

Development of OECD Inter-Country Input-Output Database and related indicators, 2025 edition

The sources and methods applied to develop the 2025 edition of OECD's Inter-Country Input-Output

(<https://www.oecd.org/en/data/datasets/inter-country-input-output-tables.html>) tables follow those described in the documentation for the previous edition¹. This note summarises the latest national Supply, Use and Input-Output resources available that were incorporated into the construction of the updated ICIO tables and presents the expanded lists of countries and economic activities. In this edition, the new tables include four new countries (Angola, the United Arab Emirates, the Democratic Republic of the Congo and São Tomé and Príncipe) as well as key features: i) the *Agriculture* and *Mining* sectors are expanded to their 2-digit ISIC Divisions; ii) *Manufacture of basic metals* is split into *iron and steel* and *non-ferrous metals*; and iii) *Building of ships and boats* is presented separately from *Other transport equipment*. The new database covers all years from 1995 to 2022.

ICIO tables provide a globally balanced view of the inter-country and inter-industry flows of the goods and services used as intermediate inputs into production and used to meet final demand (household and government consumption, and business investment). The development of ICIO tables at OECD accelerated in 2010, following the collapse in international trade during the 2008-2009 global financial crisis. This period highlighted the need for a better understanding of the complex economic linkages between countries and regions due to increasing prevalence of global value chains (GVCs). Trade policy analysts' demand for Trade in Value Added (TiVA) indicators, designed to complement traditional bilateral trade statistics, drove the production of ICIO tables. The tables provide a key tool for addressing globalisation-related policy issues such as employment and gender dynamics within GVCs, trade in embodied carbon and impacts of global and regional economic shocks.

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¹ Yamano, N. et al. (2023), "Development of the OECD Inter Country Input-Output Database 2023", *OECD Science, Technology and Industry Working Papers*, No. 2023/08, OECD Publishing, Paris, <https://doi.org/10.1787/5a5d0665-en>.

1. The OECD Inter-Country Input-Output (ICIO) system

The OECD ICIO system consists of a set of annual symmetric industry-by-industry global input-output tables. For each year, several matrices can be generated from the ICIO tables to calculate TiVA indicators. Table 1, Figure 1, Figure 2 and Figure 3 present the basic structure of the ICIO database and the main matrices need for the estimation of the TiVA indicators.

Table 1: Basic Matrices in OECD ICIO Tables and TiVA Indicators

Matrix	Size of the matrix	Description
W	$1 \times NK$	Value added , where w_i^r is the value added (at basic prices) by industry i (1 to K) in country r (1 to N) plus <i>taxes less subsidies</i> on intermediate products, so that total value added equals total final demand at basic prices.
X	$1 \times NK$	Gross output (at basic prices) , where x_i^r is the gross output from industry i in country r .
V	$1 \times NK$	Value added to output ratio , where $v_i^r = w_i^r / x_i^r$ is the ratio of value added to gross output by industry i in country r .
Z	$NK \times NK$	Intermediate consumption (at basic prices) , where z_{ij}^{rs} is the flow of goods from producing industry i in country r to the purchasing industry j in country S .
Y	$NK \times N$	Final demand , where the element y_i^{rs} represents final demand of country S for goods and services produced by industry i in country r . Final demand is separated into Household and Government Final Consumption, Gross Fixed Capital Formation (GFCF) and changes in inventories.
A	$NK \times NK$	Input coefficients , calculated as $a_{ij}^{rs} = z_{ij}^{rs} / x_j^s$
B	$NK \times NK$	Leontief inverse , or “output multipliers”, $\mathbf{B} = (\mathbf{I} - \mathbf{A})^{-1}$, where the element b_{ij}^{rs} shows the direct and indirect requirements of inputs from industry i in country r for the production of one unit of output for demand by industry j in country S .
GRTR GRTR_INT GRTR_FNL	$NK \times N$	Bilateral gross trade matrices by exporting industry/country and importing country of intermediate (INT) and final (FNL) goods GRTR = GRTR_INT + GRTR_FNL

Figure 1. OECD ICIO Basic Structure

		Intermediate Consumption				Final Demand				G.O.		
		Country 1		...	Country N		Country 1		...		Country N	
		Ind. 1	... Ind. K	...	Ind. 1	... Ind. K	FD ' ... FD F	...	FD ' ... FD F			
Country 1	Ind. 1	z^{11}		...	z^{1N}		y^{11}	...	y^{1N}		x^1	
	Ind. K											
...	:	:		:	:		:	:	:		:	
Country N	Ind. 1	z^{N1}		...	z^{NN}		y^{N1}	...	y^{NN}		x^N	
	Ind. K											
Taxes less subsidies		... on intermediate products				... on final products						
Value Added at basic prices		VA^1		...	VA^N							
Gross Output		x^1		...	x^N							

Figure 2. Obtaining the Leontief Inverse and the Value Added to Output Ratio

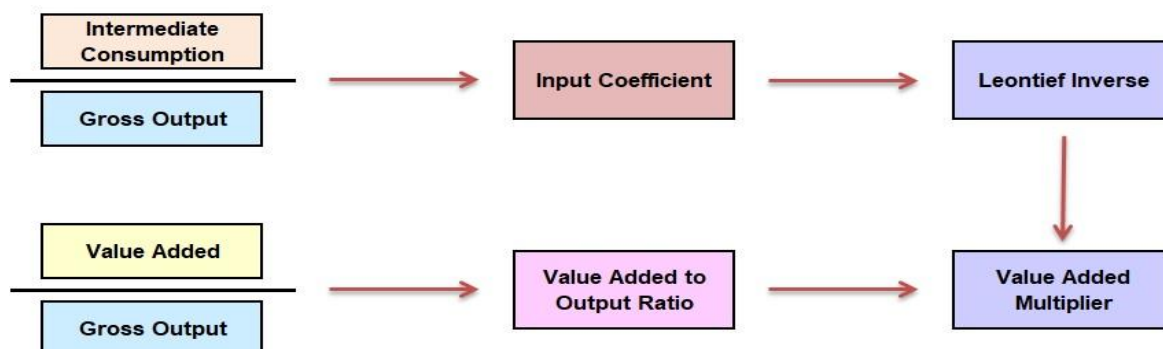


Figure 3. Obtaining the Bilateral Trade Flows

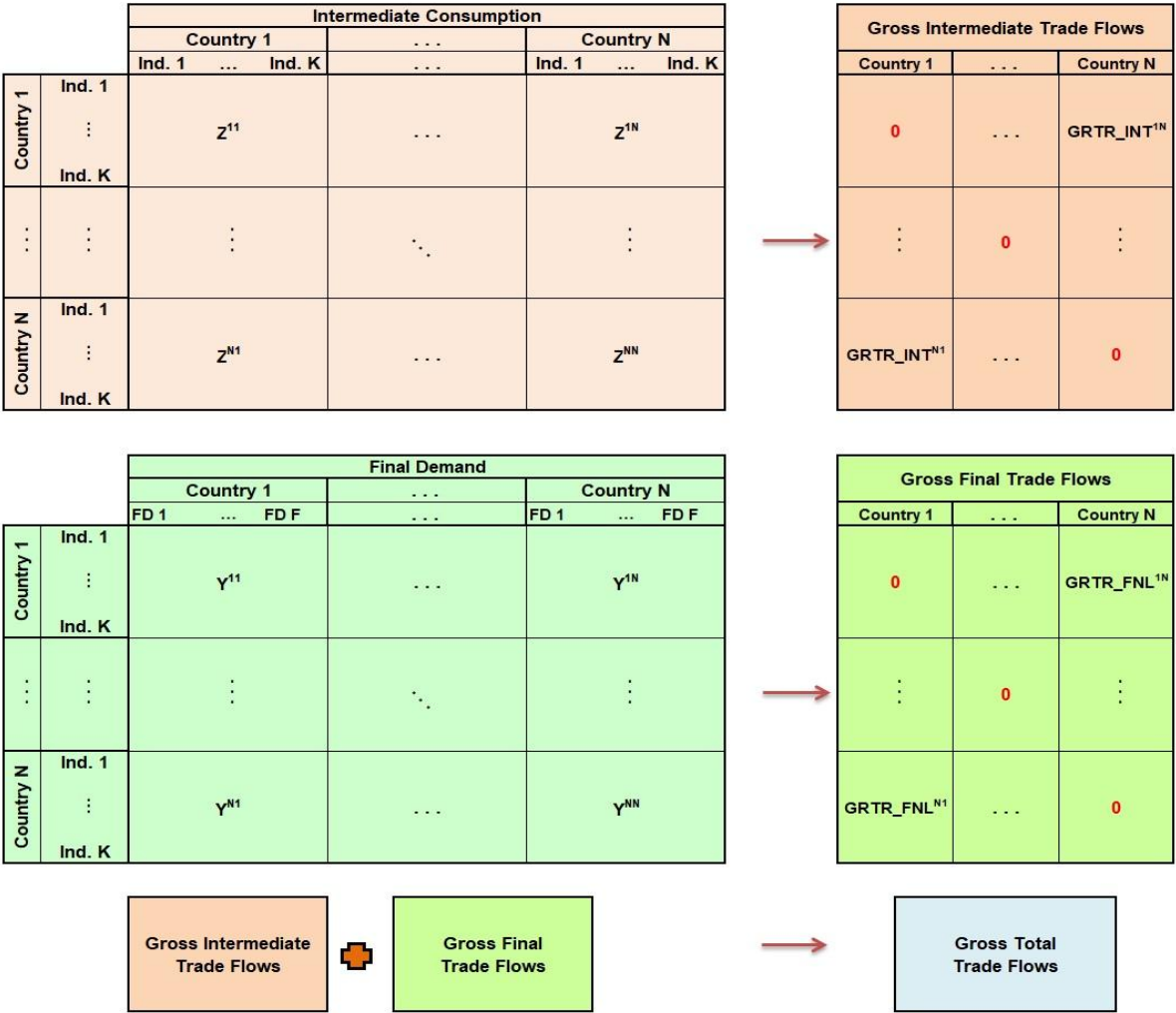


Table 2. Countries in published ICIO tables

N.	Code	Country	N.	Code	Country
1	AGO	Angola	44	KHM	Cambodia
2	ARE	United Arab Emirates	45	KOR	Korea
3	ARG	Argentina	46	LAO	Lao (People's Democratic Rep.)
4	AUS	Australia	47	LTU	Lithuania
5	AUT	Austria	48	LUX	Luxembourg
6	BEL	Belgium	49	LVA	Latvia
7	BGD	Bangladesh	50	MAR	Morocco
8	BGR	Bulgaria	51	MEX	Mexico
9	BLR	Belarus	52	MLT	Malta
10	BRA	Brazil	53	MMR	Myanmar
11	BRN	Brunei Darussalam	54	MYS	Malaysia
12	CAN	Canada	55	NGA	Nigeria
13	CHE	Switzerland	56	NLD	Netherlands
14	CHL	Chile	57	NOR	Norway
15	CHN	China (People's Republic of)	58	NZL	New Zealand
16	CIV	Côte d'Ivoire	59	PAK	Pakistan
17	CMR	Cameroon	60	PER	Peru
18	COD	Democratic Republic of the Congo	61	PHL	Philippines
19	COL	Colombia	62	POL	Poland
20	CRI	Costa Rica	63	PRT	Portugal
21	CYP	Cyprus ¹	64	ROU	Romania
22	CZE	Czechia	65	RUS	Russian Federation
23	DEU	Germany	66	SAU	Saudi Arabia
24	DNK	Denmark	67	SEN	Senegal
25	EGY	Egypt	68	SGP	Singapore
26	ESP	Spain	69	STP	Saô Tomé and Príncipe
27	EST	Estonia	70	SVK	Slovak Republic
28	FIN	Finland	71	SVN	Slovenia
29	FRA	France	72	SWE	Sweden
30	GBR	United Kingdom	73	THA	Thailand
31	GRC	Greece	74	TUN	Tunisia
32	HKG	Hong Kong, China	75	TUR	Türkiye ¹
33	HRV	Croatia	76	TWN	Chinese Taipei
34	HUN	Hungary	77	UKR	Ukraine
35	IDN	Indonesia	78	USA	United States
36	IND	India	79	VNM	Viet Nam
37	IRL	Ireland	80	ZAF	South Africa
38	ISL	Iceland			
39	ISR	Israel ²	81	ROW	Rest of the World
40	ITA	Italy	82	MX1	Mexico excluding global manufacturing activities
41	JOR	Jordan	83	MX2	Mexico global manufacturing activities
42	JPN	Japan	84	CN1	China excluding processing exports activities
43	KAZ	Kazakhstan	85	CN2	China processing exports activities

Countries added in 2025 edition

Source: Authors' elaboration

1. **Footnote by Türkiye:** The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Türkiye recognizes the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Türkiye shall preserve its position concerning the "Cyprus issue". **Footnote by all the European Union Member States of the OECD and the European Union:** The Republic of Cyprus is recognised by all members of the United Nations with the exception of Türkiye. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

2. The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities or third party. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Note: The ICIO tables include 38 OECD countries, 42 non-OECD economies, the Rest of the World and split tables for China and Mexico.

Table 3. Economic activities in published ICIO tables

N.	Code	Economic activity	ISIC Rev.4
1	A01	Agriculture and hunting	01
2	A02	Forestry and logging	02
3	A03	Fishing and aquaculture	03
4	B05	Mining of coal and lignite	05
5	B06	Extraction of crude petroleum and natural gas	06
6	B07	Mining of metal ores	07
7	B08	Other mining and quarrying	08
8	B09	Mining support service activities	09
9	C10T12	Manufacture of food products; beverages and tobacco products	10, 11, 12
10	C13T15	Manufacture of textiles, wearing apparel, leather and related products	13, 14, 15
11	C16	Manufacture of wood and of products of wood and cork	16
12	C17_18	Manufacture of paper and paper products; Printing and reproduction of recorded media	17, 18
13	C19	Manufacture of coke and refined petroleum products	19
14	C20	Manufacture of chemicals and chemical products	20
15	C21	Manufacture of basic pharmaceutical products and pharmaceutical preparations	21
16	C22	Manufacture of rubber and plastic products	22
17	C23	Manufacture of other non-metallic mineral products	23
18	C24A	Manufacture of basic iron and steel	241,2431
19	C24B	Manufacture of basic precious and other non-ferrous metals	242,2432
20	C25	Manufacture of fabricated metal products	25
21	C26	Manufacture of computer, electronic and optical products	26
22	C27	Manufacture of electrical equipment	27
23	C28	Manufacture of machinery and equipment n.e.c.	28
24	C29	Manufacture of motor vehicles, trailers and semi-trailers	29
25	C301	Building of ships and boats	301
26	C302T309	Manufacture of other transport equipment	302 to 309
27	C31T33	Manufacture of furniture and other manufacturing	31, 32, 33
28	D	Electricity, gas, steam and air conditioning supply	35
29	E	Water supply; sewerage, waste management and remediation activities	36, 37, 38, 39
30	F	Construction	41, 42, 43
31	G	Wholesale and retail trade; repair of motor vehicles and motorcycles	45, 46, 47
32	H49	Land transport and transport via pipelines	49
33	H50	Water transport	50
34	H51	Air transport	51
35	H52	Warehousing and support activities for transportation	52
36	H53	Postal and courier activities	53
37	I	Accommodation and food service activities	55, 56
38	J58T60	Publishing, Motion picture, video, television programme production and broadcasting activities	58, 59, 60
39	J61	Telecommunications	61
40	J62_63	Computer programming and information service activities	62, 63
41	K	Financial and insurance activities	64, 65, 66
42	L	Real estate activities	68
43	M	Professional, scientific and technical activities	69 to 75
44	N	Administrative and support service activities	77 to 82
45	O	Public administration and defence; compulsory social security	84
46	P	Education	85
47	Q	Human health and social work activities	86, 87, 88
48	R	Arts, entertainment and recreation activities	90, 91, 92, 93
49	S	Other service activities	94,95, 96
50	T	Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use	97, 98

Table 4: Availability of Supply, Use and Input-Output tables

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
AGO																												
ARE																												
ARG																												
AUS*																												
AUT																												
BEL																												
BGD*																												
BGR**																												
BLR																												
BRA																												
BRN																												
CAN																												
CHE																												
CHL																												
CHN																												
CIV																												
CMR																												
COD																												
COL																												
CRI																												
CYP																												
CZE																												
DEU																												
DNK																												
EGY*																												
ESP																												
EST																												
FIN																												
FRA																												
GBR**																												
GRC																												
HKG																												
HRV																												
HUN																												
IDN																												
IND*																												
IRL																												
ISL																												
ISR																												
ITA																												

-  Not available
-  Supply and Use Tables (SUTs) only
-  Input-Output Tables (IOTs) only
-  Both SUTs and IOTs

* Annual tables based on national fiscal years: Australia (1 July to 30 June); Bangladesh (1 July to 30 June); Egypt (1 July to 30 June); India (1 April to 31 March)

** Includes special provision of unpublished SUTs for reference

Table 4: Availability of Supply, Use and Input-Output tables (continued)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
JOR																												
JPN																												
KAZ																												
KHM																												
KOR																												
LAO																												
LTU																												
LUX																												
LVA																												
MAR																												
MEX																												
MLT																												
MMR*																												
MYS																												
NGA																												
NLD																												
NOR																												
NZL*																												
PAK*																												
PER																												
PHL																												
POL																												
PRT																												
ROU																												
RUS																												
SAU																												
SEN																												
SGP																												
STP																												
SVK																												
SVN																												
SWE																												
THA																												
TUN																												
TUR**																												
TWN																												
UKR																												
USA																												
VNM																												
ZAF																												

-  Not available
-  Supply and Use Tables (SUTs) only
-  Input-Output Tables (IOTs) only
-  Both SUTs and IOTs

* Annual tables based on national fiscal years: Myanmar (1 April to 31 March); New Zealand (1 April to 31 March); Pakistan (1 July to 30 June)

** Includes special provision of unpublished SUTs for reference

Table 5: Availability of Import Use and Input-Output tables

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
AUS											✓	✓	✓	✓				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
AUT	✓					✓					✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
BEL	✓					✓					✓					✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	
BGR																✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	
BRA																✓					✓							
CAN																✓					✓							
CHL														✓					✓		✓					✓	✓	
COL																				✓	✓	✓	✓	✓	✓	✓	✓	✓
CYP																✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
CZE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
DEU	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
DNK	✓											✓				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ESP	✓					✓					✓					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EST			✓			✓					✓					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
FIN	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
FRA	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
GBR	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
GRC						✓					✓					✓	✓	✓	✓	✓	✓				✓	✓	✓	✓
HRV																✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
HUN				✓		✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
IDN	✓															✓										✓	✓	✓
IRL				✓		✓					✓					✓	✓				✓					✓	✓	✓
ISR																✓				✓								
ITA	✓					✓					✓					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
JPN	✓					✓					✓						✓				✓							
KAZ																	✓				✓							✓
KOR	✓																				✓	✓	✓	✓	✓	✓		✓
LTU						✓					✓					✓					✓					✓	✓	
LVA		✓														✓					✓					✓	✓	
MEX													✓					✓						✓				
MLT																✓			✓	✓	✓							
MYS																				✓	✓					✓	✓	
NLD											✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
NOR							✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓							✓	✓	✓
NZL											✓					✓			✓						✓			
PER	✓												✓															
PHL																		✓										
POL						✓					✓					✓					✓					✓	✓	
PRT	✓				✓						✓					✓			✓		✓		✓			✓	✓	
ROU						✓			✓	✓	✓	✓		✓		✓	✓	✓	✓	✓	✓		✓			✓	✓	
RUS																✓										✓	✓	
SGP	✓					✓					✓		✓			✓		✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
SVK						✓					✓					✓	✓	✓	✓		✓				✓	✓	✓	✓
SVN		✓				✓	✓				✓				✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓
SWE	✓					✓					✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
THA	✓					✓					✓					✓												
TUR																		✓										
UKR									✓	✓	✓	✓	✓	✓	✓	✓	✓					✓	✓	✓	✓			
USA			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

2. Trade in Value Added indicators

Trade in Value Added (TiVA) indicators published by OECD². The latest indicators were estimated using the 2025 release of OECD Inter-Country Input-Output (ICIO) tables covering the years 1995 to 2022³. Indicators are provided for 80 economies (including all OECD, European Union, ASEAN and G20 countries) and a selection of region aggregates and, for 50 unique economic activities (industries) and related aggregates such as total manufactures and total services.

This guide builds on previous versions and is intended for all users, from experienced Input-Output practitioners familiar with the matrix algebra for generating indicators, to relative novices who wish to use TiVA indicators in their analyses and just need guidance on their use and interpretation.

The ICIO and TiVA databases are primarily based on statistics compiled according to 2008 System of National Accounts (2008 SNA) concepts and use an industry list based on ISIC Revision 4. Compared to the 2023 edition, the 2025 edition of TiVA indicators includes four new countries: Angola, Democratic Republic of the Congo, São Tomé and Príncipe, and the United Arab Emirates. In addition to the 80 target economies, the ICIO tables and TiVA also include an aggregate '*Rest of the World*' covering about 120 non-target economies to ensure completeness.

The TiVA indicators are designed to provide better insights into global production networks and supply chains than is possible with conventional trade statistics.

Definitions and notation used in the TiVA indicators guide 2025

The TiVA indicators in OECD (2025, <https://stats.oecd.org/wbos/fileview2.aspx?IDFile=2143f34e-6feb-41a9-abaf-cb52132608c4>) are shown in blue in the equations, while the variables derived from the ICIO system are shown in black. Visual representations of the indicators are also provided.

$EXGR_{c,p}$ represents a $K \times 1$ vector of gross exports from country c to partner country p for all K industries, where $c \neq p$. $EXGR_c$ is a $K \times 1$ vector of total exports of country c .

$V_c = [v_{c1} \dots v_{cK}]$ is a $1 \times K$ row vector with domestic value added shares of output for each industry i in country c , while V_p generally represents value added shares of the partner country p . $\hat{V}_c$ denotes the diagonalised matrix of vector V_c , i.e. a $K \times K$ matrix with elements $v_{c1} \dots v_{cK}$ on the diagonal and 0 elsewhere.

$B = (I - A)^{-1}$, is the global Leontief inverse matrix with $NK \times NK$ dimensions, where A is the global I-O coefficient matrix. $B_{c,c}$ is a $K \times K$ diagonal block matrix of B representing total domestic gross output required for one unit increase of country c demand. $B_{p,c}$ is also a $K \times K$ block matrix, and it represents the total gross output from country p required for a one unit increase in country c demand.

Total gross exports and imports in ICIO tables, and hence in TiVA indicators, differ from official National Accounts statistics due to removal of estimates of re-exports and re-imports, conversion to a *basic price* valuation and reconciliation of bilateral asymmetries via balancing under output constraints.

Changes in inventories, acquisitions less disposals of valuables, and expenditure approach statistical discrepancy for a given country are included in countries' total final demand. In other words, there is an

² See <https://www.oecd.org/en/topics/sub-issues/trade-in-value-added.html>

³ See <https://www.oecd.org/en/data/datasets/inter-country-input-output-tables.html>

implicit assumption that all products consumed within a year are produced in the same year, and vice versa.

Gross trade and output measures are presented in current prices, USD millions and, with a *basic price* valuation.

Dimensions for each indicator are provided with the following abbreviations:

Country / Region:

- Prod cou = Production country
- VA src cou = Value added source country
- Exp cou = Export country
- Imp cou = Import country
- FD cou = final demand / destination country
- World = all countries which are related to the indicator

Industry:

- Prod ind = Production source industry
- VA src ind = Value added source industry
- Exp ind = Export products producing industry
- FD ind = final demand products producing industry
- Tot ind = total industry

Supply and Demand Dimensions:

- Depending on the indicator, the supply and demand dimensions could refer to intermediate, final or total goods and services.

An overview of OECD TiVA indicators

OECD TiVA indicators classified into four groups according to data requirements:

- Structural indicators, based on the values presented in ICIO;
- Indicators based on value added, gross exports and gross imports;
- Indicators based on value added and final demand;
- Detailed indicators, with four dimensions, revealing the origins of value added in gross exports, gross imports and final demand.

The complete set of indicators, with their respective dimensions, is presented in Table 6 and Table 7.

Table 6. Overview of OECD TiVA indicators and requirements for calculation

Number in doc.	Code	Label	Unit	ICIO Matrices or vectors used in the calculations
Structural Indicators - based on the values in ICIO tables				
4.1	PROD	Production (gross output)	USD	X
4.2	VALU	Value added	USD	W
4.3	PROD_VASH	Value added as a % of production	PC	V
4.4	EXGR	Gross exports	USD	GRTR
4.4	EXGR_INT	Gross exports of intermediate products	USD	GRTR_INT
4.4	EXGR_FNL	Gross exports of final products	USD	GRTR_FNL
4.5	IMGR	Gross imports	USD	GRTR
4.5	IMGR_INT	Gross imports of intermediate products	USD	GRTR_INT
4.5	IMGR_FNL	Gross imports of final products	USD	GRTR_FNL
4.6	BALGR	Gross trade balance	USD	GRTR
4.7	EXGRpSH	Gross exports, partner shares	PC	GRTR
4.7	IMGRpSH	Gross imports, partner shares	PC	GRTR
Indicators based on value added in gross exports and imports				
Domestic value added content of gross exports				
5.1	EXGR_DVA	Domestic value added content of gross exports	USD	VB * GRTR
5.2	EXGR_DVASH	Domestic value added share of gross exports	PC	VB * GRTR
5.3	EXGR_TDVAIND	Industry domestic value added contribution to gross exports	PC	VB * GRTR
5.4	EXGR_DVApSH	Domestic value added in gross exports, partner shares	PC	VB * GRTR
Decomposition of domestic value added content of gross exports				
5.5	EXGR_DDC	Direct domestic value added content of gross exports	USD	VB * GRTR
5.6	EXGR_IDC	Indirect domestic value added content of gross exports	USD	VB * GRTR
5.7	EXGR_RIM	Re-imported domestic value added content of gross exports	USD	VB * GRTR
Foreign value added content of gross exports (backward participation in GVCs)				
5.8	EXGR_FVA	Foreign value added content of gross exports	USD	VB * GRTR
5.9	EXGR_FVASH	Foreign value added share of gross exports	PC	VB * GRTR
5.10	EXGR_TFVAIND	Industry foreign value added contribution to gross exports	PC	VB * GRTR
5.11	DEXFVApSH	Foreign value added share of gross exports, by value added origin country	PC	VB * GRTR
Domestic value added content of foreign gross exports (forward participation in GVCs)				
5.12	EXGR_DVAFXSH	Domestic value added embodied in foreign exports as share of gross exports	PC	VB * GRTR
5.13	FEXDVApSH	Domestic value added in foreign exports as a share of gross exports, by foreign exporting country	PC	VB * GRTR
Domestic value added content of intermediate and final gross exports				
5.14	EXGR_INTDVASH	Domestic value added in exports of intermediate products, as a share of total gross exports	PC	VB * GRTR_INT
5.15	EXGR_FNLDVASH	Domestic value added in exports of final products, as a share of total gross exports	PC	VB * GRTR_FNL
5.16	EXGR_INTDVApSH	Domestic value added in exports of intermediate products, partner shares	PC	VB * GRTR_INT
Services value added content of gross exports				
5.17	EXGR_SERV_DVASH	Domestic services value added share of gross exports	PC	VB * GRTR
5.18	EXGR_SERV_FVASH	Foreign services value added share of gross exports	PC	VB * GRTR
Domestic value added in imports				
5.19	IMGR_DVA	Domestic value added content of gross imports	USD	VB * GRTR
5.20	IMGR_DVASH	Domestic value added share of gross imports	PC	VB * GRTR
Re-exported intermediate imports				
5.21	REII	Re-exported intermediate imports	USD	A, B, GRTR
5.22	IMGRINT_REII	Re-exported intermediate imports as % of intermediate imports	PC	A, B, GRTR_INT
Indicators based on value added in final demand				
6.1	FFD_DVA	Domestic value added embodied in foreign final demand	USD	VB * FD
6.2	FFD_DVApSH	Domestic value added in foreign final demand, partner shares	PC	VB * FD
6.3	VALU_FFDDVA	Share of domestic value added embodied in foreign final demand	PC	VB * FD
6.4	DFD_FVA	Foreign value added embodied in domestic final demand	USD	VB * FD
6.5	DFD_FVApSH	Foreign value added in domestic final demand, partner shares	PC	VB * FD
6.6	BALVAFD	Value added embodied in final demand, balance	USD	VB * FD
Sources of value added in final demand				
6.7	FD_VA	Value added content of final demand, by source country and industry	USD	VB * FD
6.7	CONS_VA	Value added content of total consumption, by source country and industry	USD	VB * CONS
6.7	GFCF_VA	Value added content of gross fixed capital formation, by source country and industry	USD	VB * GFCF
6.8	FD_VASH	Value added share of total final demand, by source country and industry	PC	VB * FD
6.8	CONS_VASH	Value added share of total consumption, by source country and industry	PC	VB * CONS
6.8	GFCF_VASH	Value added share of gross fixed capital formation, by source country and industry	PC	VB * GFCF
Indicators with four dimensions				
Origins of value added By Source Country and Industry (BSCI)				
7.1	EXGR_BSCI	Origin of value added in gross exports	USD	VB * GRTR
7.2	IMGR_BSCI	Origin of value added in gross imports	USD	VB * GRTR
7.3	FDVA_BSCI	Origin of value added in final demand	USD	VB * FD
Gross exports with 3 country dimensions: exporter, value added origin and final destination				
7.4	FD_EXGRINT_VA	Gross exports of intermediate products by origin of value added and final destination	USD	V, A, B, FD
7.4	FD_EXGRFNL_VA	Gross exports of final products by origin of value added and final destination	USD	VB * GRTR_FNL
7.4	FD_EXGR_VA	Gross exports by origin of value added and final destination	USD	FD_EXGRINT_VA + FD_EXGRFNL_VA

Table 7. OECD TiVA indicators and their dimensions

N.	Code	number of dimensions	Indicator dimensions in OECD.STAT			Unit
			Country <i>c</i> Industry <i>i</i> 'Partner' <i>p</i>			
1	EXGR	3	Exp cou	Exp ind	Imp cou	USD
2	EXGR FNL	3	Exp cou	Exp ind	Imp cou	USD
3	EXGR INT	3	Exp cou	Exp ind	Imp cou	USD
4	EXGR DVA	3	Exp cou	Exp ind	Imp cou	USD
5	EXGR DDC	2	Exp cou	Exp ind	<i>World</i>	USD
6	EXGR IDC	2	Exp cou	Exp ind	<i>World</i>	USD
7	EXGR RIM	2	Exp cou	Exp ind	<i>World</i>	USD
8	EXGR FVA	2	Exp cou	Exp ind	<i>World</i>	USD
9	IMGR	3	Imp cou	Exp ind	Exp cou	USD
10	IMGR FNL	3	Imp cou	Exp ind	Exp cou	USD
11	IMGR INT	3	Imp cou	Exp ind	Exp cou	USD
12	IMGR DVA	3	Imp cou	Exp ind	Exp cou	USD
13	BALGR	2	Exp cou	<i>Tot ind</i>	Imp cou	USD
14	REII	2	Exp cou	Prod ind	<i>World</i>	USD
15	PROD	2	Prod cou	Prod ind	<i>World</i>	USD
16	VALU	2	Prod cou	Prod ind	<i>World</i>	USD
17	FFD DVA	3	VA src cou	VA src ind	FD cou	USD
18	DFD FVA	3	FD cou	VA src ind	VA src cou	USD
19	BALVAFD	3	VA src cou	VA src ind	FD cou	USD
20	FD VA	3	FD cou	VA src ind	VA src cou	USD
21	CONS VA	3	FD cou	VA src ind	VA src cou	USD
22	GFCF VA	3	FD cou	VA src ind	VA src cou	USD
23	EXGR DVASH	2	Exp cou	Exp ind	<i>World</i>	PC
24	EXGR FVASH	2	Exp cou	Exp ind	<i>World</i>	PC
25	EXGR DVAFXSH	2	VA src cou	Exp ind	<i>World</i>	PC
26	EXGR FNLDVASH	2	Exp cou	Exp ind	<i>World</i>	PC
27	EXGR INTDVASH	2	Exp cou	Exp ind	<i>World</i>	PC
28	EXGR INTDVApSH	3	Exp cou	Exp ind	Imp cou	PC
29	EXGRpSH	3	Exp cou	Exp ind	Imp cou	PC
30	EXGR DVApSH	3	Exp cou	Exp ind	Imp cou	PC
31	EXGR TDVAIND	2	Exp cou	Exp Ind	<i>World</i>	PC
32	EXGR TFVAIND	2	Exp cou	Exp Ind	<i>World</i>	PC
33	EXGR SERV DVASH	2	Exp cou	Exp Ind	<i>World</i>	PC
34	EXGR SERV FVASH	2	Exp cou	Exp Ind	<i>World</i>	PC
35	IMGRINT REII	2	Exp cou	Prod ind	<i>World</i>	PC
36	IMGR DVASH	3	Imp cou	Exp ind	Exp cou	PC
37	IMGRpSH	3	Imp cou	Exp ind	Exp cou	PC
38	FFD DVApSH	3	VA src cou	VA src ind	FD cou	PC
39	DFD FVApSH	3	FD cou	VA src ind	VA src cou	PC
40	VALU FFDDVA	2	VA src cou	VA src ind	<i>World</i>	PC
41	PROD VASH	2	Prod cou	Prod ind	<i>World</i>	PC
42	FD VASH	3	FD cou	VA src ind	VA src cou	PC
43	CONS VASH	3	FD cou	VA src ind	VA src cou	PC
44	GFCF VASH	3	FD cou	VA src ind	VA src cou	PC
45	DEXFVApSH	2	Exp cou	<i>Tot ind</i>	VA src cou	PC
46	FEXDVApSH	2	VA src cou	<i>Tot ind</i>	Exp cou	PC

Trade in Value Added (TiVA) - Datasets on Origins of value added

N.	Code	number of dimensions	Indicator dimensions in OECD.STAT	Unit
2	EXGR BSCI	4	VA src cou VA src ind Exp cou Exp ind	USD
3	FDVA BSCI	4	VA src cou VA src ind FD cou FD ind	USD
4	FD EXGR VA	4	VA src cou Exp cou Exp ind FD cou	USD
4	FD EXGRFNL VA	4	VA src cou Exp cou Exp ind FD cou	USD
4	FD EXGRINT VA	4	VA src cou Exp cou Exp ind FD cou	USD
5	IMGR BSCI	4	Imp cou VA src cou Exp ind Exp cou	USD

3. OECD Greenhouse gas Footprint Indicators

The sources and methods applied to develop the 2025 edition of OECD's Greenhouse Gas Footprint Indicators (GHG FP)⁴ are consistent with those used for the previous edition⁵. This note highlights the expanded lists of countries and economic activities, in line with the 2025 edition of the OECD ICIO Tables, as well as the availability of greenhouse gas emissions statistics that serve as main inputs for the construction of the updated greenhouse gas emissions indicators. Data sources are mainly OECD's Air Emissions Accounts (AEA), OECD's Greenhouse gas emissions Inventories, UNFCCC's Greenhouse gas data and IEA CO₂ emissions from fuel combustion. Compared to the previous edition, the main changes are i) the addition of four countries (Angola, United Arab Emirates, Democratic Republic of Congo and São Tomé and Príncipe); ii) the expansion of agriculture and mining to 2-digit ISIC Divisions; iii) the separation of *iron and steel* from *non-ferrous metals* within *Manufacture of basic metals*; and iv) the distinction of *Building of ships and boats* from other transport equipment. The new database covers the period 1995-2022.

Greenhouse gas footprint indicators provide a comprehensive view of the greenhouse gas emissions embodied in global production networks and final demand. Building on the OECD Inter-Country Input-Output (ICIO) framework, these indicators go beyond traditional territorial and production-based emissions accounts by tracing emissions along international supply chains and allocating them to consuming countries, economic activities and final demand categories. The current OECD GHG footprint indicators expand earlier carbon footprint measures by covering all major greenhouse gases in CO₂-equivalents, including emissions from fuel combustion, industrial processes and other non-CO₂ sources such as agriculture, mining and waste management. The indicators distinguish between production-based, demand-based and trade-embodied emissions, and allow for the analysis of emissions associated with household consumption, government expenditure and capital formation. Originally developed to complement territorial emissions statistics and address growing policy interest in emissions embodied in trade, the GHG footprint indicators support analysis of globalisation-related climate challenges, including carbon leakage, manufacturing decarbonisation, transitions to cleaner energy systems and the distribution of emissions responsibilities along global value chains. By providing a consistent and internationally comparable dataset, GHG FP indicators offer policymakers a valuable tool for assessing climate policies in an increasingly interconnected global economy.

⁴ <https://www.oecd.org/en/data/datasets/greenhouse-gas-footprint-indicators.html>

⁵ Yamano, N., M. Lioussis and A. Cimper (2024), "Measuring greenhouse gas footprints in global production networks: New perspectives on emissions embodied in production chains and final demand patterns", *OECD Science, Technology and Industry Working Papers*, No. 2024/12, OECD Publishing, Paris, <https://doi.org/10.1787/fc426ab9-en>.

Table 8. Greenhouse gas emissions statistics availability by years and country

[illegible]

Table 9. Greenhouse gas emissions statistics availability by years and country

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
JOR																												
JPN																												
KAZ																												
KHM																												
KOR																												
LAO																												
LTU																												
LUX																												
LVA																												
MAR																												
MEX																												
MLT																												
MMI																		</										