



IMF Work on Industrial Policy and Green Industrial Subsidies

WTO TESSD INFORMAL WORKING GROUP
JUNE 17, 2024

OLIVER EXTON

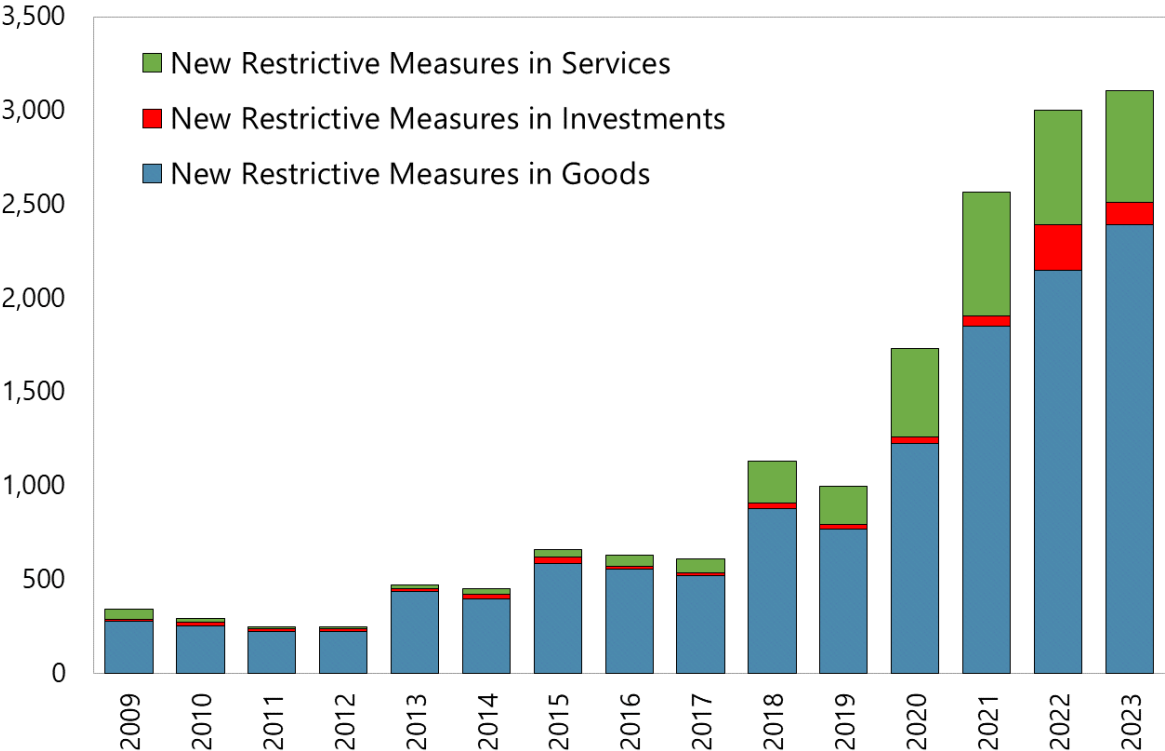
IMF Strategy, Policy and Review Department

Disclaimer: The views expressed in this presentation are those of the IMF staff and do not necessarily represent the views of the IMF's Executive Board.

The use of industrial policy has risen in recent years

Working definition of Industrial Policy: Any targeted government intervention aimed at developing or supporting specific domestic firms, industries, or economic activities to achieve national economic or non-economic (such as security, social, or environmental) objectives.

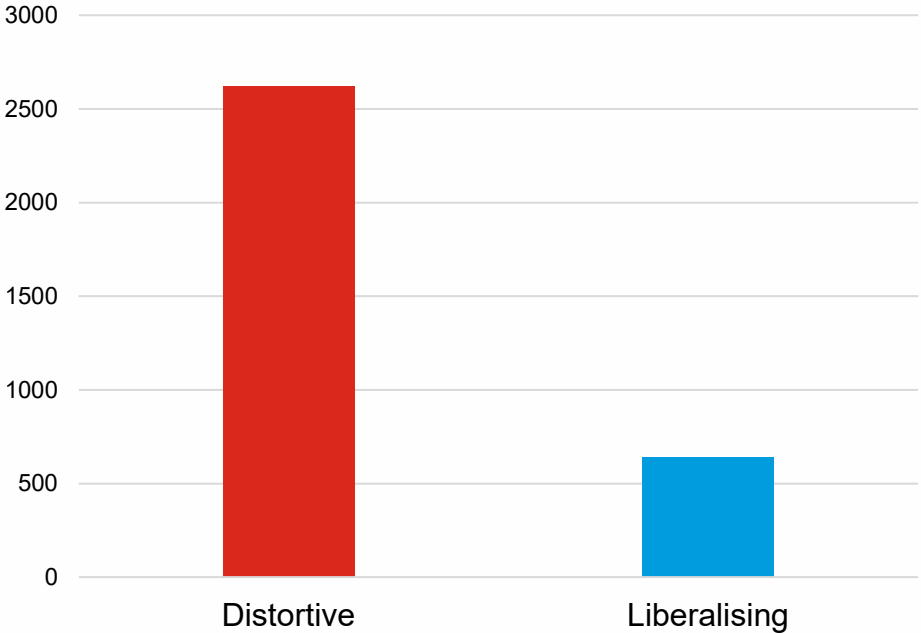
Number of New Restrictive Trade Measures



Note: Compilation process introduces judgement in some borderline cases and judgement-based approaches reduce comparability.
Source Global Trade Alert. Data accessed March 6, 2024; includes adjustment for reporting lags.

New Industrial Policy Measures

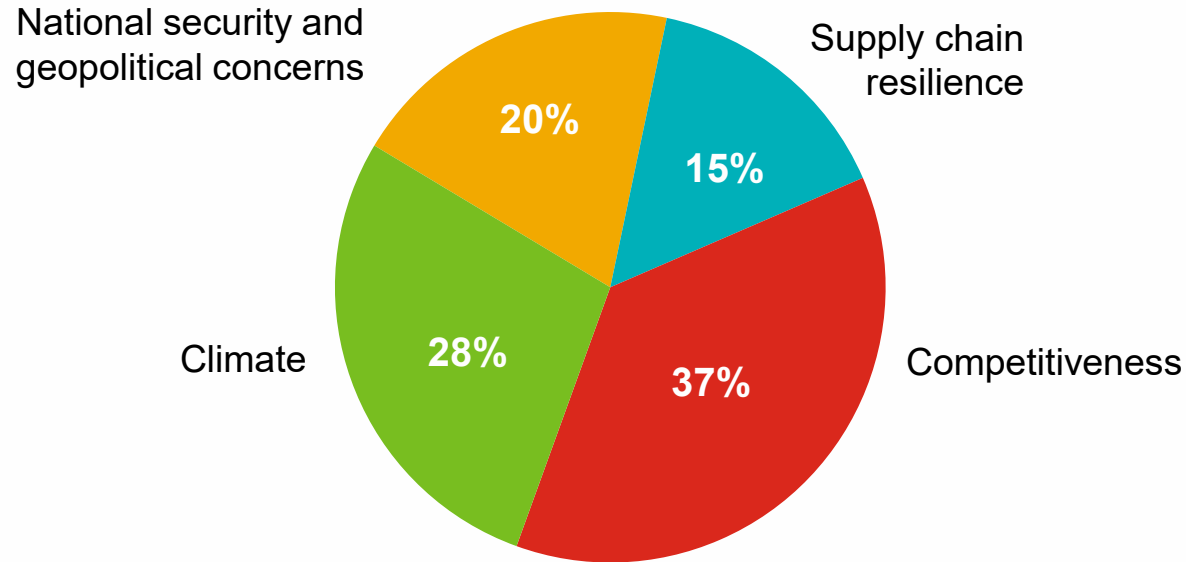
(based on implemented measures in 2023; sample of 70 countries)



Note: Compilation process introduces judgement in some borderline cases and judgement-based approaches reduce comparability.
Source: Staff calculations based on Evenett, Jakubik, Martin and Ruta (2024)

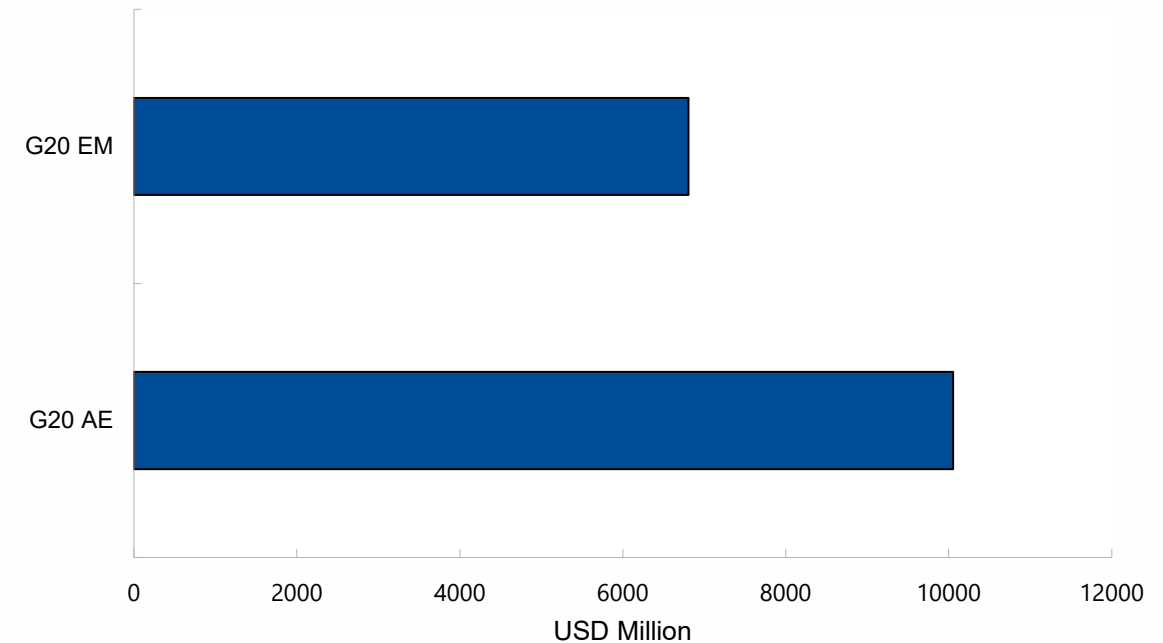
Climate change mitigation is an important motive for recent industrial policies

Industrial Policies, by Motive
(share of all measures, 2023)



Note: Motives based on official sources, available for a subset of measures. For measures with multiple motives, each motive is given equal weight. Set of measures classified as trade distortive. Compilation process introduces judgement in some borderline cases and judgement-based approaches reduce comparability.
Source: IMF staff calculations based on Evenett, Jakubik, Martin and Ruta (2024)

Value of Climate-related Subsidies
(Aggregate Subsidy Values with a Climate Change Motive averaged by Country Grouping, 2023)

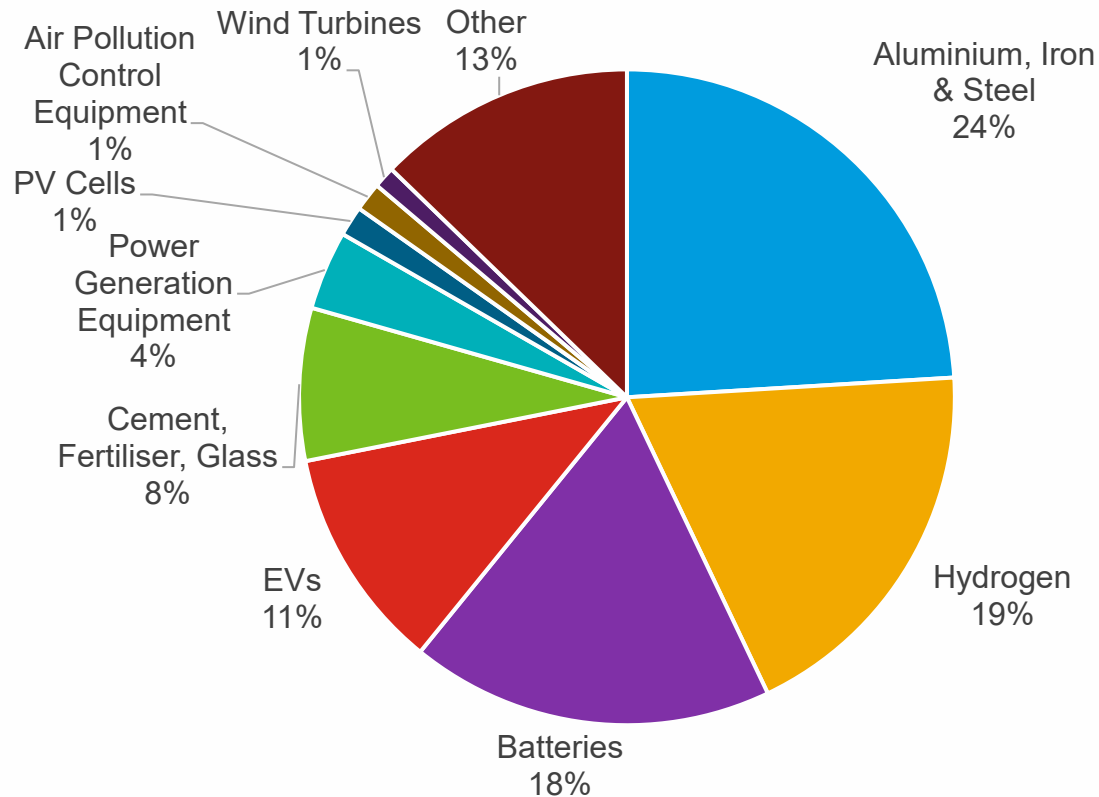


Note: Potential cross-country differences in transparency, data availability and policy preferences should be considered when interpreting this data. Compilation process introduces judgement in some borderline cases and judgement-based approaches reduce comparability.
Source: IMF staff calculations based on Evenett, Jakubik, Martin and Ruta (2024)

Green subsidies target a variety of products and use a range of instruments

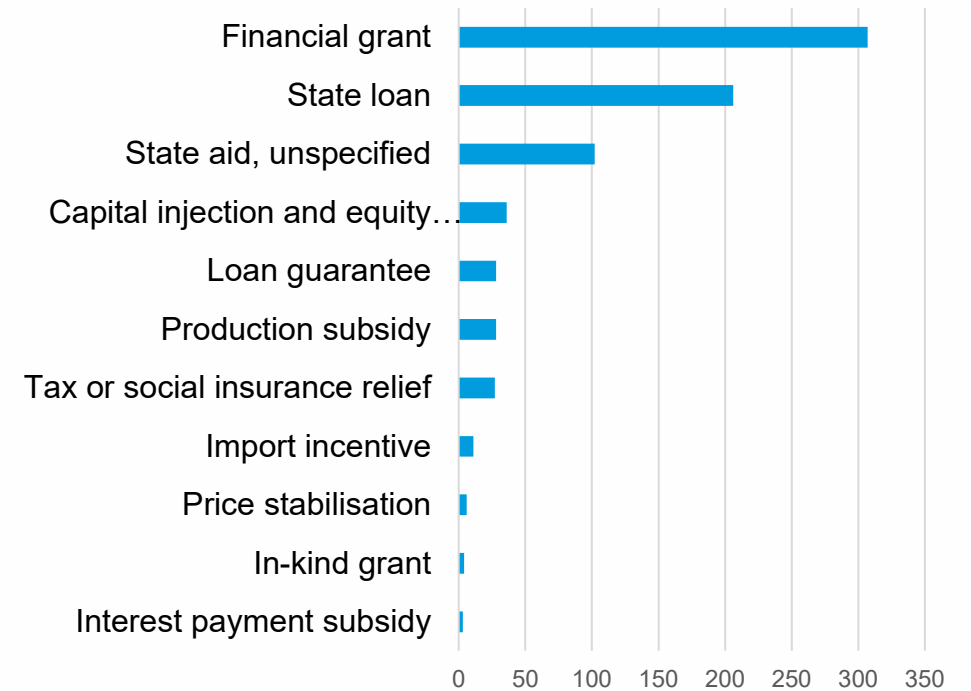
Green Subsidies, by Product

(share of measures classified as subsidy and with climate change mitigation motive, 2023)



Green Subsidies, by Instrument

(number of measures classified as subsidy and with climate change mitigation motive, 2023)



Note: Product category based on official sources, available for a subset of measures. Compilation process introduces judgement in some borderline cases and judgement-based approaches reduce comparability.

Source: IMF staff calculations based on Evenett, Jakubik, Martin and Ruta (2024)

Note: Intervention type based on official sources. Compilation process introduces judgement in some borderline cases and judgement-based approaches reduce comparability.

Source: IMF staff calculations based on Evenett, Jakubik, Martin and Ruta (2024)

Guidance to IMF staff on industrial policy

When to cover Industrial Policy in IMF surveillance

- ✓ **Macro-criticality.** Staff are required to cover industrial policy where they are assessed to significantly influence present or prospective balance of payments or domestic stability.
- ✓ **Significant cross-border spillovers.** Staff should discuss spillover effects of policies that have a significant impact on other members or the International Monetary System.

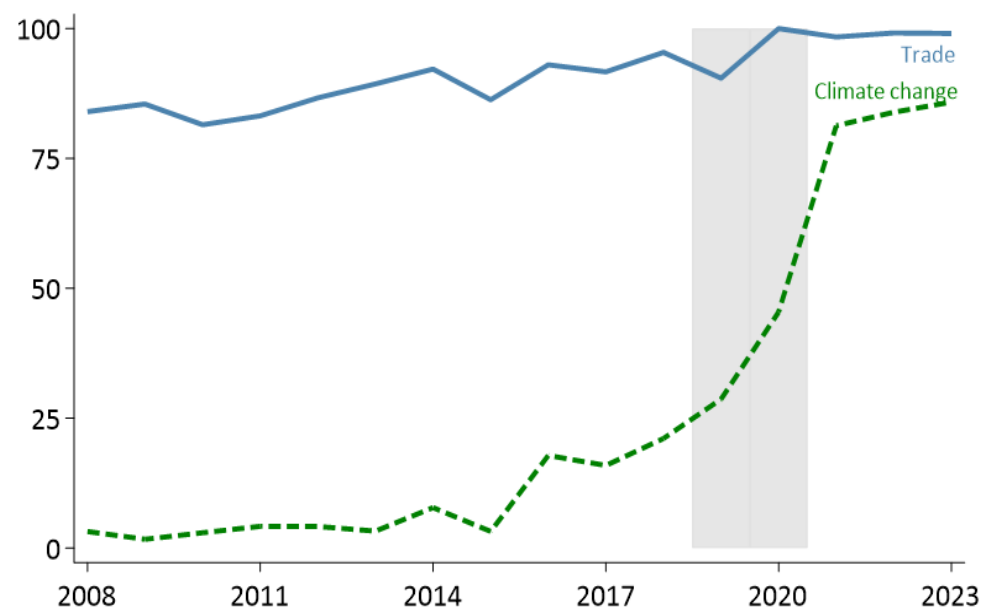
How to cover Industrial Policy in IMF surveillance

Justification	• Does it aim to address macro-critical market failures? • Is industrial policy the best way to achieve these objectives?
Design	• What is the best choice of policy instruments? • Is there a robust governance framework?
Cost-Benefit Assessment	• What are the expected net benefits (ST and LT) for the country? • Are there potential cross-border spillovers and spillbacks?
Implementation	• Is the industrial policy discriminatory? • Is it consistent with WTO and other international legal commitments?

Climate change and climate-related industrial policy is increasingly covered in IMF Article IV Reports

Coverage of Trade and Climate Change in IMF Article IV reports

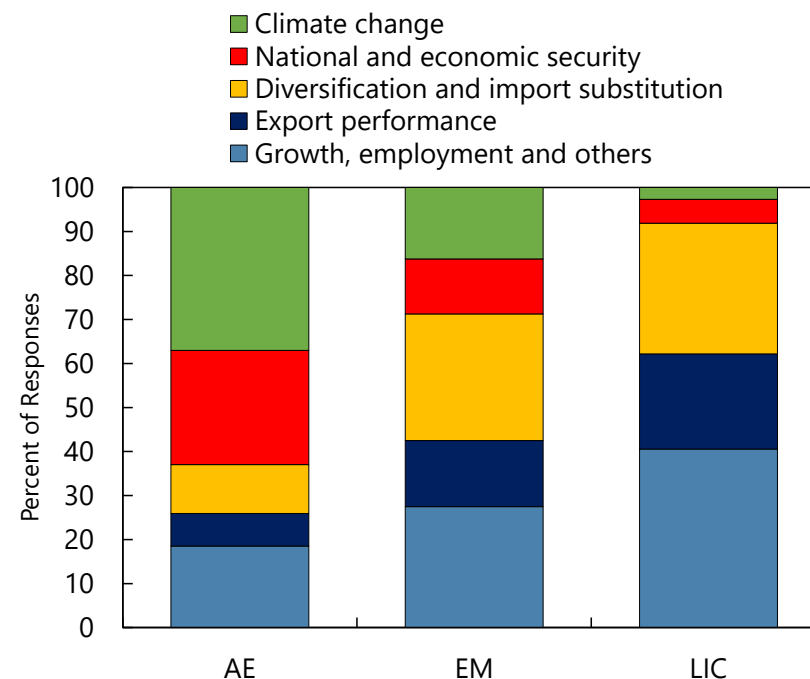
(Share of AIV Reports with at Least One Mention)



Note: IMF staff based on initial text analysis of AIV. Trade-related keywords are those used in IMF Trade Review (2023).

Source: Exton and Sztajerowska (Forthcoming).

IMF Staff Survey: Macro-critical Industrial Policies (percent of responses, by Motive, 2023)



1/ Each country can have multiple justifications.

Specific guidance for green industrial policy

Green Industrial Policies can be an important tool to address market failures and promote the green transition where market prices may not account for environmental or climate externalities.

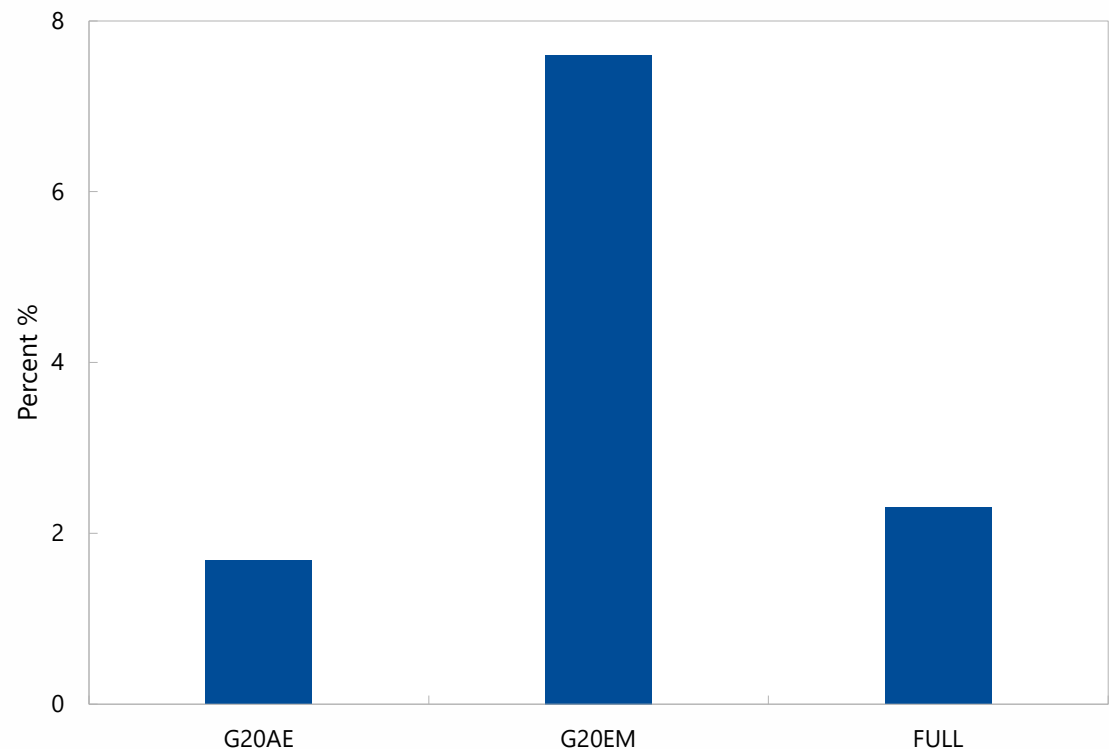
A holistic assessment requires that the design of green industrial policy...

- Complements decarbonization policies (carbon pricing)
- Minimizes adverse spillovers
- Ensures support is time-bound, cost-effective, and transparent
- Uses appropriate institutional framework to minimize implementation risks
- Promotes international coordination to improve effectiveness and efficiency

Trade spillovers of domestic subsidies

Domestic subsidies can have significant effects on international trade flows.

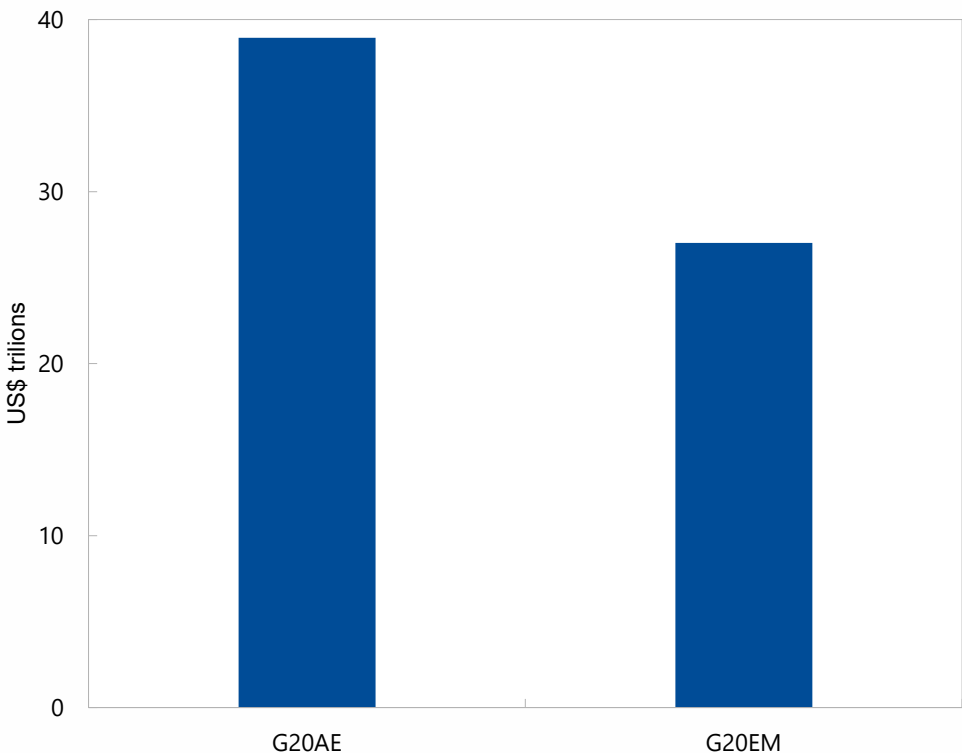
Effects of subsidies on exports



Note: Effects estimated from event-study regressions of exports at the product level (in logs) on a dummy for the presence of at least one domestic subsidy interacted with dummies for periods before and after the subsidy, over the 2009-2021 period. The reported effects are averages across the coefficients of “post” period interactions in the full sample, the sample of G20 Advanced Economies, and that of G20 economies. All specifications include dummies for other industrial policies recorded in the GTA database, country-product fixed effects, product-year fixed effects, country-sector-year fixed effects, and country-year trends.

Source: Rotunno and Ruta (2024)

Total exports of subsidized products



Note: Value of exports for products, countries and years with a domestic subsidy. Totals are computed over the 2009-2021 period for the full sample, the sample of G20 Advanced Economies, and that for G20 Emerging Economies.

Potential cross-country differences in transparency, data availability and policy preferences should be considered when interpreting this data. Compilation process introduces judgement in some borderline cases and judgement-based approaches reduce comparability.

Risk of policy escalation

- Large players tend to respond to each others’ measures, leading to a tit-for-tat dynamic.
- On average there is a 74 percent probability a subsidy for a given product by one major economy is met with a subsidy for the same product by another within one year.

Initial Implementing Jurisdiction	Form of subsequent policy intervention	Responding jurisdiction								
		China			EU-27			USA		
		Within 6 months	Within 12 months	Within 24 months	Within 6 months	Within 12 months	Within 24 months	Within 6 months	Within 12 months	Within 24 months
China	Introduce new subsidy	-	-	-	0.84	0.93	0.98	0.71	0.82	0.93
EU-27	Introduce new subsidy	0.48	0.66	0.74	-	-	-	0.65	0.72	0.79
USA	Introduce new subsidy	0.37	0.55	0.60	0.70	0.74	0.79	-	-	-

Note: Data covers measures implemented between January 2021 and December 2023. Potential cross-country differences in transparency, data availability and policy preferences should be considered when interpreting this data. Compilation process introduces judgement in some borderline cases and judgement-based approaches reduce comparability.

Source: Evenett, Jakubik, Martín, and Ruta (2024)

Thank you

Recent and forthcoming IMF work

IMF, WTO, World Bank, OECD (2022). Subsidies, Trade and International Cooperation.

IMF (2024). Industrial Policy in IMF Surveillance – Broad Considerations. Policy Paper No. 2024/008.

McDonald, Ruta and Van Heuvelen (2024). Industrial Policy: Trade Policy and WTO Considerations in IMF Surveillance. IMF How to Note 2024/002.

Exton and Sztajerowska (Forthcoming). How to Cover Trade Policy and WTO Considerations in Climate-Change and Environment Policies. IMF How to Note.

Evenett, Jakubik, Martin, and Ruta (2024). The Return of Industrial Policy in Data. IMF Working Paper 2024/001.

Rotunno and Ruta (2024). Trade Spillovers of Domestic Subsidies. IMF Working Paper No. 2024/041.

Rotunno and Ruta (Forthcoming). China's subsidies, Trade and Overcapacity.