Methodological note

This analysis was conducted using the OCDS data published by SERCOP in their open contracting portal and downloaded on July 5, 2022, from their API. The dataset includes 1,923,492 contracting procedures (including individual purchase orders from framework agreements) from 2015 to June 2022. The publication covers around 80% of procedures in Ecuador (see the publication policy), for instance Regimen Especial procedures related to Empresas Públicas, mercantiles y subsidiarias, Instituciones financieras y Seguros del Estado and Sectores Estratégicos are not yet disclosed in the publication.

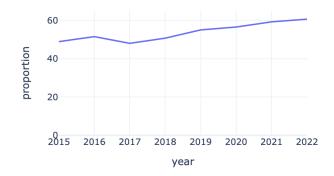
The analysis explores the variation in key indicators related to measuring how competition, and the use of Regimen Especial procedures has changed from 2015 (prior to the Open Government National Action Plan commitment) to the first semester of 2022 (six months after the publication of the open data platform platform). The analysis captures changes over time. It is not a causal estimation of the implementation of the platform. For the analysis, purchase orders from framework agreements were excluded (including both competitive and direct frameworks). In total, in the analyzed period there were 1,607,636 purchase orders related to 974 framework agreements, and 307,279 procedures using other methods. To report the metrics, the dataset was segmented in two periods: 2015 to 2018 and 2019 to the first semester of 2022.

The full analysis can be found <u>here</u>. The indicators reported on the story include:

Change in the proportion of competitive procedures

The proportion of open procedures increased from 50.7% in 2018 to 60.6% in 2022 (June). This represents an increase of 10 percentage points. Comparing the two periods, between 2015 and 2018 49% of the procedures were open and from 2019 and June 2022 57% were open. This difference in the proportions is statistically significant (two tailed Z-score test) and different from zero.

Proportion of open procedures by year



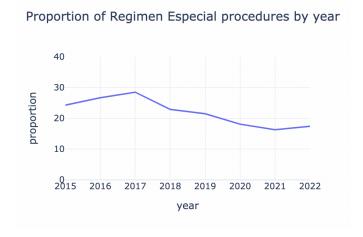


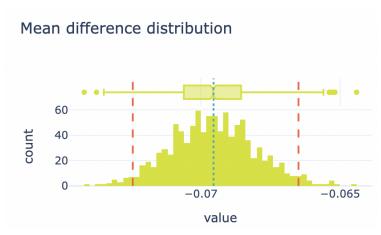
Results from bootstrap sample analysis. The difference in the proportions between the two periods is different from zero and ranges between 8 to 7.5 percentage points.

Change in the use of Special Regime

The proportion of special regime procedures decreased 23% in 2018 to 17.4% in 2022 (June)¹. This represents a decrease of 5.6 percentage points. Comparing the two periods, between 2015 and 2018 25% of the procedures used special regime and it dropped to 18.5% from 2019 June 2022. This difference in the proportions is statistically significant (two tailed Z-score test) and different from zero.

¹ Special Regime procedures related to Empresas Públicas, mercantiles y subsidiarias, Instituciones financieras y Seguros del Estado and Sectores Estratégicos are not included in the analysis since these procedures are not published in the OCDS dataset.



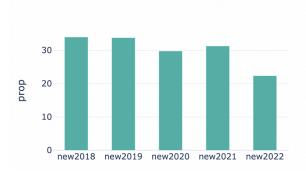


Results from bootstrap sample analysis. The difference in the proportions between the two periods is different from zero and ranges between 7.2 and 6.6 percentage points.

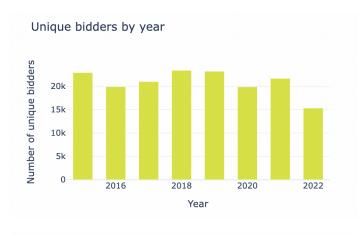
Number of bidders by year

To calculate the proportion of new bidders by year, we consider new bidders, those who hadn't participated in the market in the previous two years. Around a third of the bidders between 2018 and 2021 were new, however the proportion decreased in 2022 to 22%.





| Year | Total procedures | Unique bidders |
|------|------------------|----------------|
| 2015 | 51,199 | 22,878 |
| 2016 | 43,239 | 19,875 |
| 2017 | 43,480 | 20,970 |
| 2018 | 46,993 | 23,371 |
| 2019 | 38,642 | 23,160 |
| 2020 | 27,996 | 19,830 |
| 2021 | 36,482 | 21,640 |
| 2022 | 18,335 | 15,298 |

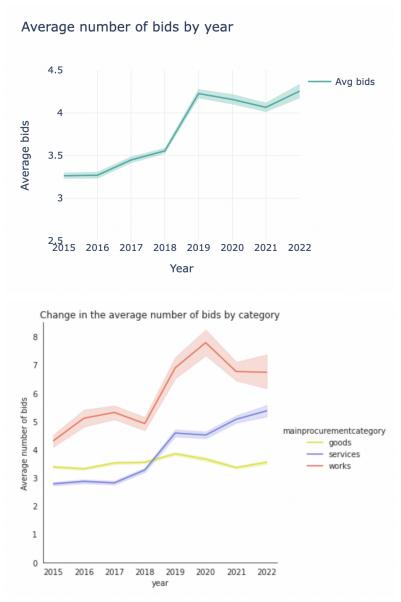




Change in the average number of bids in open procedures

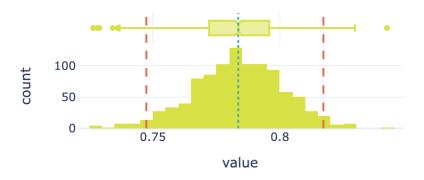
To calculate the average number of bidders we only considered open procedures (162,306). The average number of bids in open procedures increased from 3.5 in 2018 to 4.2 in 2022

(up to June). Between 2015 and 2018 the average was 3.2 and it increased to 4.2 after 2019. The plot below shows the upward trend in the average number of bids. Analyzing by procurement category works related tenders saw an increase, from 4.3 in 2015 to 6.7 in 2022, while services procedures increased from 2.7 to 5.3.



The mean difference between the two periods is statistically significant (t-test) and different from zero.

Mean difference distribution



Results from bootstrap sample analysis. The difference in the mean difference between the two periods is different from zero and ranges between 0.7 and 0.8.

In addition, we calculated the change in the average number of tenderers in specific markets. To segment the markets, we used the level 2 of classification (2 digits). Since there are tenders with multiple items and there is no variable to identify if the bidders bid for all or some items, tenders with items from different categories are excluded (1498 procedures). In total 52 markets were analyzed. Markets with less than 50 procedures in the period were not considered (see <u>table with full results</u>)

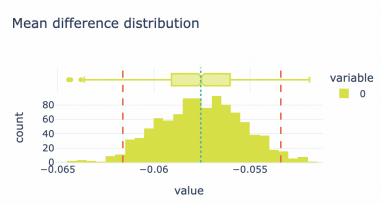
- In 42 of the 52 markets the average number of tenderers increased after 2019. In 29 of those markets the difference is statistically significant.
- In Servicios Auxiliares, which includes categories such as cleaning services or security, the average number of bidders increased from 4.3 to 9.3.
- In 6 markets the average number of tenderers increased at least in 1

The increase in competition could be due to a higher number of unique bidders participating in the market or bidders participating in more procedures.

Change in the proportion of single bid tenders

The proportion of single bid tenders in open procedures shows a decreasing trend since 2015. The proportion decreased from 29% in 2015 to 20.5% in June 2022. Comparing the two periods it changed from 26% between 2015 and 2018 to 20.6% between 2019 and 2022. The difference is statistically significant (two tailed Z-score test).





Results from bootstrap sample analysis. The difference in the proportions between the two periods is different from zero and ranges between 6 and 5.5 percentage points.