



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

World Manufacturing Production

Quarter III 2022 Report

**Growing at a modest pace
on unstable ground**

- This report provides insights on the latest trends of global manufacturing, based on **seasonally adjusted data** up to the third quarter of 2022.
- The report relies on UNIDO's **new country classification** for 2022.
- In a year-over-year comparison, **global** manufacturing production increased by **3.6 per cent** in the third quarter of 2022.
- On a **regional level**, Latin America and the Caribbean and Asia and Oceania showed the best performance.
- Manufacturing of **motor vehicles appeared at the top** of industries with the best global performance among industrial sectors.

Global and regional manufacturing growth

Global manufacturing growth picked up in the third quarter, but remained moderate. Despite this recent positive performance, global manufacturing production faces mounting challenges: high inflation and an energy price shock, persistent disruptions in the supply of raw materials and intermediate goods, global economic deceleration, weakened confidence and high uncertainty. This could build into headwinds slowing down this sector in many economies, particularly in Europe.¹

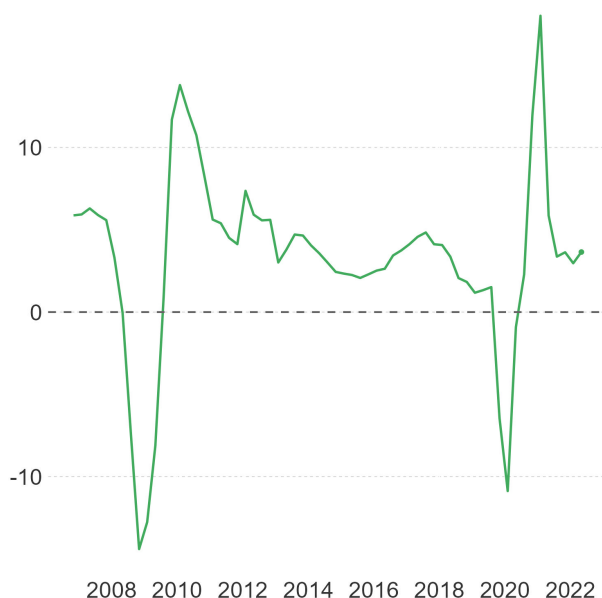


Figure 1: Year-over-year growth rates of quarterly world manufacturing output

In the third quarter of 2022, world manufacturing production stabilized at a solid 3.6 per cent year-over-year growth rate, following a weaker 3.0 per cent increase in the previous quarter (Figure 1). After the collapse of manufacturing in 2020 caused by the COVID-19 pandemic and the subsequent recovery in 2021, world manufacturing production in 2022 is growing at a modest pace, yet on an unstable ground.

A closer look at different regions provides further insights (see Figure 2).

The manufacturing sector in Latin America and the Caribbean recorded an expansion of 4.9 per cent, which can be mainly attributed to the good performance of Mexico and Argentina, reporting 7.2 per cent and 5.8 per cent growth, respectively.

Manufacturing production in Asia and Oceania achieved an output growth of 4.4 per cent. This result is primarily linked to the manufacturing activity in China, where production expanded by 4.5 per cent, climbing from a relatively weak 2.7 per cent growth recorded in the previous quarter. This has been supported by fewer restrictive containment measures in this country and a consequent rebound in activity.¹ In Japan, the performance of manufacturing sector improved in the third quarter and grew by nearly 4.0 per cent, following declines reported in the first two quarters of 2022. Significant growth was observed in Saudi Arabia, where manufacturing production rose by

¹OECD (2022), OECD Economic Outlook, Volume 2022 Issue 2: Preliminary version, OECD Publishing, Paris, available at <https://doi.org/10.1787/f6da2159-en>

25.3 per cent in the third quarter, and continued the pattern of strong growth observed in the previous quarters of 2022. A new industrial strategy of the country aims at turning this country into a prominent industrial producer at a global scale.

Northern America's manufacturing output continued growing at a moderating pace of 3.5 per cent, mirroring a slight, but notable deceleration in the manufacturing production of the United States of America (3.4 per cent growth). At the same time, European manufacturing production grew by 1.7 per cent, suffering from the proximity to the conflict in Ukraine. The United Kingdom's manufacturing output has declined for several quarters in a row. The latest data reveals a deepened fall by 5.7 per cent, one of the steepest downturns since

the global financial crisis. On the other hand, some leading European manufacturers remained in positive territory: Germany reported growth of 2.0 per cent, France 2.7 per cent, Spain 3.0 per cent, and Switzerland 6.5 per cent. However, this expansion might still be at risk considering the outlook for the approaching winter: persistent supply chain disruptions, record-high energy prices and the possibility of localized blackouts.

Limited data on Africa show a growth rate of 0.4 per cent, the lowest growth across broad regions of the world. The manufacturing development of the economies in this group was mixed; South Africa grew by 3.0 per cent, output of Côte d'Ivoire stagnated and Nigeria experienced a production decline of 0.9 per cent.

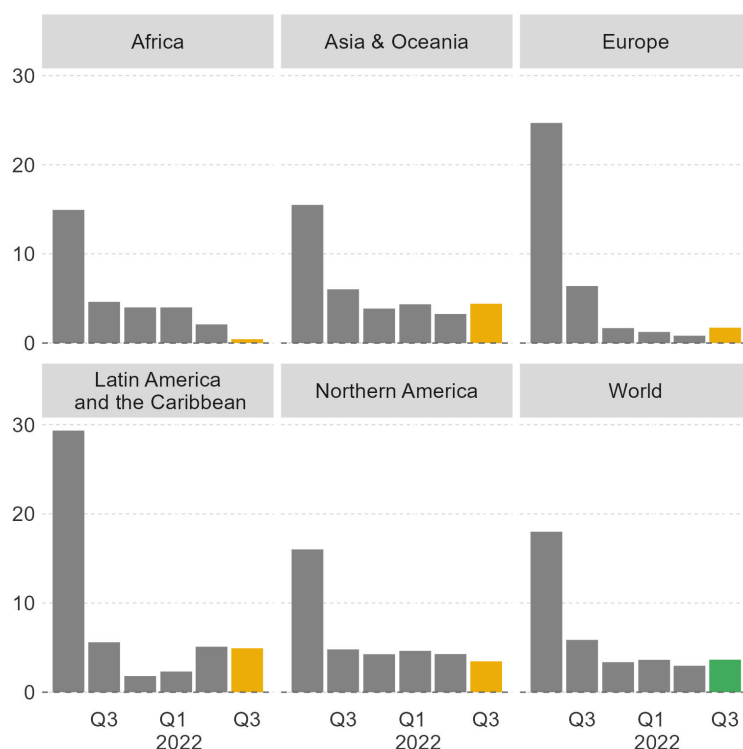


Figure 2: Year-over-year growth rates of regional manufacturing output

Findings by country groups

Industrial economies

Industrial economies, responsible for around 90 per cent of global manufacturing output, ticked up from the limited 2.5 per cent year-on-year increase in the second quarter of 2022 to a 3.6 per cent expansion in the third quarter, supported by a rebound in China (Figure 3). Middle-income industrial economies improved their manufacturing production by 3.9 per cent, though mostly as a result of a low base in the previous year. On quarter-to-quarter basis, stagnation is observed. The production performance of high-income industrial economies progressed by 2.8 per cent.

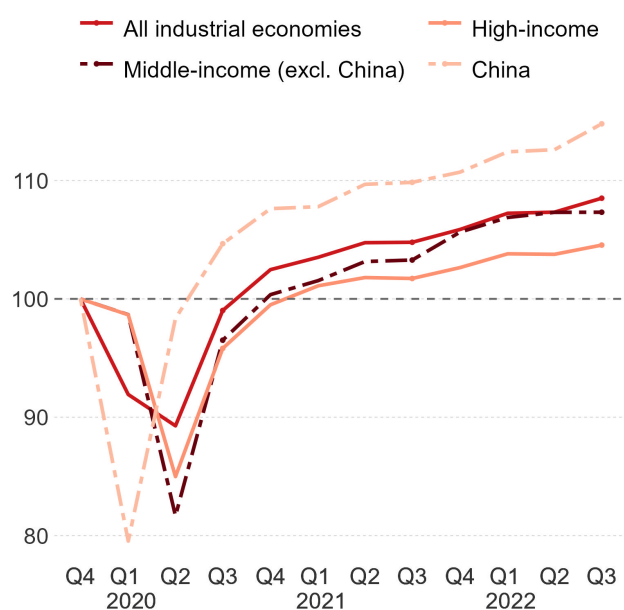


Figure 3: Index of manufacturing production of industrial economies (Q4 2019 = 100)

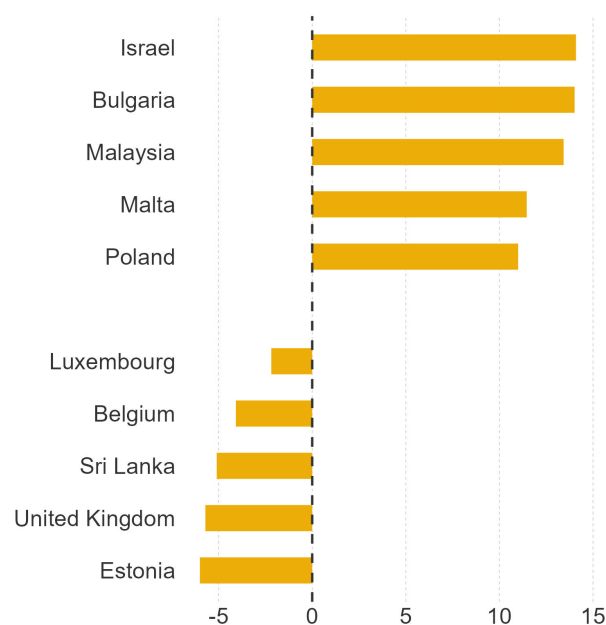


Figure 4: Year-over-year growth rates of the top 5 and bottom 5 industrial economies for Quarter III 2022

At the country level, manufacturing production continued to grow at a dynamic pace of around 14 per cent in Israel and Bulgaria (see Figure 4), followed by Malaysia with an output growth of 13.4 per cent. Malta broke recurring periods of negative growth with a 11.5 per cent upturn and output in Poland also continued growing at a two-digit level. On the other hand, Sri Lanka, the United Kingdom and Estonia suffered a production drop of more than 5 per cent.

As depicted in Figure 5, the group of middle-income industrial economies as a whole (i.e. including China) continued on a relatively stable path of subdued growth observed during the last year. The relative uptick recognized in the latest quarter follows the trajectory of China, which reported a rebound of 4.5 per cent in the third quarter, as mentioned before. Other middle-income industrial economies achieved an output increase of nearly 4 per cent, linked to strong production expansion coming from south-eastern regions of Asia (13.4 per cent from Malaysia, 7.9 per cent from Thailand and 4.8 per cent from Indonesia) as well as solid results in Mexico, Argentina and other economies in this group.

Other industrializing economies

The group of other industrializing economies accounts for a lower share of global manufacturing production. Although heterogeneous, the countries in this group are unified in that they would benefit considerably from a stronger industrial sector and a shift to industries with higher productivity and technological intensity. Overall, this group registered a year-over-year output increase of 4.9 per cent in the third quarter of 2022, higher than the group of industrial economies.

Middle-income industrializing economies slightly contracted when compared to the previous quarter, causing an effect of curve convergence (Figure 6). Note that the convergence occurs only when rebasing against Q4 2019, otherwise a clear distinction emerges between economies at different income levels (see table at the end of this report.) Low-income economies are still recovering from the crisis, even though they have now almost reached the pre-pandemic level, as the latest data suggest.

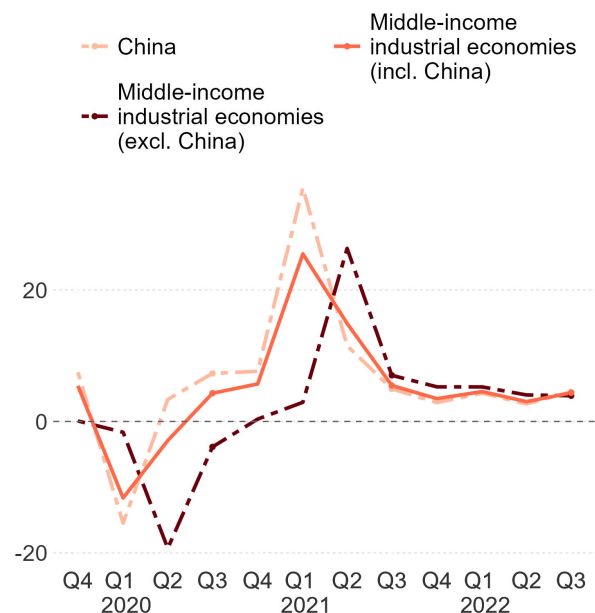


Figure 5: Year-over-year growth of manufacturing output in China and middle-income regions

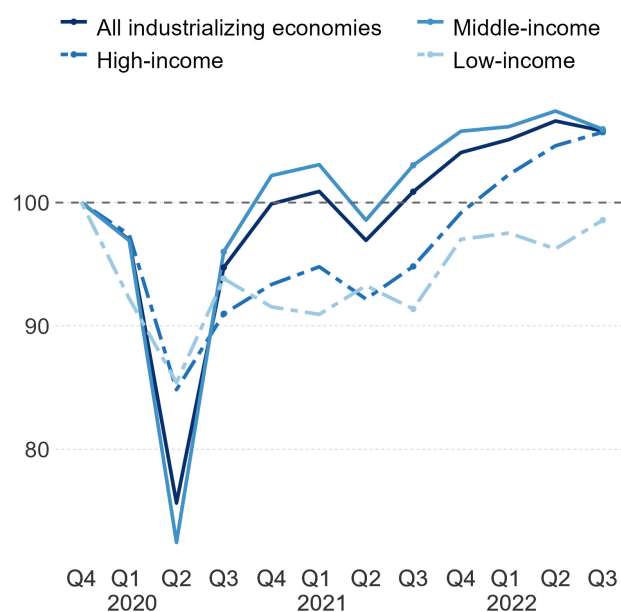


Figure 6: Index of manufacturing production of other industrializing economies (Q4 2019 = 100)

Emerging industrial economies

Emerging industrial economies is a special group of low- and middle-income economies whose manufacturing sectors have demonstrated significant dynamism in recent years. In addition to several industrial economies, the group also includes other industrializing economies which, although still at earlier stages of industrial development, have a manufacturing sector that has shown strong growth.

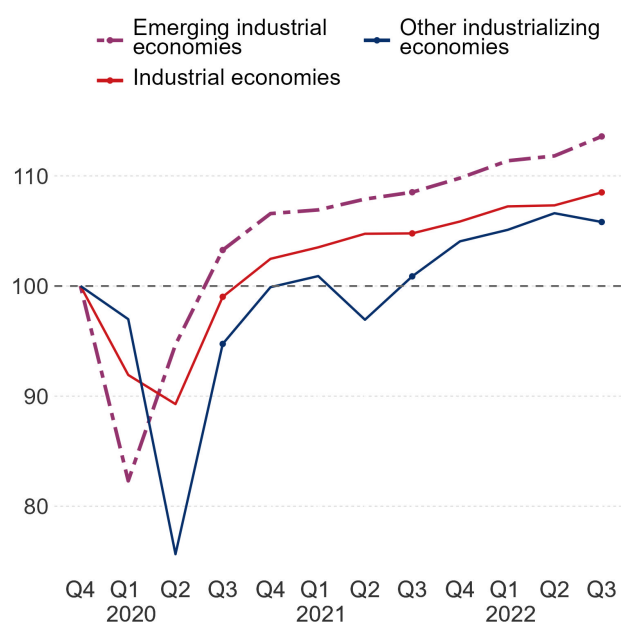


Figure 7: Index of manufacturing production of emerging industrial economies as well as other selected country groups (Q4 2019 = 100)

This group of economies has indeed demonstrated a high dynamism in manufacturing output, outpacing the world average, with a 4.7 per cent expansion during the third quarter of this year, as depicted in Figure 7.

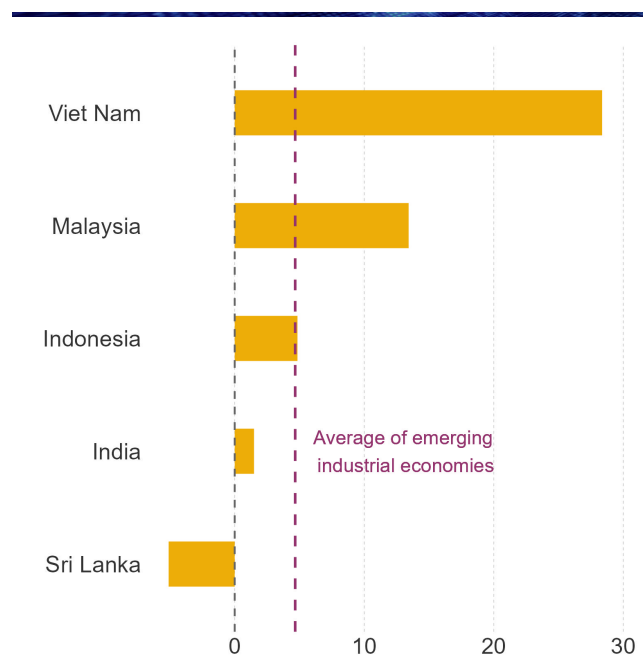


Figure 8: Year-over-year growth rates of manufacturing output of selected emerging industrial economies

It is worth noting the performance of the manufacturing sector in Viet Nam. Committed to sustainable growth, Viet Nam reported a 28.3 per cent improvement in manufacturing output during the third quarter of 2022, far exceeding the average of emerging industrial economies (Figure 8) and achieving its best performance yet since the start of UNIDO quarterly database in 2014. Moreover, this is not an isolated accomplishment; similar numbers have been registered repeatedly throughout 2022. The strategy to leverage its national, economical and geographical assets and become a major manufacturing hub in Asia has proven robust also during the critical period of 2020-2021.

The only negative performance within the group was recorded in Sri Lanka, while manufacturing production in India registered a subdued growth of 1.5 per cent.

Findings by industry groups

The latest global developments of industrial sectors grouped by technological intensity is shown in Figure 9. On average, industries classified as medium-high and high-technology continued outperforming the other sectors, growing at a year-over-year growth rate of 5.9 percent. While low-technology industries expanded by 1.0 per cent, medium-low technology industries recorded only a minimal expansion of 0.5 per cent.

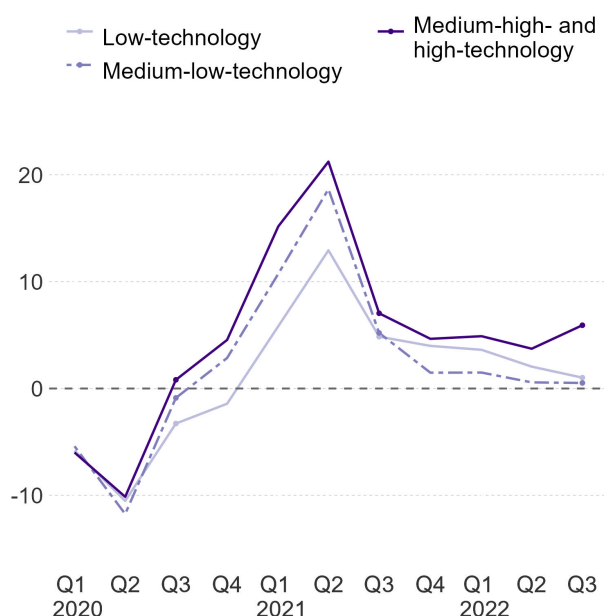


Figure 9: Year-over-year growth rates of manufacturing industries by technolog. intensity

The growth rate of medium-high and high-technology industries remained solid as a result of a recovery in the automotive sector and consistently strong production of computers, electronics

and optical products, and electrical equipment. On the other hand, production of basic pharmaceuticals experienced a loss during this period.

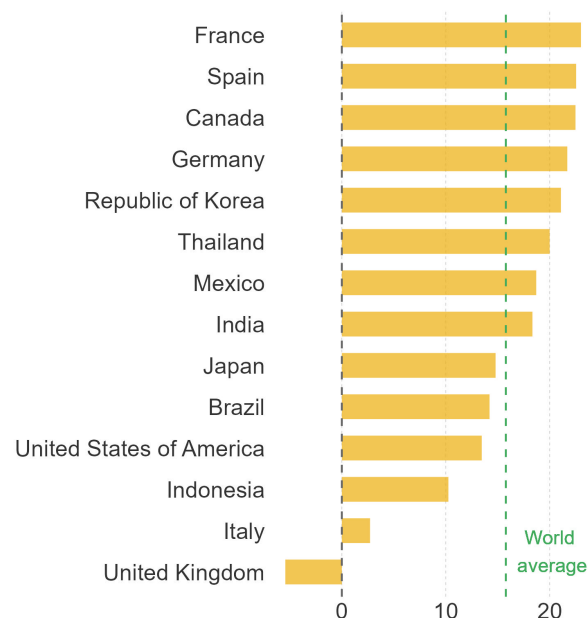


Figure 10: Year-over-year growth rates of output in the motor vehicles sector, selected countries with a large weight in this sector

Manufacturing of motor vehicles appeared as the top industrial sector with the highest performance on an annual basis, continuing its recovery and exceeding 15 per cent increase in production at a global level (Figure 11). The main automotive producers made an extraordinary performance in the third quarter of 2022, many of them reporting two-digit growth rates (Figure 10).

World Manufacturing Production, Quarter III 2022

The performance of industries differs across country groups, as shown in the growth rates presented in Figure 11. As mentioned before, industrial economies recorded the biggest increases in higher-technology sectors, with the exception of the production of pharmaceuticals, where two consecutive quarters of negative year-over-year growth were registered after an uninterrupted positive growth since 2010. However, a closer look at the data reveals that the minor 1.1 per cent decrease

observed during the third quarter was caused by the strong performance in the prior year, but actually the quarter-on-quarter rate was already positive in the third quarter. At the same time, other industrializing economies further contributed to the recovery of motor vehicles production. In addition to computers, electronics and optical products, the manufacturing of electrical equipment, wearing apparel and beverages kept growing at a fast pace.

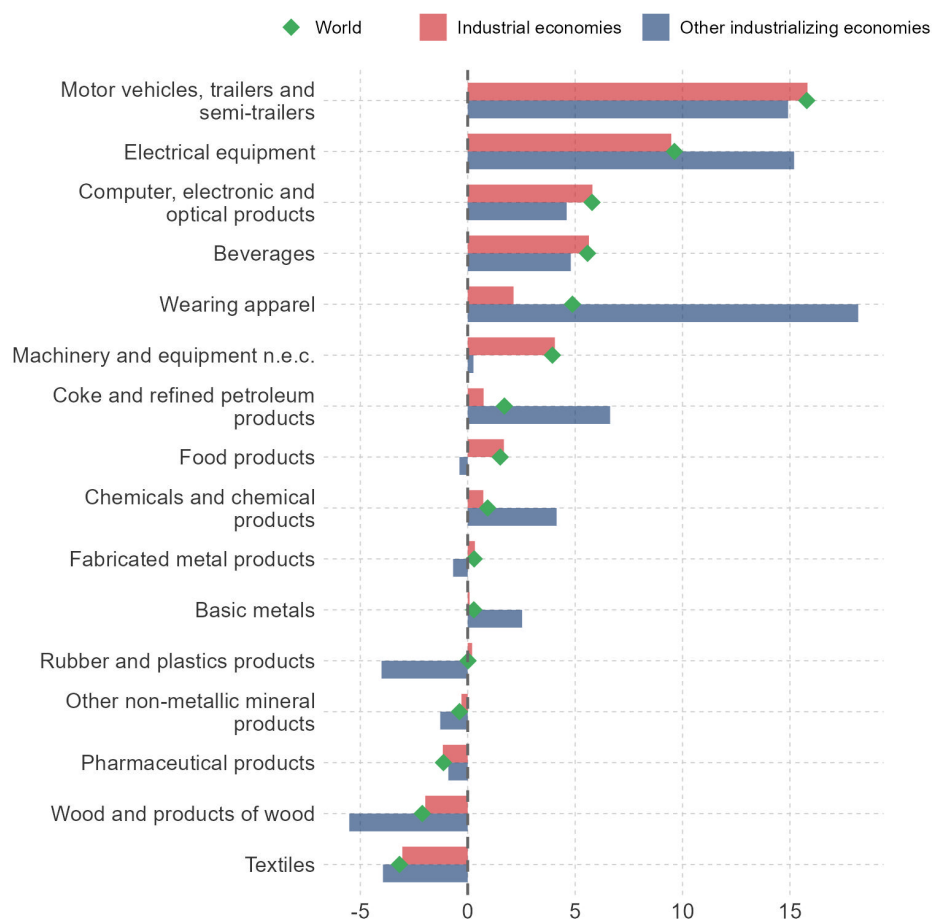


Figure 11: Growth rates by industry in percentage change compared to previous year, Quarter III 2022

Main indicators for Quarter III 2022

Estimated index and growth rates of world manufacturing output

Index values and year-over-year percentage changes

	Share in world MVA (2015)	Index (2015 = 100)	Compared to previous quarter	Compared to same period of the previous year
World	100.0	122.6	1.0	3.6
Industrial economies	92.9	122.6	1.1	3.6
High-income industrial economies	53.2	107.7	0.8	2.8
Middle-income industrial economies (excl. China)	12.4	115.0	0.0	3.9
China	27.4	155.0	1.9	4.5
Other industrializing economies	7.1	122.1	-0.7	4.9
Other high-income economies	1.9	112.2	1.1	11.5
Other middle-income economies	5.1	125.7	-1.4	2.8
Low-income economies	0.1	125.8	2.4	7.9
Regions				
Africa	1.8	108.1	-0.5	0.4
Asia & Oceania	51.0	136.9	1.5	4.4
Europe	22.7	112.2	0.4	1.7
Latin America	5.3	107.4	0.7	4.9
Northern America	19.3	102.5	0.1	3.5

Source: UNIDO Statistics.

More detailed data can be downloaded [here](#).

Methodological note

This report presents observed growth rates and estimates of world manufacturing production for the third quarter of 2022, as well as revised estimates for the second quarter of 2022. The figures are based on index numbers of industrial production (IIP) collected by UNIDO Statistics from national data sources.

IIP measures the growth of the volume of industrial production in real terms, free from price fluctuations. Users should take note that while annual industrial growth rates from national accounts generally refer to changes in manufacturing value added (MVA) (i.e. output net of intermediate consumption), quarterly IIPs reflect the growth of gross output.² Given the temporal nature of estimates, output growth provides the best approximation of value added growth, assuming that the input-output relationship remains stable during the observation period.

UNIDO has published quarterly reports on world manufacturing since 2011. The data compilation and presentation methods are regularly updated. Since 2013, growth figures have been published based on [seasonally adjusted index numbers](#). Since 2017, seasonal adjustments have been made using the TRAMO/SEATS³ method in the JDemetra+ software. The purpose of seasonal adjust-

ments is to filter out periodic fluctuations or calendar effects within time series. The individual parameters of the seasonal adjustment procedure for each time series are subject to regular revisions, normally at the beginning of each new reference year. Major economic uncertainties or other unusual events, such as the global pandemic of 2020, require frequent reviews of the underlying models based on the most recent available information.

This report refers to country groups in terms of economic territories rather than political boundaries. Economies are classified according to a combination of their stage of industrialization (industrial or industrializing) and income level (high income, middle income and low income). This classification is particularly useful for presenting growth estimates by country aggregates at different levels of structural transformation. In addition, the report includes information on the group of emerging industrial economies, which includes the most dynamic economies within both industrial and industrializing economies. Finally, regional groups based on the M49 classification are also presented. A comparative picture of growth trends in different parts of the world is provided based on these country groups. The full list of economies in the country groupings is available in the [International](#)

²For a description of the variable manufacturing value added (MVA) can be found [here](#).

³TRAMO stands for Time series Regression with ARIMA noise, Missing values and Outliers, and SEATS for Signal Extraction in ARIMA Time Series. ARIMA is the abbreviation of Autoregressive Integrated Moving Average, a widely applied statistical method for time series analysis.

[Yearbook of Industrial Statistics](#) 2022.

The present report implements revision 4 of the International Standard for Industrial Classification of All Economic Activities ([ISIC Rev.4](#)). For countries that publish monthly/quarterly indices based on ISIC Rev.4, national data are used in their original form. For countries that still produce index numbers based on ISIC Rev.3, growth figures are estimated at the two-digit level of Rev.4 using correspondence tables. In both cases, data on index numbers are derived from national statistical sources. In case of missing data, UNIDO conducts imputations. These estimates are replaced as soon as the officially reported values become available in national statistical publications.

Growth rates are calculated from the national

index numbers aggregated to the given country group or geographical region using weights based on the countries' contribution to world MVA. Since the first quarter of 2020, the base year has been adjusted to 2015 in accordance with other UNIDO publications.

Users can find further information on the methodology of index numbers, estimation procedures and a compilation of country groups' indices in a [methodological document](#) that is available on the statistical pages of UNIDO's website. The indices themselves are published in UNIDO's [Quarterly IIP database](#), available on the UNIDO Statistics Data Portal. Since 2020, UNIDO also publishes [monthly data](#) on world manufacturing production with regular updates.