

DOES FINANCING OF PUBLIC GOODS BY LOTTERIES CROWD OUT PRO-SOCIAL INCENTIVES?

PETER KATUŠČÁK¹
TOMÁŠ MIKLÁNEK¹

¹CERGE-EI
PRAGUE

MASARYK UNIVERSITY
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 - *other types* (17%): “hump-shaped,” random, etc.

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- **Secondary questions (replications):**

1. Does introduction of a lottery increase public good provision overall?
2. Is the distribution of types (conditional cooperator, free-rider, others) similar as in the previous studies?

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- Information on the social preference profile of the target population:
 - small-scale field experiment
 - national survey that includes data on incentivized decisions
 - repeated interaction with the population of donors

EXISTING LITERATURE ON THE EFFECT OF A FIXED-PRIZE LOTTERY

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- **Theory:** fixed-prize lottery improves social efficiency in comparison to VCM:
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- **Experiments:** public good provision increases under lotteries as opposed to VCM:
 - Morgan and Sefton (2000)
 - Orzen (2008)

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- Expected monetary payoff:

$$E(\pi_i) = w - g_i + \alpha \left(\sum_{j=1}^n g_j - R \right) + \frac{g_i}{\sum_{j=1}^n g_j} R$$

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- It is possible to increase social efficiency by increasing R

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 2. $R = 12$

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 - a subject cannot win the prize and receives a fixed payment of $0.25R$ instead
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 - **Issue 2:** if present, the outside money should be present in all within-subject treatments
 - **Issue 3:** if so, if not used for the lottery prize (e.g., in VCM), should the money be contributed to the public good or should it be distributed to subjects?

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 - $R = 16$: implies $g^* = 12$, suggesting a boundary choice of contributions

WITHIN-SUBJECT STAGES

- Three stages, order balanced (6 possible permutations):

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 4. conditional contributions in the lottery case (order balanced)

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 3. conditional contributions in the fixed case
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- Separate printed instructions for each stage, changes relative to the previous stage highlighted

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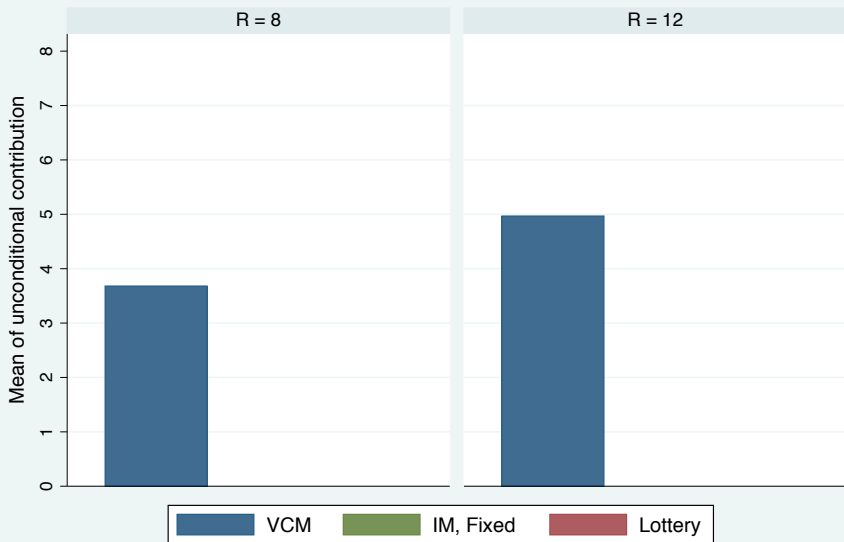
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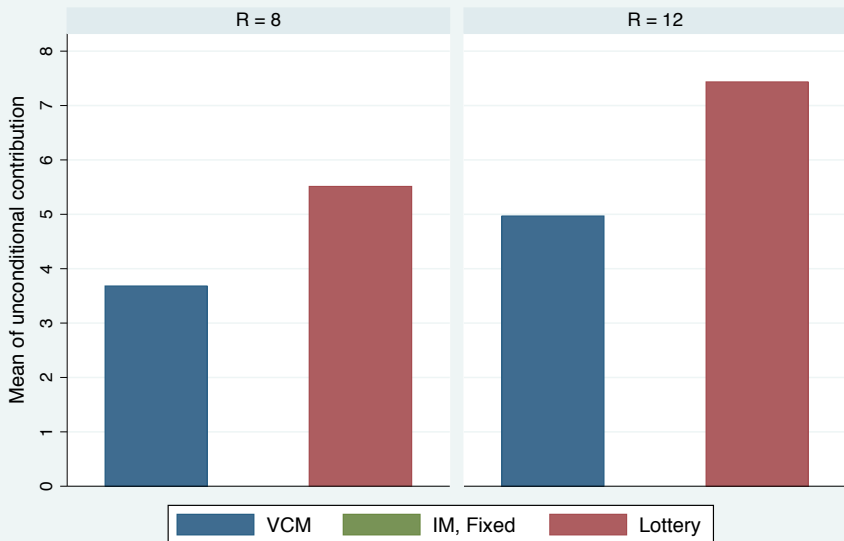
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- Average earnings: 332 CZK (13 EUR), including a 100 CZK (4 EUR) show-up fee

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UNCONDITIONAL CONTRIBUTIONS: TREATMENT EFFECTS

	Lottery prize:		Difference:
	$R = 8$	$R = 12$	(12) – (8)
Lottery - VCM	1.83*** (0.33)	2.46*** (0.35)	0.63 (0.48)
IM, Fixed - VCM	-1.03*** (0.32)	-1.31*** (0.40)	-0.28 (0.51)
Lottery - IM, Fixed	2.86*** (0.38)	3.77*** (0.41)	0.91 (0.56)

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 - triangular contributor (15 subjects)

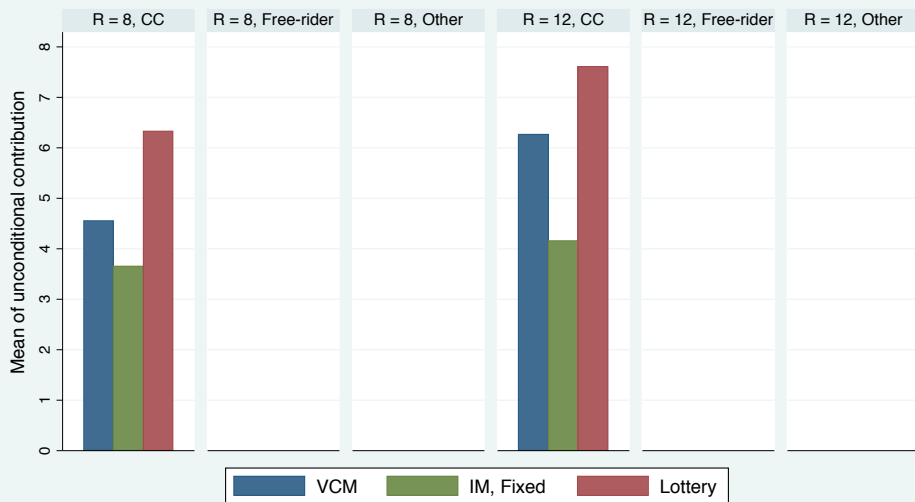
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 - unclassified (12 subjects)

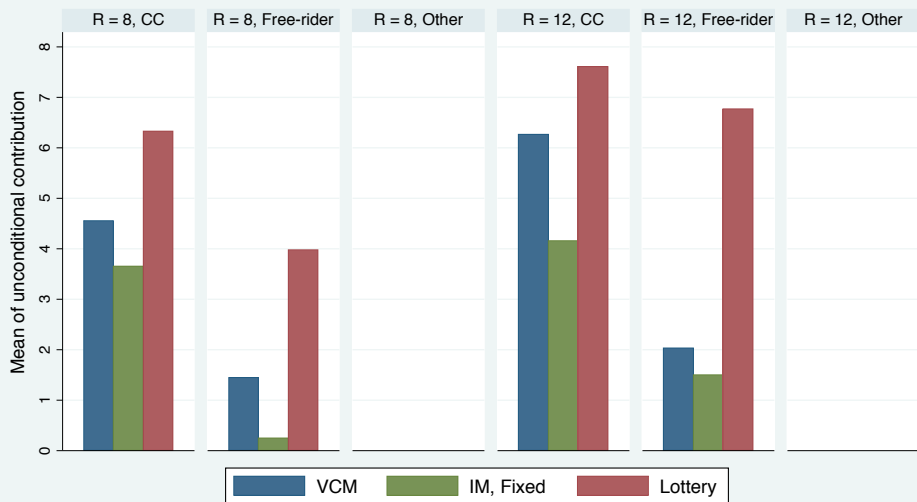
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 - triangular contributor (15 subjects)
 - unclassified (12 subjects)
- Similar type distribution as in Fischbacher et al. (2001) or Herrmann & Thöni (2009)

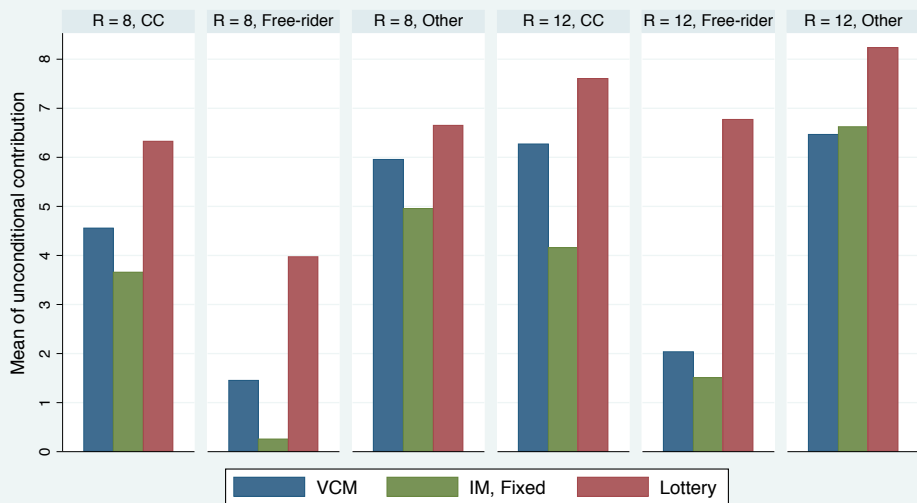
UNCONDITIONAL CONTRIBUTIONS BY TYPE



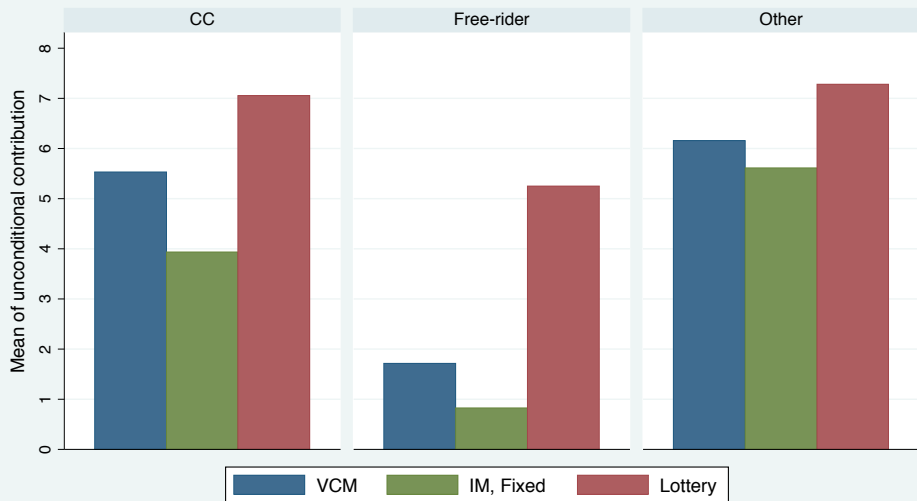
UNCONDITIONAL CONTRIBUTIONS BY TYPE



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UNCONDITIONAL CONTRIBUTIONS: (LOTTERY - VCM) BY TYPE

	All	Lottery prize:		Difference:
	Subjects	$R = 8$	$R = 12$	(12) - (8)
CCs	1.53*** (0.28)	1.78*** (0.50)	1.34*** (0.31)	-0.44 (0.58)
FRs	3.53*** (0.48)	2.53*** (0.58)	4.73*** (0.74)	2.21** (0.93)
Others	1.12** (0.53)	0.70 (0.63)	1.77* (0.91)	1.07 (1.11)
CCs - FRs	-2.00*** (0.55)	-0.75 (0.76)	-3.39*** (0.80)	-2.64*** (1.10)

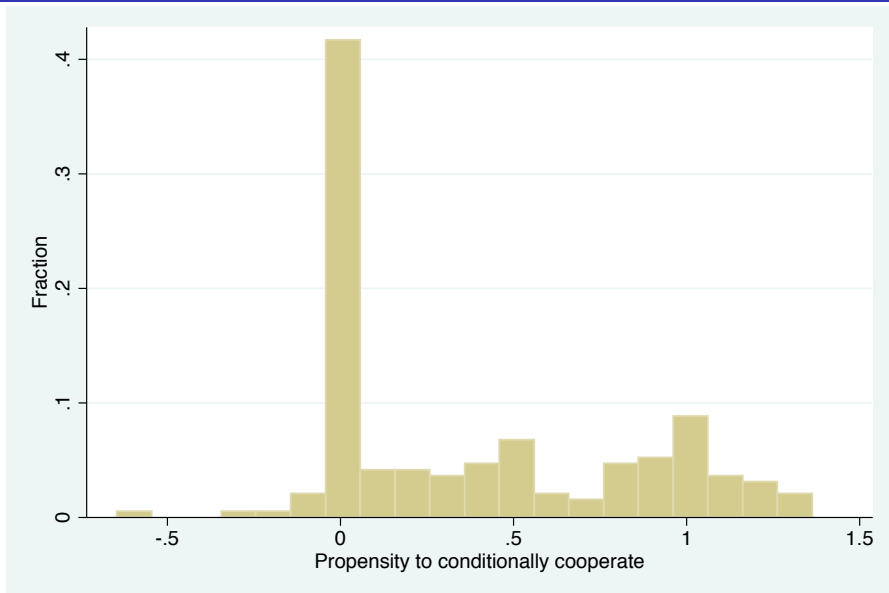
UNCONDITIONAL CONTRIBUTIONS: (IM, FIXED - VCM) BY TYPE

	All	Lottery prize:		Difference:
	Subjects	$R = 8$	$R = 12$	(12) - (8)
CCs	-1.59*** (0.39)	-0.90* (0.53)	-2.11*** (0.55)	-1.21 (0.76)
FRs	-0.89** (0.44)	-1.19** (0.50)	-0.53 (0.77)	0.66 (0.91)
Others	-0.55 (0.46)	-1.00 (0.64)	0.15 (0.59)	1.15 (0.87)
CCs - FRs	-0.70 (0.59)	0.29 (0.73)	-1.58* (0.94)	-1.87 (1.19)

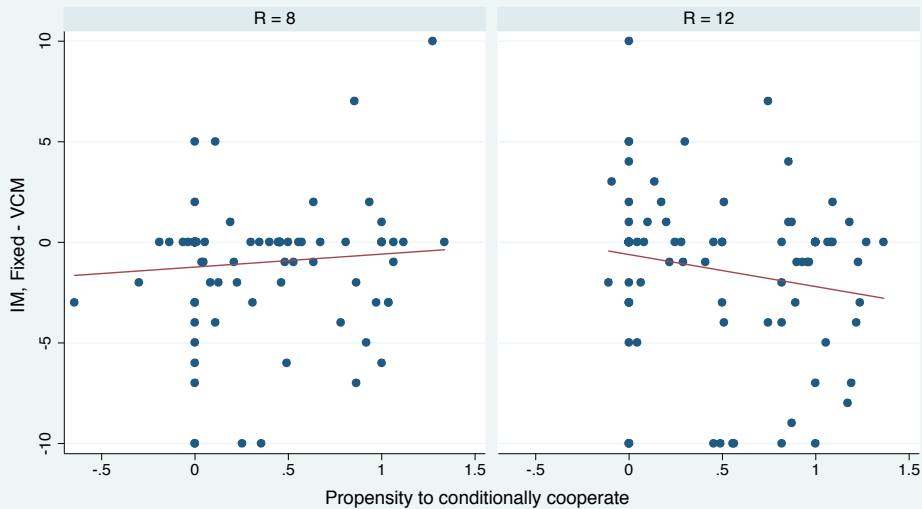
UNCONDITIONAL CONTRIBUTIONS: (LOTTERY - IM, FIXED) BY TYPE

	All	Lottery prize:		Difference:
	Subjects	$R = 8$	$R = 12$	(12) - (8)
CCs	3.12*** (0.40)	2.68*** (0.57)	3.45*** (0.56)	0.78 (0.80)
FRs	4.42*** (0.47)	3.72*** (0.62)	5.27*** (0.71)	1.54 (0.94)
Others	1.67*** (0.59)	1.7* (0.85)	1.62* (0.75)	-0.08 (1.13)
CCs - FRs	-1.31** (0.62)	-1.05 (0.84)	-1.81** (0.90)	-0.77 (1.23)

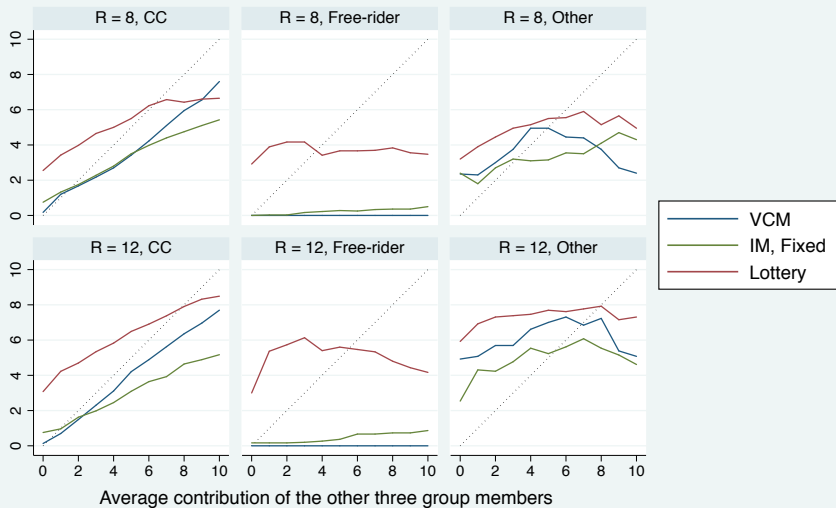
CONTINUOUS MEASURE OF COND. COOPERATION



CONDITIONAL COOPERATION AND CROWDING-OUT



CONDITIONAL CONTRIBUTIONS



CONCLUSION

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