Five Keys to improving research costing in low- and middle-income countries

A three-hour seminar
[DATE]
[PRESENTER]

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Seminar overview

- To consider why accurate costing is important for the sustainability of research institutions
- To provide an overview of the *Five Keys*
- To examine how the Five Keys might apply to your institution, projects, or research networks

This seminar's central questions

- How sustainable is your institution?
- How do your research-costing practices affect your sustainability?

Sustainable research institutions

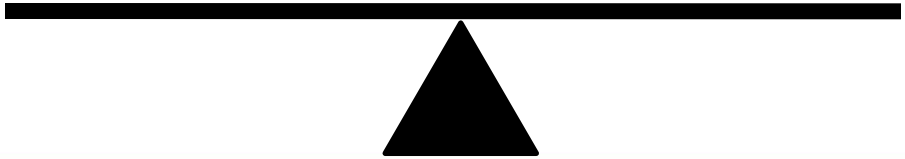
Inputs

- Good students
- Good academics
- New academics
- Income
  - Student fees
  - Grant funding
  - Subsidies

Outputs

- Good graduates
- Research publications
- Protected innovations
- New ideas
- Knowledge
- Solutions

Balance is required



The *Five Keys*

- **Defining and categorizing direct and indirect costs**
- **Determining indirect cost rates**
- **Institutional management of research grants**
- **Developing relevant skills and competencies**
- **Bridging the gap between funders and research institutions**

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ESSENCE on Health Research is a **collaborative framework between development agencies, research funders, philanthropists and multilateral initiatives** to:

- Strengthen research capacity and conditions for doing research, especially in Africa;
- Implementation of Paris Declaration and Accra Agenda principles in interactions between funders and recipients;
- Enhance alignment of efforts and achieve sustainable impact.

http://www.who.int/tdr/partnerships/initiatives/essence

Key 1
Defining and categorizing direct and indirect costs

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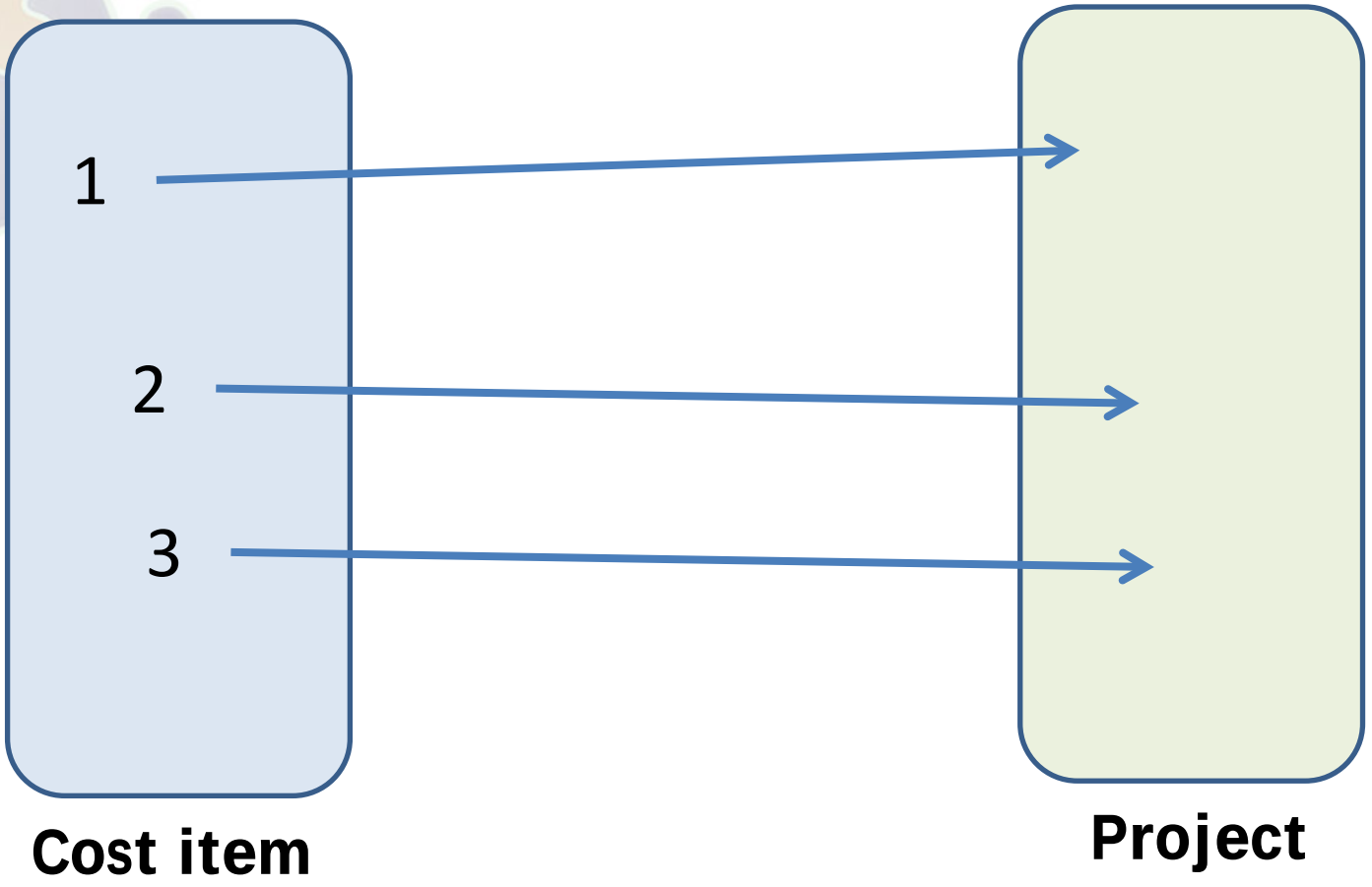
Direct costs

Direct costs are expenses that are necessary to the completion of a project.

Direct costs can include:

- Personnel
- Equipment
- Materials and supplies
- Travel costs
- Bursaries

One-to-one mapping of costs to a project



Indirect costs

(overheads, office costs, administrative costs)

Indirect costs are often difficult to allocate accurately to a single project as they are often shared between several projects

Items allocated to indirect costs differ depending on an organization's structure and accounting system.

Examples of indirect costs

Administration

- Procurement services
- Financial management
- HR
- Research office
- Library services
- Legal services

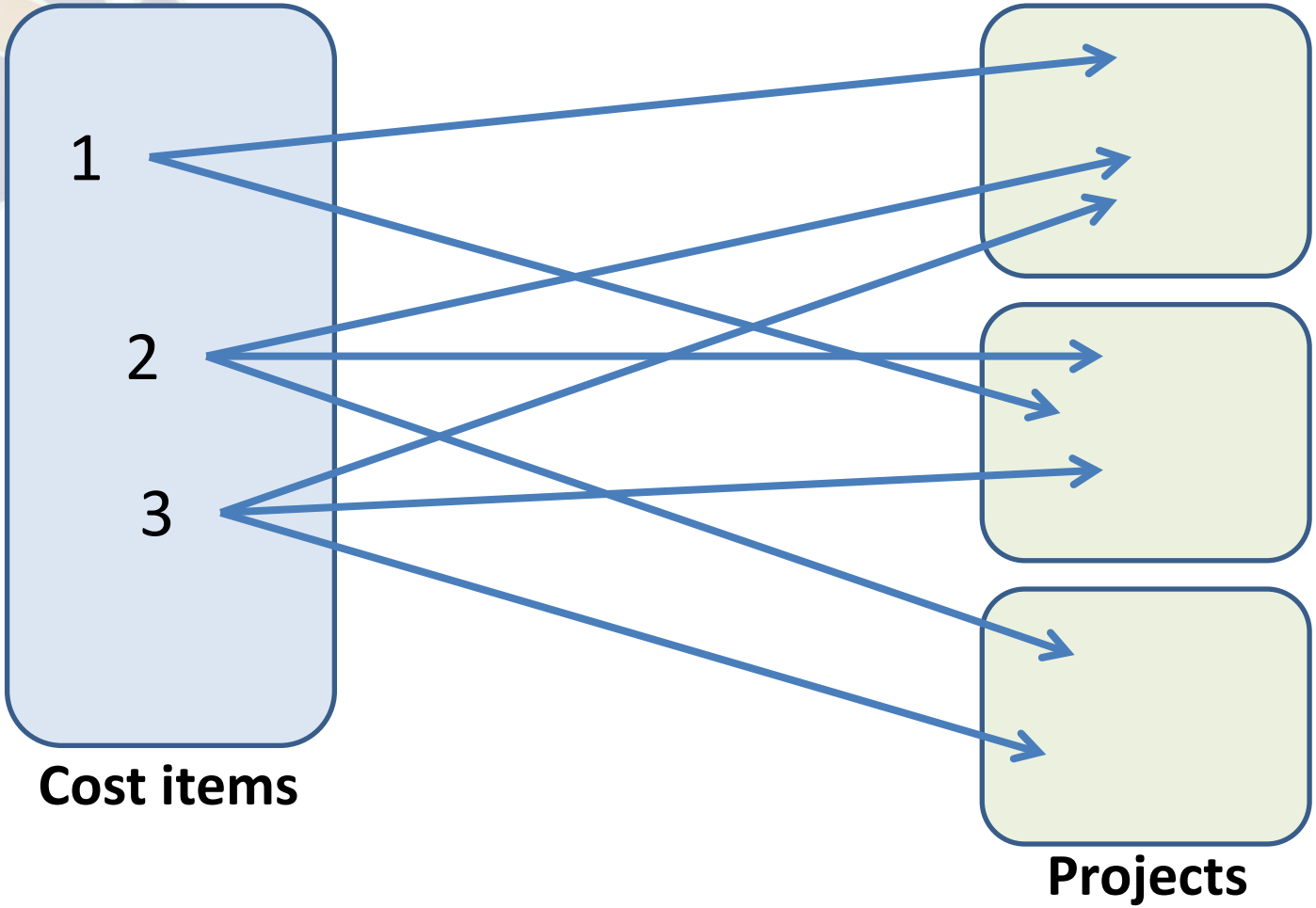
Other

- Security services
- Quality assurance
- Marketing

Buildings and equipment

- Maintenance
- Electricity
- Water
- Cleaning
- Insurance
- Waste

One-to-many mapping of costs to multiple projects



Direct, indirect and full costs

Full costs consist of:

- Direct costs directly related to a single project
- Indirect costs related to multiple projects

Direct costs

+

Indirect costs

=

Full cost

Indirect-cost rates

- Because indirect costs are difficult to allocate accurately to a particular project, organizations calculate a standard rate that is applied to all projects.
- An indirect-cost rate is a method of charging specific projects for their share of the indirect costs.
- The rate is usually a ratio between the total indirect expenses and the direct costs.
- Understanding how your institution's indirect-cost rate is derived is they key to adequate cost recovery, and thus to ensuring your organization's sustainability.

Calculating an indirect-cost rate

- The ratio of indirect costs to direct costs is calculated as follows:

$$\frac{Indirect\ costs}{Direct\ costs} \times 100 = Indirect\ cost\ rate$$

- The indrect-cost rate is the ratio of indirect costs to direct costs expressed as a percentage.
- Indirect costs are usually lower than direct costs.

Consider…

Are the full costs of your research being met by the funds raised for research (irrespective of the source)?

If YES:

- How are indirect costs being recovered by the organization?
- How is the organization distributing the recovered costs?

If NO:

- Does your organization have an indirect-cost rate that is applied to all research projects?
- Does your organization have criteria or processes for deciding whether to submit research proposals to funders that do not cover the full indirect-cost rate?

Key 2
Determining indirect-cost rates

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Calculating an indirect-cost rate

Calculations need to be:

- Accurate
- Defensible – based on audited financial results
- Updated regularly (annually)
- Flexible enough to suit different funders

It is probably best to calculate one rate for the whole institution but, in large institutions, it may be necessary to vary the rate across faculties

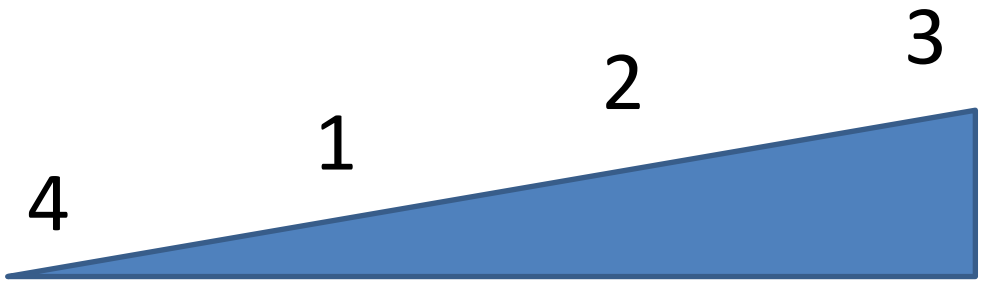
Some pointers

- There is no ‘one-size-fits-all’ method – context matters
- Your accounting system may limit you to a single rate or allow different rates for different departments
- Try to agree on an appropriate methodology with your major funders - this will reduce time spent negotiating about specific projects
- Recalculate the rate regularly using fresh data
- Use financial data averaged out over about three years to allow for irregularities

Four approaches to calculating indirect-cost rates

Based on the

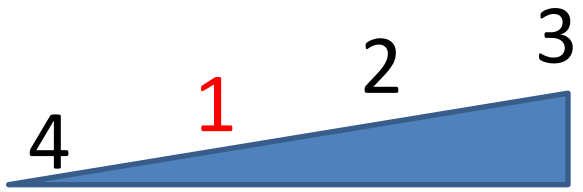
1. Total direct costs
2. Modified (or reduced) total direct costs
3. Remuneration costs only (even more modified than 2)
4. Facility costs only



1. Total direct costs

- A simple approach
- Total indirect costs divided by total direct costs

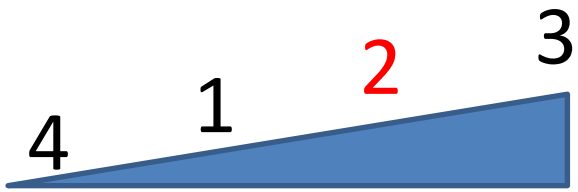
$$\frac{Indirect\ Costs}{Total\ Direct\ Costs} \times 100 = Indirect\ Cost\ Rate$$



2. Modified total direct costs

- Total direct costs are reduced by subtracting:
  - Capital expenditure
  - Bursaries
  - Other expenses that cannot be justified

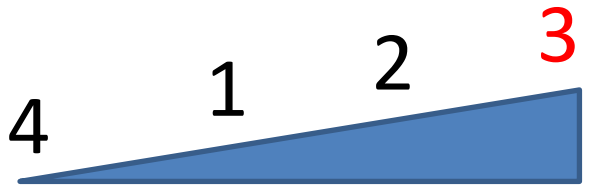
$$\frac{Indirect\ Costs}{(Total\ Direct\ Costs - Certain\ Direct\ Costs)} \times 100 = Indirect\ Cost\ Rate$$



3. Remuneration only

- The numerator is the normal sum of indirect costs
- The denominator is the difference between the total salary cost of the university minus the salary costs of the Research Office and others that are usually included in the indirect costs

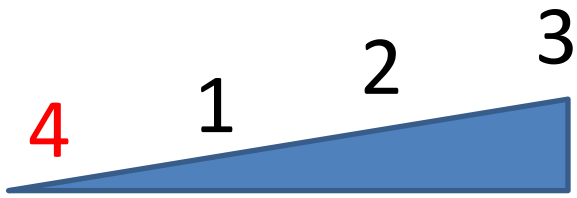
$$\frac{Indirect\ Costs}{(Total\ Salary\ Cost - Salary\ Component\ in\ the\ Indirect\ Costs)} \times 100 = ICR$$



4. Separating facility costs

- Facility costs include:
  - The cost of municipal services
  - Building maintenance
- This method is useful for charging for off-site work
- A facility rate (per meter^2 can then be added in for on-site work)

$$\frac{(Indirect\ Costs - Facility\ Costs)}{Total\ \ Direct\ Costs} \times 100 = Indirect\ Cost\ Rate$$



Using the appropriate methodology

Different methods might be better for different contexts:

- Sometimes you want to keep things simple
- Sometimes you are willing to keep the budget low to establish a relationship with a new funder or a prestigious research partner
- Sometimes a method is determined by a funder or your institution's management team

Costing versus pricing

- The cost of a project is not necessarily the same as the price charged to the client
- The price will depend on the type of project, the funding stream, the reasons for doing the project, etc.
- There may be reasons to conduct a project:
  - for a profit (price is more than the cost)
  - on a breakeven basis (the price is equal to the cost)
  - at a loss (price is less than the cost)

Reasons for pricing projects differently

FOR PROFIT (Price > Cost)	BREAKEVEN (Price = Cost)	LOSS (Price < Cost)
Contract research Consulting	Research grants Donations	Research grants Donations
Clients benefit from the prestige of your institution Profits are allowed	Funding stream does not allow any profit to be made by the institution but the research benefits the institution	The project brings other benefits, such as students, equipment, capacity, etc.

Permissible deviations

PERMISSIBLE DEVIATIONS	APPLICATION OF THE POLICY ON DEVIATIONS
The funder's prescribed indirect-cost recovery rate is less than 25% of the total project income.	The maximum allowable overhead that the funder is willing to pay must be used as the indirect-cost recovery rate.
The funder's allowable overhead is greater than 25% of project income	The maximum allowable overhead can be used in the project budget, but only 25% will be taken as the indirect-cost recovery rate. If more than 25% is used, the balance accrues to the project as profit.
The funder will pay for direct project costs only (i.e. they will not pay for university-funded staff costs or indirect costs)	The researcher can apply for the 25% to be waived if significant other benefits accrue to the university (such as student involvement, publications, patents, etc.).
The funder will allow an overhead on certain costs only	The researcher can apply for the levy on the applicable cost to be waived if significant other benefits accrue to the university (student involvement, publications, patents, etc.).

(Source: University of the Free State, South Africa)

Key 3
Institutional management of external research grants

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An overview of grant management

Pre grant award

Grant development

- Identify funding opportunities
- Disseminate information
- Liaise with funders
- Help with proposals and budgets

Grant submission

- Facilitate peer and ethics reviews
- Facilitate institutional sign-off
- Send and follow up on proposals

Post grant award

Grant implementation and stewardship

- Ensure financial compliance
- Monitor progress
- Facilitate financial reporting
- Project closure

Institutional policies and guidelines

- Outline roles, responsibilities and procedures for proposal development, clearance, approval and sign-off
- Set out the steps involved in setting up, managing and closing a grant
- Spell out categories for direct and indirect costs
- Explain how to apply the institution's standard indirect-cost rate
- Establish procedures for waiving the standard indirect-cost rate
- Establish how recovered indirect costs are distributed
- Support the development of research proposals and budgets

Consider…

- Considering the complexity and competition of the funding environment, can individual researchers manage their own research as well as apply for and manage research grants?
- What is in place to support researchers in the pre- and post-award processes? Is this sufficient?
- What organizational changes could strengthen the coordination and management of research funding at my institution?

Key 4
Developing the relevant skills and competencies

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The ideal grant manager

- Facilitates the administrative aspects of research grants and reduces researchers' administrative loads
- Is aware of and able to limit the contractual, legal, ethical and financial risks involved in grant management

General responsibilities

- Develop policies and procedures
- Develop processes, systems and supporting tools
- Drive policy implementation
- In-house training to build research capacity
- Build relationships and networks to advance research
- Pre-award grants management (proposal development, including budget development and proposal submission)
- Award negotiation and acceptance
- Post-awards grants management (implementation and stewardship)

Skills and competencies

- Understanding of the institution's strategic priorities and processes
- Awareness of research processes and of what motivates researchers
- The ability to formulate policies, and to design and implement effective workflows
- A thorough understanding of how direct and indirect costs are defined, calculated, charged, and allocated
- Capacity to monitor and apply institutional and funder regulations
- The ability to coordinate and document institutional approval for grant proposals
- Awareness and experience of grant-seeking techniques and tools

Skills and competencies (continued)

- The ability to assess project budgets, and master the relevant financial-management skills
- Strong organizational, analytical and project-management skills
- Good interpersonal and negotiating skills, including the ability to foster respect for cultural and individual differences
- The ability to communicate technical and budgetary details
- The ability to multi-task and meet deadlines

Key 5
Bridging the gaps between funders and research institutions

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Funders' concerns about institutions

- Grant management and coordination is weak
- Language barriers and cultural differences create difficulties
- Institutions have few policies or standard procedures
- The redistribution of recovered indirect costs is not documented so funders can't be sure how these will be allocated

Institutions' concerns about funders

- Funders are powerful and generally unwilling to negotiate terms and conditions of grants
- Modest budget proposals are more likely to be successful
- Reporting templates and requirements are highly varied, and institutions seem to be expected to set up several different management and financial systems to cope
- Training offered by funders needs to happen *in situ*;
  it is too expensive if held in the US or Europe

Harmonization between funders

Policies and practices among funders, and in some cases even within funding organizations, differ vastly when it comes to:

- Expectations of how budgets are compiled
- Expectations of how expenditure is reported
- Funding indirect research costs

Funders have undertaken to try to harmonize these aspects of their work

Summing up

Obstacles to accurate research costing

- Institutions fail to calculate and negotiate indirect-cost rates proactively
- The management and coordination of research grants by some research institutions is too random and undeveloped
- Funders' policies and practices on the reimbursement of indirect costs vary significantly
- Cooperation between the various funders, as well as between funders and research institutions is generally too weak

Ongoing debates…

Questions raised during the consultations on Five Keys include:

- Can overheads be used to support teams during the period between the end of one grant and the start of another?
- How can the depreciation cost of equipment be factored into future grants?
- Could templates be developed to facilitate the calculation of indirect costs?
- Could ESSENCE assist institutions to develop grant-management offices?

Where to from here…

- *Five Keys to improving research costing in low- to medium-income countries*
  http://www.who.int/tdr/partnerships/initiatives/*essence)*
- Videos on YouTube
- Additional training interventions?

Thank you for your attention and participation!