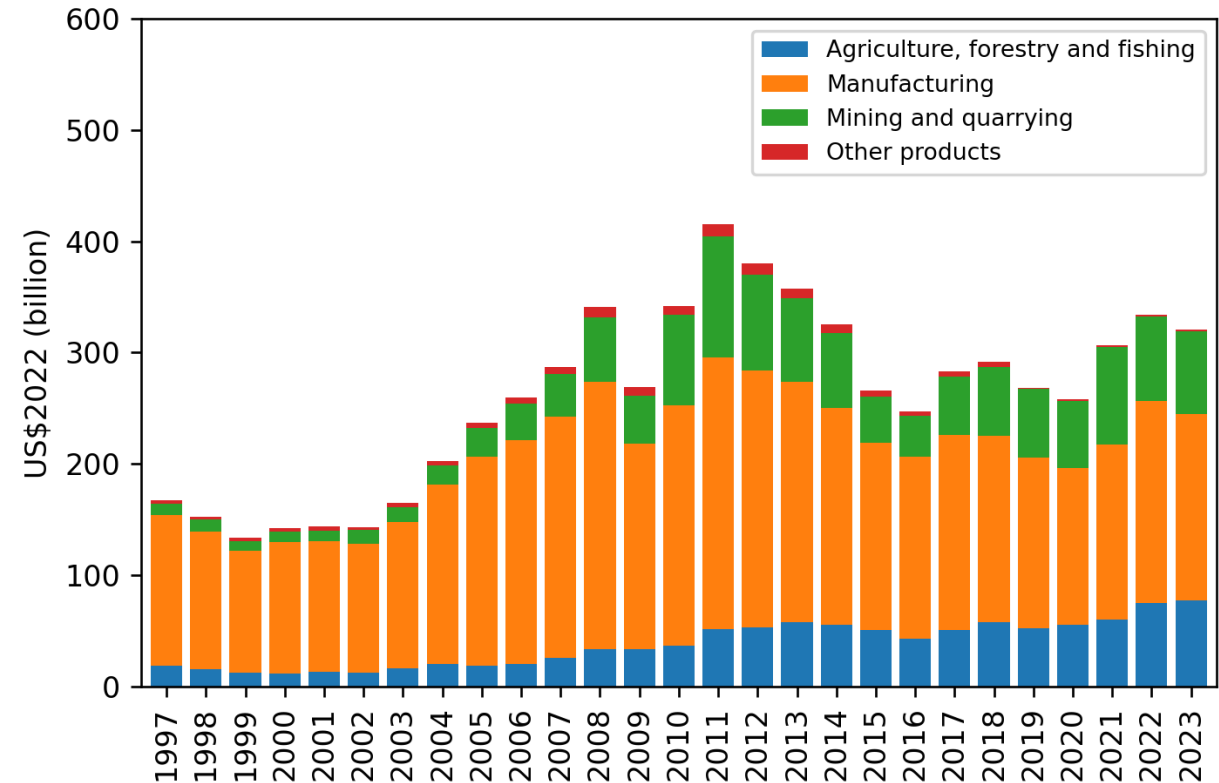


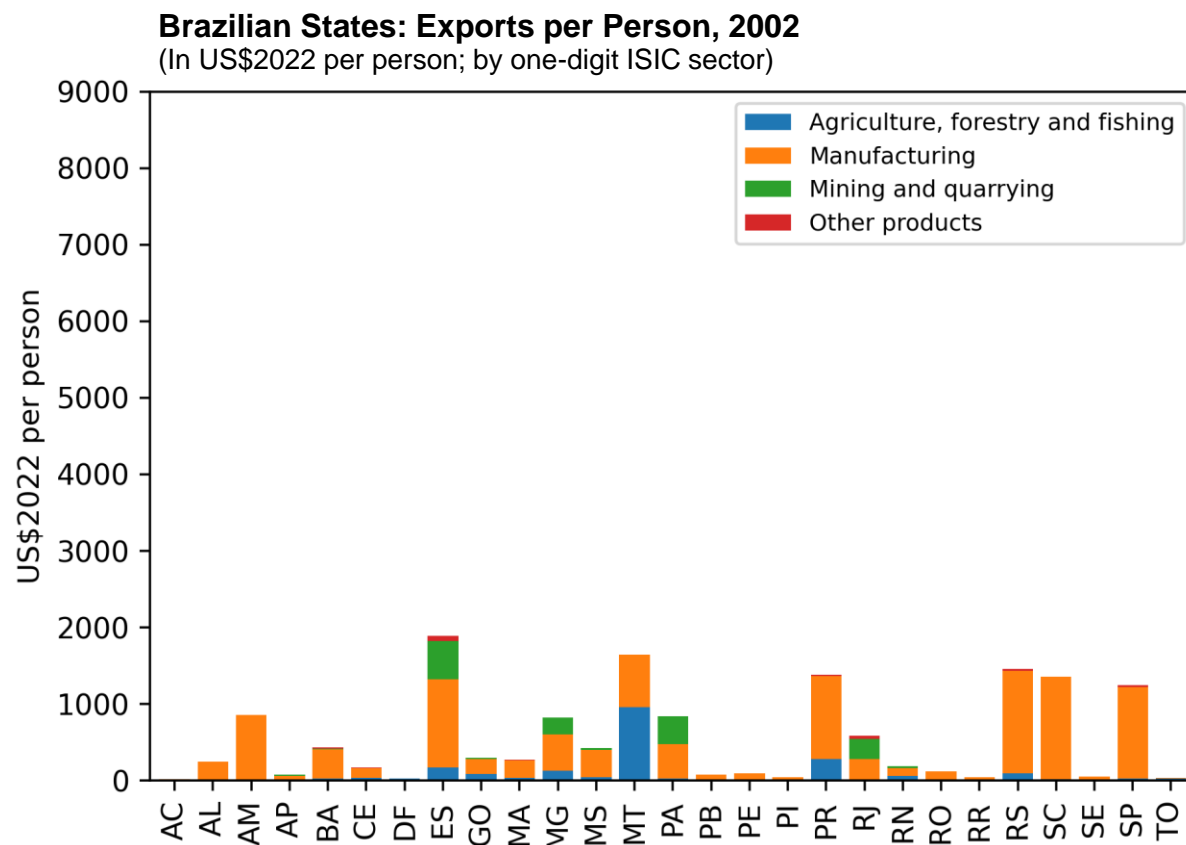
- In aggregate terms, real exports are about 3x from larger than 20 years ago but about 25% down from the 2010 peak.
- At a macro-level (1-digit industry) the cycle is a combination of a continuous expansion of agro; a large cycle of oil; and a volatile manufacturing sector



Sources: Own calculations with MDIC, IBGE and Fred data.

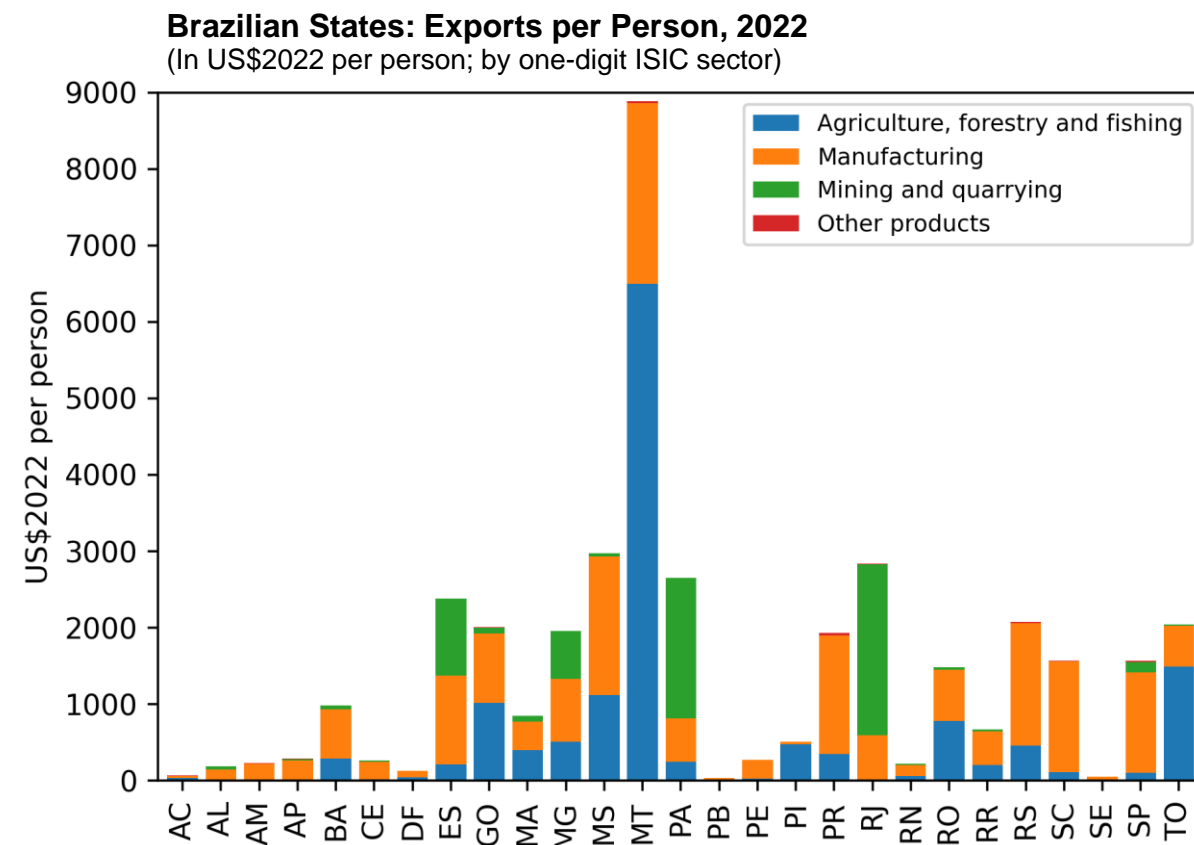
How does this look across states?

Average levels of exports increased for most states...



Sources: Own calculations with MDIC, IBGE and Fred data.

...and while the common story about agriculture does matter, there are some complementarities between agriculture and manufacturing at play...



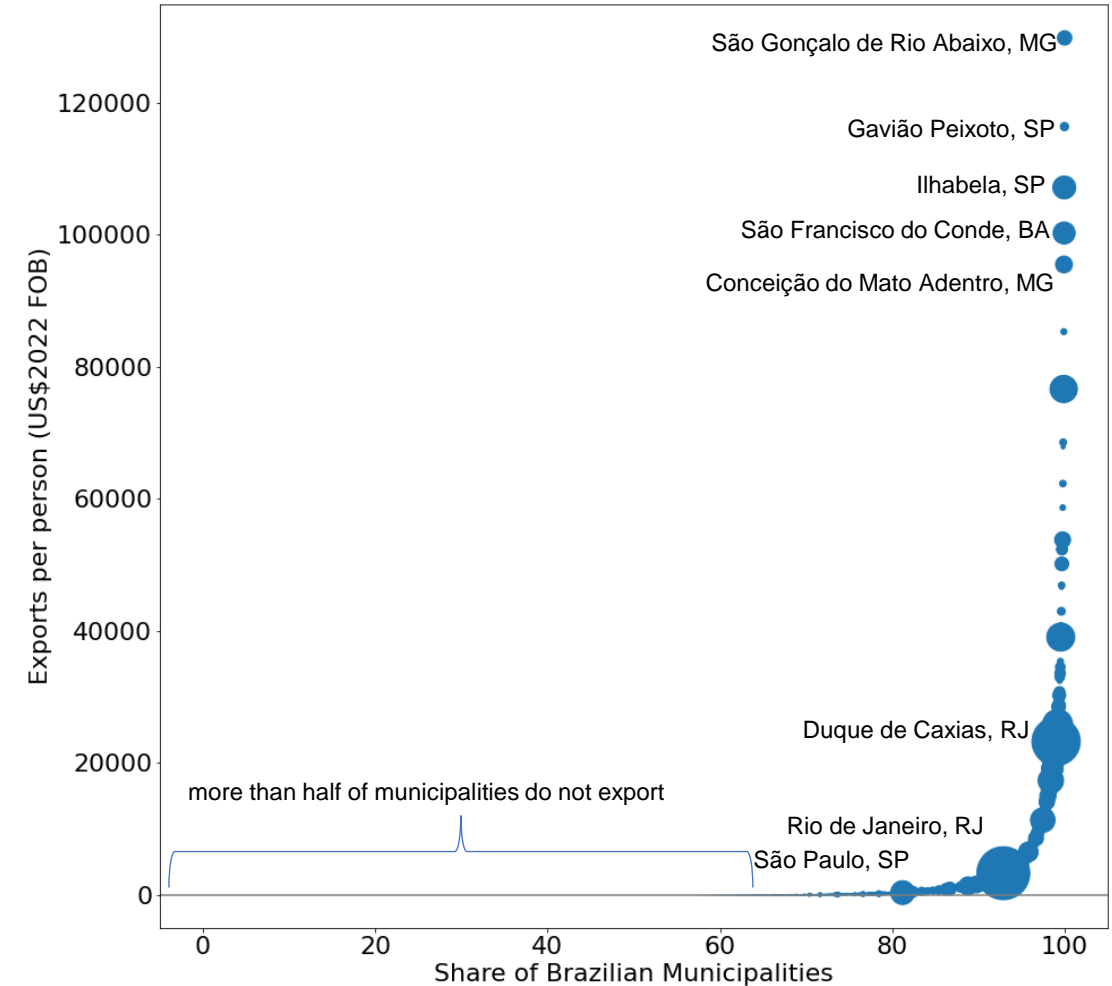
Sources: Own calculations with MDIC, IBGE and Fred data.

Local exposure to exports

- More than half of Brazilian municipalities did not export in 2022
- Among the top 20 largest cities in Brazil, only Rio de Janeiro-RJ (\$3,303), Curitiba-PR (\$1,367), Guarulhos-SP (\$1,591), and São Luís-MA (\$1,838) have per capita exports larger than \$1,000.
- However, some smaller municipalities have very high exposure to exports.

Brazilian Municipalities: Exports per Person, 2022

(In US\$2022 per person; bubbles are proportional to total municipal exports)



Sources: Own calculations with MDIC, IBGE and Fred data.

Local exposure to exports

**São Gonçalo de Rio Abaixo, MG
(Vale *Brucutu* Mining Site)**

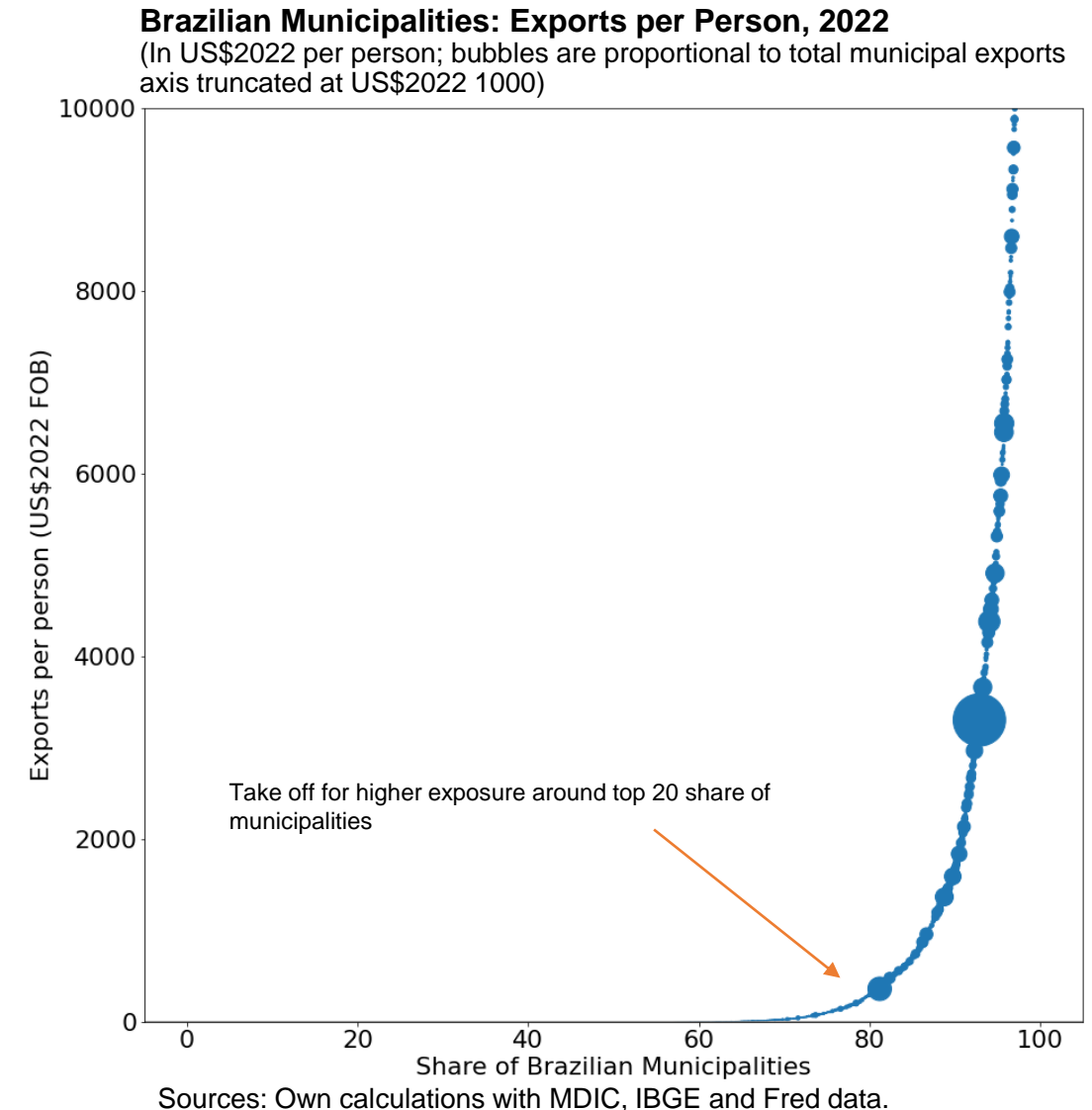


**Gavião Peixoto, SP
(Embraer Production Plant)**



Local exposure to exports... Zooming in

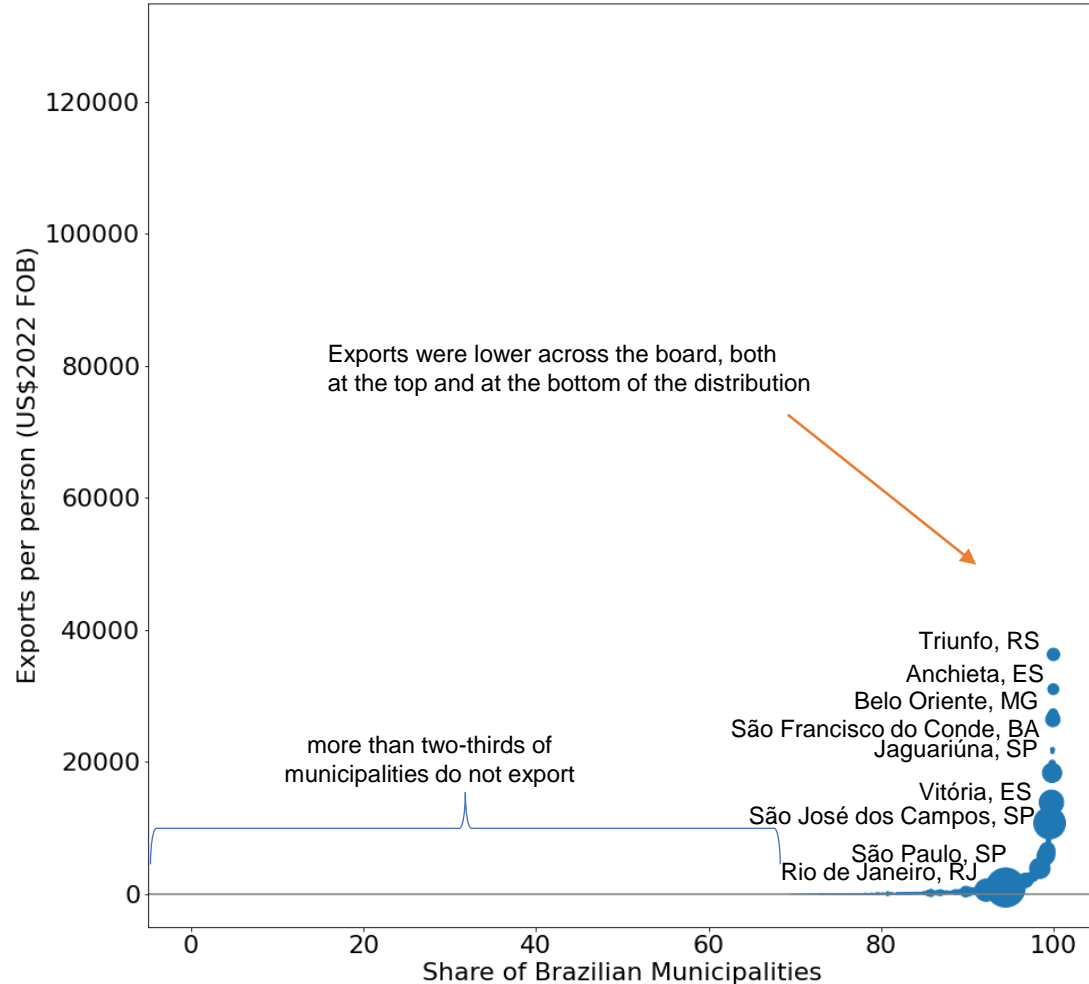
- In 2022, the turning point seems to be around percentile 80...
- ...in other words, 20 percent of Brazilian municipalities were more exposed to exports.



Going back 20 years, total exposure is lower and the take off threshold was higher

Brazilian Municipalities: Exports per Person, 2002

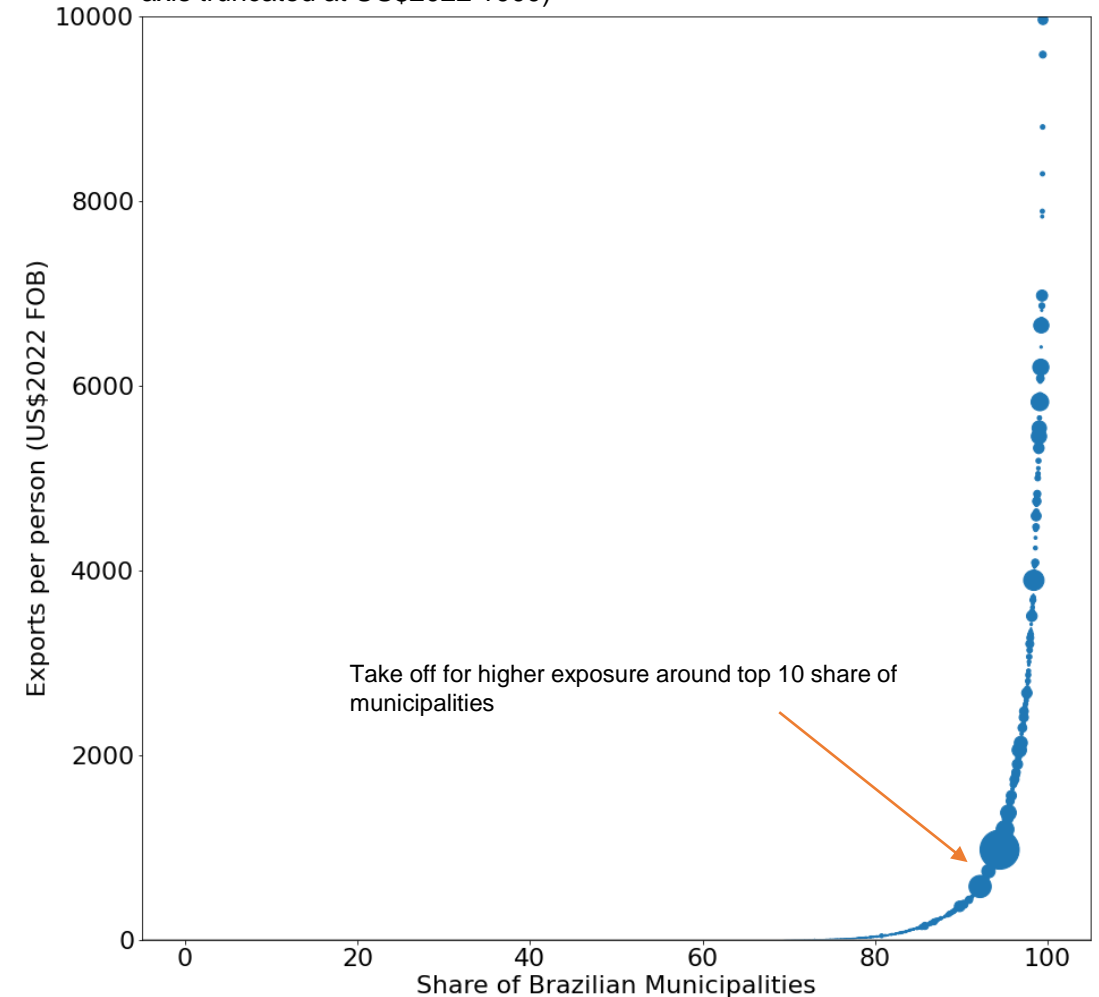
(In US\$2022 per person; bubbles are proportional to total municipal exports)



Sources: Own calculations with MDIC, IBGE and Fred data.

Brazilian Municipalities: Exports per Person, 2002

(In US\$2022 per person; bubbles are proportional to total municipal exports; axis truncated at US\$2022 1000)

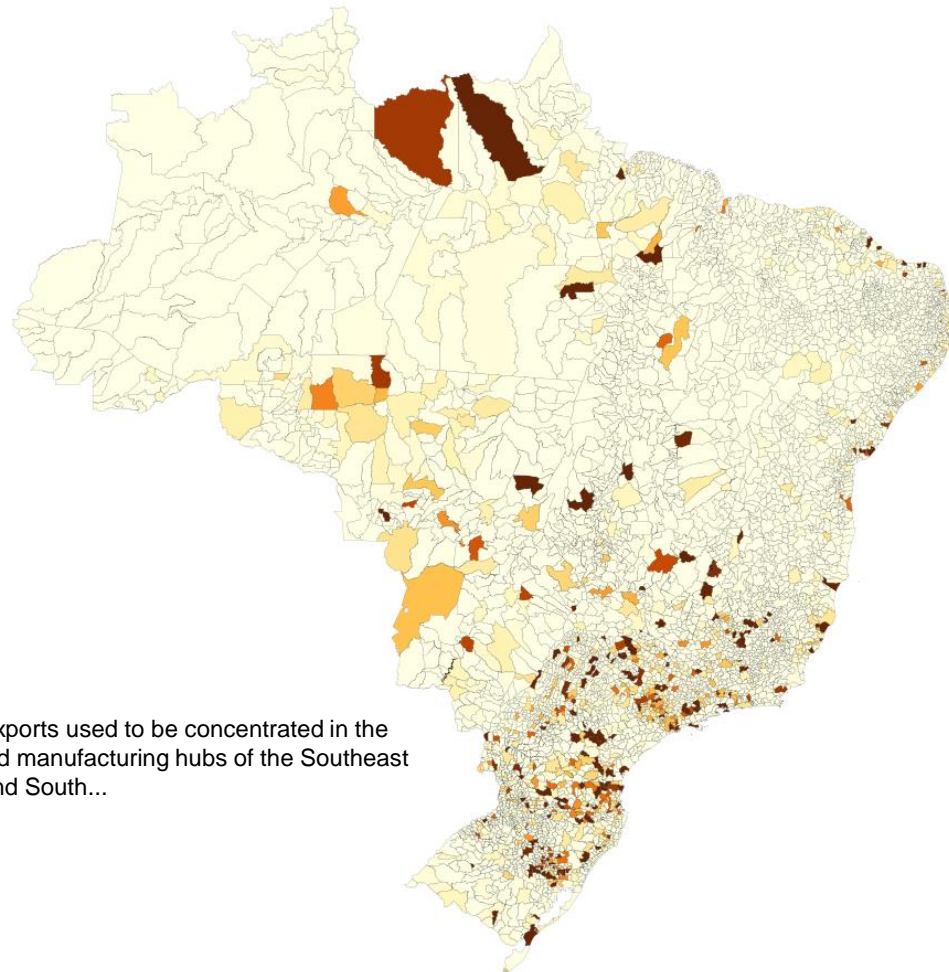


Sources: Own calculations with MDIC, IBGE and Fred data.

Looking at the distribution over space, one can see the takeoff of the countryside

Brazilian Municipalities: Exports per Person, 2002

(In US\$2022 per person; bubbles are proportional to total municipal exports; distribution truncated at US\$2022 2500+)

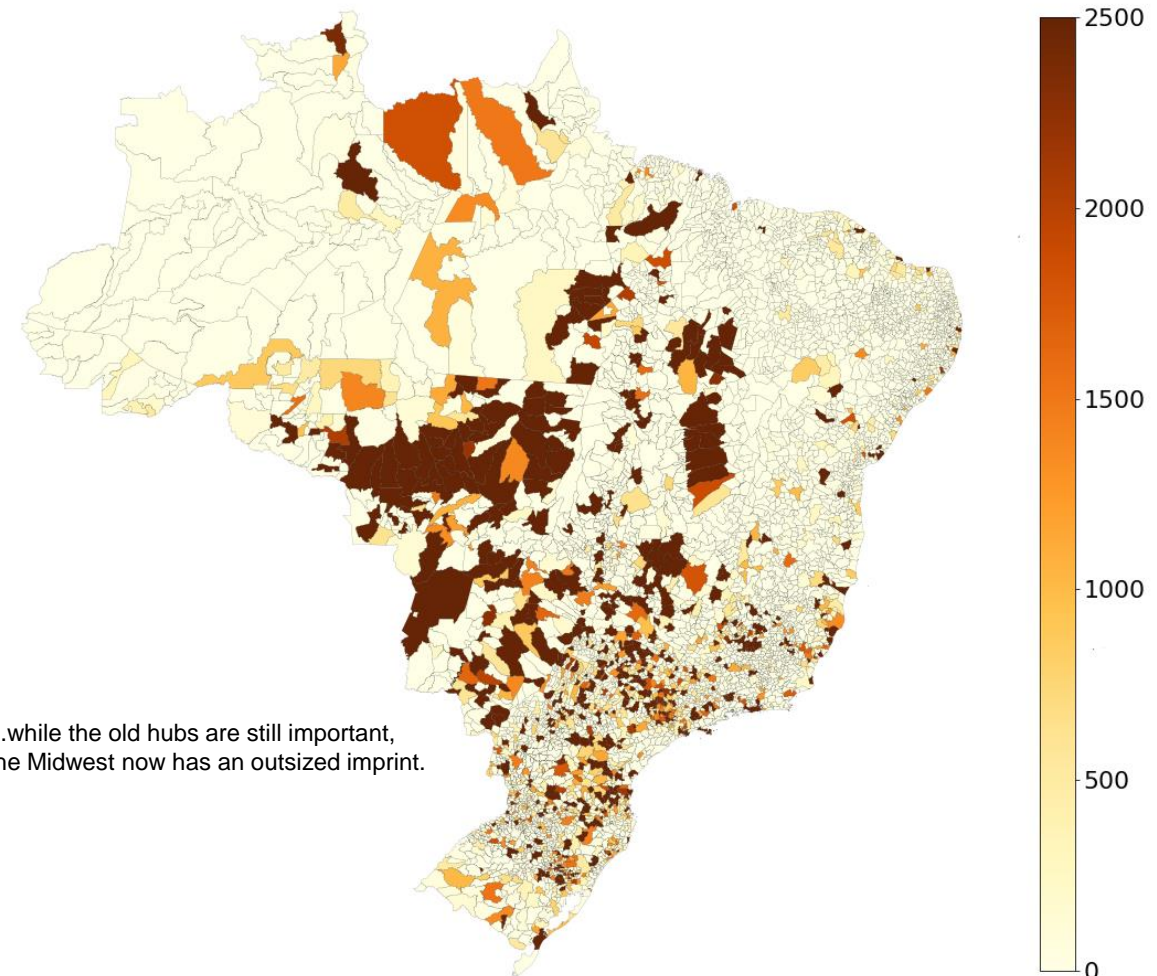


Exports used to be concentrated in the old manufacturing hubs of the Southeast and South...

Sources: Own calculations with MDIC, IBGE and Fred data.

Brazilian Municipalities: Exports per Person, 2022

(In US\$2022 per person; bubbles are proportional to total municipal exports; distribution truncated at US\$2022 2500+)



...while the old hubs are still important, the Midwest now has an outsized imprint.

Sources: Own calculations with MDIC, IBGE and Fred data.