

# **Public Private Partnership (PPP) and Credit Risk**

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# What is a Standard & Poor's Rating ?

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**“Standard & Poor’s opinion on the ability and willingness of an obligor to meet its debts as they fall due, or the ability and willingness of an obligor to respect the financial terms of a particular debt security or other financial obligation.”**

## What a Rating is NOT...

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### A rating is not...

- **A recommendation to purchase, hold or sell securities**
- **An audit**
- **A certification**
- **An opinion on how ‘good’ or ‘bad’ an obligor is.**

# Long-Term Debt Rating Scale ... as applied to Issuers

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<b>AAA*</b>	<b>Highest Credit Quality **</b>
<b>AA</b>	
<b>A</b>	
<b>BBB</b>	<b>↑ Investment Grade</b>
<hr style="border-top: 1px dashed orange;"/>	
<b>BB</b>	<b>↓ Non-Investment Grade</b>
<b>B</b>	
<b>CCC</b>	
<b>CC</b>	
<b>C</b>	
<b>SD/D</b>	<b>Debt in Selective Default / Default</b>

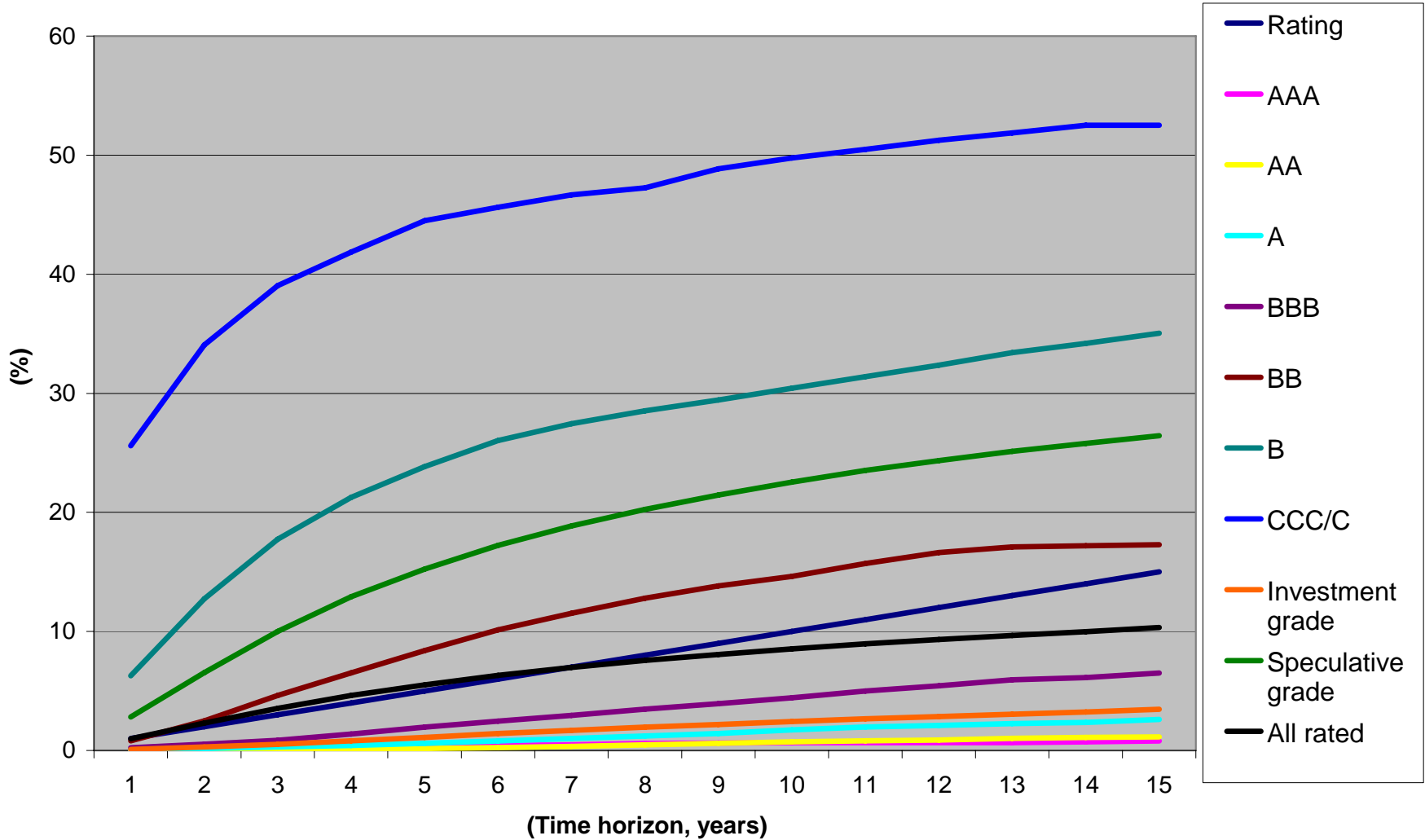
\* "+ and -" apply from AA to CCC.

\*\* Full definition can be found in S&P criteria books.

# Default Risk by Rating

## Cumulative Default Rates 1981-2007

Cumulative Average Default Rates By Rating, 1981 - 2007



Source: S&P's Global Fixed Income Research Chart 15

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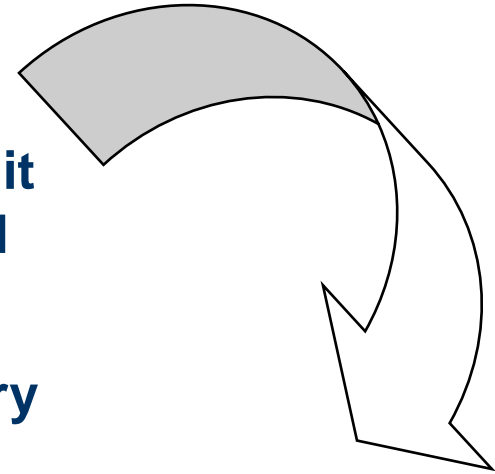
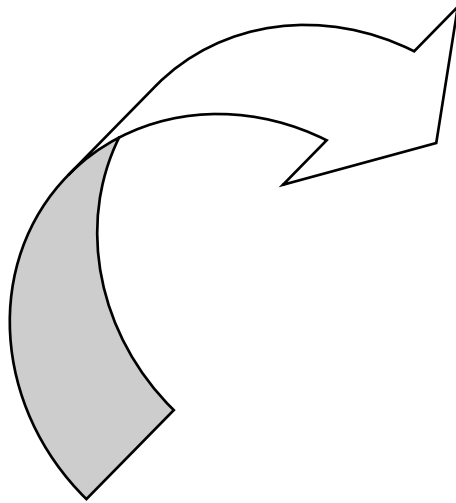


# Benefits of Ratings in the Marketplace

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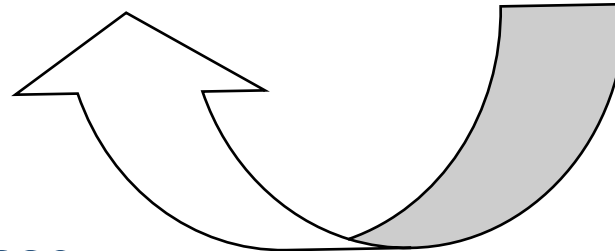
## Investors

- Independent assessment of credit quality of entity and specific issue
- Enhances secondary market liquidity



## Borrowers/Issuers

- Enables capital structure to be optimised
- Broadens lender base
- Determines cost of funds in public market



## Intermediaries

- Key consideration for structuring and pricing transaction to sell
- Allows approach to wider group of Investors

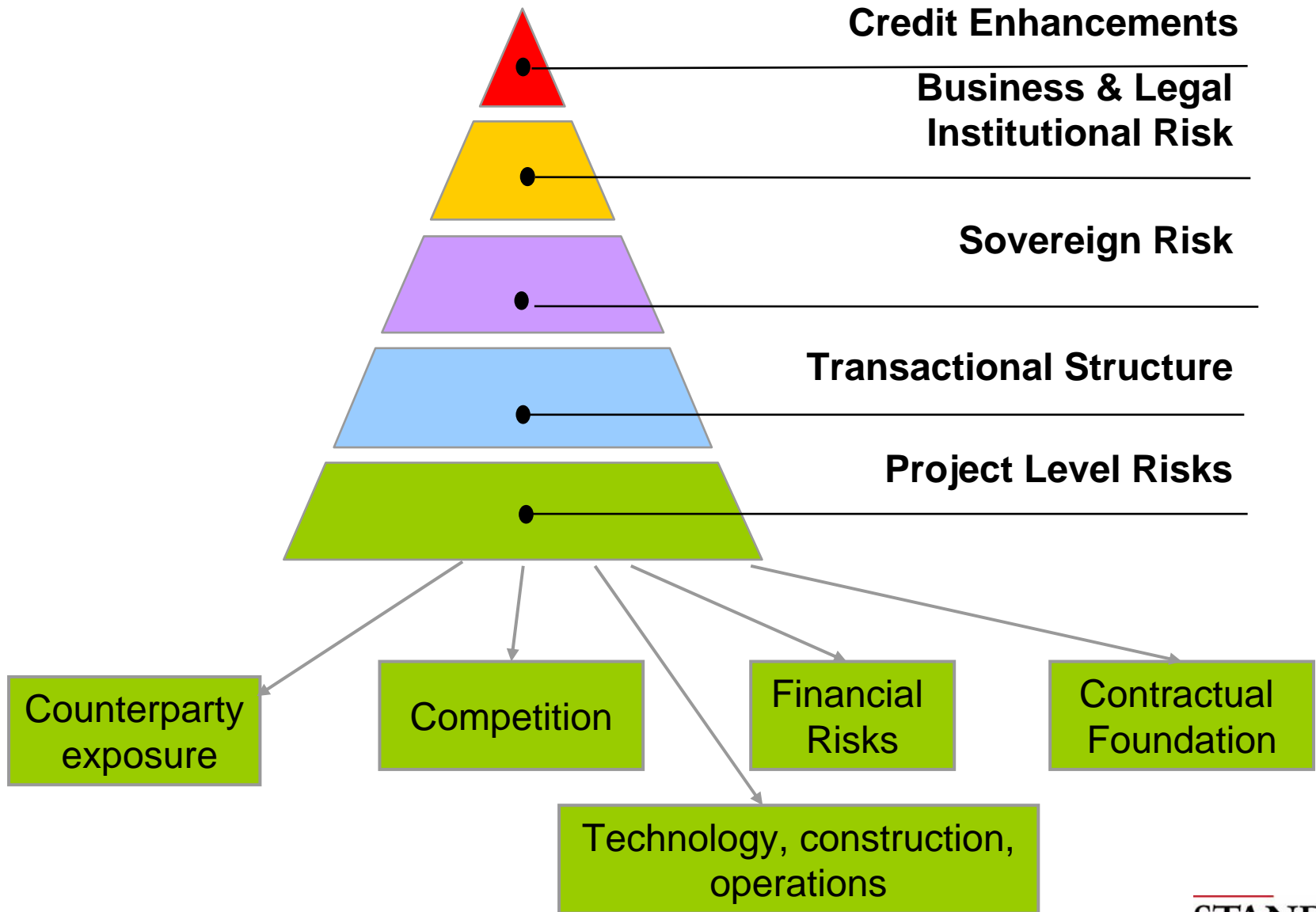
# What is a project?

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- **Standard & Poor's defines a project company as a group of agreements and contracts between lenders, project sponsors, and other parties that creates a form of business organization that will:**
  - *issue a finite amount of debt on inception*
  - *operate in a focused line of business*
  - *ask that lenders look only to a specific asset to generate cashflow as the sole source of principal and interest payments and collateral.*
- **Social Infrastructure projects e.g. U.K. PFIs for schools, hospitals, accommodation etc.**
- **Economic Infrastructure projects e.g. toll roads etc.**

# Project Risk Analysis

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# Risk Factors Associated with PPPs

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- **Construction Risk** – exposure to contractors, limited third party support etc.
- **Operating Risk** - long-term concessions – 25, 30, 35 years plus with maintenance and asset lifecycle risk exposure (even the “oldest” PFIs are only 9 or 10 years into their concessions.....)
- **Demand Risk** – relevant for volume related projects such as toll roads etc.
- **Financial Risk** – aggressive financial structures (e.g. 90/10 debt:equity with low debt service cover ratios e.g. 1.20x)

## **LONG TERM ASSETS WITH LONG TERM CONSIDERATIONS**

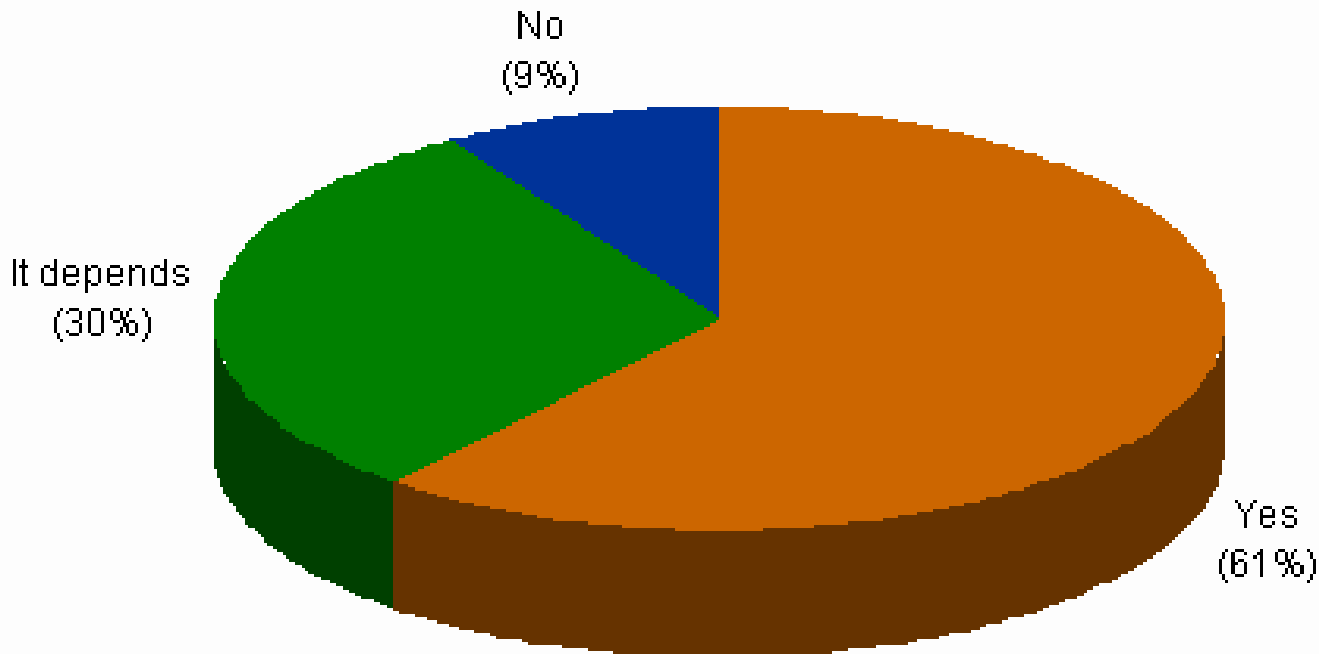


- **Completion of literature & internal review**
  - Key issues used to design our on-line survey
- **On-line survey**
  - Preparatory work
    - No ‘standing email list’ of PPP sector participants
      - Create our own (advertise survey and ask people to register)
    - 319 PPP professionals registered
  - Survey proper
    - Different questionnaires for different professions
    - Survey responses...
      - 161 responses
      - 22 countries
      - Bankers, advisors (financial/technical), lawyers, construction companies etc.
      - Average sector exposure = 6 - 7 years

## 4 Questions

- **Do PPPs work?**
- **Are some asset classes more reliable than others?**
- **What are the reasons behind construction-phase distress?**
- **How can we use the research results?**

## Do PPPs Have A Better Track Record Of Delivery Than Conventional Methods? (Open Question)



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# PPP Construction Track Record

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- “*It depends...*” – on what??

- Adequate definition of the technical solution required
- Adequate definition of contractual obligations
- Performance incentives
- Sophistication of the public sector
- Political interference
- Experience of the private sector
- Project management
- Clarity regarding changes
- Efficiency of existing procurement
- Policies to avoid extended negotiation
- People


“*Too soon to say*”

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# Type of PPP likely to encounter construction problems?



Schools?



Roads?



Transit?



Tunnels?



Hospitals?



Accommodation?

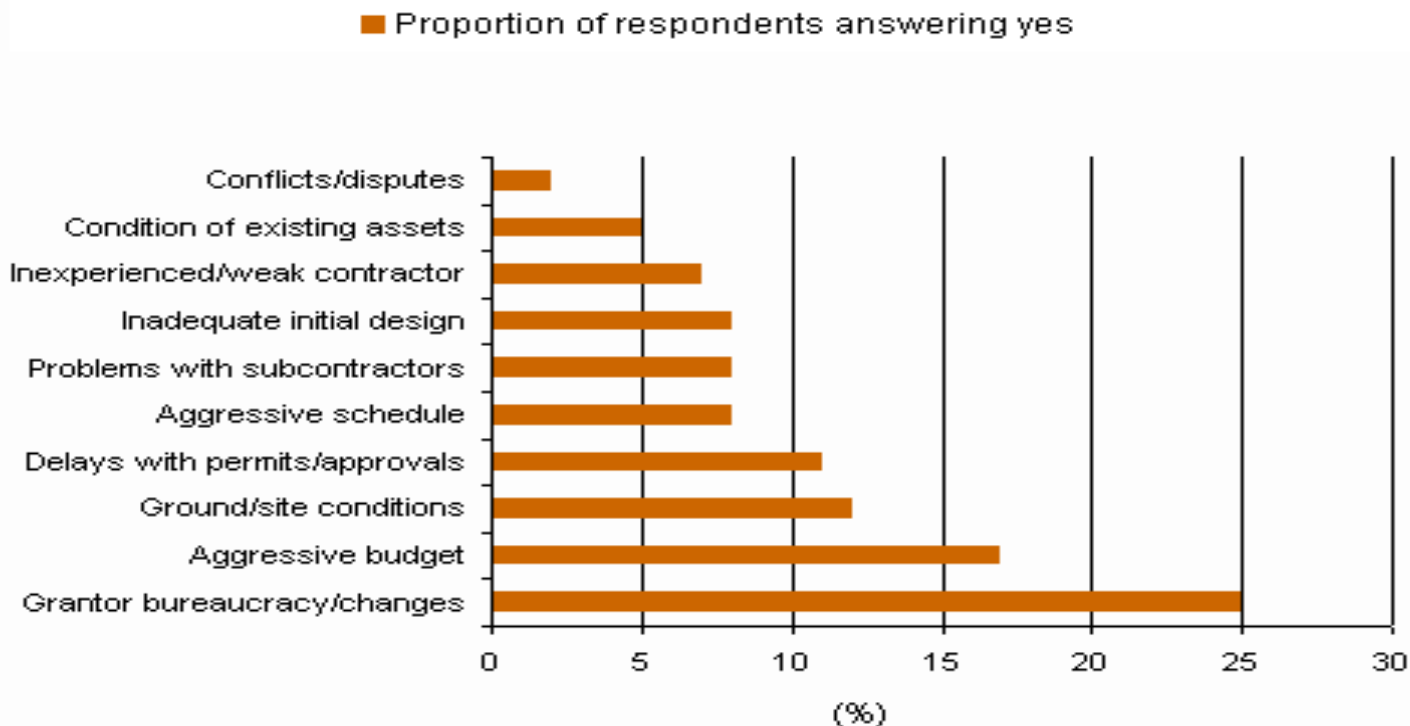
# Type of PPP likely to encounter construction problems?

- **Limited evidence of any positive correlation between**
  - asset class, and
  - exposure to/experience of construction budget/schedule risks
  
- Many respondents actually cited/inferred zero correlation
  
- **Responses concentrated on the nature of construction obligation**

# Type of PPP likely to encounter construction problems?

- **Construction works reliant upon/exposed to:**
  - **New technologies**
  - **Very large or highly technical requirements**
  - **Changing legislative environments**
  - **Hurried scope-of-works**
  - **Aggressive scheduling**
  - **Limited detailed design**
  - **Multi-site programmes**
  - **Linear construction sites**
  - **Weak contractors**
  - **Skilled trades**
  - **Legacy issues**
  - **Multi-party interfaces**
  - **Incomplete permitting**
  - **Complex project phasing**

## What Are The Main Reasons For Construction Budget/Schedule Problems? (Open Question)



As an open question, many respondents listed more than one reason. Accordingly, the number of reasons given exceeds the number of respondents. This chart should, therefore be interpreted as in the following example: Of all the reasons given for PPP construction budget/schedule problems, the "condition of existing assets" accounted for 5%.

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# Project Specific Analysis

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- **Survey Response**

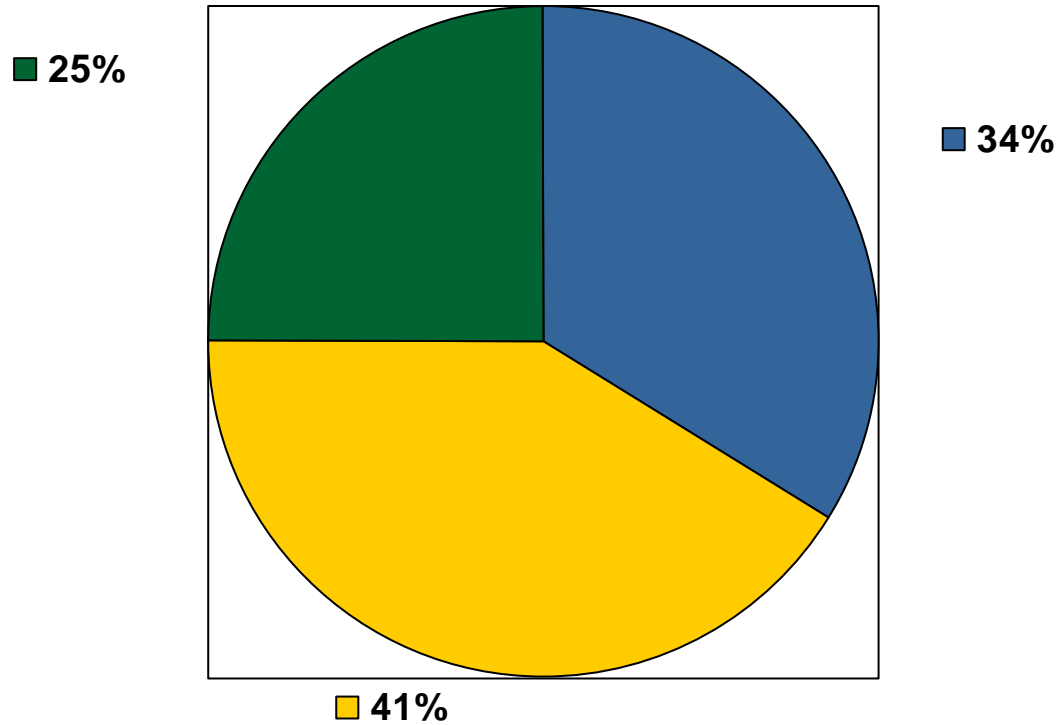
- 102 separate projects identified by name and jurisdiction

- Respondents identified whether problems with any of the following occurred in each project:

- Construction Budget
    - Construction Programme
    - Construction Specification

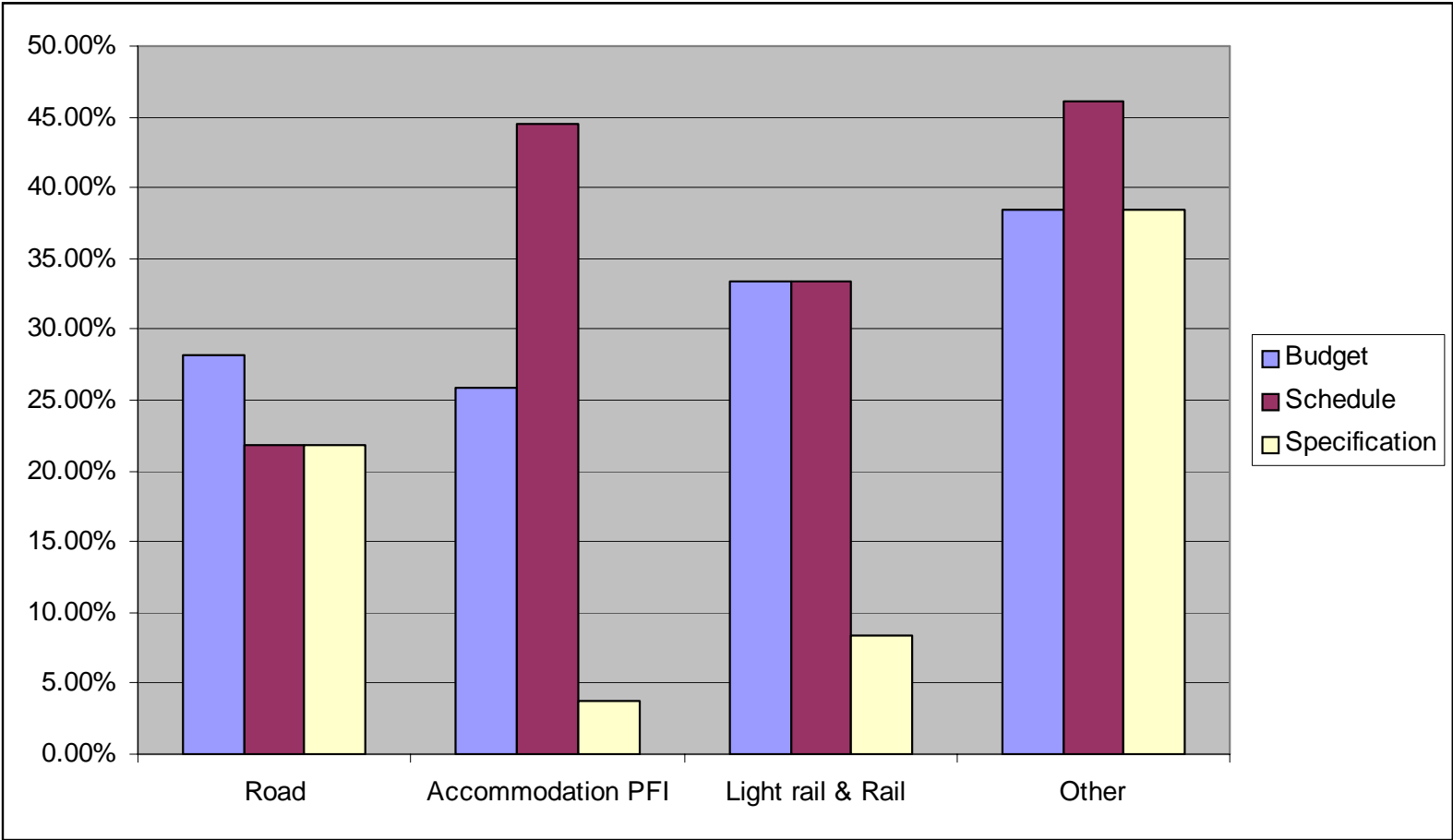
# Overall project disaggregation

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■ Cont. Budget ■ Const. Schedule ■ Const. Specification

# Disaggregation by Asset class



# Project Schedule

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- **Stated Reasons for delay**
  - **Contractor financial difficulties**
  - **Contractor performance / experience**
  - **Ground conditions**
  - **Number of construction interfaces**
  - **Variations/Rescoping**
  - **Access**
  - **Permits**
  - **Technology risk**
  - **Specification**

# Preliminary Research Output: The Construction Risk Index

PPP Construction Risk Index; Version 1.0		
Risk Category	Risk Assessment	
	Low risk	High risk
<i>Project preparations</i>		
Expropriation	Complete	Outstanding
Design	Detailed	Conceptual
Permits/consents	Granted in full	Granted in part
Investigations/site sampling	Rigorous	Partial
<i>Project characteristics</i>		
Construction challenge	Uncomplicated	Complex/highly technical
Construction skills	Standard civil engineering	Specialist engineering
Construction materials	Readily available	Supply-chain constraints
Construction scale	Small	Large
Construction duration	Short	Long
Construction technology	Proven	Innovative
Construction location	Greenfield	Brownfield (busy/operational)
Construction site	Contained	Long, linear
Number of sites	Single	Many
Site access constraints	None	Many constraints/limitations

## PFI/PPP rating so far...

1996: Two U.K. PFI transactions rated publicly



2007: About 200 PPP deals assessed in Europe either for public capital markets issuance or for participation in CDOs



### Some strong credit features:

- Contractually stable income stream
- Little or no volume risk to lenders
- Relatively low operational risks.



### ... But significant weaknesses:

- High leverage
- Low debt service coverage (DSCR)
- Single-asset nature of projects.

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**Thank You**

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# Contact Information

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