A NEW LOOK AT FACTORS DRIVING INVESTMENT PROJECT PERFORMANCE

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DEC Policy Research Talk
September 2018
Introduction, background, motivation
IPFs have been the main form of World Bank financing since its inception
The Bank deploys IPFs in IBRD and IDA countries
SD and HD are more likely to use IPF than other instruments compared to EFI.
What do we understand by project quality? (I)

**IEG outcome rating**

The ‘outcome’ rating = assessment of (i) relevance of project objectives and (ii) efficient achievement of the objectives

A 2-stage process: 1. the Bank’s self-evaluation – the ICR – and 2. the ICR Review (ICRR) conducted by IEG

An independent validation of the WB’s self-evaluation and rating
What do we understand by project quality? (II)

Quality judged on a six-point scale ranging from ‘highly unsatisfactory’ to ‘highly satisfactory’

“Successful” projects score 4 or greater

Distribution of IEG ratings, all projects approved between FY95 and FY09
Areas of focus
Guiding Questions

To what extent are observed variations in project quality:

1. related to country institutional quality and other country factors largely outside the Bank’s influence?

2. related to the selection, assignment, and retention of key staff and managers (TTL, PM and CD)?

3. related to design and management factors that are largely within the Bank’s control?

This work (i) revisits predictors of project quality, (ii) leverages World Bank administrative and specially collected data to explore the following questions.
Data and methodology
Data sources (I)

We combine administrative World Bank data, generally available country-level data, specially requested HR reports, and manual collection from project documents.

Full Dataset

All World Bank’s 4,348 IPF projects that *closed* between FY1995-2017, rated by IEG.

Data includes:

All system-generated project variables
Country-level economic and institutional data

Staffing data – preparation TTL, supervision TTLs, PM at approval, CD at approval
- We identify the preparation TTLs for 3,355 projects
- Country Director at time of approval for 4,342 projects
- Practice Manager for 2,211 projects

From HR records we observe age and education, previous Bank experience, and location (HQ or a field office)
## Data sources (II)

### Analytic Dataset

For main analysis: focus on all projects *approved* between FY95 and FY09 to minimize missingness and censoring: 2845 projects

This total accounts for 89% of all projects that were exited and rated over 2001-2015

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<thead>
<tr>
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<th>Number of projects approved</th>
<th>Number of projects exited and rated</th>
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<td>84</td>
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<td>2017</td>
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</table>
Data sources (III)

To investigate more carefully features not captured in routine data, a subsample of projects

120 project deeper look

A stratified random sample of 120 projects

Given full text review – PADs, ICRs, ICRRs – to extract harder to quantify information:

- expert panel assessment of the quality of Project Development Objectives (PDOs) and results frameworks

- data on restructurings

- contingent indicators such as the number of PDO changes and closing date extensions for those projects that underwent restructuring
Analytic approach

Purely descriptive

Attempt to understand robust correlates of IPF quality

One goal: identify predictors of performance, to assist portfolio monitoring and management for quality

Causal stories at times can be ruled in or out, other findings will have multiple plausible interpretations

Specification

Straightforward regression with common vector of controls for fixed project characteristics:

- region, sector, funding source (IBRD/IDA), original length, and commitment value,

Robustness

Results highly robust to:

binary outcome or count variable specification: probit, LPM, ordered probit, OLS

weighting by project or dollar volume

missing data
Country level predictors of IPF quality
Literature: country institutional quality and factors outside the Bank’s control

Regime type and political institutions
Blum (2014); Denizer, Kaufman and Kraay (2013); Dollar and Levin (2005)

Economic and political stability
Guillaumont and Laajaj (2006); Asian Development Bank (2016); Chauvet, Collier, and Duponchel (2010)

Institutional capacity

Sector
The country setting, an important factor for IPFs (I)

Revisit this question with a host of measures

**Macroeconomic indicators**
- GDP per capita (PPP $) at approval
- log population
- GDP growth over project life

**Institutional quality**
- WB’s Country Policy and Institutional Assessment (CPIA)
  - Overall rating
  - Sub-ratings

**Other characteristics**
- Political rights, civil liberties
- Country level risks, political, financial, and economic
The country setting, an important factor for IPFs (II)

**CPIA score and its sub-ratings**
The CPIA rates
- countries’ policy and institutional frameworks
- conduciveness to poverty reduction, sustainable growth, and the effective use of development assistance

This rating consists of 16 criteria grouped in four clusters:

*Economic management*
monetary and exchange rate policies, fiscal policy, and debt policy and management

*Structural policies*
trade, financial sector and business regulatory environment

*Social inclusion and equity*
gender equality, equity of public resource use, building human resources, social protection and labor, and environmental stability

*Public sector management and institutions*
property rights and rule-based governance, quality of budgetary and financial management, efficiency of revenue mobilization, and quality of public administration
The strongest country-level predictor of project outcomes is the CPIA.

Consistent with earlier work, CPIA is among the most consequential country predictor.

- Longer term average (11 year average centered on the project’s approval FY) CPIA scores are even more consequential.

* = The result is significant at $p<.05$
The strongest country-level predictor of project outcomes is the CPIA (II)

- Can partition indicators into: (a) information known at start of project (predictive content), (b) information measured over life of project, Both are important!

- Exploits the correlation structure in CPIA scores

Association of CPIA with project quality, at project start and change over project life, estimated jointly

* = The result is significant at p<.05
CPIA sub-components differentially associate with quality

Overall, project outcomes are most clearly associated with the CPIA public sector management sub-rating (sub-rating D) less so with those for economic management (A), structural policies (B), and social inclusion (C)

* = The result is significant at p<.05
Institutional setting matters differently for different sectors

- Link between Sub-score D especially apparent for SD projects
- But HD projects much more associated with sub-rating C

* = The result is significant at p < 0.05
Not all country level factors matter for IPF quality

In a multivariate framework, only CPIA score – the level and change – emerge as strong predictors of IPF quality.

Many other measures of national policy and the macro-economic environment that have no association with project quality.

Factors that are not/minimally associated with IPF quality in a multivariate framework:

Log GDP per capita
Log population
Freedom House scores of political rights and civil liberties
Assessed political risks such as the stability of the government or the impartiality of the legal system
Assessed financial risks such as foreign debt service as percentage of exports
Assessed macroeconomic risks such as inflation and budget balance
Influence of staff and managers
Literature: selection and retention of key staff

Staff “quality”

“Quality” of TTLs during supervision is found to be important in Denizer et al. (2013); Geli et al. (2014); Moll et al. (2015)

- quality of TTL during supervision is one of two best predictors of outcomes (other is CPIA)

There is no relevant literature on influence of TTLs during preparation or influence of Bank management

Staff experience

The number of projects TTLs have worked on in the past hasn’t been found to be a reliable determinant of project success

Staff turnover

Turnover has been the one other consistent predictor of project quality – greater turnover is associated with lower quality
**TTL “quality” defined as predicted performance**

**Leave out mean**

Previous work has focused on the leave-out mean – average quality of all other projects the TTL has managed.

**Value added approach**

The difference between the predicted performance of TTL’s previous projects and actual performance.

Value added approach can be applied to PMs and CDs as well as TTLs.
# Building the staff data

Linking staff to projects is not straightforward, particularly for the preparation stage, as no centralized internal database exists.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Source</th>
<th>Frequency</th>
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<tbody>
<tr>
<td>Preparation TTL (at Approval)</td>
<td>Data scraping from PADs</td>
<td>2,840</td>
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<tr>
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<td>TTL as listed on 1st ISR</td>
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<td>Manually collected</td>
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<td>Staff time charge code data</td>
<td>65</td>
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<tr>
<td>Practice Manager (at Approval)</td>
<td>Manual collection</td>
<td>2,211</td>
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<td></td>
<td>Quality controlled through HR Historical Reports</td>
<td>1,862</td>
</tr>
<tr>
<td>Country Director (at Approval)</td>
<td>Ask an Archivist</td>
<td>2,842</td>
</tr>
</tbody>
</table>

For 2,845 projects approved between FY95 and FY09, we observe data for:

a. **Preparation TTL** for 2,840 projects, can calculate a performance/value-add measure for 1,953.

b. **Supervision TTL** (at mid-point) for 2,833 projects, can calculate value-add measure for 1,946 project.

c. **Supervision TTL** (on last ISR) for 2,838, can calculate a performance/value-added measure for 1,908.

d. **Practice manager** (at approval) for 1,862 projects, we can calculate a quality measure for 1,090 projects.

e. **Country director** (at approval) for 2842 projects, a value added measure calculated for 2,615 of those projects.
Prep TTL’s predicted performance helps explain project quality

Preparation TTL predicted performance has significant association with project quality, especially for IBRD projects.

The importance of prep TTL diminishes as we include information on supervision TLLs.
TTL supervision can make a difference, during the second half of project

The association of supervision TTL predicted performance is much more important in the second half of project.

A suggestive finding: supervision TTL’s matters most in IBRD countries and even more in UMICs; not quite as important in IDA countries.
TTL’s prior World Bank experience matters

Prep TTL’s predicted performance positively related to prior experience - only suggestively however

Direct relation between previous supervision experience and final quality ratings - especially strong in IBRD countries:

- A TTL with above median experience (i.e. over 20 previous ISR reports) associates with final quality rating increase of 0.25 points.
TTL supervision continuity also matters... not clear why

Turnover in supervision also predicts lower quality - for IBRD projects, and more so in the 2nd half or the project.

Example: Doubling the TTL turnover rate in the second half of a project (from 4 ISRs to 2 per TTL) predicts lower quality by 0.35 points in UMICs.
What about other staff characteristics and project success?

The available data have few other characteristics:

*Location – HQ vs. field*

No association between field based location and ultimate quality for projects approved since FY03

*Age*

No identifiable relation between TTL age and project quality

*Education*

Whether the TTL has a PhD does not affect project quality, in general
PM predicted performance has a strong influence on project outcomes

PM at approval influences the likelihood of project success

Controlling for PM, influence of preparation TTL is halved

Association of Practice Manager predicted performance with project quality, after controlling for other staff qualities, by project characteristics, with 90% CI
Influence of CD less important for IPF outcomes, though may matter in UMICs and during supervision

The predicted performance for CD does not generally predict IEG outcome ratings

However a relatively large association in UMIC countries

Association of Country Director predicted performance with project quality, after controlling for other staff qualities, by project characteristics, with 90% CI
Project design and project management
Literature: design and supervision factors within the Bank’s control

Clarity of project design and prior analytical work
Wane (2004); Ika et al. (2012); IEG (2016); Blanc et. al. (2016); Deininger et al. (1998)

Project size and duration
Geli et al. (2014); Wane (2004); Bulman (2015)

Project resourcing
Kilby (2000); Kilby (2001); Limodio (2011); Kilby (2015)
Basic flaws in results frameworks at design stage can effect quality (I)

Expert panel ratings: the clarity of PDOs and results frameworks has been improving

The project’s PDO score not associated with quality, but Results Framework ratings are a significant correlate
Select project-level factors during preparation relevant to final outcome (I)

Project design and M&E

Various design factors associated with quality – quality of the results framework, number of components, number of intermediate indicators, and quality of M&E design – are actionable

120 Sample: Suggestive Micro Project Correlates of IEG Outcomes

- **:** Significant
- ***:** Highly significant
Select project-level factors during preparation relevant to final outcome (II)

Legacy of poor design

Changing components (substantially) during implementation or having to restructure due to poor design are strong negative predictors.

Restructuring for other reasons – i.e. unanticipated factors encountered during implementation – is positively correlated with quality.
Select project-level factors during preparation relevant to final outcome (III)

Borrower capacity

Effectiveness delays and whether the project required a capacity assessment on the implementing agency likely reflect a weaker borrower capacity.

120 Sample: Suggestive Micro Project Correlates of IEG Outcomes
Longer preparation times are associated with lower quality ... but a kink?

Longer preparation time – from PCN to Approval – is significant in predicting poorer outcomes.

An increase in preparation time from 1 to 2 years does not matter much; IEG ratings begin to fall off sharply after 2 years.

The impact of longer preparation time is especially strong for emergency IPFs and TA loans.

Also a bigger drop-off for UMICs.
Timing in the fiscal year is a factor

A significant relationship between quarter of board approval and project quality – a ‘rush to board’ effect?

** The result is significant at p<.05
* The result is significant at p<.10
Analytical work: can prior ASA make a difference?

Over the past ten years, the Bank has spent US$830 million on the production of advisory services and analytics (ASA)
Analytical work: can prior ASA make a difference?

Linked ASA is associated with an increase of 0.12 in IEG outcome ratings.

The effect is stronger for IDA than IBRD and strongest in FCVs.

Also more important in shifting projects from moderately to fully successful than in improving otherwise unsuccessful projects.
Summary of findings and recommendations
Overall drivers of quality… and what is left unexplained

Variation in project quality can be attributed to different factors:

Country Level
CPIA – initial level and change, region.

Bank Staffing
TTL and PM predicted performance,

Other Project Characteristics
Preparation time, original length and change in length, original commitment and change, GP, prep and supervision costs

Percentage of Variation Explained

- Project Monitoring Flags: 25.02%
- Staffing Characteristics: 11.77%
- Other Project Characteristics: 4.54%
- Country Factors: 6.36%

Percentage
Summary of findings and recommendations: selection and retention of key staff and managers

TTLs and PM account for a substantially higher influence than country-level characteristics, 2nd half supervision especially

Country Director predicted performance matters more during project implementation and for UMICs

There is no evidence that either field-based or HQ-based TTLs achieve superior outcomes

“What staff bring” is one of most important correlates of operational performance

Importance increases as countries move up the income and complexity ladder: IDA -> IBRD -> UMICs

– in future, staff will likely play an even more critical role in quality as clients grow and systems increase in complexity

World Bank specific experience, beyond general professional experience, matters

Important to attract and retain (over the long-term) the highest quality staff
Summary of findings and recommendations: country institutional quality and factors outside the project’s control

An annually updated measure based on the CPIA at approval and subsequent changes in CPIA may improve on the country environment/record flags that is part of the current portfolio monitoring system.

The importance of CPIA sub-components varies by sector across countries - consider tailoring CPIA-based flags for each sector grouping?
## Summary of findings and recommendations: design and supervision factors within the Bank’s control

<table>
<thead>
<tr>
<th>Project designs that fail to define basic aspects of results framework receive lower outcome ratings</th>
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<tbody>
<tr>
<td>Preparation TTLs should receive focused training in most crucial aspects of project design (esp. results frameworks), operational training should be adapted accordingly</td>
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<tr>
<th>Preparation times of over two years are associated with lower quality, especially for emergency and technical assistance IPFs</th>
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<tbody>
<tr>
<td>Review all projects under preparation for a period over 2 years, especially emergency/TA that take excessively long to prepare</td>
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</table>

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<tr>
<th>Turnover of TTLs after preparation is correlated with poorer outcome ratings</th>
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<tbody>
<tr>
<td>Frequent TTL turnover is a proxy for a potential poor performing project and should be flagged for management attention</td>
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</table>
## Summary of findings and recommendations: interoperability of World Bank data systems

### Many staff weeks devoted to data construction.

Principal challenge: no historical record of project’s preparation team stored anywhere but on the PAD

2nd challenge: name variants and need to link to UPI

TTLs add and drop middle names on PADs at an astounding rate

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<td>Practice Manager and Country Director Prior Management Experience</td>
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<td>Location (field or HQ) of TTL when preparing a project</td>
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<tr>
<td>Location (field or HQ) of TTL when supervising a project</td>
<td>HR Reports</td>
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Acknowledgements

This report was prepared by a core team led by Mustafa Zakir Hussain (recently of OPSPQ) and including Jed Friedman (DECPI) and John Underwood, Helen Louise Ashton, Eun Jung Park, Jaime Sarmiento, Mo Zhou, Thomas Kenyon and Akib Khan (all OPSPQ).

We also acknowledge very useful contributions from the following: Enrique Pantoja, Aiza Aslam, Hanta Ramarinjanahary, Pervaiz Rashid, Vivek Suri, Christian Yves Gonzalez, Anca Cristina Dumitrescu, Roxana Elena Caprosu, Erik Kim Han, Sangil Lee (OPSPQ); Tsegaye Assayew, Rumana Haque, Brett Libresco (OPSRR); Thomas Danielewitz, Jason Johnston (OPSOM); Vivek Sharma, Harsh Anuj (GTKM1); Shahid Syed Arif (HRDGM); Aart Kraay (DECMG); and Nastassha Arezza, Olatunde Olatunji, Bastien Koch (Georgetown University).

Overall guidance for this work was provided by Lily Chu and Hassan Zaman (OPSPQ).
Additional slides for reference
Purpose

This analysis investigates the determinants of IPF quality. Its aim is to identify actions that management and staff might take to improve project outcomes.

We consider projects evaluated by IEG since the late 1990s, the most recent fiscal year being FY2017. The full sample comprises 4,348 IPFs, but we also undertake more detailed analysis on three smaller sub-samples.

For trends and compositional analysis, we focus on 1,992 IPFs that exited between FY2006 and FY2016 with an IEG overall outcome rating, and use the median exit fiscal year 2011 to create a point of comparison. For analyzing staffing as a determinant of quality, we use 2,845 IPFs approved between FY1995 and FY2009, which provides us with the highest level of complete data across all key variables. We intensively investigated ‘micro’ project-level correlates relating to design factors under management control using a stratified sample of 120 projects drawn from projects that closed during FY2000-15.

A separate Technical Note details the data and methodology.
Summary of key findings (1):

Trends

The use of IPF projects in IDA countries, AFR, and FCV countries increasing.

IPFs are getting larger and taking longer to implement.

IEG ratings of IPF quality have improved recently: the Bank has met its corporate targets by project count and by volume.

The outcome ratings of projects in IDA countries, especially AFR, have improved.

Projects in FCV and complex environments receive poorer outcome ratings than other projects; but there has been no deterioration in their quality over time.

Role of country level factors

Country institutional quality (as measured by long term CPIA) is the most consistently significant predictor of project outcomes, ahead of other country factors such as real per capita GDP growth; no significance was found for others such as population, Freedom House ratings, etc.

Project outcomes are most clearly associated with the CPIA public sector management sub-rating; except for outcomes of HD projects, which are most closely correlated with the social inclusion rating.
Summary of key findings (2):

Role of staff and managers

The key inputs to project outcomes are the predicted performances of the preparation TTL, the Practice Manager, and, especially, the supervision TTLs.

Country Directors lead the senior level dialogue and have less focus on individual projects. The influence of CDs is more significant during project implementation and in UMICs, but otherwise, their influence on project quality is not found to be statistically significant.

Previous experience of being a World Bank TTL contributes to higher quality outcomes. Other factors such as education, other work experience, etc. were not found to be significant.

We do not find that either field-based or HQ-based TTLs achieve superior outcomes.

Design and supervision factors

Project designs that fail to define basic aspects of results framework receive lower outcome ratings.

Teams are spending less time and funds on preparation but more on supervision. For FCVs, preparation costs have stayed constant, though supervision costs have increased significantly.

Preparation times of over two years are associated with lower quality, especially for emergency and technical assistance IPFs.

Turnover of TTLs after preparation is correlated with poorer outcome ratings.

Prior analytical work can improve the quality of project outcomes, especially in FCVs.
Variable Definition (I)

Outcome Rating

The outcome rating of an IPF operation is defined as the extent to which the project’s objectives were relevant and achieved efficiently. IEG uses a six-scale grading system: highly satisfactory, satisfactory, moderately satisfactory, moderately unsatisfactory, unsatisfactory and highly unsatisfactory.

Institutional Capacity

The World Bank’s Country Policy and Institutional Assessment (CPIA) is done annually for all its borrowing countries. It comprises a set of criteria that are grouped in four clusters: (a) economic management; (b) structural policies; (c) policies for social inclusion and equity; and (d) public sector management and institutions. The analysis uses the average CPIA rating by country over 2005-2013.

Task Team Leader (TTL) Predicted Performance

TTL predicted performance is defined as (a) the average quality of the TTL’s observed portfolio in all other projects in which he/she served and (b) the predicted quality of the portfolio using regression techniques with country and year fixed effects plus CPIA, GDP per capita, population and GP of projects as independent variables either at the time of board approval (for estimates of ‘preparation TTL’) or during implementation (for estimates of ‘supervision TTL’).

Practice Manager (PM) Predicted Performance

PM predicted performance is defined as the difference between (a) the average quality of the PM’s portfolio in all other countries in which he/she served and (b) the predicted quality of the portfolio using regression techniques with country and year fixed effects plus CPIA, GDP per capita, population and sectoral mix of projects as independent variables.

Country Director (CD) Performance

CD performance is defined as the difference between (a) the average quality of the CD’s portfolio in all other countries in which he/she served and (b) the predicted quality of the portfolio using regression techniques with country and year fixed effects plus CPIA, GDP per capita, population and sectoral mix of projects as independent variables.
Variable Definition (II)

Project design

The standards against which results frameworks were measured and rated were found to be robust predictors of success. Indicators should be measurable and the criteria for measurability be well defined. Each objective should have a suitable associated project DO outcome indicator. Intermediate result and output indicators should be adequate to capture the contribution of project components towards achieving PDO level outcomes. Teams should establish baselines and targets. Sources, methodologies, frequency of reporting and responsible bodies should be established and be appropriate.

Prior analytical work

Binary variable coded as one if project was associated with prior analytical or advisory work in the three years prior to Board approval, zero otherwise.

TTL turnover

The rate of TTL turnover is proxied by two measures: (a) whether the preparation TTL departs before the second ISR report, (b) the ratio of the number of distinct supervision TTLs and the total number of filed ISR reports.
We do not know what is effective in turning around chronic problem projects

The only identifiable influence in turning around chronic problem projects – those that enter problem project status at least once in both halves of implementation – is the CPIA rating; TTL supervision quality is not significant.

Reducing the size of a problem project in the first half of project implementation has no effect; reducing it in the second half is associated with a decreased likelihood of turnaround – so more likely a symptom of difficulties than a cause.

Closing date extensions may be beneficial in providing time to turn around projects that have been identified as having problems.
IPFs have been getting larger
IPF Project duration has been getting longer

Gap between Original and Actual Project Length

- Actual Project Length
- Original Project Length
IEG outcome ratings of IPF quality have improved recently

Percentage of IPFs Rated Successful by IEG

- By Project Count
- By Volume

- By project benchmark
- By volume benchmark
IEG outcome ratings of IPF quality have improved recently.

**Percentage of IPFs Rated Successful by IEG**

- **By project count**
  - FY8-10: 80%
  - FY9-11: 80%
  - FY10-12: 79%
  - FY11-13: 79%
  - FY12-14: 80%
  - FY13-15: 85%
  - FY14-16: 85%

- **By volume**
  - FY8-10: 70%
  - FY9-11: 69%
  - FY10-12: 68%
  - FY11-13: 68%
  - FY12-14: 68%
  - FY13-15: 71%
  - FY14-16: 73%

**Percentage of IBRD IPF rated Successfully by IEG**

- **By project count**
  - 2006: 88%
  - 2007: 94%
  - 2008: 73%
  - 2009: 74%
  - 2010: 74%
  - 2011: 74%
  - 2012: 75%
  - 2013: 65%
  - 2014: 70%
  - 2015: 77%
  - 2016: 74%

- **By volume**
  - 2006: 76%
  - 2007: 65%
  - 2008: 76%
  - 2009: 76%
  - 2010: 65%
  - 2011: 70%
  - 2012: 77%
  - 2013: 70%
  - 2014: 77%
  - 2015: 74%
  - 2016: 74%

**Percentage of IDA IPF Rate Successfully by IEG**

- **By project count**
  - 2006: 50%
  - 2007: 60%
  - 2008: 70%
  - 2009: 80%
  - 2010: 75%
  - 2011: 82%
  - 2012: 79%
  - 2013: 78%
  - 2014: 74%
  - 2015: 79%
  - 2016: 87%

- **By volume**
  - 2006: 90%
  - 2007: 75%
  - 2008: 79%
  - 2009: 75%
  - 2010: 78%
  - 2011: 74%
  - 2012: 79%
  - 2013: 74%
  - 2014: 79%
  - 2015: 87%
  - 2016: 77%
TTL supervision continuity also matters... not clear why

Switching TTLs between preparation and implementation is correlated with poorer quality

Turnover in supervision also predicts lower quality - for IBRD projects, and more so in the 2\textsuperscript{nd} half or the project

Example: Doubling the TTL turnover rate in the second half of a project (from 4 ISRs to 2 per TTL) predicts lower quality by 0.35 points in UMICs
TTL location (HQ vs field) also matters… or it did, but no longer

A significant *negative penalty* if TTL (prep or supervision) based outside HQ, but only in early period

After FY2003 – no apparent relation

Over this period large numbers of TTLs moved to field offices

What is clear – no current evidence project quality is either worse or better for projects prepared/supervised from HQ or the field
What about other staff characteristics and project success?

The available data have few other characteristics:

_TTL Work load_

Bringing multiple projects to board in same FY is not associated with quality difference

Supervising multiple projects in same FY is actually associated with higher mean quality

_Location – HQ vs. field_

No association between field based location and ultimate quality for projects approved since FY03

_Age_

No identifiable relation between TTL age and project quality

_Education_

Whether the TTL has a PhD does not affect project quality, in general
Basic flaws in results frameworks at design stage can affect quality (II)

Project designs that don’t include basic aspects of good results framework receive lower ratings.

Common shortcoming in results framework: no outcome indicators; inadequate baseline information.

Complexity (# of intermediate indicators) also an issue

<table>
<thead>
<tr>
<th>Reason for low rating</th>
<th>Number of projects</th>
<th>Relative frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No outcome indicators</td>
<td>38</td>
<td>47</td>
</tr>
<tr>
<td>Poor measurability</td>
<td>21</td>
<td>26</td>
</tr>
<tr>
<td>Inadequate intermediate indicators</td>
<td>24</td>
<td>30</td>
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<tr>
<td>Absent or poorly defined baseline</td>
<td>52</td>
<td>64</td>
</tr>
<tr>
<td>Absent or poorly defined targets</td>
<td>42</td>
<td>52</td>
</tr>
<tr>
<td>Poorly defined source or methodology</td>
<td>18</td>
<td>22</td>
</tr>
</tbody>
</table>

Basic design flaws persist: 81 of 120 projects had low results framework rating with the following problems:
Timing and stage in the IDA cycle seem not to matter, but project approval month might.

No evidence that projects prepared in last two quarters of IDA cycle (a) take longer or (b) perform worse.

However, a significant relationship between quarter of board approval and project quality – a ‘rush to board’ effect?

**The result is significant at p<.05**
* The result is significant at p<.10
Timely identification of problems is critical

Most unsatisfactory projects are identified as problem projects, but fewer than three out of five problem projects (59 percent) are corrected.

Problem projects identified before MTR are three times as likely to obtain a satisfactory rating as those that are only identified later.

**Most unsatisfactory projects are identified as problematic; the difficulty is correcting them**