

Joint review of Further Education costs

Context

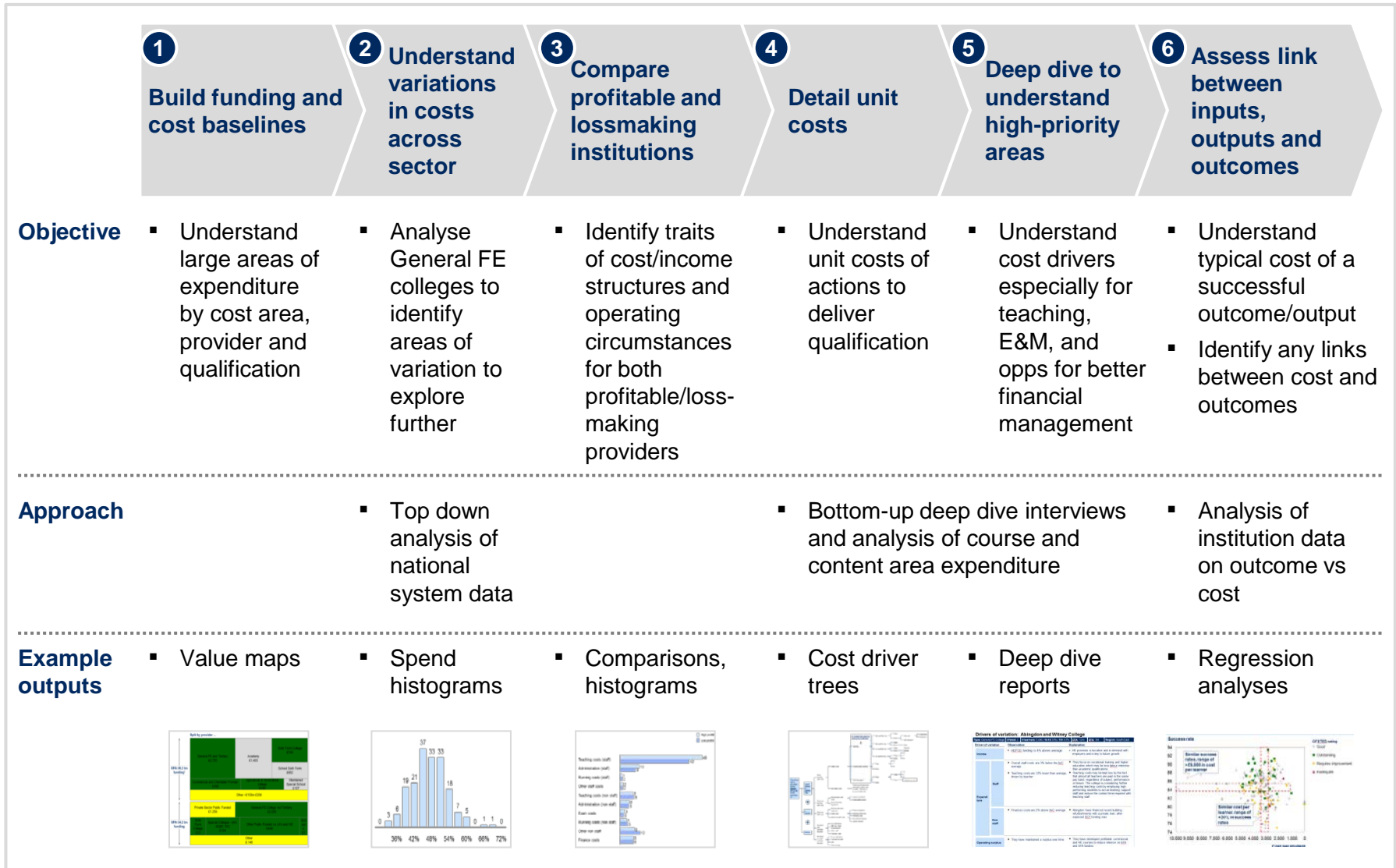
- The publicly funded Further Education sector **delivers formal learning to ~4 million people a year**, including basic skills, formal qualifications, vocational and skills training for apprenticeships and some higher education courses. The sector is **made up of 1,232 institutions** spanning GFE Colleges, Academies, Sixth Form Colleges, School Sixth Forms, Specialist Colleges and private sector/independent publicly funded institutions. The sector **receives £10.4bn a year in funding** from the EFA and SFA.
- In February 2015, the Treasury, BIS and DfE commissioned a '**Joint review of Further Education (FE) cost drivers**' to understand the funding, cost drivers and outcomes of the FE system in England, with a particular focus on teaching costs, E&M provision and financial management.
- Over 6 weeks, the project team worked with HMT, BIS and DfE to **build a cost baseline for the FE sector**, conducted **deep dives on teaching, E&M and financial management**, and looked at the **relationship between input costs, outputs and outcomes in the sector**.
- The findings from this project were informed by an **analysis of system-level financial data** (including financial health metrics for **1,232 FE institutions** and cost breakdowns for **341 colleges, using AoC information**), and by **20 deep dive visits to FE institutions** (including structured interviews, observations and data requests).
- The findings of the project are inevitably **constrained by the short time-line (6 weeks) and data availability (cost data only available for 341 colleges)**, but hopefully provide a rapid source of insight into the cost drivers of the FE sector.

Headline insights

The FE sector is **grant-funded** (£10.4bn in annual EFA and SFA funding) and **fragmented** (1,232 colleges and providers), driving **significant variation in outcomes, financial performance and reporting**.

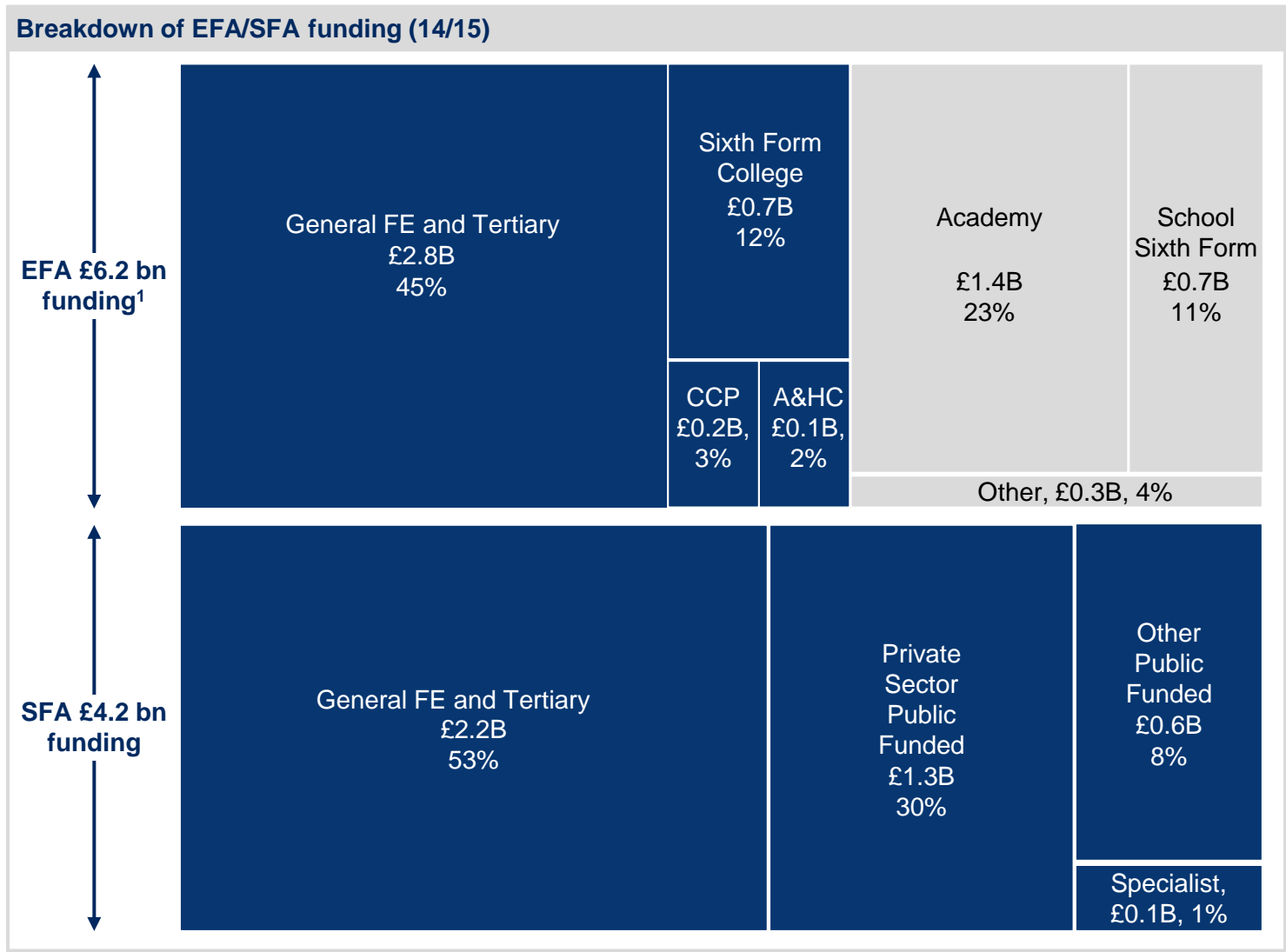
- A** The **overall FE system operates at 1% profit**, so any future reduction in funding would need to be offset across the system by a reduction in costs, additional income generation or reduction in outputs.
- B** However, there is a **significant difference in profitability of individual providers** (15% profit difference between top and bottom decile performers), suggesting efficiency opportunities in the sector.
- C** **The most profitable providers** use a set of practices that could be transferred across colleges to achieve higher income per learner and course profitability (£3.7k vs. £2.9k), lower teaching costs (4% difference), and non-teaching costs (4% difference) and admin costs (6% difference).
- D** Colleges have been able to achieve **low teaching costs** (46% of total spend in the sector) through managing their staffing mix, managing costs per teacher (e.g., greater use of high performing staff from lower tenure bands), and optimising the number of learners per teacher (e.g., 75% higher income per teacher).
- E** Providers have reacted to the market disruption caused by the new **E&M requirements** (additional costs from teaching, timetabling and exams) by redesigning timetables around E&M delivery and re-training existing workforce to integrate E&M tuition.
- F** Providers with the best **financial management** in the sector have an SMT with both private sector and educational expertise; collect and use financial and operational data at every level; conduct market analysis of local employer needs; establish SPs with private companies.
- G** We did not find **a relationship** between success and cost per learner or in the 40 other relationships we examined.
- H** If **funding is reduced** in the next SR, the centre can support providers by: i) giving clear guidance on future funding and funding formula ii) working with the sector to develop more consistent unit cost reporting and iii) sharing best practices of what the sector is doing to achieve 'best in class' teaching costs and low admin costs - which make up the majority of both costs and cost variation.

We took a structured approach to the costing project



Total EFA and SFA funding of the FE sector is £10.4bn, of which General FE and Tertiary colleges receive the largest proportion

■ In scope
■ Out of scope



¹ Excludes Residential Bursary and DaDA

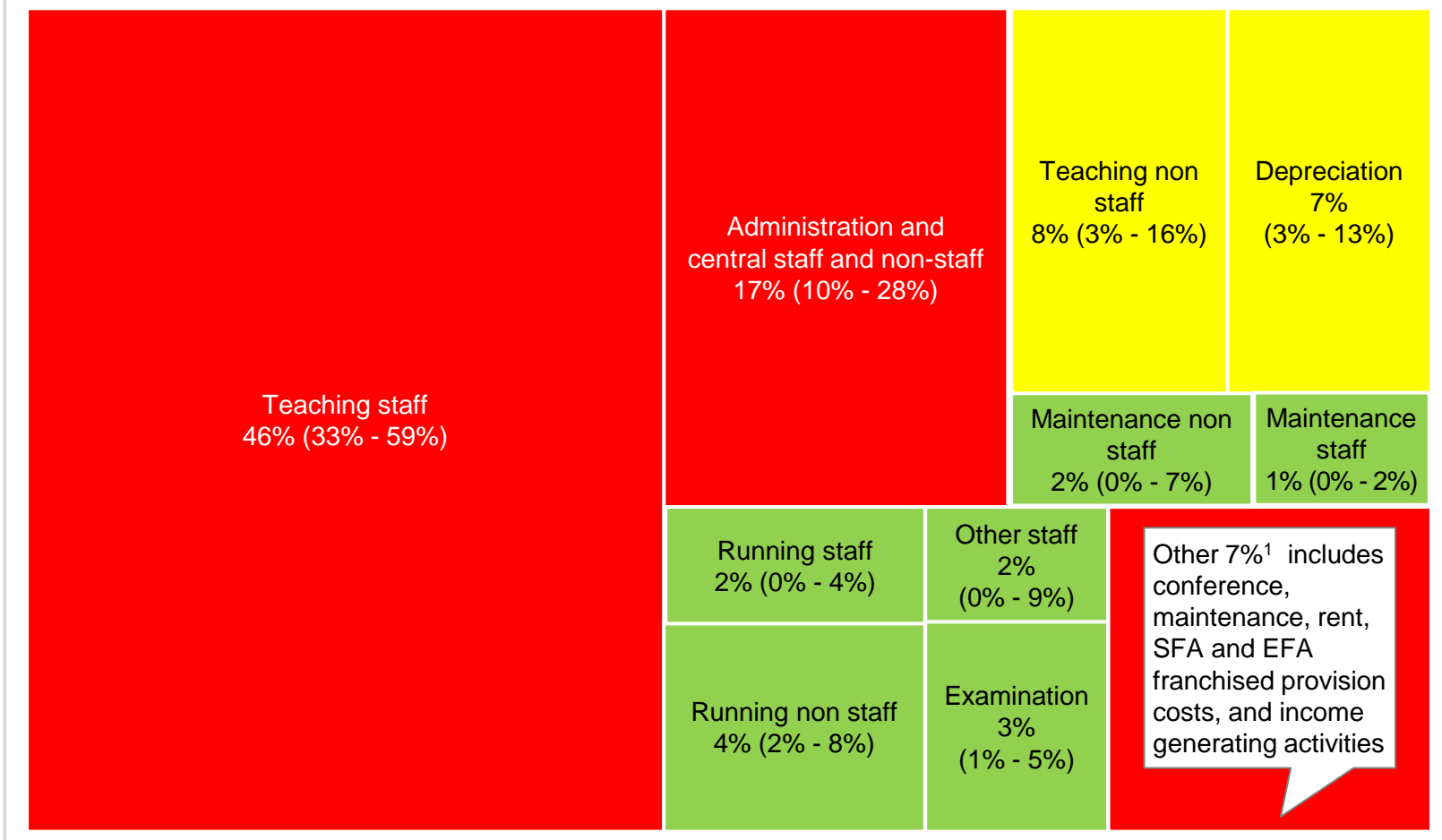
SOURCE: SFA – Funding Allocation to Training Providers; EFA – Funding 16-19 Allocations

There is variation in all major cost areas in Further Education – the most significant of which is in teaching and administrative costs

n = 338, all AoC providers

■ > 15% variation
 ■ 10 – 15% variation
 ■ < 10% variation

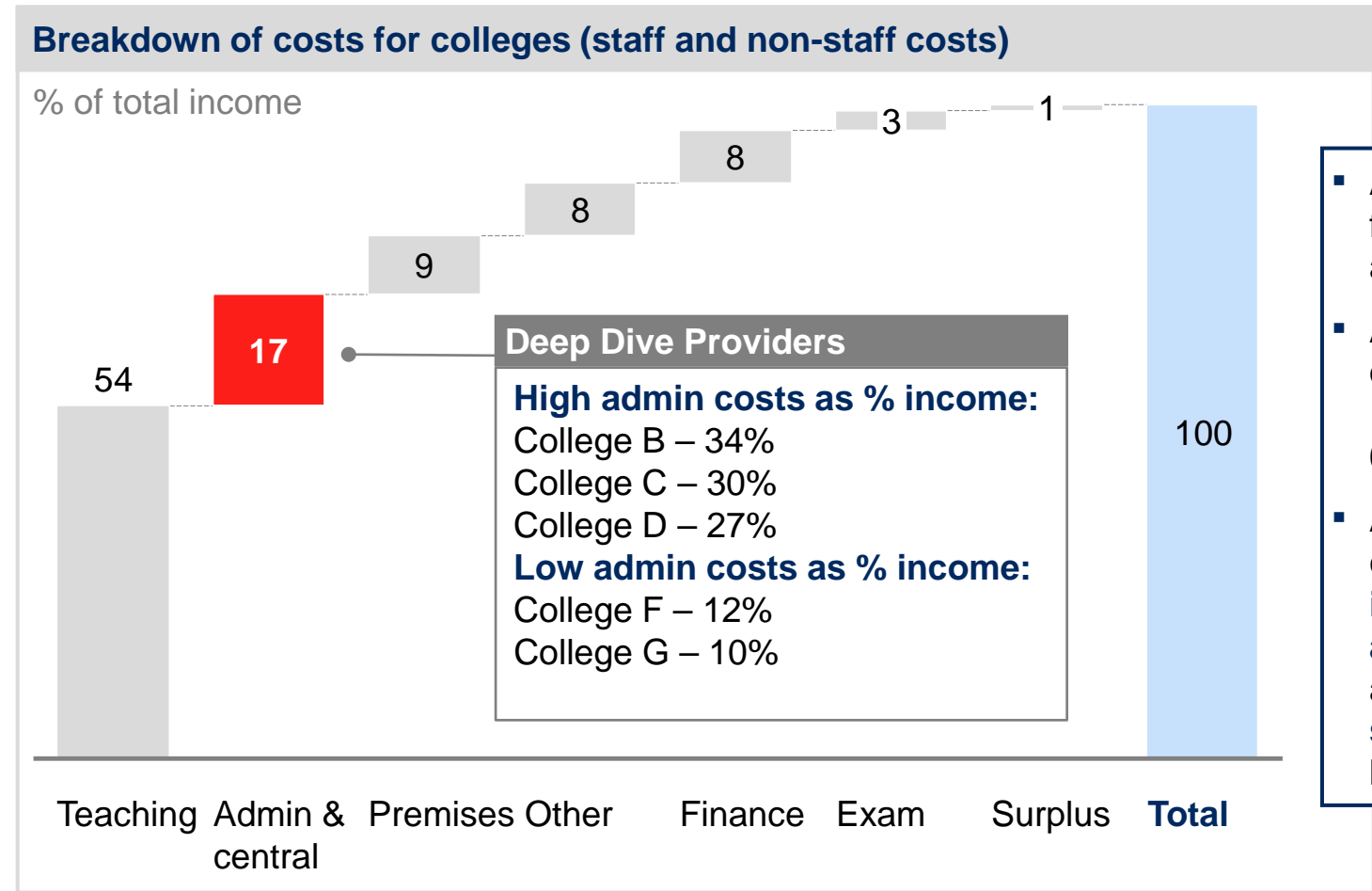
Total costs of AoC providers (12/13), (% of total income; variation in % of total income for upper and lower deciles)



1 This heat map shows costs as a % of total income, using AoC data. AoC colleges have a marginal overall surplus, therefore the costs shown here add up to 99% of total income.

Admin is the largest of the non-teaching costs, averaging 17% of income compared to 11% for academies and NHS hospitals

n = 338, all colleges (AoC data)

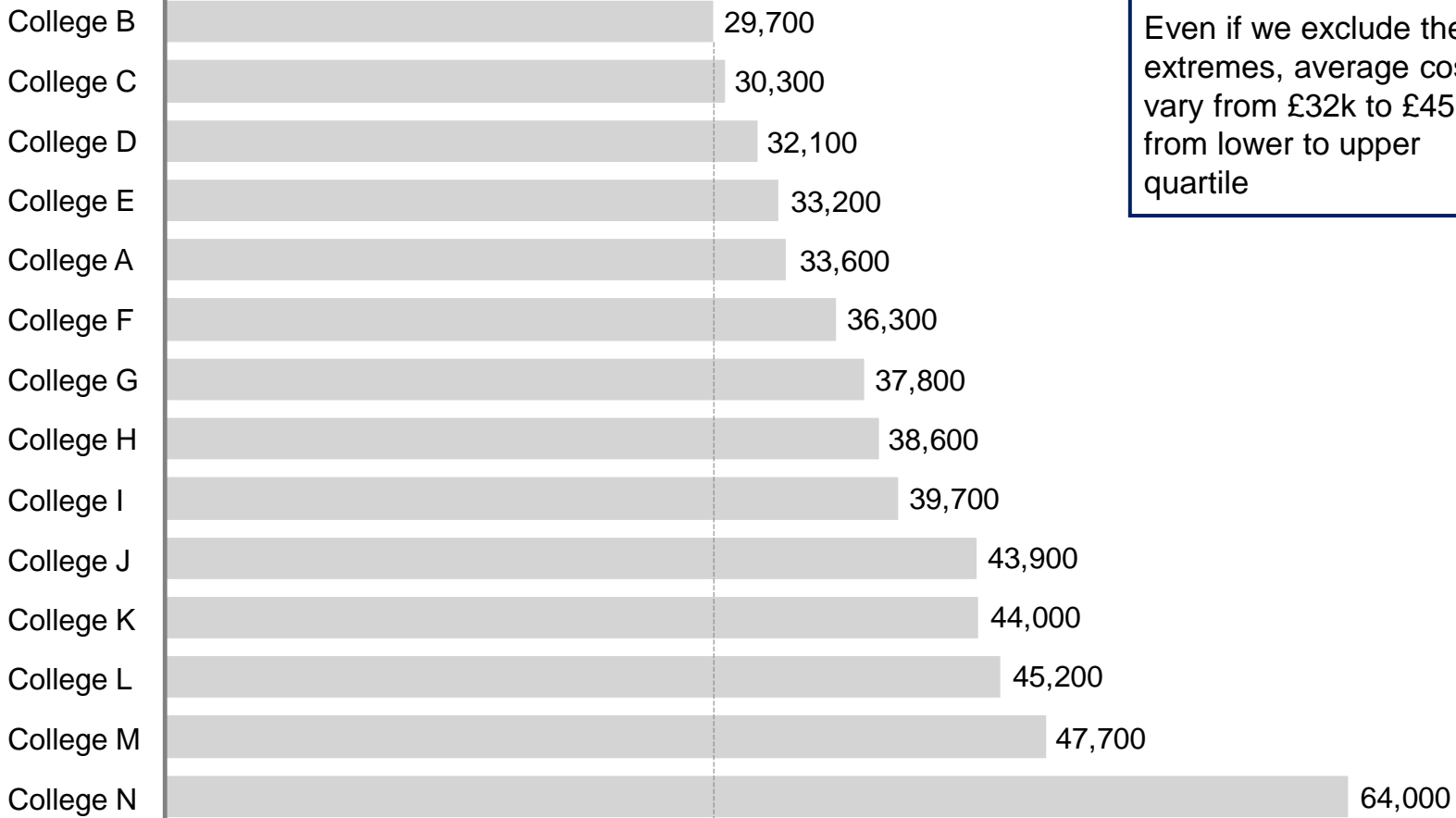


- Admin costs range from 6% to 41% across FE providers
- Admin costs as % of total income are 17% (11% staff and 6% non-staff)
- Average admin costs are **11.1% of income for academies²** and are **11.2% of total staff costs** at NHS hospitals

1 Administration and central services (staff) + Administration and central services (non-staff) costs
 2 <https://www.gov.uk/government/statistics/income-and-expenditure-in-academies-in-england-2012-to-2013>. Includes admin staff administrative non educational supplies, legal and professional and auditor costs. See back up for full definition

Wide variations between teacher salaries at different Further Education providers drive much of the variation in teaching staff costs (46% total)

Average teacher salary by provider (costs include on costs and national insurance)



Even if we exclude the extremes, average costs vary from £32k to £45k from lower to upper quartile

+115%

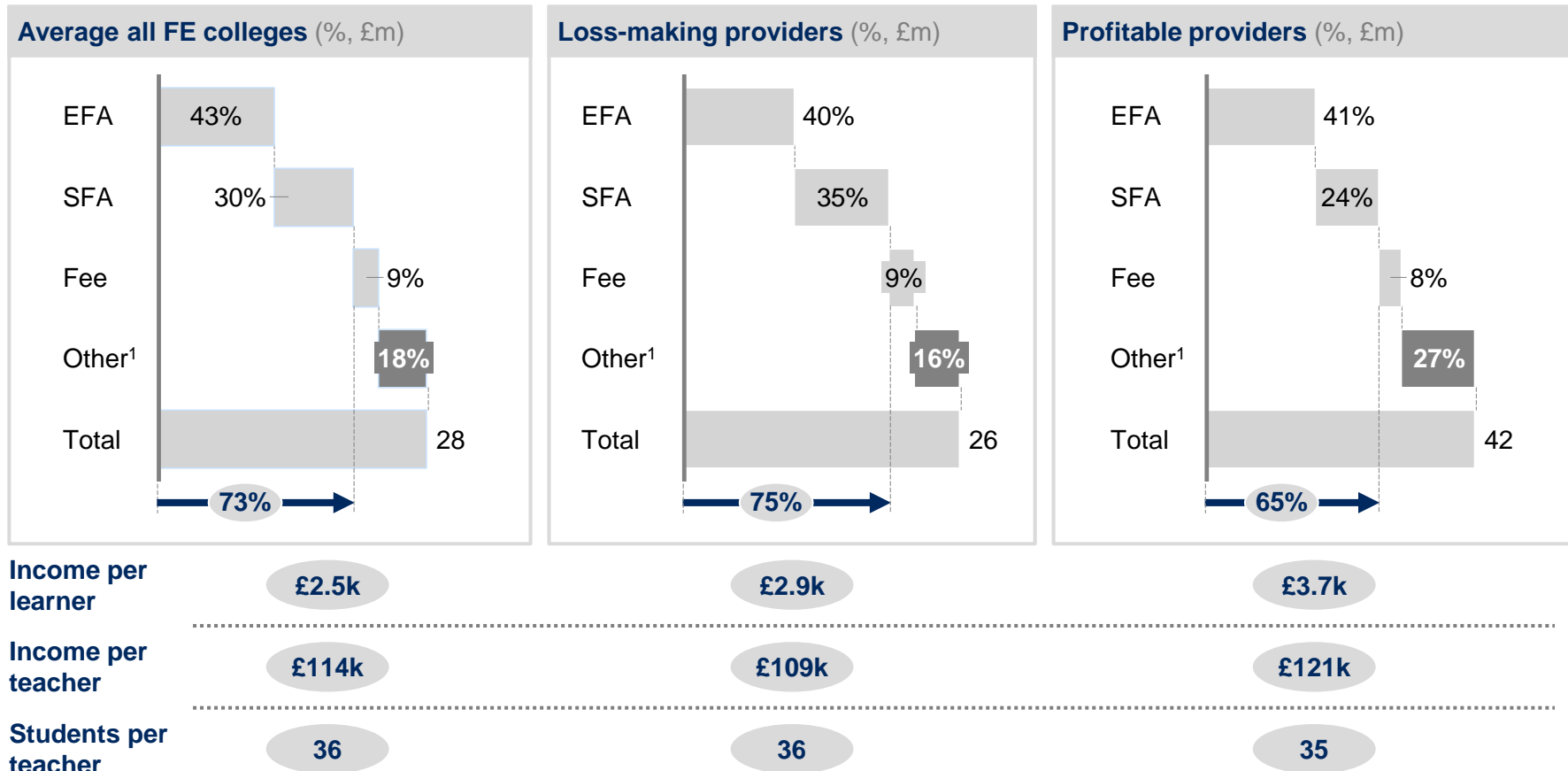


Average teaching salary is driven primarily by tenure, but subject geography and performance are also important

Driver of variation	Reasons for variation	Ways to reduce costs
Tenure	<ul style="list-style-type: none"> Typical pay ranges guidelines indicate pay ranges from £19-36k for full time lecturers, depending on tenure and qualifications 	<ul style="list-style-type: none"> College A found that reducing average tenure of teaching staff can reduced the median wage
Subject	<ul style="list-style-type: none"> Demand for teachers varies by subject with providers reporting up to a 50% premium for E&M and a range from £61k for plumbing to £21k for business studies 	<ul style="list-style-type: none"> Increasing supply of teaching staff in subjects in high demand will reduce average salaries
Region	<ul style="list-style-type: none"> Average teacher salaries ranges from £30-43k, driven by cost of living. However only London based providers receive supplementary funding 	<ul style="list-style-type: none"> Regions with higher cost of living outside of London may be forced to recruit lower tenure staff to compensate
Performance	<ul style="list-style-type: none"> Few colleges pay based on performance, so this is not a major driver of variation – however some providers signaled desire to move to performance based pay 	<ul style="list-style-type: none"> Linking performance to well-defined performance metrics, align teacher and students' incentives

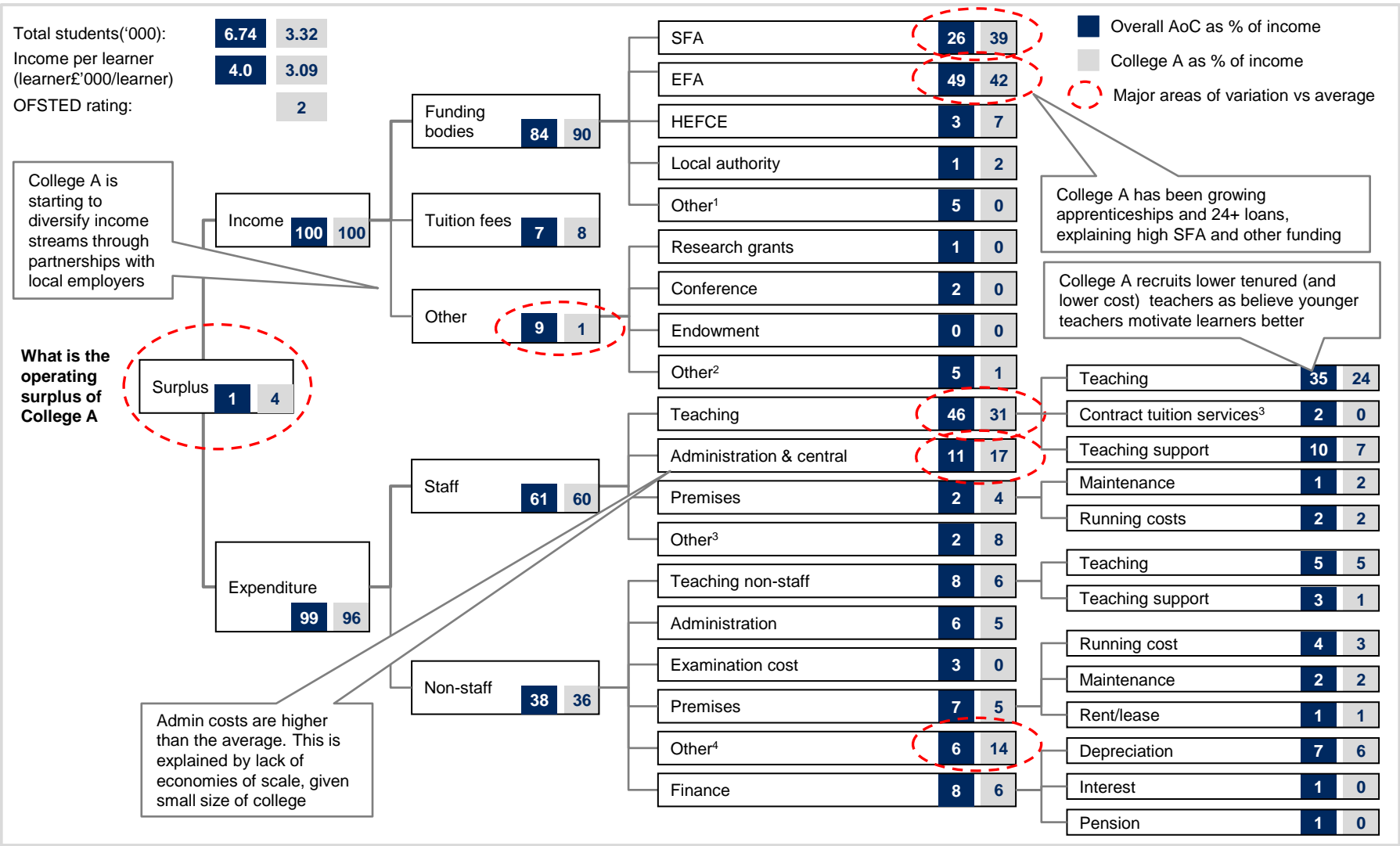
More profitable providers have higher average income per learner, often due to more diverse funding sources or a funding mix balanced towards 16-18 learners

- More profitable providers obtain higher incomes per learner than loss-making colleges through from:
 - Higher share of funding from EFA for 16-18 year olds, for which funding per learner is higher than SFA funding
 - More non-EFA or SFA-funding, e.g., HEFCE funding, endowments, catering, conferences and franchised provision



¹ Includes HEFCE, other funding bodies, conferences, endowment income, catering, conferences, farming, franchised provision and creche income

Institution-level income and expenditure driver analysis



1 Includes EU grants, release of capital grants and other funding body

2 Includes farming, catering, exam fee, creche, releases from deferred capital grants and other

3 Includes income generating activities, farming, conference, SFA and EFA franchised provision and other. All categories average at <1% of income

4 Some providers may have included contract tuition services in non-staff costs

NB: % reflect allocation of cost across AoC providers (FE Colleges, Tertiary Colleges, Sixth Form Colleges, Specialist Colleges)

NB: Due to rounding up of small percentages, branches further to the right may not add up exactly to their parent branch on the left

X = % of income
 Y = £m value
 Z = £ per learner
 Overall AoC average

Root cause cost driver analysis

Teaching costs at College A

Teaching staff costs are 15% lower than the average. College A has been on a turn-around journey, requiring significant cost cutting. 6% of income saved through redundancies and lowering teaching costs by recruiting lower tenure teachers

Total teaching costs		
37%	£3.7	£1,137
54%	£12.1	£2,170

College A cut loss-making course offerings as part of its turnaround e.g., no longer offers A-Levels. Streamlining course offerings can drive more efficient teaching costs (breadth is costly for a small provider)

Teaching staff cost		
31%	£3.2	£953
46%	£10.3	£1,879

Teaching non staff cost		
6%	£0.6	£183.9
8%	£1.8	£291

Teaching (FTE)		
24%	£2.4	£729
35%	£7.8	£1,461

Contract tuition services (FTE)		
0%	£0	£0
2%	£0.3	£46.75

Teaching support (FTE)		
7%	£0.7	£224
10%	£2.2	£371

Average salary	
	£33,583

# teacher (FTE)	
	72

Average salary	
	£27,617

# teacher (FTE)	
	26

# learner	
	3,317

Learners/Teacher	
	46.07

# learner	
	3,317

Learners/Teacher	
	72

Teaching hrs per teacher	
	~840

Teaching hrs per learner	
	-

Teacher utilisation	
	~98%

Class size	
	13.1

Teaching hrs per teacher	
	-

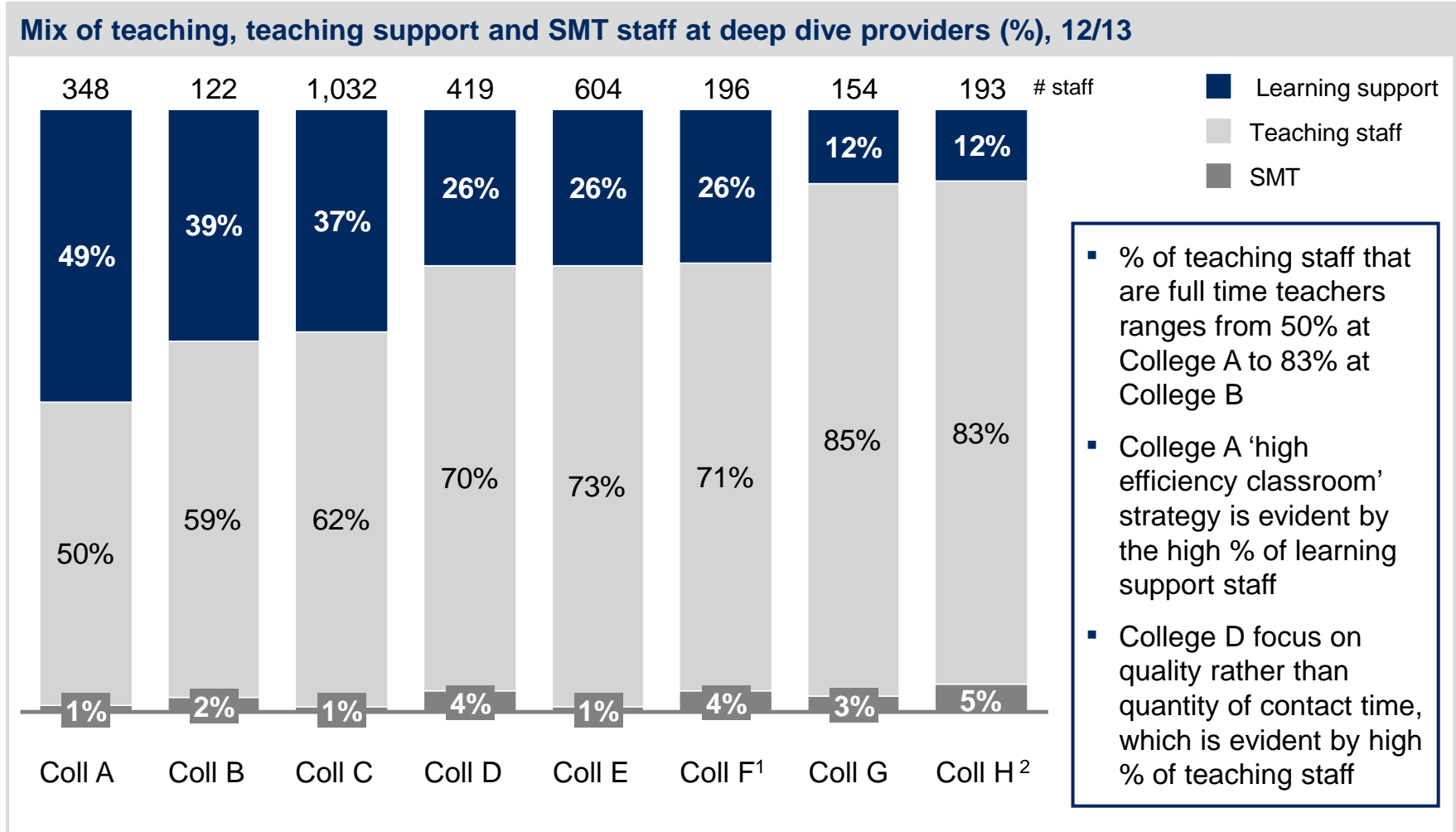
Teaching hrs per learner	
	-

Teacher utilisation	
	-

Class size	
	13.1

Average class sizes are small. College A is a vocational specialist, and certain vocational courses necessitate small classes e.g., for health and safety reasons. As a small FE College, there is also less flexibility to increase class sizes by combining learners across courses. For English & Maths, College A chooses to run small class sizes to customise content to learner abilities and interests

Some providers have adopted a 'high efficiency classroom' strategy to increase dependence on cost effective learning support staff



Many providers are struggling to recruit quality teachers in response to the new English & Maths GCSE requirements

Providers report increasing competition for E&M teachers...

“Increasing competition from English and Maths teachers with **upward pressure on salaries** of English and Maths”

88%¹ of providers

“High **cost in management time** from increased interviews”

A LA

“We are unable to pay significantly higher salaries, so it **takes longer to recruit**. We have also had teachers **turn us down due to salary being too low**”

A college

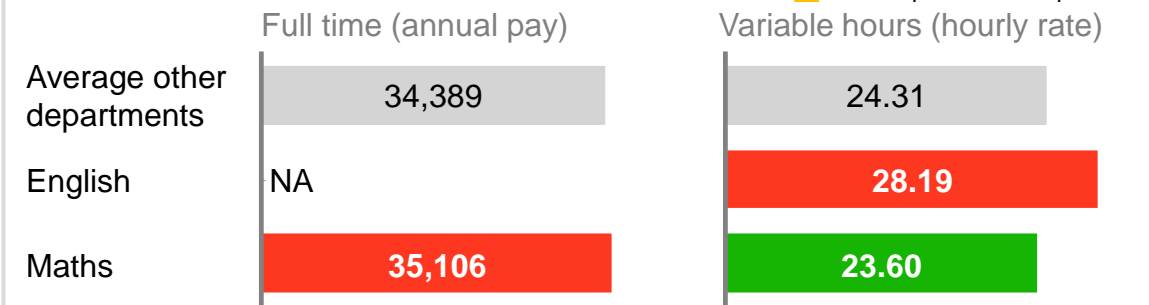
...however this is not consistently reflected in higher salaries for E&M teachers

Salaries are not always higher for English and Maths as some providers are:

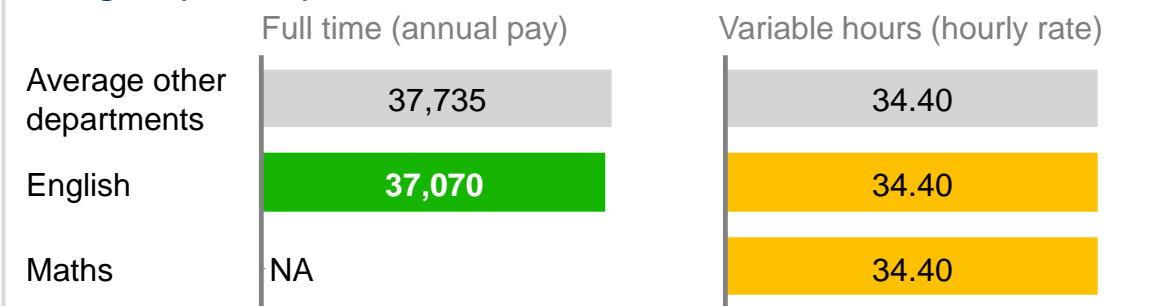
- **Not setting differential pay** rates for morale/union reasons
- Finding additional hidden costs (e.g., more **time spent recruiting**)
- Employing **lower skilled or lower quality teachers**

■ E&M higher than other dpmts
■ E&M lower than other dpmts
■ E&M equal to other dpmts

College A (2013/14)



College B (2013/14)



A few providers have redesigned timetables around English and Maths, however many split groups into small class sizes at higher cost

Some providers have put E&M at the centre of their course delivery...

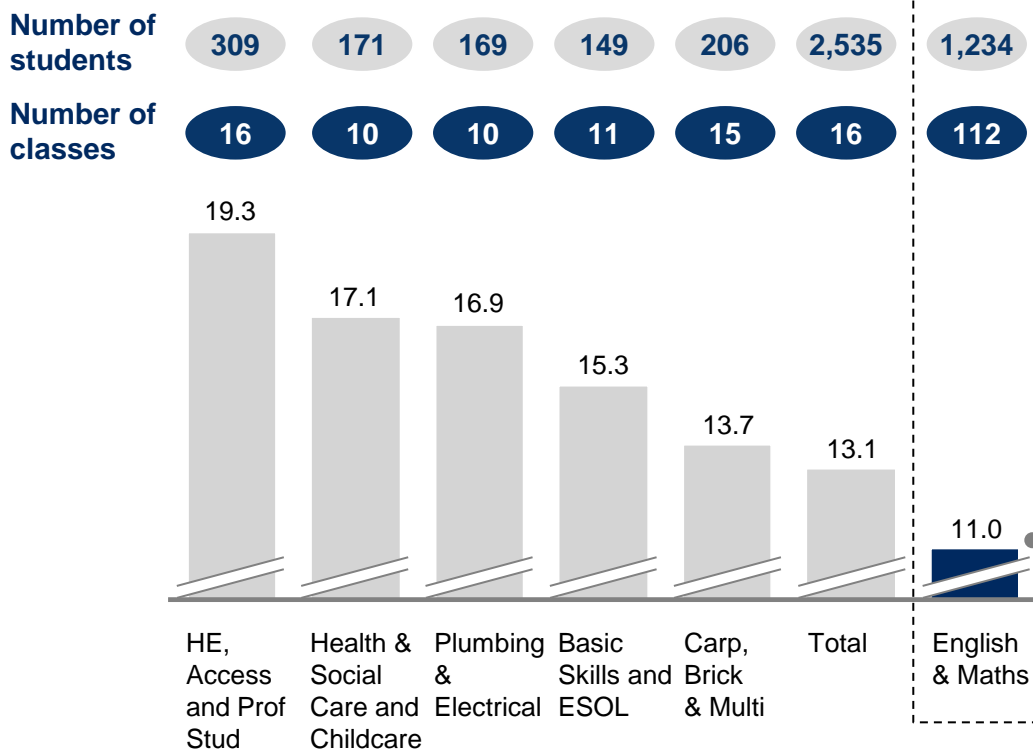
College A timetables high volume classes early in the morning or in the evening and organises other courses around this to maximise class size

College B set a policy to only run classes of 20+ for English and Maths ability on timetable

College C timetable E&M classes at the centre of core vocational programmes, maintaining relatively large class sizes

Many still run high volumes of E&M classes to accommodate different abilities of different learner groups, resulting in small class sizes

Example College D: Average class size for selection of courses



One college offers over 100 different courses in English and Maths across different levels and modes of delivery i.e. Maths for Plumbing (levels 1 and 2), Functional skills English (delivered by training group),



Profitable institutions and/or those who have been on a financial turn-around have four distinct management capabilities in place

A combination of private sector and educational expertise in the SMT

- Skill mix of private sector business skills; deep experience in FE, including teaching; and knowledge of the local economy and market demands. For example:
 - **College A** employed an FD with experience in college turnarounds to support improvement
 - **College B** have an SMT with a mix of experience between the HE and FE sector, service firms (KPMG) and industry (hotel industry)

Data driven decision making on courses and expenditure

- Data collected, understood and used at every level to inform decision making on strategy, budget and course offerings at organisational and departmental level. For example:
 - **College C** track data down to course level to understand inefficiencies
 - **College D** require business case for any substantial financial decision including use of agency staff (targeting break-even in 2015/16 following a 12% deficit)
 - **College E** tracks enrolment and course contribution data on a weekly basis and makes real-time adjustments

Market assessment of local employers

- Continuous monitoring of the local labour market and close collaboration with employers to test new courses or scale-back unprofitable courses. For example:
 - **College F** adjusts course offerings on a semester by semester basis depending on market demand and enrolment data
 - **College G** have an outreach team working closely with local employers in the community, who gather insight on demand for learners and apprenticeships that feeds into course planning
 - **College H** (and many other colleges) work closely with LEP and local employers

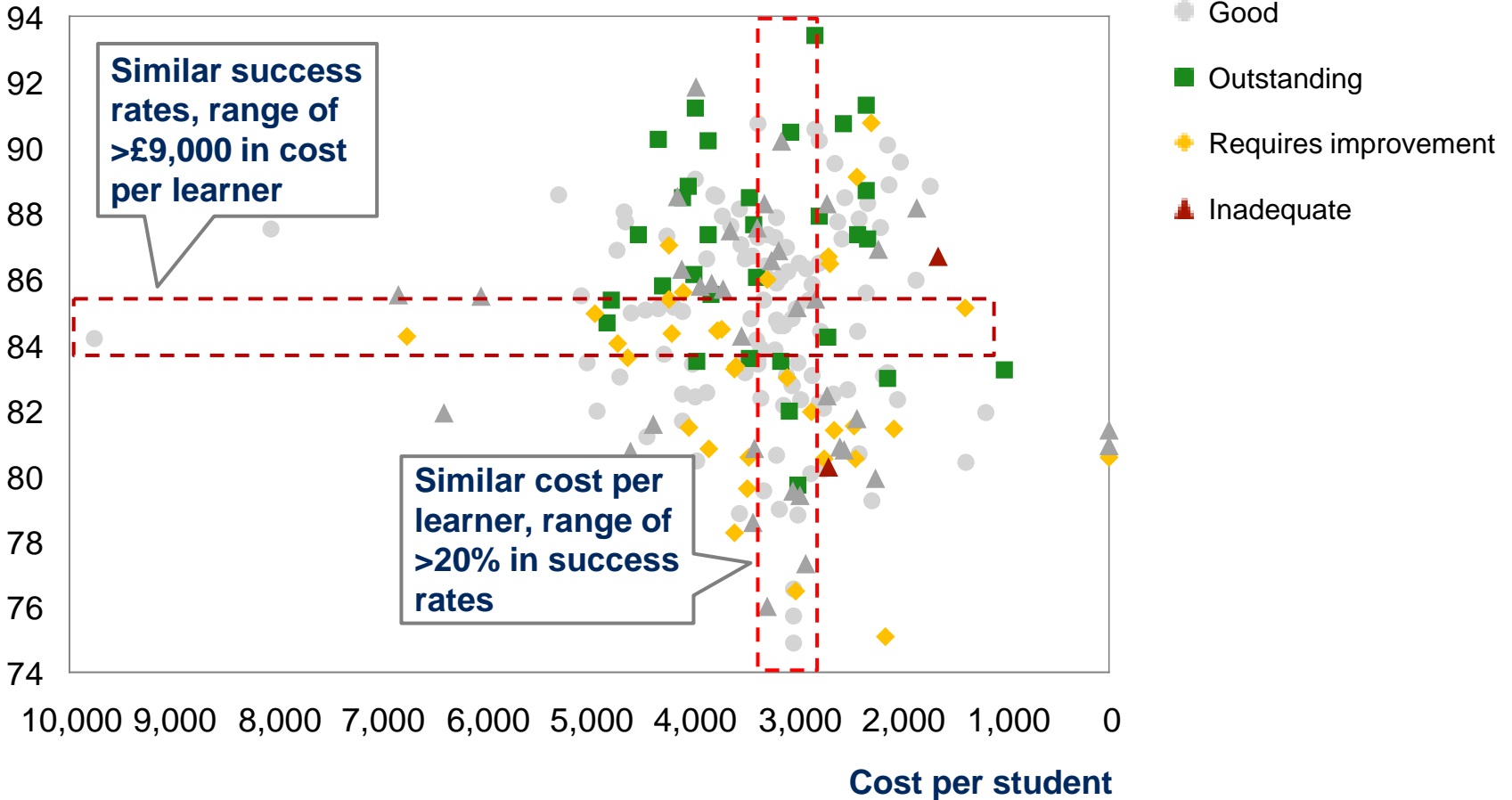
Strategic partnerships with local, national and international businesses

- Build strategic partnerships with local, national and international businesses to develop sector capabilities and anticipate changes in demand. For example:
 - **College I** working with Siemens on a mechatronics lab and course
 - **College J** work with Luton Airport on courses in aviation, travel and tourism
 - **College K** train 500 learners per year for Nissan on a replica of the Nissan production line

We did not find a strong relationship between success and cost per learner, or in over 40 other relationships we analysed

Example 1: Outputs and costs per learner in FE colleges

Success rate



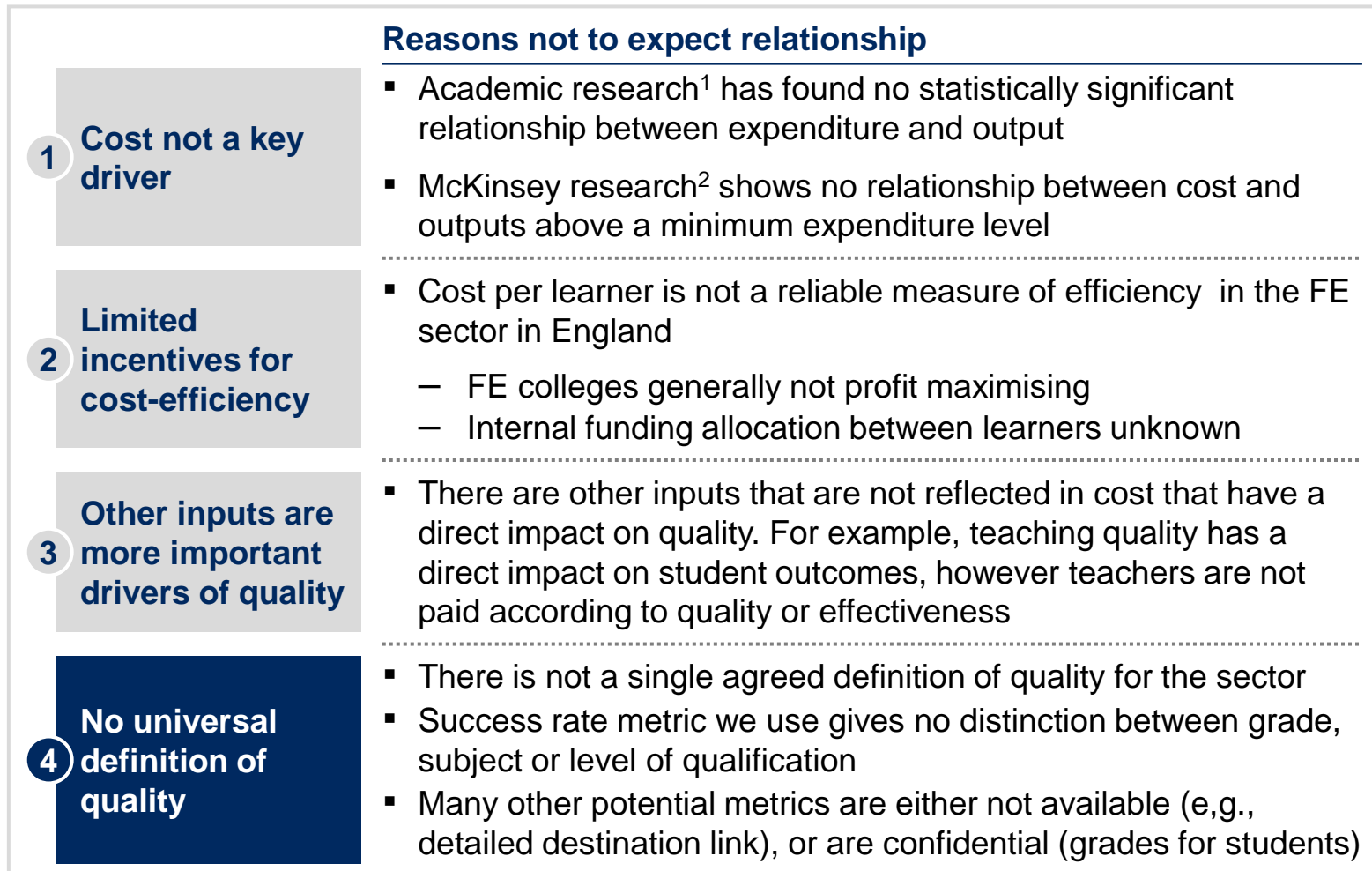
1 Includes general further education colleges and tertiary colleges

SOURCE: AoC College accounts 2012/13; Participation by Provider by Funding Stream, Learner and Learning Characteristics 2012/13

There are four potential reasons why finding causal relationships between costs and outputs in further education sector is challenging

System rationale

Data limitation



¹ Hanushek (2002) who found that 66% of 162 studies found no statistically significant relationship between expenditure and output

² Research across school systems