README for "Inferring Conduct to Guide Strategic Trade Policy"

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Data Availability and Provenance Statements

☑ This paper does not involve analysis of external data (i.e., no data are used or the only data are generated by the authors via simulation in their code).

Computational requirements

Software Requirements

☑ The replication package contains one or more programs to install all dependencies and set up the necessary directory structure.

- Julia 1.10.0
  - the program `Code/install_packages.jl` will install all dependencies (compatible with 1.10.0) listed in `Project.toml`, and should be run once prior to running other programs. See more details here.

Controlled Randomness

☑ Global random seed is set at line 1 of `Code/main_parameters.jl`. Task-specific seeds are generated throughout the code to ensure replicability with parallel processing.

Memory, Runtime, Storage Requirements

Summary Approximate time needed to reproduce the analyses on a standard (2025) desktop machine:

☑ 2-7 days

Approximate storage space needed:

☑ 250 MB - 2 GB

The code was last run on a **14-core CPU Apple M4 Pro Mac Mini with MacOS version 15.3.2 with 64 GB of RAM**. Computation took around 65 hours with 10 threads.

Description of programs/code

- All Julia scripts have been stored in `Code/` and the `_master.jl` file is the main program that runs all other scripts in order.

License for Code

List of tables and programs

The provided code reproduces:

☑ All numbers provided in text in the paper
☑ All tables and figures in the paper

Table 1: List of tables and figures

#	**Program**	**Line #**	**Output file**
Figure 1(a)	CES_3rd_mkt_ad_valorem/main/reaction_function_plots.jl	47	Figures/Figure1a.pdf
Figure 1(b)	CES_3rd_mkt_ad_valorem/main/reaction_function_plots.jl	94	Figures/Figure1b.pdf
Figure 1(c)	CES_3rd_mkt_ad_valorem/main/reaction_function_plots.jl	184	Figures/Figure1c.pdf
Figure 1(d)	CES_3rd_mkt_ad_valorem/main/reaction_function_plots.jl	142	Figures/Figure1d.pdf
Figure 2(a)	CES_3rd_mkt_ad_valorem/main/C2N1_example.jl	88	Figures/Figure2a.pdf
Figure 2(b)	CES_3rd_mkt_ad_valorem/main/C2N1_example.jl	144	Figures/Figure2b.pdf
Figure 3(a)	CES_extended_3rd_mkt_ad_valorem/main/C2N1_example1.jl	81	Figures/Figure3a.pdf
Figure 3(b)	CES_extended_3rd_mkt_ad_valorem/main/C2N1_example1.jl	122	Figures/Figure3b.pdf
Figure 4(a)	CES_extended_3rd_mkt_ad_valorem/main/C2N1_example2.jl	81	Figures/Figure4a.pdf
Figure 4(b)	CES_extended_3rd_mkt_ad_valorem/main/C2N1_example2.jl	122	Figures/Figure4b.pdf
Figure 5(a)	CES_extended_3rd_mkt_ad_valorem/w_simDT/main/output_C2N1.jl	248	Figures/Figure5a.pdf
Figure 5(b)	CES_extended_3rd_mkt_ad_valorem/w_simDT/main/output_C2N1.jl	262	Figures/Figure5b.pdf
Figure 6(a)	CES_extended_3rd_mkt_ad_valorem/w_simDT/main/output_C2N1.jl	284	Figures/Figure6a.pdf
Figure 6(b)	CES_extended_3rd_mkt_ad_valorem/w_simDT/main/output_C2N1.jl	302	Figures/Figure6b.pdf
Figure 7(a)	CES_extended_3rd_mkt_ad_valorem/w_simDT/main/output_C2N1.jl	333	Figures/Figure7a.pdf
Figure 7(b)	CES_extended_3rd_mkt_ad_valorem/w_simDT/main/output_C2N1.jl	342	Figures/Figure7b.pdf
Figure 8(a)	CES_extended_3rd_mkt_ad_valorem/w_simDT/main/output_C3N1.jl	237	Figures/Figure8a.pdf
Figure 8(b)	CES_extended_3rd_mkt_ad_valorem/w_simDT/main/output_C3N1.jl	254	Figures/Figure8b.pdf
Figure 9(a)	CES_extended_3rd_mkt_ad_valorem/main/C2N2_example1.jl	81	Figures/Figure9a.pdf
Figure 9(b)	CES_extended_3rd_mkt_ad_valorem/main/C2N2_example1.jl	122	Figures/Figure9b.pdf
Figure 10(a)	CES_extended_3rd_mkt_ad_valorem/main/C4N4_example1.jl	81	Figures/Figure10a.pdf
Figure 10(b)	CES_extended_3rd_mkt_ad_valorem/main/C4N4_example1.jl	122	Figures/Figure10b.pdf
Table 1	CES_extended_3rd_mkt_ad_valorem/w_simDT/main/parameters_C2N1.jl	28	Tables/Table1.tex