

INCENTIVES VS. FINANCING

Disentangling Attribution

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Counterfactual Scenario

- Counterfactual in free-ridership context:

What would the customer have done in the absence of the program?

- Double counterfactual:

What would the customer have done...
if only the incentive had been available?
if only the loan had been loan available?
if neither had been available?



Program Background

- On-bill finance (OBF) programs offered by the 4 California investor-owned utilities
- Open to non-residential customers
- 0% interest loans; bill neutrality
- All OBF participants receive a loan and an incentive

Policy Context

- Attribution methodology depends on policy context
 - All loan recipients also received incentive
 - Established attribution methodology for the CA non-residential incentive programs
 - Existing net impact estimates for the incentive programs
 - Savings are claimed through the incentive programs, not the OBF programs

Key Evaluation Questions

What were the incremental net impacts of the 2013/14 OBF programs, relative to net impacts already claimed by the incentive programs?

What was the relative importance of the loan versus the incentive in participants' decision to complete the energy-efficient installations?



Evaluation Approach

- Survey of program participants (n=136)
- Stratified random sampling approach
 - Sampling domains: IOU and lighting/non-lighting
- Free-ridership questions and algorithm based on CA non-residential incentive program approach
 - Augmented/Modified with questions about loan



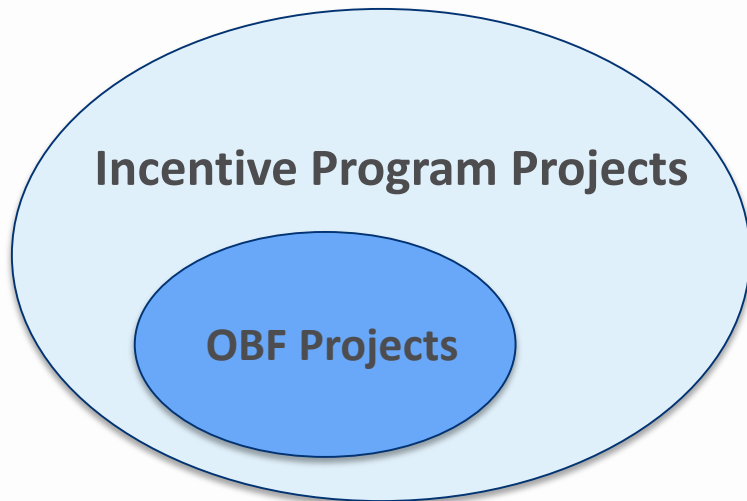
FR Approach

	Incentive Program Questions	OBF Modifications
PAI-1	<p>0-10 importance rating of...</p> <ul style="list-style-type: none"> • various program factors • various non-program factors 	<p>Additional importance rating:</p> <ul style="list-style-type: none"> • OBF loan
PAI-2	<p>10 points divided between...</p> <ul style="list-style-type: none"> • incentive program • non-program factors 	<p>10 points divided between...</p> <ul style="list-style-type: none"> • OBF program • non-program factors
		<p>OBF points divided between...</p> <ul style="list-style-type: none"> • loan • incentive • other program factors
PAI-3	<p>Likelihood to implement...</p> <ul style="list-style-type: none"> • without incentive program 	<p>Likelihood to implement...</p> <ul style="list-style-type: none"> • without OBF program • with loan but not incentive • with incentive but not loan



Evaluation Question #1

What were the incremental net impacts of the 2013/14 OBF programs, relative to net impacts already claimed by the incentive programs?



- ✓ OBF projects are part of incentive program evaluation.
- ✓ Incentive program evaluation does not consider influence of OBF loan.
- ✓ Net impacts claimed for OBF projects reflect the influence of the incentive program only.

Hypothesis:

*Influence of incentive AND loan > Influence of incentive
OBF NTGR > Incentive Program NTGR*



Incremental Net Impacts

OBF Incremental NTGR =

OBF NTGR – Incentive Program NTGR for OBF Projects

	OBF NTGR	Incentive Program NTGR	OBF Incremental NTGR
Overall	0.67	0.58	0.09
Lighting	0.70	0.56	0.13
Non-Lighting	0.63	0.59	0.04

- *OBF Incremental NTGR does not reflect importance of loan.*
- *Net savings attributable to OBF loans that are not being claimed through the incentive programs.*



Evaluation Question #2

What was the relative importance of the loan versus the incentive in participants' decision to complete the energy-efficient installations?



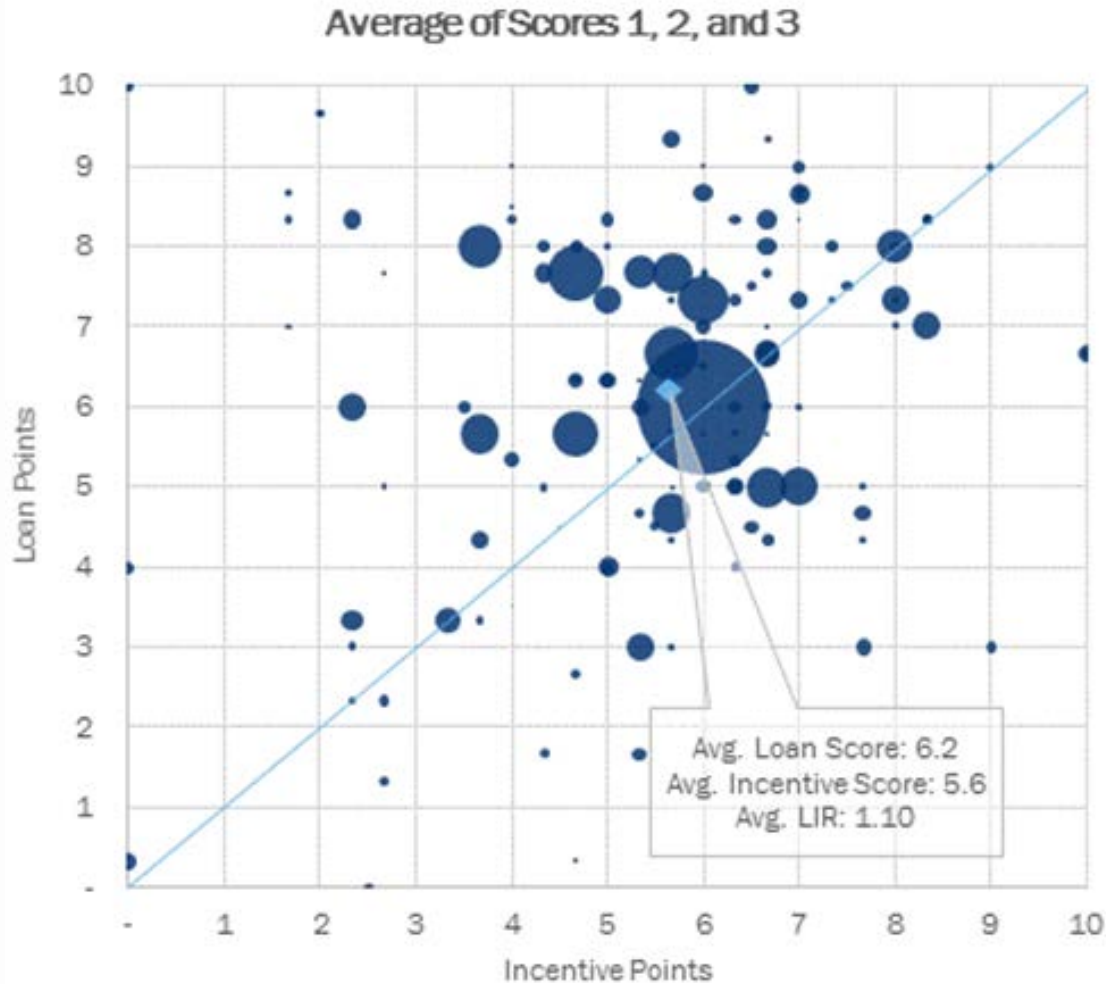
Ratio Analysis: Methodology

- Developed Loan Scores and Incentive Scores

	Loan	Incentive
Score 1	Importance rating of Loan	Importance rating of Incentive
Score 2	Points allocated to Loan	Points allocated to Incentive
Score 3	10 - Likelihood to implement without Loan	10 - Likelihood to implement without Incentive
Overall	Average of three Loan Scores	Average of three Incentive Scores

- Scores are on a scale from 0 – 10
- Higher score means higher influence

Ratio Analysis: Results



Conclusions

- There are incremental net impacts associated with OBF loans that are not being claimed through the incentive programs.
- Both loan and the incentive are important in customers' decisions to implement high-efficiency projects.
 - Both are often needed to go forward with the project.
- Based on statewide results, customers consider the loan to be slightly more important than the incentive.

Considerations for Other Policy Scenarios

- Think about five mutually exclusive and exhaustive groups:
 - Need neither incentives nor financing
 - Need both incentives and financing
 - Need incentives but not financing
 - Need financing but not incentives
 - Need either financing *or* incentives, but not both



Thank you

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