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Government subsidies for large manufacturing firms: Insights from the OECD MAGIC database

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Government subsidies are an increasingly central issue for global trade, yet their nature and implications for international trade are still insufficiently understood. Using novel data from the OECD MAnufacturing Groups and Industrial Corporations (MAGIC) database, this column reveals that subsidies are common among major global firms across 14 key industrial sectors but typically modest relative to firm revenue, with notable exceptions. China-based companies stand out for receiving significantly larger subsidies, especially in

the form of below-market borrowings, and frequently expanding their share in global markets.

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Government financial support to industries has long been a central issue in trade policy. Recently, challenges with the climate transition, the COVID-19 pandemic, and related concerns about supply chain resilience, the level playing field and geopolitical tensions have intensified interest in government support, and industrial policies more broadly (Juhász et al. 2023, Evenett et al. 2024).

Assessing the scope and scale of government subsidies is challenging due to a persistent lack of reliable data comparable across countries and time (OECD 2023, Millot and Rawdanowicz 2024). Data deficiencies reflect both methodological difficulties with quantifying government support and the unwillingness of some governments to comprehensively disclose their own measures and associated costs.

In our recent paper (OECD, 2025), we fill some of the knowledge gaps, building on the new confidential firm-level OECD MAnufacturing Groups and Industrial Corporations (MAGIC) database, and contribute to a rapidly growing literature and ongoing policy discussions about the size and nature of government subsidies.

The OECD MAGIC database

The OECD MAGIC database provides a unique view on the level and types of subsidies received by the largest manufacturing companies globally from all levels of government. It covers 482 of the largest manufacturing firms over 2005-22 (including listed and non-listed companies) from 14 key manufacturing sectors. These firms – selected for their size – collectively account for at least two-thirds of global sales or capacity in their respective sectors.

The database combines financial and economic data and estimates of three types of government support: **grants** (obtained directly from corporate disclosures); **corporate income tax concessions** (i.e. the calculated tax savings of companies due to particular provisions of the tax code); and **below-market borrowings** (estimated by comparing

actual interest rates that firms pay on their borrowings against hypothetical benchmark interest rates that would normally prevail in the market based on borrowers' financial profile).

Around half of the companies covered in the database are based in OECD countries (of which roughly one-third are in the EU and slightly less in the US) and around one-third in China. Many of these companies are large multinationals and the subsidies they report often combine amounts obtained in the multiple jurisdictions in which they operate. Consequently, the headquarter country should not be assumed to be the country providing all subsidies received by a given firm. Companies based in China are a notable exception. They tend to produce mainly in China and obtain most of their subsidies from Chinese authorities.

Firm-level information makes it possible to uncover subsidies provided by less transparent jurisdictions and those that occur at various levels of government. It also enables the estimation of subsidies channelled through state enterprises acting as intermediaries, such as state banks, which may not otherwise be covered in subsidy assessments undertaken at a government level.

In this regard, the OECD MAGIC database differs from other measurement approaches such as the New Industrial Policy Observatory (NIPO) dataset based on the Global Trade Alert (Evenett et al. 2024). These approaches identify subsidies from the perspective of subsidy-providing authorities. While this facilitates linking individual subsidies to country-level support policies, findings rely heavily on governments providing sufficient public information and are affected by whether governments report individual transactions or aggregate programmes only. Consequently, they can give a misleading picture of the scope and scale of industrial subsidies, particularly in less transparent jurisdictions (Chimits 2023).

While the use of firm-level information for measuring industrial subsidies solves many problems encountered at the country level, it also has its own limitations. The coverage of firms in selected sectors is restricted to the largest firms for which information can generally be accessed through regular corporate disclosures. The OECD MAGIC database also does not identify the policy objectives and design characteristics of subsidies. Finally, it does not quantify other forms of government subsidies, such as differential treatment in relation to regulatory measures, export restrictions on upstream inputs, below-market energy inputs, and government land acquired or rented by firms at below-market prices.

Key stylised facts about industrial subsidies

Subsidies are found to be widespread among large industrial producers. Most of the firms in the OECD MAGIC database received at least one type of government support for half of the period for which data are available or longer.

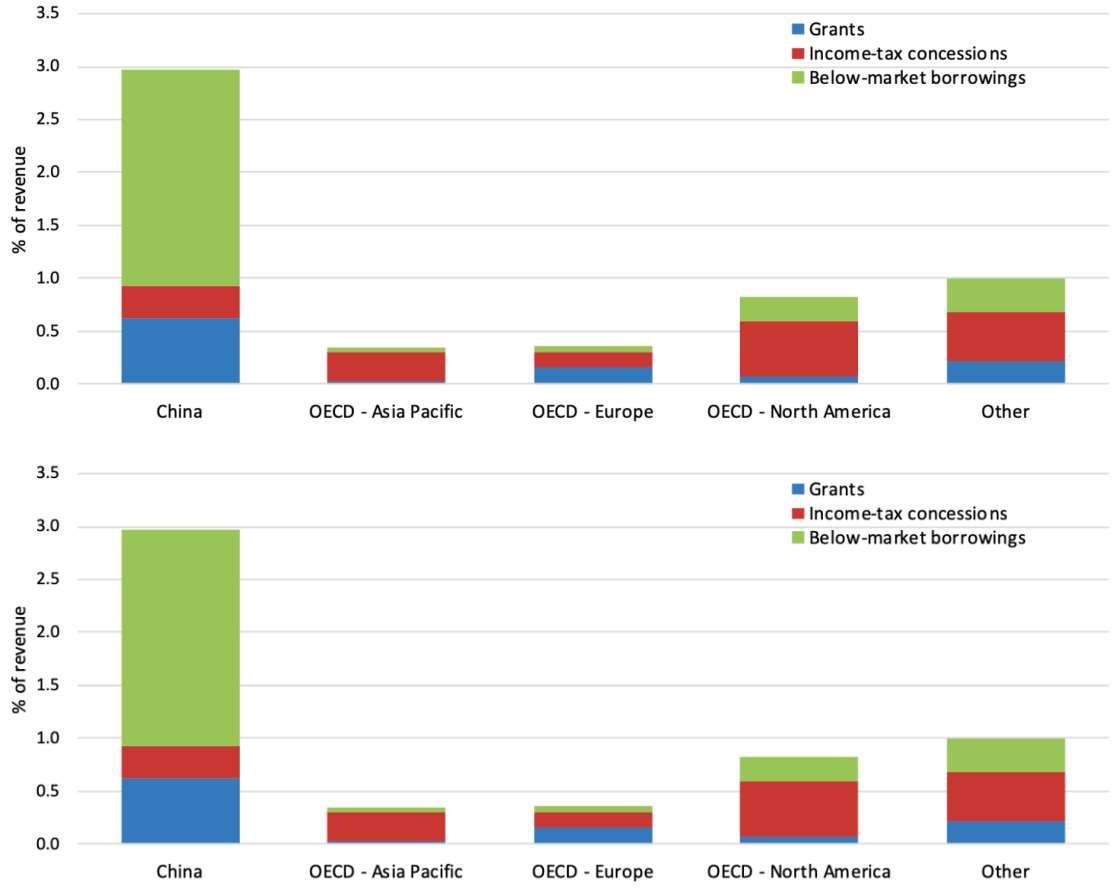
Government subsidies are seemingly modest on average. The median annual-firm observation corresponds to a subsidy of 0.6% of revenue. However, there are cases of very large subsidies, exceeding 15% of revenue. These cases are dominated by companies based in China, especially in the aluminium, cement, glass, and semiconductor industries, which receive not only large but long-running government support. Moreover, total subsidies in relation to revenue tend to be larger for smaller firms and for state enterprises.

Subsidies are generally larger relative to firms' investment in fixed tangible assets. Despite representing a relatively small percentage of total consolidated sales on average, subsidies can still have decisive impacts on individual transactions and investment decisions.

Firms differ in the scale and types of subsidies they receive across countries and sectors:

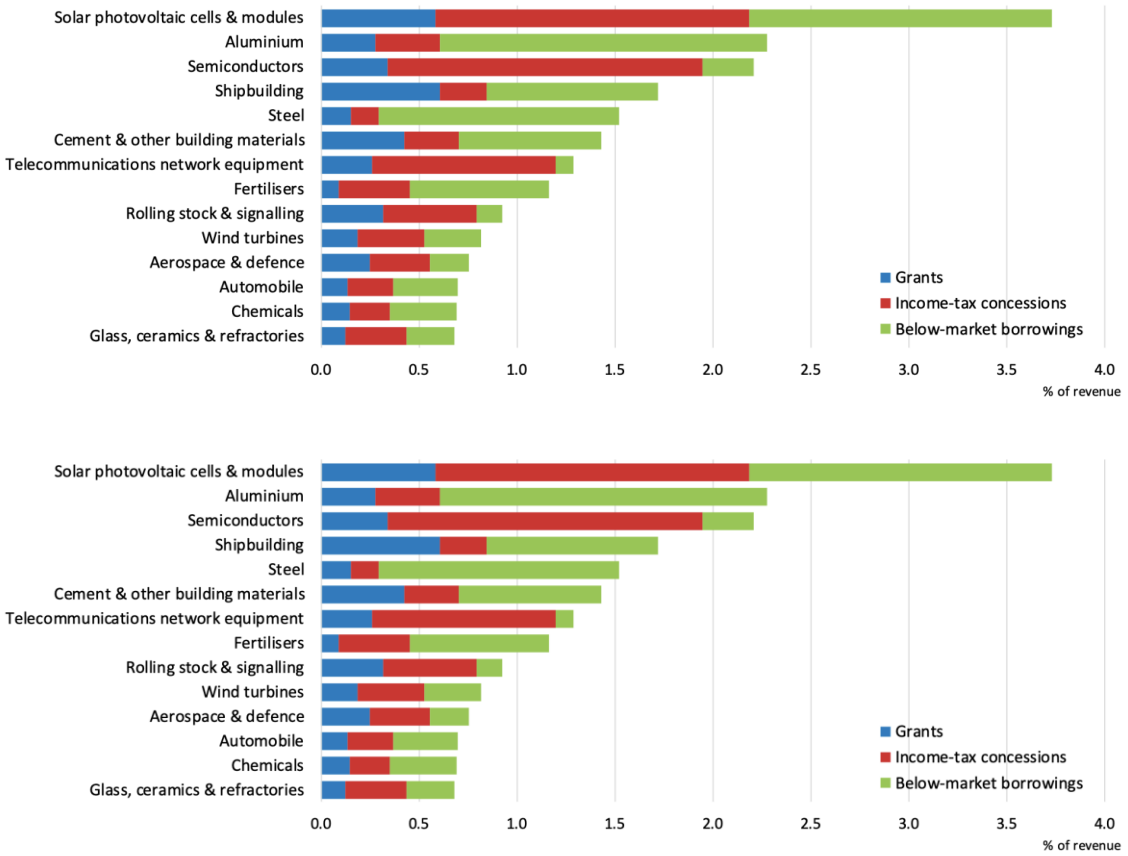
- Subsidies relative to firm revenue are on average larger for firms based in China than for those based in other jurisdictions, particularly when it comes to below-market borrowings (Figure 1).
- The use of below-market borrowings is notably common in capital-intensive heavy industries, which rely relatively more on debt than equity for financing (Figure 2). This type of subsidies has also supported distressed firms during crises (including during the global financial crisis, and in China in 2015 to bolster domestic metal producers) and more occasionally to rescue companies experiencing financial difficulties for idiosyncratic reasons.

Figure 1 Government support to the largest manufacturing firms in 14 sectors by region



***Note*: The group "Other" includes Brazil, India, Indonesia, Malysia, Russia, Saudi Arabia, South Africa, and several other smaller jurisdictions for which only few firms are included.**
***Source*: OECD (2025).**

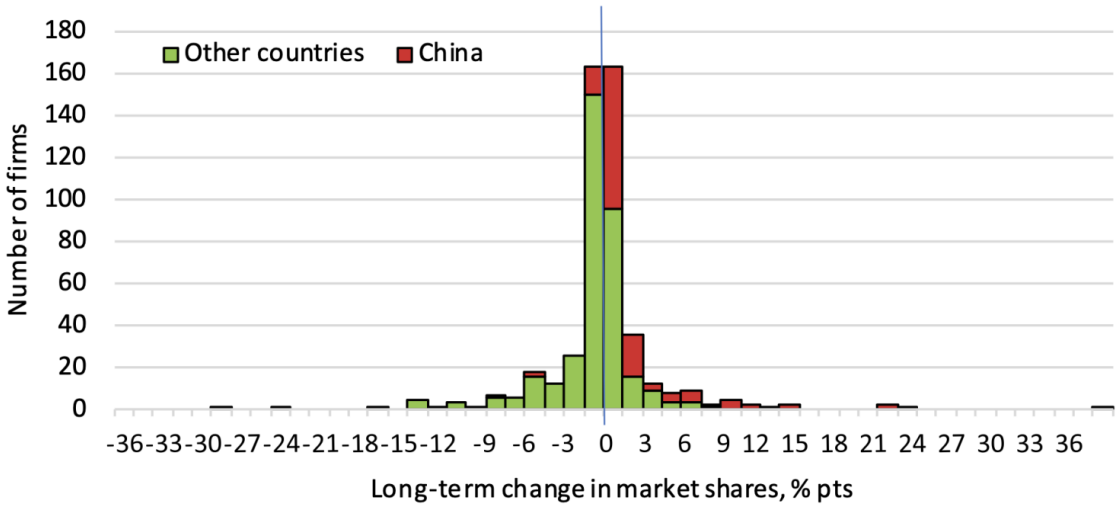
Figure 2 Industrial subsidies by sector (2005-22 average)

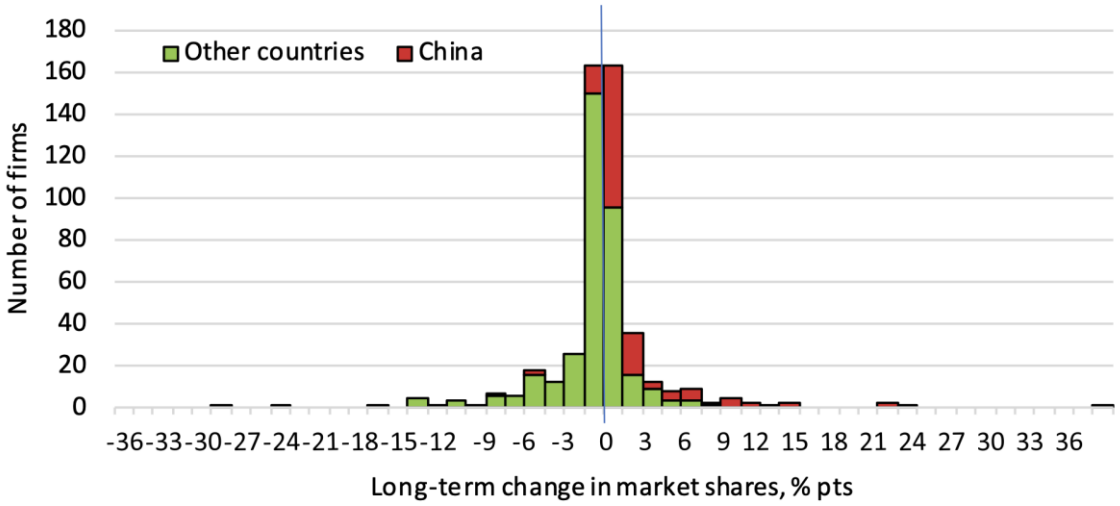


***Source*: OECD (2025).**

Global market shares, which account for both domestic and foreign sales in a sector, tend to be rather stable for most of the firms, but there are cases of large shifts in market position (Figure 3). China-based companies have experienced more frequent gains than losses in market share and generally account for most of the firms with the largest market share gains. The opposite is true for firms based in other jurisdictions, mainly in OECD countries.

Figure 3 Distribution of longer-term changes in market shares

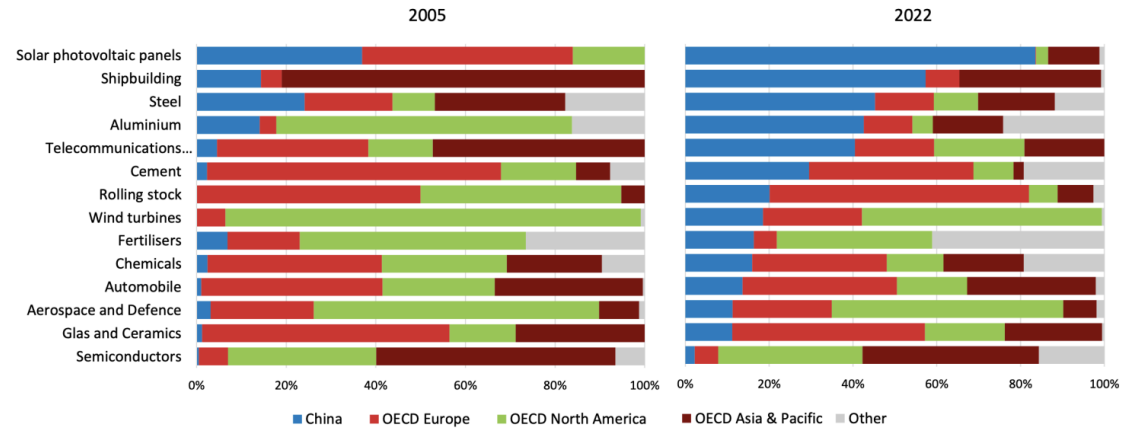


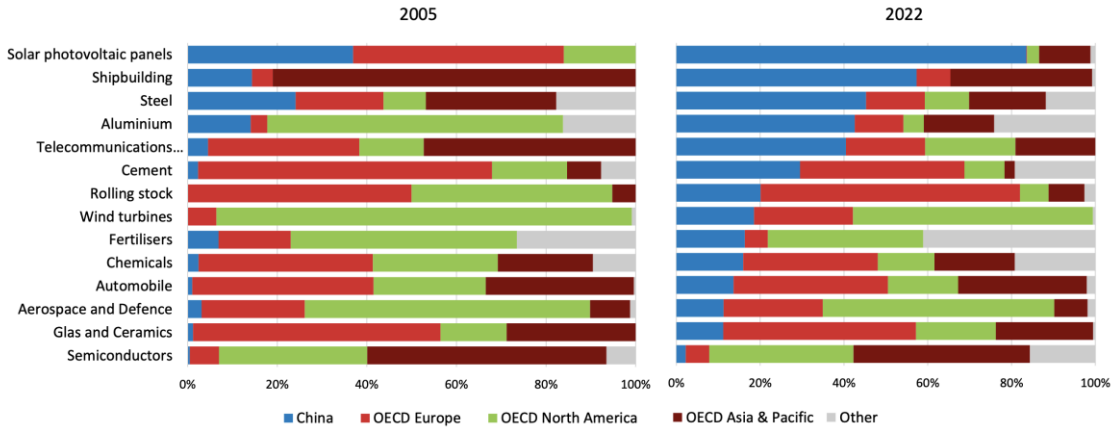


***Note*: Including all firms with at least five years of observations for market shares. The period over which the change in market share is observed differs across firms, depending on the number of years for which they are covered in the OECD MAGIC database. The distribution is with the right-closed bin intervals, implying that the first bar on the left to the value of zero contains firms with no change in market share. Some changes in market shares may stem from mergers and acquisitions, including where they are supported by governments.**
***Source*: OECD (2025).**

The gains in market position of China-based firms are also visible at the sectoral level (Figure 4). The largest gains are observed in solar photovoltaic cells and modules, shipbuilding, telecommunications network equipment, and aluminium. These increases are mostly related to gains in home markets, as most China-based companies sell mainly domestically. Notable exceptions are solar panels, shipbuilding, semiconductors and, to a lesser extent, telecommunications network equipment, where sales abroad are more important. Still, OECD-based companies taken together continue to have dominant market position in several sectors (accounting for more than 80% of the sectoral market). This is the case for automobiles, aerospace and defence, glass, ceramics and refractories, semiconductors, and wind turbines.

Figure 4 Market shares by sector and region





***Note*: OECD Europe includes firms headquartered in most EU countries, Norway, Switzerland, Türkiye and the United Kingdom. OECD North America includes firms headquartered in Canada, Mexico and the United States. OECD Asia & Pacific includes firms headquartered in Australia, Japan and Korea.**
***Source*: OECD (2025).**

Future work

The OECD MAGIC database constitutes a significant improvement in the knowledge on industrial subsidies, helping shed more light on the extent to which governments are supporting industrial producers in key sectors of the global economy. That said, more needs to be done, including further improving data coverage and expanding the set of support instruments captured in the database. Forthcoming OECD analysis will also aim to provide econometric evidence on what these subsidies mean for firm productivity, investment, and changes in market shares, among other outcomes.

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