Can Government Accountants save The World?

The links between PFM reform and corruption

Research seminar series

University of Central Florida, Orlando, 26th Feb 2020

Fred Mear, Samuel Komakech, Louis Ellam, Anna Mear

Associate Professor De Montfort University, Leicester UK.

.

Does Reforming the Public Financial management system reduce corruption?

- Fred Mear – Associate Professor, Dept of Accounting and Finance, De Montfort University

- Samuel Komakech – Associate Professor Dept of Accounting and Finance, De Montfort University

- Louis Ellam– Lecturer Dept of Accounting and Finance, De Montfort university

- Anna Mear– Senior Lecturer, Department of Allied Health Professionals, De Montfort university

REASONS FOR THE STUDY -

5O YEARS OF POOR AID EFFECTIVENESS

CORRUPTION   FRAUD

WASTE   INEFFICIENCY

POOR FISCAL   IMF/WB/EU

 GOVERNANCE?   TECHNICAL
                                ASSISTANCE

Population growth rates continue to pose lingering challenges to development efforts on the continent. The **population of Africa** is expected to roughly **double** by 2050. This will add 1.2 billion people
to **Africa's** 2019 **population** of 1.3 billion people.

MASS MIGRATION   TERRORISM

SOCIAL COHESION   RESOURCE WARS

AFTER 30 YEARS INVOLVEMENT IN INTERNATIONAL DEVELOMENT I'VE NEVER BEEN SO PESSIMISTIC

BUT – WE COME FROM LEICESTER

CONTEXT OF THE RESEARCH PROJECT

5 YEARS OF RADICAL NEW APPROACH

BUDGET SUPPORT MODALITY

UNITY OF DONOR COMMUNITY UNDER STRAIN

EVIDENCE OF EFFICTIVENESS OF NEW APPROACH NEEDED

OECD and development partner community view

- Successful development requires capacity for countries to implement policies and manage public resources through their own institutions and systems.

- When donors and developing countries endorsed the Paris Declaration on Aid Effectiveness in 2005, they were united with a common objective: to build stronger, more effective partnerships for development.

# The *Strengthened Approach to Supporting Public Financial Management Reform*

- embodies three components agreed in the five high level meetings in Rome (2003), Paris (2005), Accra (2008), Busan (2011) and Mexico (2014):

- a country-led agenda; a government-led reform program for which analytical work, reform design, implementation and monitoring reflect country priorities and are integrated into governments' institutional structures;

- a coordinated program of support from donors and international finance institutions - in relation to both analytical work, reform financing and technical support for implementation;

- a shared information pool on public financial management - information on PFM systems and their performance which is commonly accepted by and shared among the stakeholders at country level, thus avoiding duplicative and inconsistent analytical work

The Paris Declaration on Aid Effectiveness (2005)

- The aims of the Paris accord were to enhance the working together of donor organisations in assisting improving Public Finances of developing and fragile states.

- **Ownership:** Developing countries set their own strategies for poverty reduction, improve their institutions and tackle corruption.

- **Alignment:** Donor countries align behind these objectives and use local systems.

- **Harmonisation:** Donor countries coordinate, simplify procedures and share information to avoid duplication.

- **Results:** Developing countries and donors shift focus to development results and results get measured.

- **Mutual accountability:** Donors and partners are accountable for development results.

PFM reform – Development Partner or Country led?
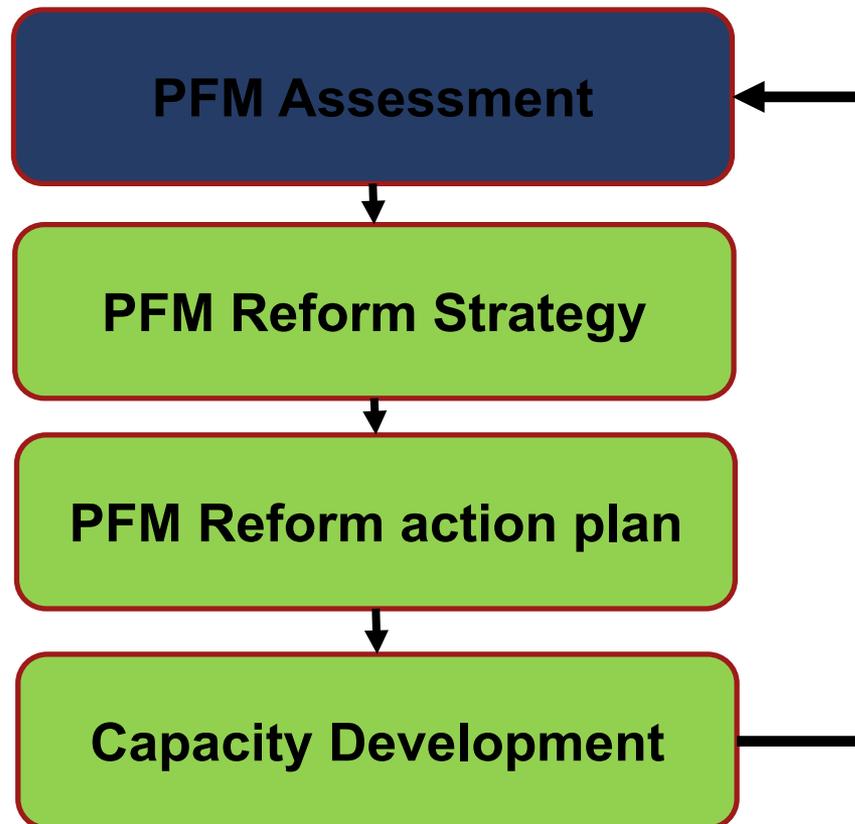
Findings of other research

- Much work has been carried out on the importance of the political economy and the distortions this may create if adopting a country led agenda.

- Despite attempts to make each reform agenda country specific there is a very close pattern in reforms in most countries implying an "off the shelf approach"

Approach to Data Analysis

- We measure the association between perceived corruption, as measured by the Corruption Perceptions Index (CPI), and indicator/dimension pairs appear on PEFA risk assessments.

- Corruption Perceptions Index (CPI):
  - takes values between 0-100, (100 indicating the lowest levels of corruption)
  - published annually by Transparency International,
  - determined by an average of expert assessments and opinion surveys.

- PEFA risk assessment
  - Each indicator/dimension pair is measured by a score of A, B, C, D.
  - A score of 'A' is indicative of stronger forms of PFM systems

PEFA Tool – 2011 Framework

- Modified in 2016

- In order to assess information available looking at PEFA Assessments the framework used from 2011 to 2016 was used

- 6 pillars

- 94 dimensions

The 2011 PEFA diagnostic tool

The PEFA Iceberg – how comprehensive?

PEFA 2011 Framework

Procurement

Fixed asset register

Supply chain management

Financial administrative network

Political context

Market

Engaged civil society

Capacity

Quality of expenditure management

The PEFA reach…

Between 2003 and April 2016... 506 assessments were completed in 140+ countries, 120+ led by EU…(Source: Budapest Conference, April 2016)

– 312 assessments at national level; 146 baseline and 166 repeat assessments

– 194 sub-national assessments; 165 baseline and 29 repeat assessments

Used by:

– 94% of Low Income Countries (LIC)

– All Lower Middle Income Countries (LMIC)

– 80% of Upper Middle Income Countries (UMIC) and

– 28% of High Income Countries

PEFA Scoring

- **Indicators and Dimensions**

  – Scores of indicators use a four point ordinal scale (A, B, C and D)

  – indicators may have more than one dimension

- **Two scoring methods:**

  – Method M1 'weakest link among dimensions'

  – Method M2 'average of dimensions'

Difficulties

- Qualitative categories that are non-linear
  - BUT represented alpha-numerically
  - Dimensions are categorial/ordinal in nature
  - Non linear in scoring mechanisms
- Indicators of unequal importance

Approach to Data Analysis

- We identified a total of 62 observations
  - countries that had a PEFA risk assessment using the 2011 framework, and a CPI score during 2012-2016.
  - We had to discard risk assessments that took place before 2012 as the CPI scoring framework substantially changed from 2011 to 2012.
  - 2016 was the most recent year that had PEFA risk assessments using the 2011 framework.
  - We could not find CPI scores islands with small populations.

Approach to Data Analysis

- We use Ordinary least squares (OLS) to obtain an unbiased and consistent estimators

  – Others advocate a weighted least squares (WLS) to account for the standard error in the calculated CPI score,

  – however, as the standard errors estimates are inaccurate there is a substantial loss in efficiency and the standard errors remain biased.

- CPI score is calculated by taking an average of a varying number of assessments

  – Potential heteroscedascity

  – We considered both standard and robust standard errors

- Performed a regression for each dimension to identify significant dimensions.

- Then perform backward elimination to find the most important dimension and to assess the dimension's joint significance.

Results – Significant Dimensions

- The results are affirmative

  Generally, there is a positive association between CPI and score

- The the trend is often non-linear with 'jumps' between particular scores

  – Some indicators/ dimensions are more important than others

  – An increase between any two scores doesn't usually have the same effect on CPI

  – The non-linear behaviour varies by dimension

- Summing/averaging may be inappropriate and the important characteristics may be lost

Code	Indicator	R2	B	C	D	P-Val.
PI.20.2	Effectiveness of internal controls for non-salary expenditure	0.22	-7.81 (3.94)	-10.6 (3.88)	-20.86 (5.35)	0.002
PI.21.1	Effectiveness of internal audit	0.21	1.79 (5.11)	-3.64 (5.00)	-9.92 (5.06)	0.003
PI.14.1	Effectiveness of measures for taxpayer registration and tax assessment	0.186	-2.16 (4.05)	-5.11 (3.99)	-15.05 (4.83)	0.007
PI.18.2	Effectiveness of payroll controls	0.158	-9.37 (2.92)	-3.05 (3.56)	-3.33 (4.17)	0.020
PI.10.1	Public access to key fiscal information	0.153	-3.01 (3.18)	-6.8 (3.90)	-12.41 (4.13)	0.021
PI.18.1	Effectiveness of payroll controls	0.148	-9.60 (3.44)	-10.03 (4.44)	-10.67 (3.70)	0.025
PI.16.3	Predictability in the availability of funds for commitment of expenditures	0.144	-8.56 (3.39)	-5.03 (3.04)	-11.82 (4.55)	0.028
PI.26.1	Scope, nature and follow-up of external audit	0.147	-3.07 (4.65)	-7.17 (4.44)	-11.73 (4.61)	0.032
PI.16.2	Predictability in the availability of funds for commitment of expenditures	0.134	-8.36 (3.13)	-3.22 (3.59)	-8.14 (3.59)	0.038
PI.18.3	Effectiveness of payroll controls	0.136	-6.78 (3.23)	-9.22 (3.19)	-6.22 (4.57)	0.039
PI.13.2	Transparency of taxpayer obligations and liabilities	0.099	-6.65 (2.79)	-5.81 (3.31)	n/a	0.046

Results – Backwards Elimination

- To identify the most important indicator-dimension pairs

- The obtained regression contained 6 indicator and dimension pairs

- R^2 value of 0.673. i.e. 67% of the sample variance is explained by these 6 factors

| Code	Indicator	B	C	D	P-Val.
PI.18.2	Effectiveness of payroll controls	-8.96 (2.72)	1.30 (3.36)	8.04 (4.30)	< 0.001
PI.13.2	Transparency of taxpayer obligations and liabilities	-7.22 (2.45)	-1.64 (3.10)	n/a	0.015
PI.16.3	Predictability in the availability of funds for commitment of expenditures	-7.88 (2.83)	-5.31 (2.71)	-9.16 (3.95)	0.037
PI.18.1	Effectiveness of payroll controls	-5.00 (2.83)	-8.05 (3.70)	-10.38 (3.48)	0.039
PI.20.2	Effectiveness of internal controls for non-salary expenditure	-8.90 (3.51)	-9.51 (3.60)	-8.63 (6.51)	0.062
PI.14.1	Effectiveness of measures for taxpayer registration and tax assessment	8.06 (3.68)	8.22 (3.98)	0.36 (5.85)	0.074

Results – Significant Dimensions

- The results are affirmative

  Generally, there is a positive association between CPI and score

- The the trend is often non-linear with 'jumps' between particular scores

  - Some indicators/ dimensions are more important than others

  - An increase between any two scores doesn't usually have the same effect on CPI

  - The non-linear behaviour varies by dimension

- Summing/averaging may be inappropriate and the important characteristics may be lost

Code	Indicator	R2	B	C	D	P-Val.
PI.20.2	Effectiveness of internal controls for non-salary expenditure	0.22	-7.81 (3.94)	-10.6 (3.88)	-20.86 (5.35)	0.002
PI.21.1	Effectiveness of internal audit	0.21	1.79 (5.11)	-3.64 (5.00)	-9.92 (5.06)	0.003
PI.14.1	Effectiveness of measures for taxpayer registration and tax assessment	0.186	-2.16 (4.05)	-5.11 (3.99)	-15.05 (4.83)	0.007
PI.18.2	Effectiveness of payroll controls	0.158	-9.37 (2.92)	-3.05 (3.56)	-3.33 (4.17)	0.020
PI.10.1	Public access to key fiscal information	0.153	-3.01 (3.18)	-6.8 (3.90)	-12.41 (4.13)	0.021
PI.18.1	Effectiveness of payroll controls	0.148	-9.60 (3.44)	-10.03 (4.44)	-10.67 (3.70)	0.025
PI.16.3	Predictability in the availability of funds for commitment of expenditures	0.144	-8.56 (3.39)	-5.03 (3.04)	-11.82 (4.55)	0.028
PI.26.1	Scope, nature and follow-up of external audit	0.147	-3.07 (4.65)	-7.17 (4.44)	-11.73 (4.61)	0.032
PI.16.2	Predictability in the availability of funds for commitment of expenditures	0.134	-8.36 (3.13)	-3.22 (3.59)	-8.14 (3.59)	0.038
PI.18.3	Effectiveness of payroll controls	0.136	-6.78 (3.23)	-9.22 (3.19)	-6.22 (4.57)	0.039
PI.13.2	Transparency of taxpayer obligations and liabilities	0.099	-6.65 (2.79)	-5.81 (3.31)	n/a	0.046

Result - PI.14.1

- **Indicator:** Effectiveness of measures for taxpayer registration and tax assessment

- **Dimension:** Controls in the taxpayer registration system

- **Conclusion:** Most of the variation is due to the decrease between C and D.
 - Taxpayer registration for individual databases

R2	B	C	D	P-Val.
0.186	-2.16 (4.05)	-5.11 (3.99)	-15.05 (4.83)	0.007

PI.14.1
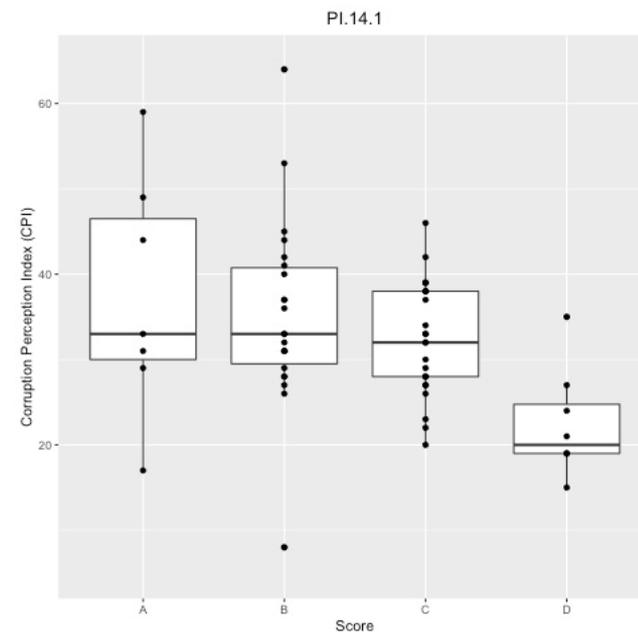
Result - PI.13.2

- **Indicator:**
  Transparency of taxpayer obligations and liabilities

- **Dimension:** Taxpayer access to information on tax liabilities and administrative procedures.

- **Conclusion:**
  Most of the variance appears to be due to the decrease from A to B.

  – Taxpayer education

R2	B	C	D	P-Val.
0.099	-6.65 (2.79)	-5.81 (3.31)	n/a	0.046

PI.13.2
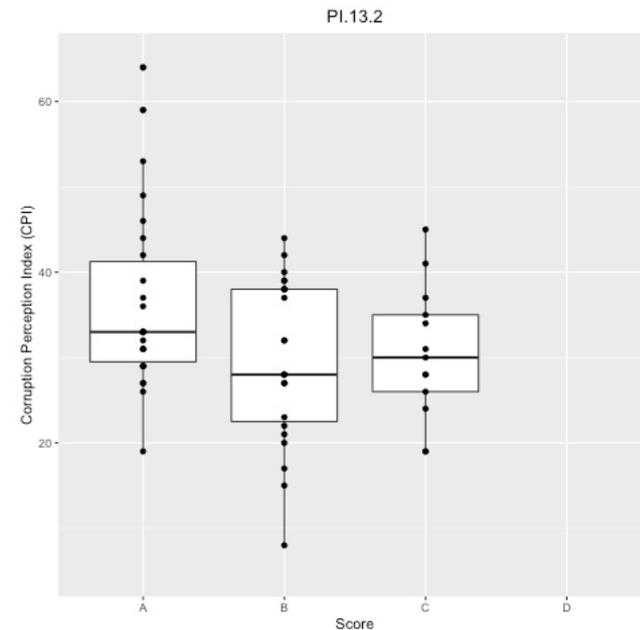
Result - PI.18.2

- **Indicator:** Effectiveness of payroll controls

- **Dimension:** Timeliness of changes to personnel records and the payroll

- **Conclusion:** There is a notable difference between B and the others. There is decrease in CPI from A to B.

  – Records updated immediately

R2	B	C	D	P-Val.
0.158	-9.37 (2.92)	-3.05 (3.56)	-3.33 (4.17)	0.02

PI.18.2
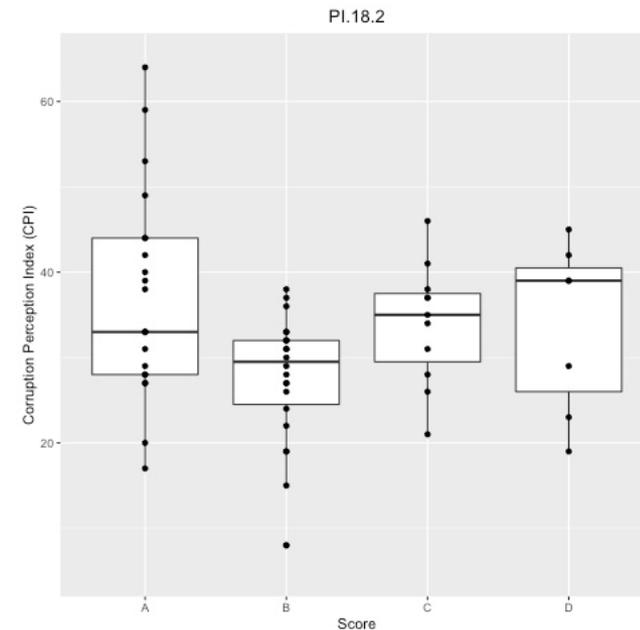
PI 18 – effectiveness of payroll controls

- 18.1 –Degree of integration and reconciliation between personnel records and payroll data

- 18.2 - Timeliness of changes to personnel records and the payroll

- 18.3 – Internal controls of changes to personnel records and payroll

- 18.4 – Existence of payroll audits to identify control weaknesses and/or ghost workers

Result - PI.18.1

- **Indicator:**
  Effectiveness of payroll controls

- **Dimension:**
  Number of the above listed elements of public access to information that is fulfilled

- **Conclusion:**
 Most of the variation is due to the decrease between A and B.

R2	B	C	D	P-Val.
0.148	-9.60 (3.44)	-10.03 (4.44)	-10.67 (3.70)	0.025

PI.18.1
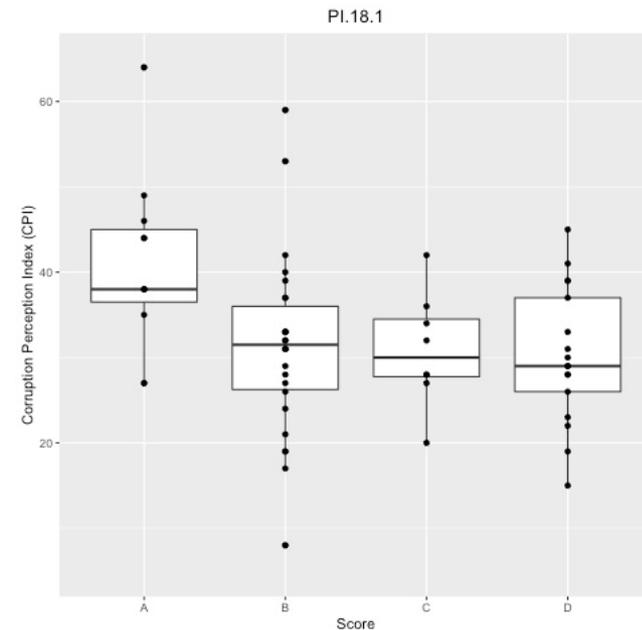
Result - PI.18.3

- **Indicator:**
  Effectiveness of payroll controls

- **Dimension:**
  Internal controls of changes to personnel records and the payroll.

- **Conclusion:**
 Most of the variation appears to be due to the decrease from A to B.

R2	B	C	D	P-Val.
0.136	-6.78 (3.23)	-9.22 (3.19)	-6.22 (4.57)	0.039

PI.18.3
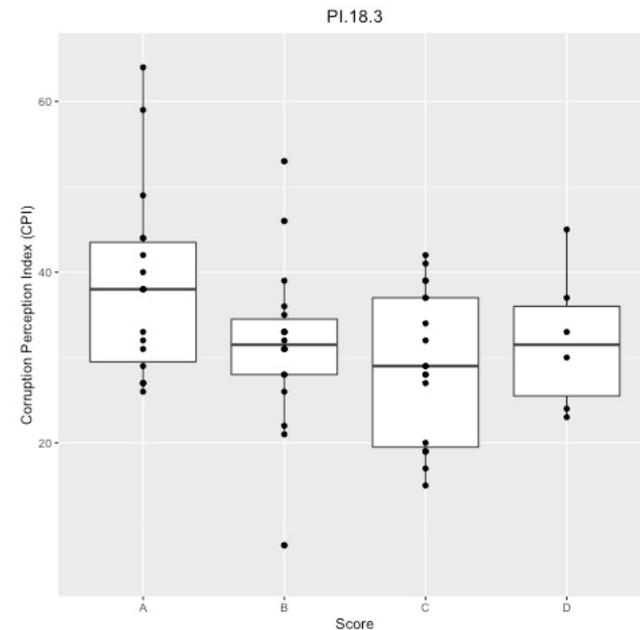
Result - PI.20.2

- **Indicator:**
  Effectiveness of internal controls for non-salary expenditure

- **Dimension:**
  Comprehensiveness, relevance and understanding of other internal control rules/ procedures

- **Conclusion:**
 There is a positive trend in that higher scores are associated with a higher CPI.

R2	B	C	D	P-Val.
0.22	-7.81 (3.94)	-10.6 (3.88)	-20.86 (5.35)	0.002

PI.20.2
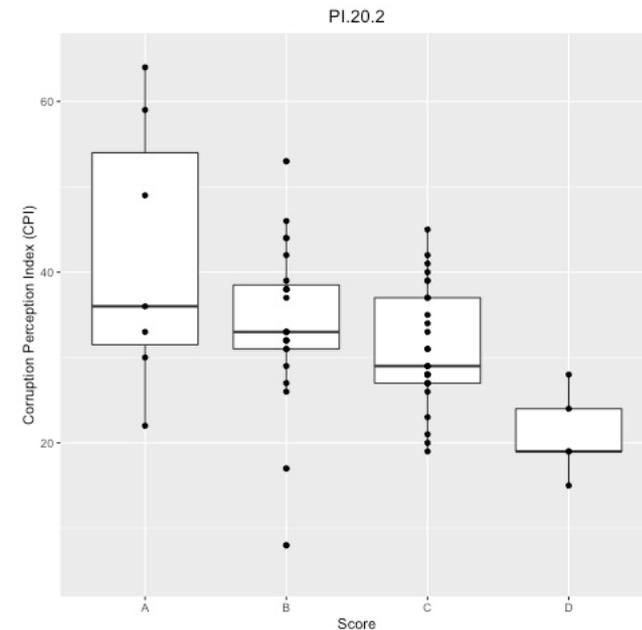
Result - PI.16.2

- **Indicator:** Predictability in the availability of funds for commitment of expenditures

- **Dimension:** Reliability and horizon of periodic in-year information to MDAs on ceilings for expenditure commitment

- **Conclusion:** Most of the variance appears to be due to the decrease from A to B.

R2	B	C	D	P-Val.
0.134	-8.36 (3.13)	-3.22 (3.59)	-8.14 (3.59)	0.038

PI.16.2
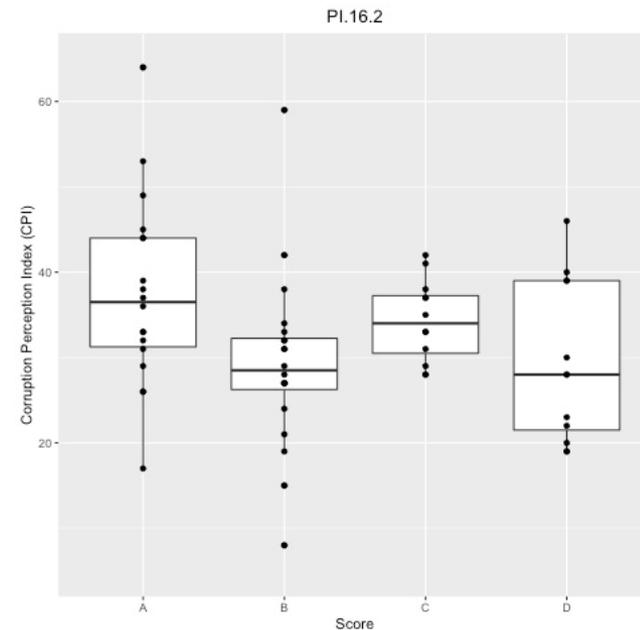
Result - PI.16.3

- **Indicator:**
  Predictability in the availability of funds for commitment of expenditures

- **Dimension:**
  Frequency and transparency of adjustments to budget allocations

- **Conclusion:**
 The most noticeable difference is between A and B

R2	B	C	D	P-Val.
0.144	-8.56 (3.39)	-5.03 (3.04)	-11.82 (4.55)	0.028

PI.16.3
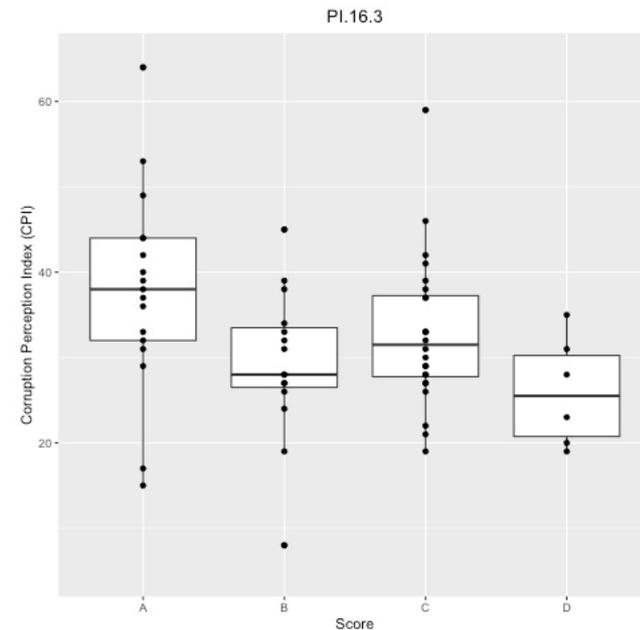
Result - PI.26.1

- **Indicator:** Scope, nature and follow-up of external audit

- **Dimension:** Scope/nature of audit performed (incl. adherence to auditing standards).

- **Conclusion:** A positive trend is noted, with most of the variation due to the decrease between C and D.

R2	B	C	D	P-Val.
0.147	-3.07 (4.65)	-7.17 (4.44)	-11.73 (4.61)	0.032

PI.26.1
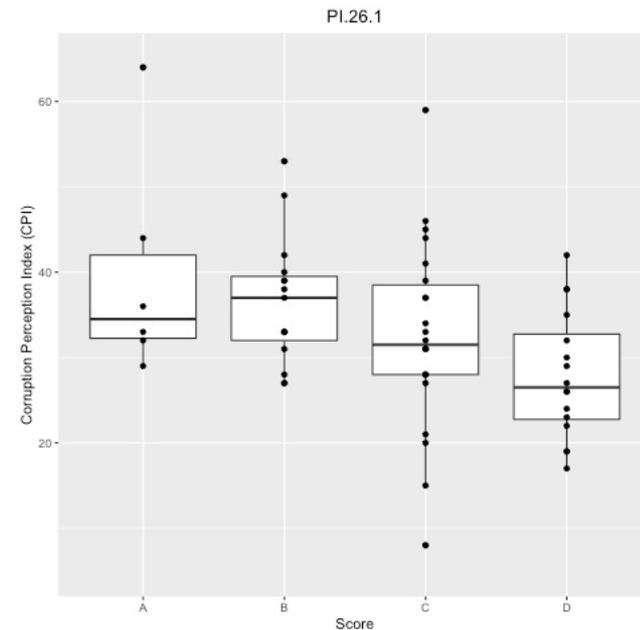
Performance indicator 20- Effectiveness of Internal Controls

- 3 dimensions:

- 20.1 - Effectiveness of Commitment controls

- 20.2 - comprehensiveness, relevance and understanding of internal controls

- 20.3 -Degree of compliance with rules for processing and recording

Key initial findings

- Trying to adopt an evidence based cause and effect has too many confounding factors.

- The performance indicators measure a range of different roles of PFM objectives based on democratic models make it difficult to isolate areas of corruption from those of democratisation or poverty reduction.

- To separate the different elements of impact of PFM reforms we need to drill down into dimensions.

Key initial findings (2)

- Improved PFM systems do reduce corruption

- Reinforces the instruction of PEFA not to focus on grades.

- Lack of consistency in impact and sometimes the impact is negative – supporting the view that sometimes reforms have been over ambitious or capacity has not been developed quickly enough.

Can Government Accountants save the world?

- We are getting closer to robust evidence to support areas of dialogue between development partners on what reforms should be supported.

- Can government accountants save the world?

  – We may need some help!

  – but without directing resources effectively we will live in an increasingly unsustainable nvironment.

Thank You!

- Any Questions, comments, observations