Agenda Item 2.3
SMB8-02C
For discussion

Reflecting on CGIAR's indicators regarding Center financial health

Purpose: This document sets out some early thinking regarding the overall adequacy of CGIAR's current indicators for Center financial health, taking into account best practice models on relevant criteria/components to make such assessments. If there is interest in exploring a revised set of financial health indicators, this could be taken up via the Centers' Corporate Services Executives group, and discussed in the Centers Audit Committee Chair meeting in February 2018, to explore a way forward.

Document category: This is a working document of the System Management Board. There are no restrictions on circulation.

Version: 30 November 2017

1. Introduction

Paragraph r. of the Terms of Reference of the SMB's Audit and Risk Committee (ARC) provides that the ARC will:

> *"Periodically review forecasts of available resources for the CGIAR Portfolio and monitor the financial position of the System Organization and the Centers, recommending to the Board appropriate corrective action to be taken in the circumstances of an adverse financial position".*

At its 7th meeting, the ARC discussed the matter of Center financial performance:

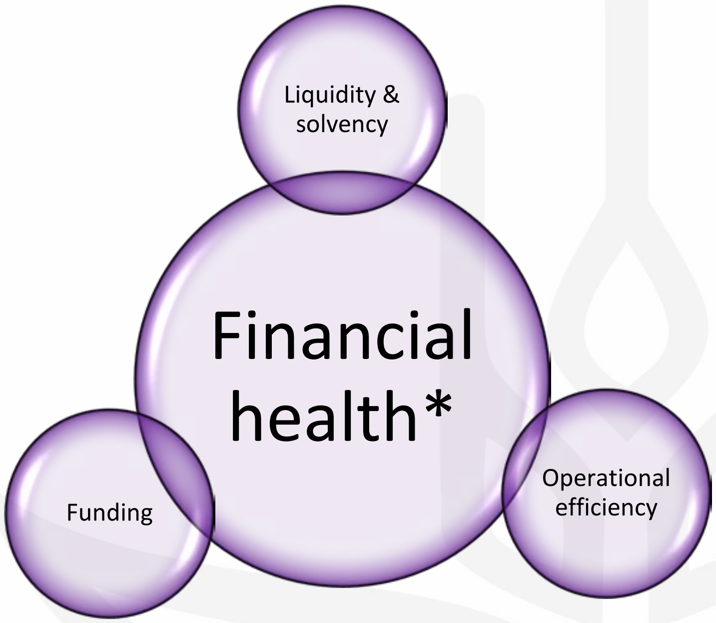
- Suggesting that "improved early warning indicators could be explored in support of the SMB having a better feeling for financial health across the System" and
- Proposing use of a "dashboard approach" to show changes over time

This document: reflects on how such an approach may be able to be implemented building on a range of early inputs, including the views of Center Corporate Services Executives and Center/Regional Team Heads of Internal Audit

2. Components of financial health

Conceptually, the following three factors contribute to the financial health of a Center*:

- **Liquidity and solvency**. Liquidity is the amount of cash and easily-convertible-to-cash assets a Center owns to manage its short-term debt obligations. Before a Center can prosper in the long term, it must first be able to survive in the short term. Solvency is closely linked to liquidity and is a Center's ability to meet its debt obligations on an on-going basis, not just over the short term.
- **Funding** reflects on a Center's ability to generate revenues consistently to be able to continue delivering quality research.
- **Operational efficiency** provides an indication of how well management controls the costs. Good management is essential to a Center's long-term sustainability. Good management can overcome an array of temporary problems, while poor management can lead to the collapse of even the most promising business.



** Adapted from approach suggested by Investopedia, a "wholly owned by IAC (NASDAQ: IAC) largest financial education website in the world"*

2. Components of financial health

A Center's financial health is affected by both external (e.g. change in donor priorities) **and internal factors** (e.g. poor budgetary controls).

Linking to the new CGIAR Risk Management Framework - the diagram to the left summarizes key threats to Center financial stability that are linked to the **overall family of risks** of *"Poor execution undermines capability"* with the success factor of "*Financial stability requirements met by all Centers*."

Major threats to Center financial health

Liquidity & solvency

- Poor cash flow planning
- Lack of control over receivables
- Excessive loans and debts
- Insufficient reserves; lack of reserve replenishment
- Loss of money due to poor/risky investment choices

Funding

- Ineffective fundraising and other income generating activities
- Unfulfilled donor commitments e.g. when activities are pre-financed by a Center and funding fails to materialize
- Significant dependency on one donor who withdraws support
- Unrestricted funding is not sufficiently generated
- Support costs are not or insufficiently covered by restricted funding (cost recovery)

Operational efficiency

- Poor budgetary controls
- Accumulation of unfunded costs
- High fixed costs
- High dependence on collaborators to deliver research
- Monetary losses due to fraud and subsequent withdrawal of donor support

3. CGIAR's current financial health indicators mapped to best practice categorization

Liquidity & solvency	Funding	Operational efficiency
• Operating reserves ratio • Liquidity ratio • Current ratio	• Cash management of restricted operations ratio	• Indirect cost ratio

- The diagram above reflects to what extent current indicators address threats to financial health across the three components (*See the Appendix A for details of current CGIAR financial health indicators*).

- Optimally, **indicators of financial health** would cover all three factors of financial health proportionally, addressing the relevant threats in a meaningful way. Currently, there is more weighting on liquidity & solvency than other areas

3. CGIAR's current financial health indicators: pros and cons

Liquidity & solvency	Funding	Operational efficiency
• Operating reserves ratio • Liquidity ratio • Current ratio	• Cash management of restricted operations ratio	• Indirect cost ratio
👍 • Historically, Operating reserves and Liquidity ratios were best to flag issues with financial health 👎 • Both ratios generally track each other due to the way the Liquidity ratio is calculated • Current ratio was less effective in reflecting financial troubles in the past	👍 • Good to reflect how much of a restricted cash flow a Center pre-finances 👎 • Donor payables fluctuate throughout a year and an annual snapshot may not accurately reflect Center performance. Needed to be reported more frequently	👍 • Indirect cost ratio aims to reflect Center efficiency 👎 • Should be used with caution as the definitions of indirect cost may differ from Center to Center

To note:

- An indicator on ***Long-term sustainability ratio*** is lacking
- More effective indicators to reflect on Center status against Funding and Operational efficiency are needed

3. Taking stock of the adequacy of the current CGIAR financial health indicator set

Frequency and timing

- Current indicators are produced as part of CGIAR financial report based on Center financial statements and are shared 6 months into the next financial year by which time Center financial position would have moved on. SMB may need to consider shortening this timeframe
- Since 2016 report, the indicators are reported for the last 2 years. While providing some trend analysis, 3 to 5-year view would give the SMB a better visibility over the fluctuations of Center financial position
- At the moment, the indicators are reported once a year as the source of the data to calculate them is rooted in the Balance Sheet report of Center Financial Statements. As some items of the Balance Sheet report are calculated once a year e.g. Unrestricted net assets, the related indicators can only be reported once a year
- More frequently reported indicators will give the SMB better visibility over Center financial position

Targets and risk tolerance

- Current targets were set for over a decade ago
- While Center financial performance fluctuates around the targets, the *acceptable level of fluctuation is not set*. i.e. how significant a departure from a target would trigger an alarm and action from the SMB?

4. Current and additional/alternative indicators

Taking into account the components of financial health and threats to it, the next slide lists the current and potential new indicators.

The 3 current indicators that are suggested to be kept going forward are colored in green. These are:

- Operating reserves ratio
- Liquidity ratio (with adjusted calculation i.e. removing long-term investments from the calculations of working capital), and
- Cash management of restricted operations ratio

- It is suggested to drop the current ratio and the indirect cost ratio.

The 5 possible additional indicators that are proposed to be used in the future are colored in blue.

4. Current and additional/alternative indicators

Components of financial health	Sources of risks to financial health	Current indicators *(green, suggested to be continued)*	Additional/alternative indicators (details are included in the Appendix B) *(Blue, suggested additional)*
Liquidity and solvency	• Poor cash flow planning • Lack of control over receivables • Excessive loans and debts • Insufficient reserves; lack of reserve replenishment • Loss of money due to poor/risky investment choices	**1.1 Operating reserves ratio** **1.2 Liquidity ratio** 1.5 Current ratio	2.1 Reserves replenishment ratio 2.2 Budget surplus/deficit **2.3 Long-term investments credit ratings**
Funding	• Fundraising and other income generating activities are ineffective • Unfulfilled donor commitments e.g. when activities are pre-financed by a Center and funding fails to materialize • Significant dependency on one donor who withdraws support • Unrestricted funding is not sufficiently generated • Support costs are not or insufficiently covered by restricted funding (cost recovery)	**1.4 Cash management of restricted operations**	**2.4 Fundraising budgets vs actuals** 2.5 Donor proposal success rate 2.6 Contributions from top 5 funders 2.7 Unrestricted vs restricted revenue **2.8 Admin cost recovery** 2.9 Admin costs charged to CRP
Operational efficiency	• Poor budgetary controls • Accumulation of unfunded costs • High fixed costs • High dependence on collaborators to deliver research • Monetary losses due to fraud and subsequent withdrawal of donor support	1.3 Indirect cost ratio	2.10 Capital investments 2.11 Proportion of collaborator costs **2.12 Headcount vs budget surplus/deficit** 2.13 Research vs non-research staff **2.14 Expenditure budget vs actual** 2.15 A rolling indicator of monthly spend vs monthly revenue budget measured over 12 months

3. Proposed revised indicator set and frequency

Possible way forward

- Suggest rolling 3-year view for annual indicators, and rolling 4-quarter view for quarterly indicators
- **The next slide demonstrates what the indicators may look like**
- The indicators include **targets** i.e. expected performance and **tolerance levels** i.e. the acceptable levels of deviation from the target. Exceeding the tolerance levels should trigger an action
- In the charts reflecting Center view, only Centers whose indicators **deviate** significantly from the targets and tolerance levels are included
- To note: Not all data is available at the moment to report on these indicators

Liquidity & solvency	Funding	Operational efficiency
• Operating reserves ratio (annual) • Long-term investment credit rating (annual) • Liquidity ratio (quarterly)	• Overhead cost recovery (annual) • Cash management of restricted operations ratio (quarterly) • Performance against fundraising budget (quarterly)	• Headcount against budget surplus/ deficit (annual) • Expenditure budget vs actual (quarterly)

Further discussions are needed to agree on appropriate targets and tolerance levels

3. Annual indicators

Chart 1. Operating reserves in days by a selected Center (real data)

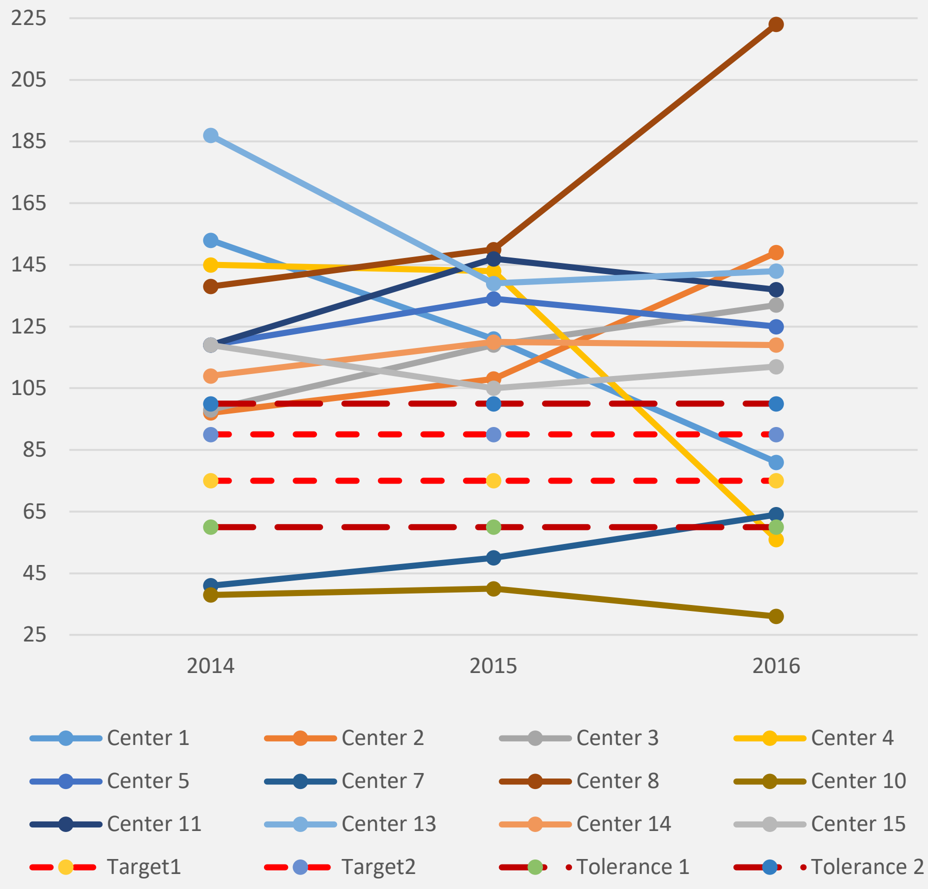
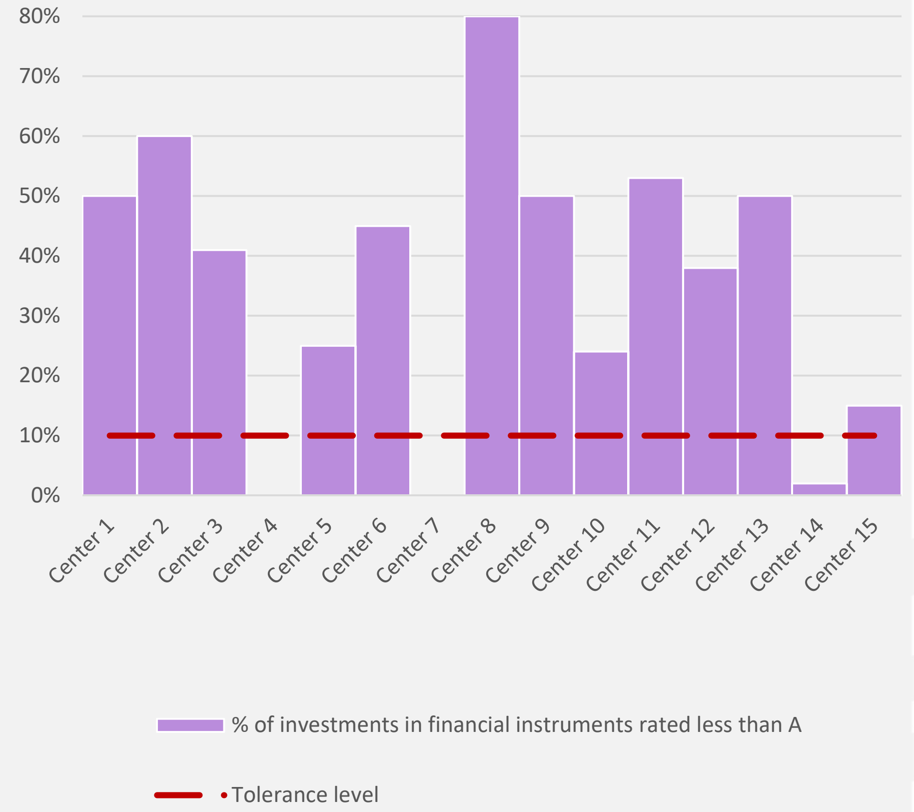


Chart 2. POSSIBLE NEW INDICATOR: % of long-term investments in financial instruments with credit rating of less than A in 2016 (mock up)



3. Annual indicators

Chart 3. POSSIBLE NEW INDICATOR: % of overhead costs recovered by a selected Center (real data)

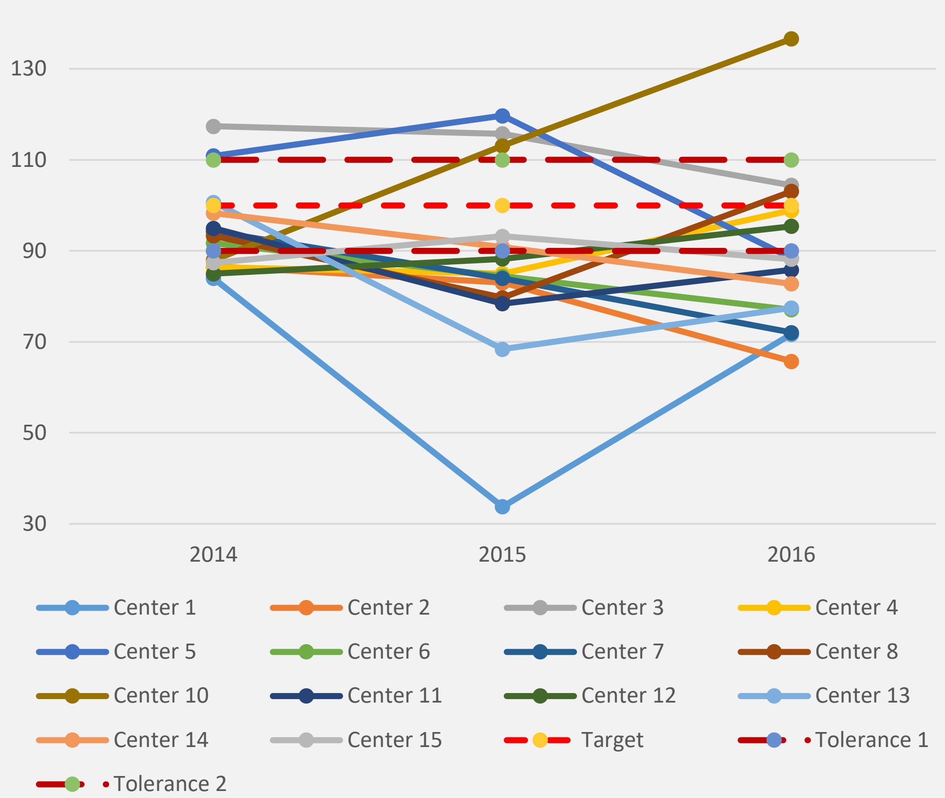
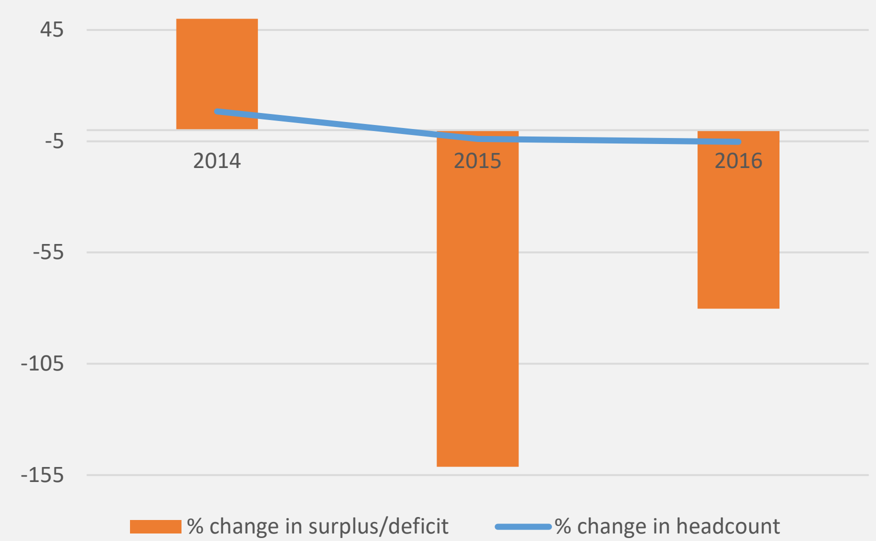


Chart 4. Headcount change against budget surplus/deficit trend averaged across the Centers (real data)



Detailed information for each Center can be supplemented on exception basis

3. Quarterly indicators
(mock up using current available annual data)

Chart 5. Liquidity ratio, days by a selected Center, Q4/2016 <u>(real data)</u>

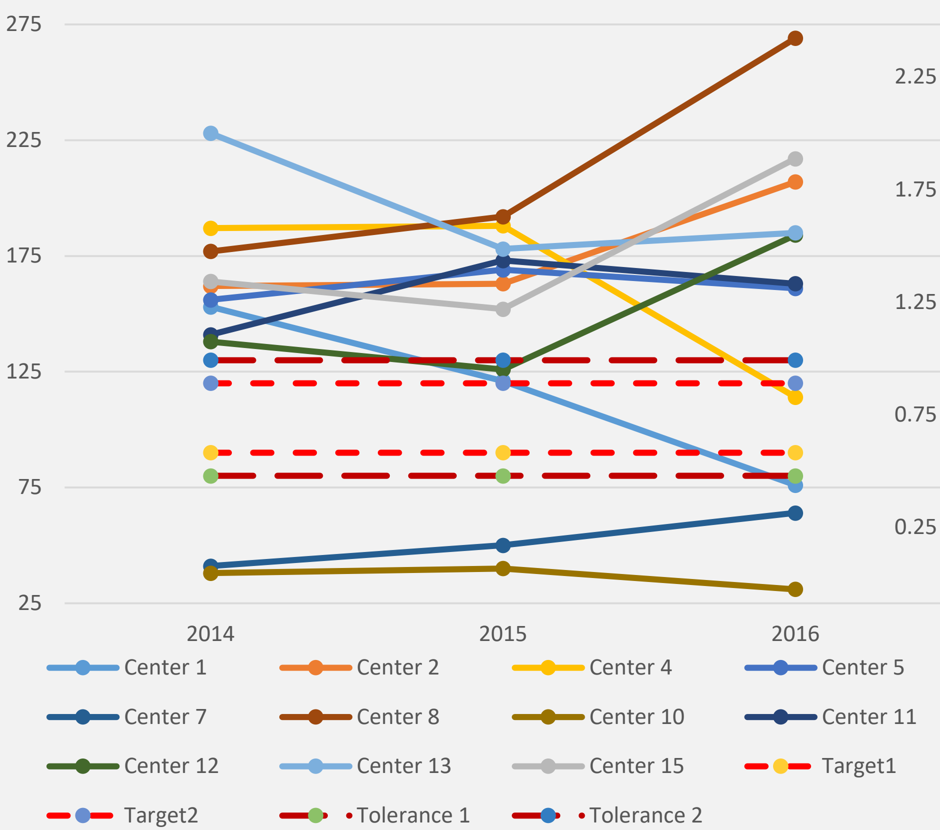
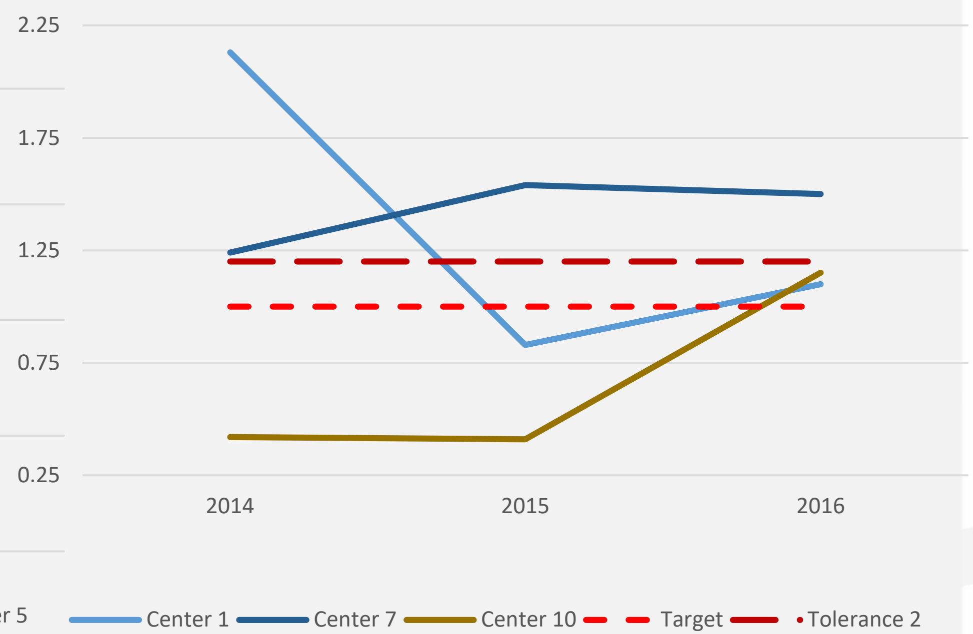


Chart 6. Cash management of restricted operations by a selected Center, Q4/2016 <u>(real data)</u>



3. Quarterly indicators

Chart 7. POSSIBLE NEW INDICATOR: Performance against YTD fundraising budget in %, Q4/2016 (mock up)

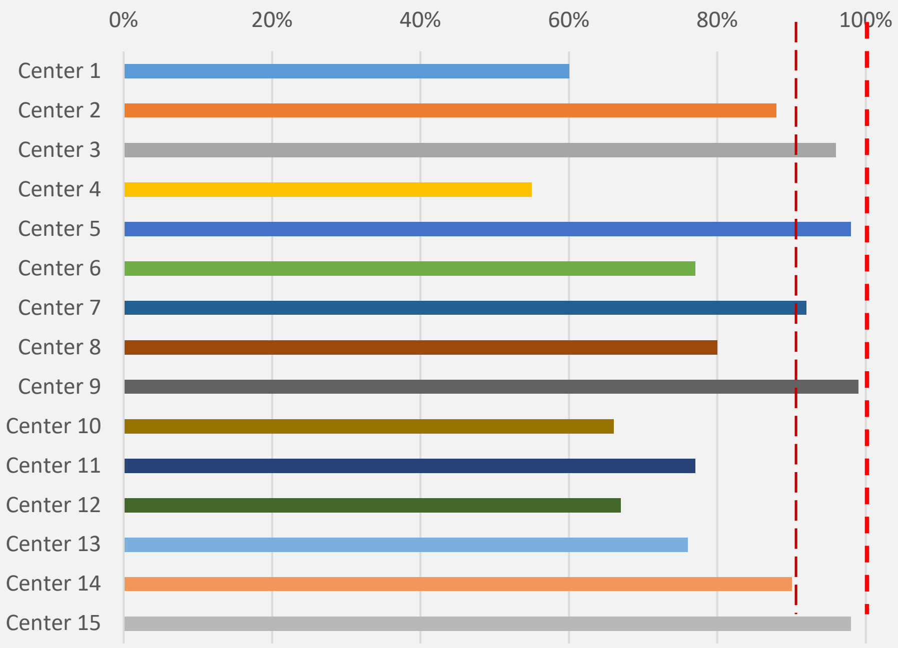
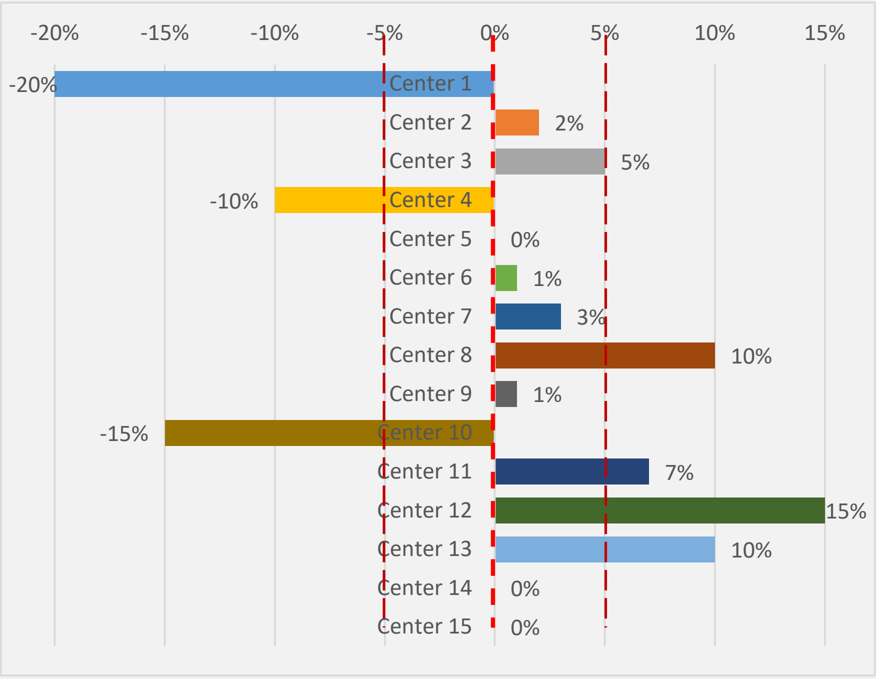


Chart 8. POSSIBLE NEW INDICATOR: YTD actual spend vs YTD budget in % of budget variance, Q4/2016 (-overspend/underspend) (mock up)



Appendix A – current indicators

Metrics mandated by the Financial Guidelines 1 (FG1) to measure financial performance include:

#	Metric (from FG1)	Name	Target	How calculated
1.1	The long-term financial stability ratio measures the adequacy of an organization's reserves and its ability to absorb longer-term revenue reductions or funding shocks.	**Operating reserves**, days	Min 75-90 days	Unrestricted net assets less net fixed assets, divided by daily operating expenses using calendar days
1.2	The short-term solvency ratio monitors the liquidity of a Center and its ability to pre-finance and operate in the short term when donor contributions are delayed.	**Liquidity** ratio, days	Min 90-120 days	Working capital (current assets + long-term investment – current liabilities) divided by daily operating expenses, expressed in days of operation using calendar days
1.3	The indirect cost ratio is an indicator of the cost of a Center's support functions.	**Indirect cost** ratio, %	Not specified	Percentage calculated by dividing indirect costs by direct costs
1.4	The management of the donor receivable/payable measures cash flow from donors.	**Cash management of restricted operations**	At or less than 1	Donor receivables divided by donor payables
1.5	Reflects to what extent current assets cover current liabilities*	*** Current ratio**	At or over 1	Current assets divided by current liabilities
1.6	The external audit opinion provides an outside view.	**** External auditor opinion**	Unqualified	Opinion

** Current ratio is not mandated by FG1 but is included and reported every year*

*** External Auditor Opinion is not in fact a metric/ratio*

Appendix B – Description of possible additional/alternative indicators

2.1 Reserves replenishment ratio. Reserves replenishment ratio shows how fast reserves are being replenished from one year to another. It is calculated as % of year-on-year growth/decline in reserves (unrestricted assets less fixed assets). The formula is (Y1-Y2)/Y1*100

2.2 Budget surplus/deficit. Budget surplus/deficit is simply a difference between reported revenue and expenditure. The indicator reflects how healthy a Center's financial position is at the end of a financial year. A deficit may mean that projected revenues did not materialize or weak cost controls; a surplus can only be generated by underspend in unrestricted revenues and from income generating activities.

2.3 Long-term investments credit ratings. Long-term investments credit ratings would show the overall risk of investment vehicles and compliance with the investment policy. This information is not readily available at the moment.

2.4 Fundraising budget vs actuals. Measuring progress against a fundraising budget would help generate early warning of gaps in funding and would allow to take preventive actions. This could be viewed as a long-term stability indicator. The related information is not readily available.

2.5 Donor proposal success rate. Donor proposal success rate is measured by a number of non-for-profit organizations to reflect on how effective their fundraising efforts are. It is usually measured as a proportion of successful proposals in the overall number of proposals submitted in a given period. This information is not readily available.

2.6 Contributions from top 5 funders. This data would flag any unhealthy dependency on one or a group of funders. Conversely, it would also give a prompt to increase efforts to strengthen relationships with funders whose funding is decreasing.

2.7 Unrestricted vs restricted revenue. The value of unrestricted revenue is important as a reflection of a Center's ability to cover unforeseen costs, overall level of dependence on the funders and ability to replenish reserves.

2.8 Admin (overhead) cost recovery. For the purposes of this report, administrative costs are those which are not directly charged to projects. Admin cost recovery calculated as % of the recovered admin costs against total admin costs. It shows whether a Center was able to recover its overhead costs from restricted funding. Ideally the recovery of the administrative costs should be full i.e. 100%. Concerns would rise when the costs are under-recovered, however, when the costs are over-recovered, it also indicates that funders are being overcharged and the need to reassess the basis for the cost-recovery calculations.

Appendix B continued

2.9 Admin costs charged to CRP. High dependency on admin cost recovery from CRP funding may indicate that any potential reduction of CRP revenue may jeopardize a Center's ability to cover its admin costs. At the moment the indicator may not be as useful as CRP funding in financial statements also includes bilateral funding mapped to a CRP.

2.10 Capital investments. The capital investments indicator aims to reflect whether the reserves are not hoarded and are used for example for updating a Center's infrastructure.

2.11 Proportion of collaborator costs. Research spend through collaborators (CGIAR and non-CGIAR) and through direct research calculated as % of the total of research costs. Too high a dependence on collaborators to deliver research may mean that a Center exposes itself to higher risks related to third parties. The result may also depend on the extent to which a Center receives conduit funding i.e. pass-through revenue which would affect the indicator. Current financial statements do not differentiate between CGIAR and Non-CGIAR collaborators, and that would provide a more nuanced picture.

2.12 Headcount vs budget surplus/deficit. The headcount indicator can be used as a proxy indication whether a Center is downsizing or expanding. Considered in conjunction with reserves or liquidity indicators, it may also reflect on how well a Center is managing its costs in hard times.

2.13 Research vs non-research staff. Centers create value through research and if the research capacity is diminished it may affect a Center's ability to create value. The indicator of proportion of research staff may reflect on Centers' capability. The difficulty is that there is no common definition of research staff; it may include administrative staff that support research as well.

2.14 Expenditure budget vs actual. Actual spend vs budgeted spend (should be Center-based indicators measured at least quarterly) will reflect on effectiveness of budgetary controls. Currently Centers are requested to send their budget vs actual spend information to the SMO, however only Q2 and Q3 information is sent and only W1/W2 funding is covered.

2.15 A rolling indicator of monthly spend vs monthly revenue budget measured over 12 months. This indicator would reflect how well a Center spend is aligned to its revenue budget. For example a persistent high spend relative to the revenue budget may indicate poor expenditure controls or poor revenue budgeting and the need to reign in costs; spend lower than revenue budget may reflect on the need for better activity management controls and/or reduced ability to realize revenue in the long run which will affect cash flows.