

## Market evolution: Ball and roller bearings (CN 8482) — 2015–2025

### Introduction

The European Union's external trade in ball and roller bearings (CN 8482) between 2015 and 2025 reveals a sector undergoing a profound transformation. While total export value grew modestly, the underlying physical flows contracted sharply. A strong surge in unit prices, a reorientation of key partner countries, and a marked increase in export propensity characterise a decade in which the EU's bearing industry strengthened its high-value position, even as import sourcing became more concentrated. This report examines the main dynamics observed in the data, drawing exclusively on the figures provided by the trade dashboard.

### A premium shift: Rising unit values absorb a steep decline in export volumes

#### Export value grew despite a 26-percent drop in tonnage, driven entirely by a near-47-percent price increase

The headline figures show that the EU exported bearings worth € 4.25 billion in 2015 and € 4.62 billion in 2025, an increase of 8.6 %. Over the same period the exported volume collapsed from 264.9 thousand tonnes to 196.0 thousand tonnes (–26.0 %). Consequently, the average export unit price rose by 46.9 %, from € 16 037 to € 23 552 per tonne. This indicates that the EU has moved decisively up the value chain, shipping fewer but far more sophisticated – and expensive – bearings.

#### The product mix confirms a structural upgrade towards high-value cylindrical and combined roller bearings

A closer look at the sub-commodity breakdown on the product comparison page underscores the change.

| Sub-heading                                  | Export value<br>2015 (€ M) | Export value<br>2025 (€ M) | Unit price<br>2015 (€/t) | Unit price<br>2025 (€/t) |
|----------------------------------------------|----------------------------|----------------------------|--------------------------|--------------------------|
| Ball bearings (848210)                       | 1 379 M                    | 1 649 M                    | 18 246                   | 28 582                   |
| Cylindrical roller bearings<br>(848250)      | 675 M                      | 864 M                      | 23 316                   | 40 101                   |
| Tapered roller bearings<br>(848220)          | 586 M                      | 665 M                      | 13 318                   | 16 508                   |
| Spherical roller bearings<br>(848230)        | 565 M                      | 535 M                      | 14 473                   | 16 174                   |
| Parts (848299)                               | 446 M                      | 362 M                      | 12 563                   | 20 328                   |
| Combined & other roller<br>bearings (848280) | 211 M                      | 209 M                      | 18 264                   | 30 570                   |

All categories recorded double-digit price growth, with cylindrical roller bearings posting the highest absolute price level. The volume of ball bearing exports fell by nearly 24 % while value rose, showing the same premiumisation logic.

## Import dynamics reflect cost-competitive sourcing rather than a quality race

Imports increased in value from € 2.85 billion to € 3.36 billion (+17.9 %), while tonnage jumped by 25.8 % (308.8 kt to 388.5 kt). The import unit price eased from € 9 219 to € 8 640 (–6.3 %), implying that a large part of the extra volume consisted of lower-priced, standardised products, especially from Asian suppliers. EU manufacturers therefore appear to be concentrating on high-precision bearings while sourcing commodity-grade items from abroad.

## Geopolitical reorientation: Partners realign amid sanctions, Brexit and supply-chain trends

### Exports to Russia collapsed; exports to the United States, India and Türkiye surged

The partner-by-partner data from the top partners table reveals a dramatic recasting of the EU's export markets.

| Export destination | 2015 (€ M) | 2025 (€ M) | Change (%) |
|--------------------|------------|------------|------------|
| China              | 864        | 740        | -14.3      |
| United States      | 764        | 990        | +29.6      |
| India              | 186        | 346        | +85.9      |
| Türkiye            | 204        | 347        | +70.2      |
| United Kingdom     | 383        | 328        | -14.5      |
| Brazil             | 138        | 199        | +44.5      |
| Russia             | 126        | 0.05       | -100.0     |

Russia's market vanished after the 2022 invasion of Ukraine; the corresponding export coefficient of variation (0.68) is the highest of all major partners, confirming an extreme shock — see volatility bars. At the same time, shipments to the United States rose by almost 30 %, and deliveries to India and Türkiye grew by 86 % and 70 % respectively, more than compensating for the drop in sales to China and the UK.

## The import side mirrors a growing reliance on China and a fading role for traditional suppliers

EU imports of bearings have become markedly more focused. China's share climbed from 30 % to over 42 % of import value (€ 851 M → € 1 427 M, +67.8 %), while imports from Japan contracted by 29 % and those from the United Kingdom fell by 56 % after Brexit. The Herfindahl-Hirschman Index for imports rose from 1 576 to 2 236 (+41.9 %), as shown on the concentration dashboard. In volume terms the concentration is even more extreme, with the HHI jumping by 76 %. The EU's import basket is thus heavier but structurally narrower, mostly supplied by China.

## Resilience under pressure: Shocks, volatility and the EU's growing industrial autonomy

### Net-import reliance turned more negative, and export propensity nearly doubled

The EU's position as a net exporter of bearings strengthened. The net-import reliance moved from -8.4 % in 2003 to -20.3 % in 2024, meaning the bloc exported far more than it needed to cover apparent consumption. The export propensity climbed from 29.8 % to 57.1 % over the same long window, while trade intensity moved from 42.5 % to 69.4 %. These metrics point to an industry that has become more outward-oriented and less dependent on foreign supply of finished goods.

## Price shocks hit imports from Asia during the post-pandemic disruption

The shock-detection tool recorded three significant price events on the import side (see supply shock analysis):

- **India** (2022): a 25 % price jump, abnormality score 8.4.
- **China** (2022): a 12.2 % price surge, abnormality 6.8.
- **Korea, Republic of** (2021): a 17.2 % price rise, abnormality 3.4.

All three accompanied volume increases, suggesting pandemic-era logistics bottlenecks and strong demand temporarily boosted prices. Their temporary nature is confirmed by the return to baseline prices in 2023-2024.

## Domestic production expanded in value, and specialisation is geographically concentrated

Over the full period for which production data are available (2003-2024), the EU's output of bearings rose from 550 million units to 623 million units in quantity (+13.3 %), while the value of production grew from € 6.68 billion to € 8.25 billion (+23.5 %) — see production volumes. The engine of this growth is a handful of member states. According to the specialisation map, Romania (RSCA 0.67), Slovakia (0.51), Austria (0.28) and France (0.16) were the most specialised EU reporters in 2025, while countries like Ireland, Cyprus and Malta play virtually no role. This concentration of know-how reinforces the EU's capacity to supply high-end bearings to the world market.

## Conclusion

The 2015-2025 window captures a European bearing sector that successfully navigated Brexit, the pandemic, war-related sanctions and a deep structural shift in trade. While export volumes fell by a quarter, the value of those exports edged up, sustained by a remarkable improvement in the average price per tonne. The EU re-directed shipments from China and Russia towards the United States, India and Türkiye, and expanded its high-value product lines, especially cylindrical roller bearings. At the same time, import sourcing became simpler but riskier, as China supplied an increasingly dominant share of the EU's foreign purchases. With domestic production continuing to grow in value and export propensity soaring, the European bearing industry stands more autonomous than a decade ago, though the concentration of imports remains a point of watch.

Auto-generated report: it accelerates, and sometimes misleads, human analysis. It cannot replace it in full.

If you need advice on European trade policy, or representation for your interests in Brussels, feel free to contact me at [support@tradedashboard.eu](mailto:support@tradedashboard.eu). You can find my CV at [this address](#).