

Circular Economy in Türkiye

Green PASA (P174569)

Pillar: Policies for a Circular Economy (CE)



Project Timeline



Objectives

To develop policy diagnostics on circular economy for Türkiye through conducting analysis on the: (i) macroeconomic impacts of circular economy policies; (ii) exposure to evolving circular economy policies in major trade partners; (iii) prioritization of the industrial sectors that can accelerate the CE transition.

These diagnostics are intended to generate knowledge, inform, and scale-up policy dialogue and strategic engagement on green growth and climate change with the Government of Türkiye with a specific focus on supporting a resilient, sustainable and inclusive long-term growth.

Key Questions Addressed

- How can Türkiye make the transition to a CE with minimal negative or even positive impacts on growth, jobs and GHG emissions?
- What does an effective policy package for CE transition look like?
- How will the EU's and Türkiye's CE policies affect trade?
- Which economic sectors should Türkiye prioritize for the CE transition?
- How can these sectors be supported in the adoption of circular business models?

Main Agencies and Partners

- Strategy and Budget Office of the Presidency (SBO)
- Ministry of Industry and Technology, Ministry of Trade (MoT)
- Ministry of Environment, Urbanization and Climate Change (MoEUCC).

Key Activities

CGE Model:

- Costs of different CE policy bundles and their impacts on primary/secondary material use and CO₂ emissions
- Reductions of material use by up to 14 percent possibly by 2030 (compared to baseline)

Trade Analysis:

- Impact of EU CE policies on Türkiye's industry
- GVC-CE analysis for two prioritized sectors: textiles and apparel, and automotive
- Recommendations for trade policy, human capital and supplier development, standards, and infrastructure

Prioritization of Industrial Sectors:

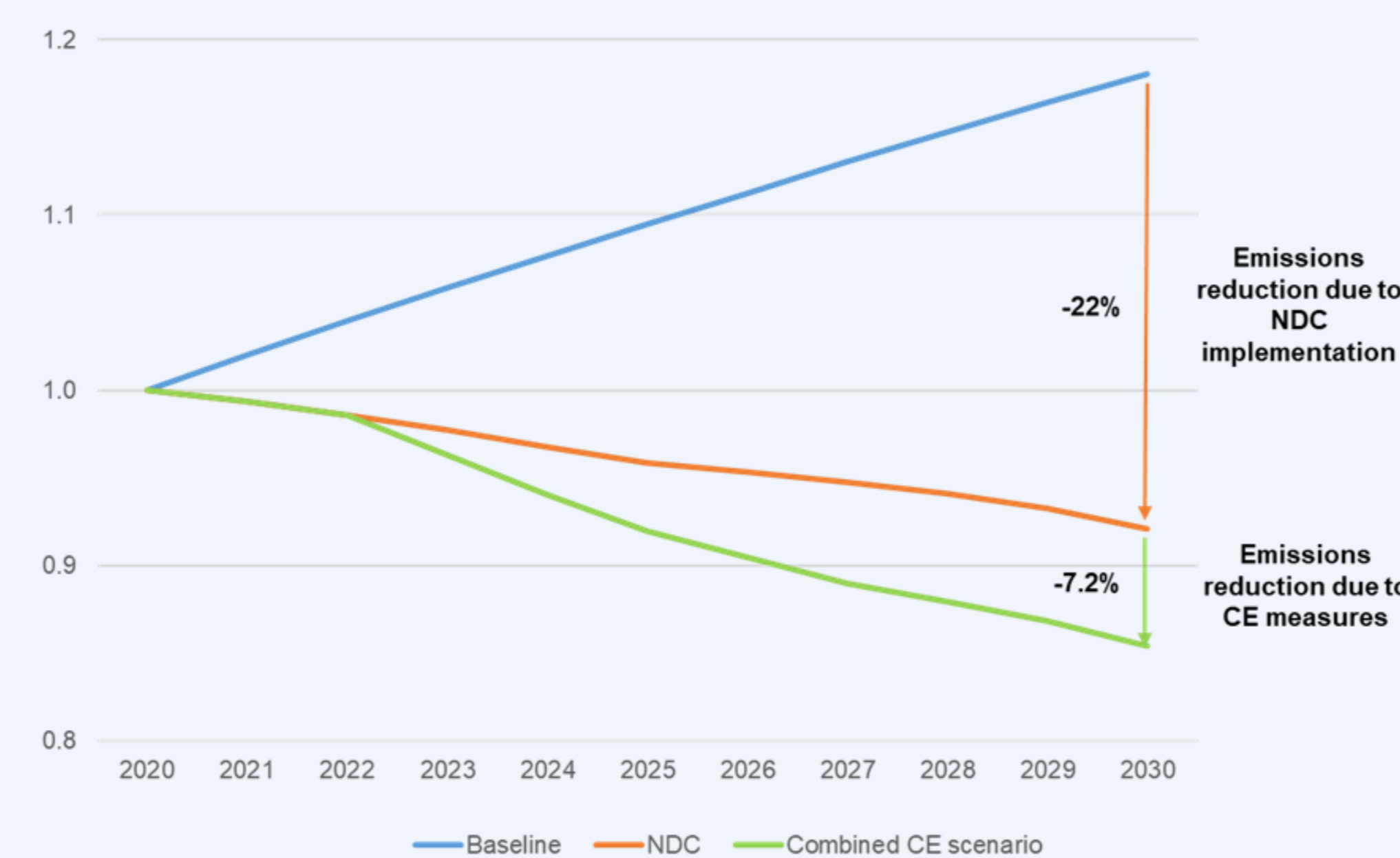
- Network analysis assessing sectors most critical for CE transition
- Recommendations for promoting targeted linkages between sectors, developing policies to support circular industries, and fostering private sector involvement

Outputs

- Paper 1: Circular Economy Transition in Türkiye: Impacts and Interactions (drafted)
- Paper 2: Türkiye's Circular Economy Transition in the EU's Global Value Chains Ecosystem (drafted)
- Paper 3: Building a Competitive Circular Economy: Prioritizing Industries for Accelerated Development in Türkiye (drafted)
- Summary Paper of the above (ongoing)

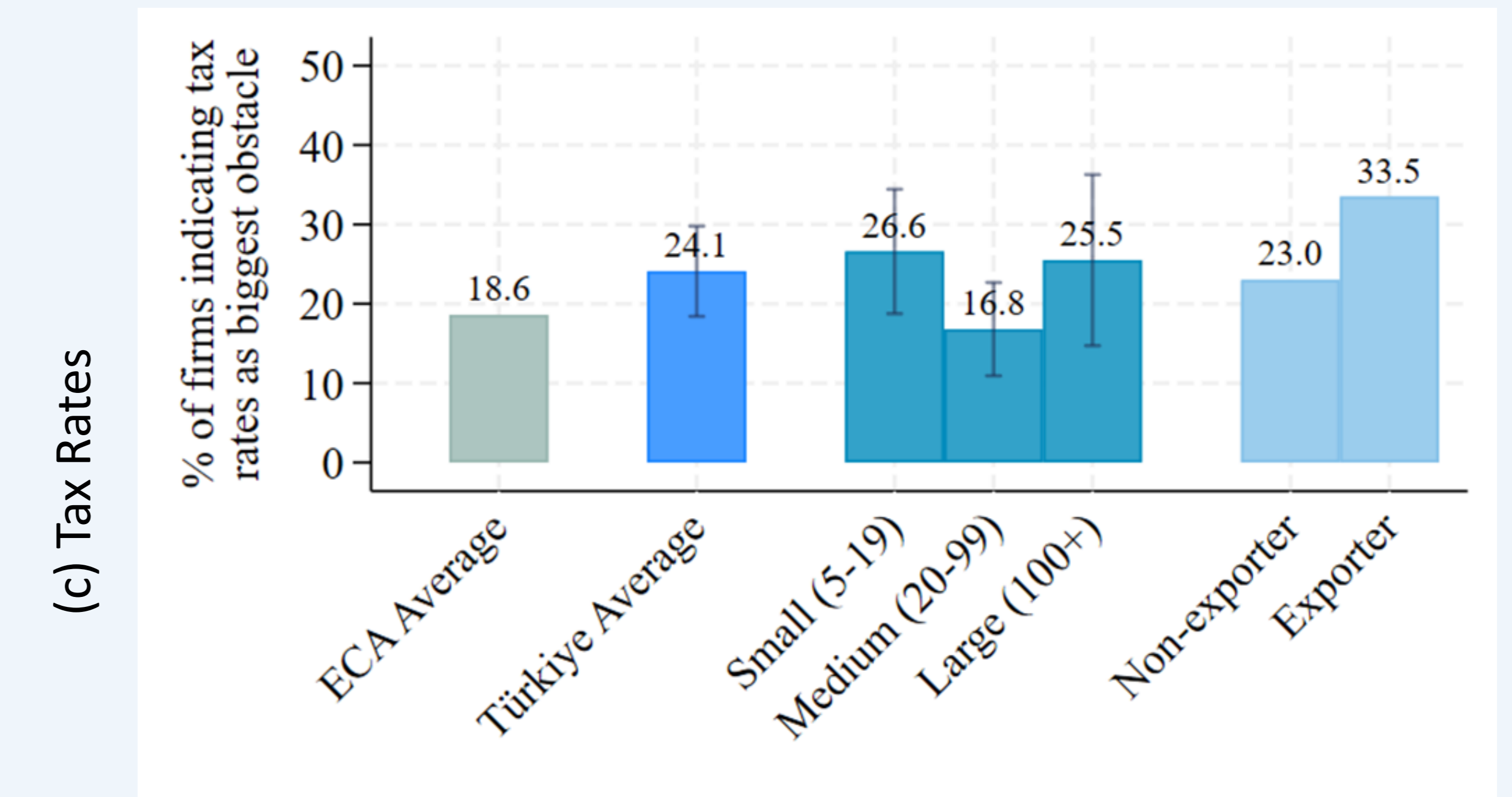
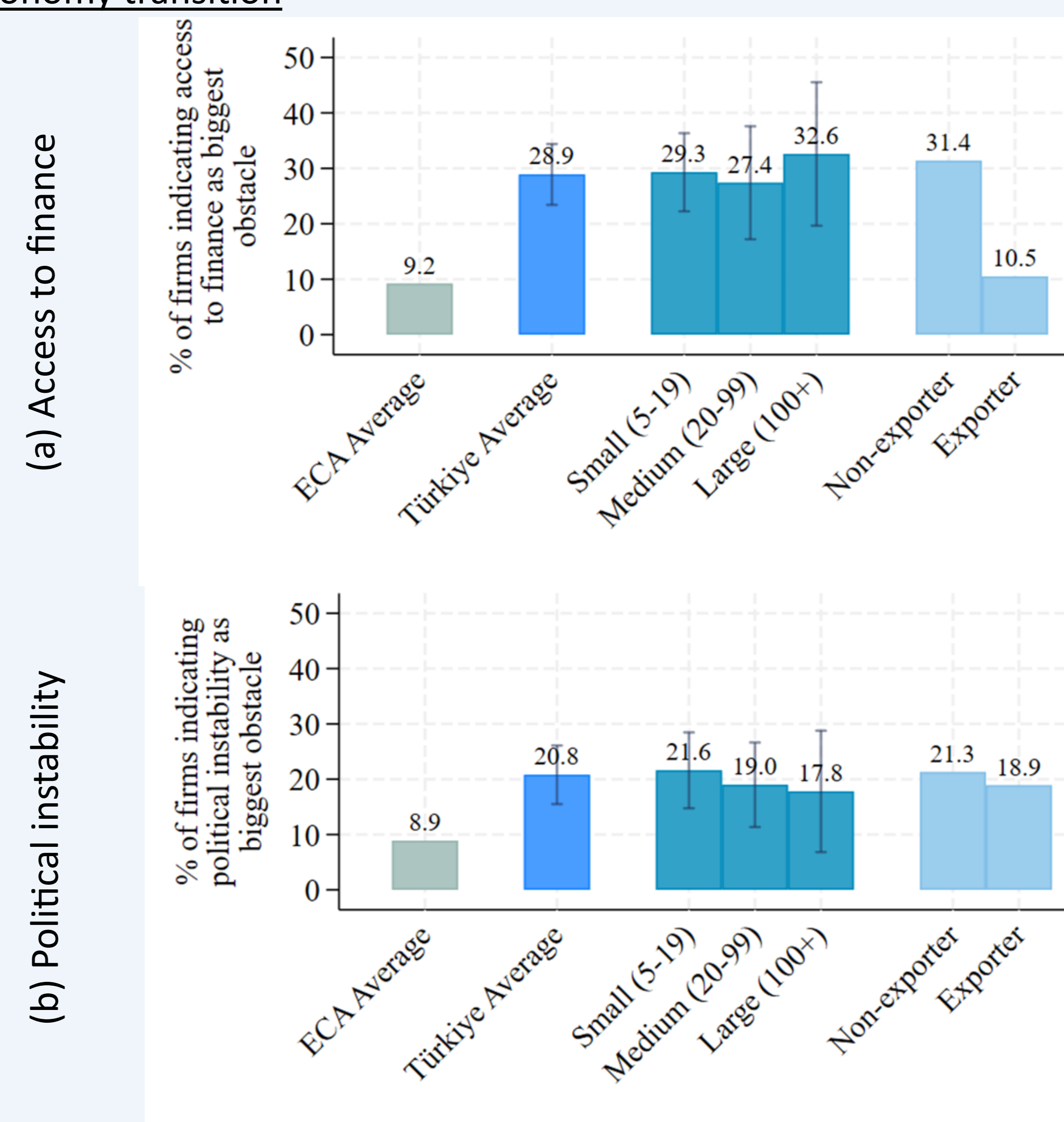
Some Selected Preliminary Results

Figure 1: Economy-wide CO₂ emissions from fossil fuels under different scenarios (2020=1)



Note: This graph shows how a bundle of circular economy measures can further decrease CO₂ emissions in Türkiye, in addition to CO₂ emissions reductions already achieved through the implementation of the Nationally Determined Contribution (NDC), Türkiye's commitment to the 2015 Paris Agreement.

Figure 2: Major obstacles identified by Türkiye's firms in the circular economy transition



Note: This figure shows the percent of firms that identify access or the cost of finance (panel a), political instability (panel b), or tax rates (panel c) as a "major" or "very severe" obstacle. The panels display average shares across surveyed ECA economies, in Türkiye, and within firm size groups and export exposure in Türkiye. 95% confidence intervals are included whenever inference is possible.

Figure 3: A strategic blueprint for the transition to a competitive circular economy in Türkiye

The table presents a strategic blueprint for the transition to a competitive circular economy in Türkiye with examples from the six sectors with the highest circular economy potential (chemicals, non-metal minerals, metal basics, wood, mining, and plastics). Examples of these sectors' prospects are given for four central pillars: (i) Strengthening CE Inter-Industry Relationships; (ii) Adoption of CE Practices and Technology; (iii) Sustainable CE Regulations; and (iv) Promotion of Fair Competition in the CE Market. Each sector's prospects within these pillars are gauged on a green-yellow-red scale, representing the potential for engagement and value creation within the context of associated risks and mitigating economic potential gaps. The table only provides hypothetical examples with a macroscopic lens.

Hypothetical sector examples for CE transition	Strengthening CE Inter-Industry Relationships	Adoption of CE Practices and Technology	Sustainable CE Regulations	Promotion of Fair Competition in the CE Market
Green (Lower risk to engage CE practices, Lower efforts to create CE value)	Collaborative platforms in the chemical and pharmaceutical industry	Public-private incentives in the mining and quarrying sector	Product stewardship measures in the non-metal mineral industry	Fair market regulations in the fabricated metal industry
Yellow (Moderate risk to engage in CE practices, Moderate efforts to create CE value)	Symbiotic relationships in the wood and forestry industry	Education and training programs in the plastics industry	Sustainability standards in mining and quarrying	Fair access to secondary materials in the non-metal minerals industry
Red (Higher risk to engage in CE practices, Higher efforts to create CE value)	Resource and information flow mechanisms in the plastics industry	R&D initiatives in the chemical and pharmaceutical industry	Waste reduction measures in mining and quarrying	Consumer education and protection policies in the wood and forestry industry