

St Andrews

School of Economics and Finance Discussion Papers

## **Persuasion Meets Delegation**

Anton Kolotilin and Andriy Zapechelnyuk

School of Economics and Finance Discussion Paper No. 1802 7 Apr 2018 (revised 5 Mar 2020) JEL Classification: D82, D83, L43 Keywords: persuasion, delegation, regulation

School of Economics and Finance Online Discussion Paper Series issn 2055-303X http://ideas.repec.org/s/san/wpecon.html info: econ@st-andrews.ac.uk

## PERSUASION MEETS DELEGATION

ANTON KOLOTILIN AND ANDRIY ZAPECHELNYUK

ABSTRACT. A principal can restrict an agent's information (the persuasion problem) or restrict an agent's discretion (the delegation problem). We show that these problems are generally equivalent — solving one solves the other. We use tools from the persuasion literature to generalize and extend many results in the delegation literature, as well as to address novel delegation problems, such as monopoly regulation with a participation constraint.

JEL Classification: D82, D83, L43

Keywords: persuasion, delegation, regulation

Date: 5th March 2020.

Kolotilin: School of Economics, UNSW Business School, Sydney, NSW 2052, Australia. *E-mail:* akolotilin@gmail.com.

Zapechelnyuk: School of Economics and Finance, University of St Andrews, Castlecliffe, the Scores, St Andrews KY16 9AR, UK. *E-mail:* az48@st-andrews.ac.uk.

We are grateful to Tymofiy Mylovanov, with whom we are working on related projects. We thank Ricardo Alonso, Kyle Bagwell, Benjamin Brooks, Deniz Dizdar, Piotr Dworczak, Alexander Frankel, Drew Fudenberg, Gabriele Gratton, Yingni Guo, Emir Kamenica, Navin Kartik, Ming Li, Hongyi Li, Carlos Oyarzun, Alessandro Pavan, Eric Rasmusen, Philip Reny, Joel Sobel, Bruno Strulovici, and Thomas Tröger for helpful comments and suggestions. We also thank participants at various seminars and conferences. Part of this research was carried out while Anton Kolotilin was visiting MIT Sloan School of Management, whose hospitality is greatly appreciated. Anton Kolotilin gratefully acknowledges support from the Australian Research Council Discovery Early Career Research Award DE160100964 and from MIT Sloan's Program on Innovation in Markets and Organizations. Andriy Zapechelnyuk gratefully acknowledges support from the Economic and Social Research Council Grant ES/N01829X/1.

## The paper is currently undergoing a substantial revision.

Please come back later for the updated version, or email to az48@st-andrews.ac.uk to check the status of the revision or to request the most recent update.