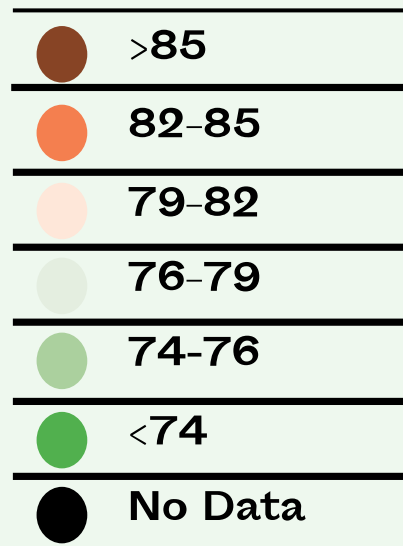


Source: World Bank staff calculations using Puspendik data 2016-18.

*Learning differences  
are also pronounced  
across regions*

# AKSI test indicated that Eastern Provinces tend to have higher share of low-performing students.

Share of Students with Low Mathematic AKSI (Asesmen Kompetensi Siswa Indonesia) for grade 4



Note: Colors reflect the share of students (%) with low mathematics scores as measured by the AKSI test, a sample-based assessment with higher standards of implementation and PISA-like test items.

Source: MoEC (2017).



1 Strengthen coordination with SNGs and their capacity to implement education policy

2 Ensure that students are taught by high-quality teachers

3 Improve M&E to increase accountability for the education sector

4 Improve the accountability of the education sector

# Recommendations to Improve the Quality of Spending

04

# 1 Strengthen coordination with SNGs and their capacity to implement education policy through:

- Guaranteeing **minimum financial capacity** to implement education policy
- Strengthening the **institutional capacity of districts** to implement education policy and **utilize data** for evidence-based policymaking
- Boosting **coordination on ECED**, including in villages
- Strengthening the **role of SNGs** in helping BOS to reach its full potential

# 2 Ensure that students are taught by high-quality teachers through:

- Ensuring that all teachers have the right pedagogical and technical **competencies**
- Ensuring continuous **professional development** to improve teacher competencies

### 3 Improve M&E to increase accountability for the education sector through:

- Strengthening and evaluating current actions from the **central government** to improve efficiency and effectiveness of government programs, such as BOS, BOP-PAUD, TPG and DAK Fisik.
- Providing quality, timely sectoral and **fiscal data** related to the education sector, at a sufficiently disaggregated level

### 4 Improve the accountability of the education sector through:

- Launching a **National Education Quality Initiative**, a concerted effort to improve the availability of data on education financing and the use of education resources to promote effectiveness and efficiency of spending.

**Further reading:**

**Overview of Education Flagship ‘The Promise of Education in Indonesia’**

**<https://bit.ly/EducationFlagship>**

A photograph of a classroom scene. A teacher, wearing a red and white patterned hijab and a dark blue long-sleeved shirt, is leaning over a wooden desk. She is looking down at a young girl who is sitting at the desk, writing in a notebook with a pen. The girl is wearing a white school uniform with a red tie. In the background, other students are visible, some sitting at desks and others standing. The classroom has wooden desks and a red heart-shaped decoration on the wall.

# Terima Kasih Thank You