Türkiye and Mexico:
Export concentration & Economic Complexity

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Export's concentration and recomposition

The Herfindahl-Hirschman Index (HHI) shows that Mexico and Türkiye have diverged in their exports concentration paths over the past decade.

Export concentration: Two Perspectives

We estimate two normalized* Herfindahl-Hirschman Indices (closer to 1 means higher concentration) for Mexico and Türkiye

IHH_D = 1 The exporting country concentrates all of its exports in a single country

$$IHH\_D = (\sum_c (\frac{x_{cp}}{X})^2 - \frac{1}{D}) * (\frac{1}{1-\frac{1}{D}})$$

IHH_P = 0 The country exports a uniformly weighted basket of goods (each with the same share)

$$IHH\_P = (\sum_p (\frac{x_{cp}}{X})^2 - \frac{1}{P}) * (\frac{1}{1-\frac{1}{P}})$$

Example for IHH_D with 5 destination countries for a given year: Market Shares (%)						
	Scenario (A)	(B)	(C)	(D)	(E)	(F)
Country 1	100%	90%	50%	60%	40%	20%
Country 2		10%	50%	25%	25%	20%
Country 3				15%	25%	20%
Country 4					10%	20%
Country 5						20%
Traditional HHI	10,000	8,200	5,000	4,450	2,950	2,000
Normalized HHI	**1**	**0.64**	**0**	**0.34**	**0.18**	**0**

*Cracau, Lima. (2016) "On the Normalized Herfindahl-Hirschman Index: A Technical Note"
Oil exports (crude and refined) are excluded from analysis related to data quality issues and following Hausmann, R., Hidalgo, C. A., Bustos, S., Coscia, M., Simoes, A., & Yıldırım, M. A. (2013).

Notes on data cleansing and processing

We use international trade data from Harvard Growth Lab Atlas Data which recovers trade flows from the United Nations Statistical Division (UN Comtrade) and follows the Bustos-Yildirim Method to generate consistent estimates of trade flows between countries. **No services trade was considered for the study.**

- The data set was updated in September 2024, comprising the period 1995 - 2022.

- We select the Harmonized System 1992 (HS) at 4-digit levels due to inconsistencies at the 6-digit level.

- We excluded "Undeclared" trading partners" (ANS code), Commodities not specified according to kind (9999 code), and Trade data discrepancies (XXX)

- We also exclude Petroleum oils, crude (2709 code), and refined products (2710 code) due to inconsistencies with national data sources for Mexico and Türkiye.

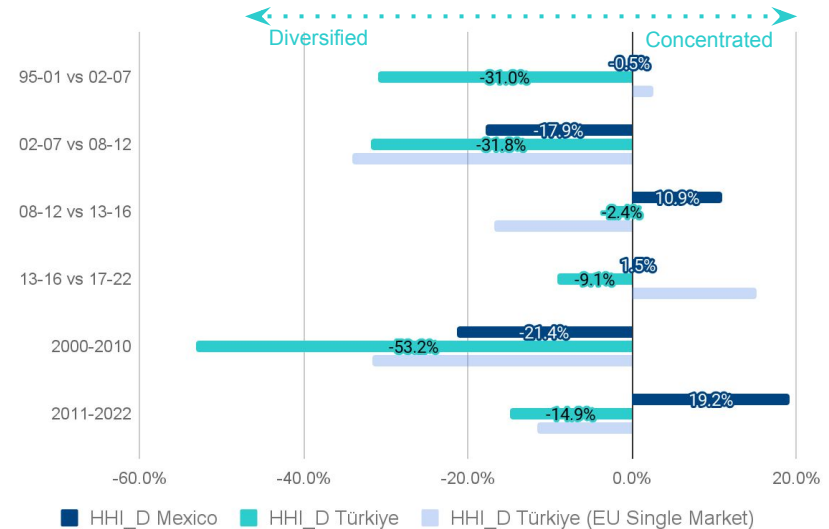# Diverging paths in the export concentration by destination country (IHH_D)

EXPORT CONCENTRATION BY DESTINATION
(IHH_D: 0-1)*
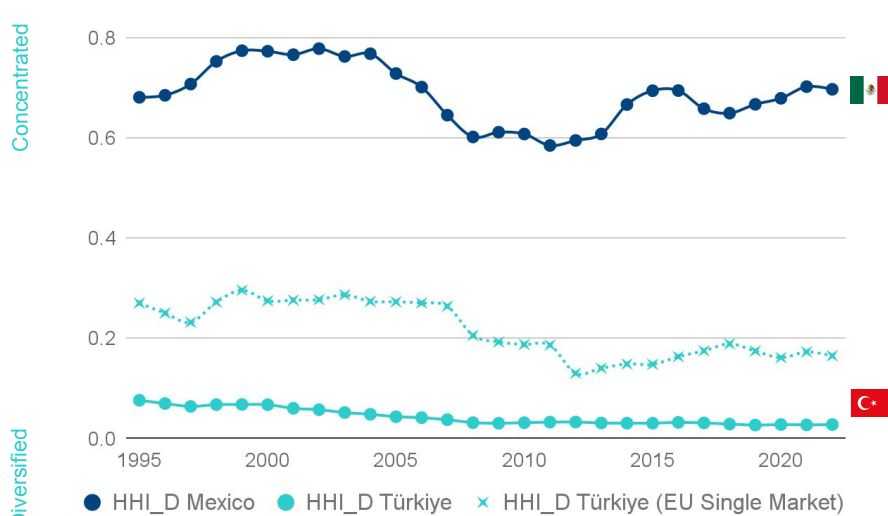
EXPORT CONCENTRATION BY DESTINATION
(CHANGE %, SELECTED PERIODS)

Source: BBVA Research with data from Harvard Dataverse.   *Value close to 1 means a greater export concentration (less diversification).

The HHI_D is clearly different for both countries. Mexico's exports are concentrated on the north-american region while Türkiye has steadily diversified the countries to export, up to 14.9% in the period 2011-2022 both by increasing the number of countries and reducing the concentration among the top trading partners, even when considering the EU as a single market.

In 2022, 94.4% of Mexico's exports went into the Top 10 destination countries

MEXICO: TOP 10 EXPORT PARTNERS
(SORTED BY SHARE % OF TOTAL EXPORTS)

1995 (92%)	2000 (94.6%)	2005 (93.8%)	2010 (91%)	2015 (93.2%)	2022 (94.4%)
USA (82.5%)	USA (87.9%)	USA (85.3%)	USA (77.9%)	USA (83.3%)	USA (83.4%)
CAN (3.2%)	CAN (2.5%)	CAN (2.3%)	CAN (4.1%)	CAN (3.6%)	CAN (3.9%)
BRA (1.2%)	DEU (0.9%)	DEU (1.2%)	DEU (1.5%)	CHN (1.5%)	CHN (2.6%)
JPN (1.1%)	JPN (0.7%)	JPN (0.9%)	CHN (1.5%)	DEU (1%)	DEU (1.1%)
DEU (0.8%)	GBR (0.6%)	COL (0.9%)	COL (1.5%)	COL (0.9%)	JPN (0.7%)
CHL (0.7%)	BRA (0.4%)	CHN (0.8%)	BRA (1.3%)	BRA (0.8%)	BRA (0.6%)
COL (0.7%)	VEN (0.4%)	VEN (0.7%)	JPN (1.1%)	JPN (0.7%)	KOR (0.6%)
HKG (0.6%)	GTM (0.4%)	GBR (0.6%)	GBR (0.7%)	GTM (0.5%)	GBR (0.5%)
FRA (0.6%)	CHL (0.4%)	BRA (0.5%)	ARG (0.7%)	KOR (0.5%)	COL (0.5%)
GBR (0.6%)	COL (0.3%)	GTM (0.5%)	CHL (0.7%)	FRA (0.4%)	GTM (0.4%)

TÜRKIYE: TOP 10 EXPORT PARTNERS
(SORTED BY SHARE % OF TOTAL EXPORTS)

1995 (63.5%)	2000 (65.4%)	2005 (58.7%)	2010 (50.2%)	2015 (50%)	2022 (48.7%)
DEU (24%)	DEU (19.1%)	DEU (13.2%)	DEU (10.5%)	DEU (9.3%)	DEU (8.9%)
USA (7.8%)	USA (11.9%)	GBR (8.7%)	ITA (6.3%)	GBR (7.8%)	USA (6.9%)
RUS (6.1%)	GBR (8.3%)	ITA (7.6%)	GBR (6.1%)	IRQ (6.7%)	IRQ (5.9%)
ITA (5.7%)	FRA (6.6%)	USA (6.1%)	IRQ (5.7%)	ITA (5%)	GBR (5.3%)
GBR (5.3%)	ITA (6.3%)	FRA (5.5%)	FRA (5.6%)	USA (4.7%)	ITA (5.2%)
FRA (5%)	NLD (3%)	ESP (4.4%)	RUS (4.2%)	FRA (4.2%)	FRA (4%)
NLD (3.6%)	ESP (2.7%)	IRQ (4.1%)	USA (3.2%)	CHE (3.6%)	RUS (3.9%)
SAU (2.3%)	ISR (2.6%)	RUS (3.4%)	ESP (3.1%)	ARE (3%)	ESP (3.4%)
BEL (1.9%)	BEL (2.4%)	NLD (3.1%)	ARE (2.7%)	IRN (2.9%)	ISR (2.9%)
ESP (1.7%)	RUS (2.4%)	ROU (2.6%)	IRN (2.7%)	ESP (2.9%)	NLD (2.3%)

Source: BBVA Research with data from Harvard Dataverse.

Mexico's export destination composition has remained stable over the last 20 years. In the same period, Türkiye has reduced its dependence on the German market while increasing its share in the US, UK, Iraq, and other European countries. In 2022, Türkiye's top 10 export partners accounted for 48.7% of total exports, Mexico's top 10 account for 94.4%

China's share in Mexico's exports increased 18% between 2017-2022

MEXICO'S EXPORT DESTINATION
(GAIN IN SHARE % OF TOTAL EXPORTS, 2017-2022)

Partner name	Share 2017	Share 2022	Change % 22-17
United Kingdom	0.32%	0.53%	67.41
Belgium	0.29%	0.38%	31.27
China	2.22%	2.62%	18.02
El Salvador	0.15%	0.17%	15.52
South Korea	0.53%	0.59%	11.90
Switzerland	0.19%	0.21%	9.37
Guatemala	0.40%	0.44%	7.91
Turkiye	0.16%	0.17%	7.58
Thailand	0.11%	0.12%	6.96
Czechia	0.12%	0.13%	6.05
Spain	0.30%	0.31%	4.95
Canada	3.79%	3.92%	3.31
United States of America	81.06%	83.41%	2.90

MEXICO'S EXPORT DESTINATION
(LOSS IN SHARE % OF TOTAL EXPORTS, 2017-2022)

Partner name	Share 2017	Share 2022	Change % 22-17
United Arab Emirates	0.12%	0.12%	-3.42
Australia	0.36%	0.35%	-4.46
Honduras	0.14%	0.12%	-9.53
Nicaragua	0.18%	0.16%	-11.90
Italy	0.15%	0.13%	-12.33
Brazil	0.80%	0.65%	-18.86
Dominican Republic	0.13%	0.11%	-19.04
Panama	0.19%	0.15%	-24.67
Japan	0.93%	0.70%	-25.44
Colombia	0.64%	0.47%	-26.29
Costa Rica	0.21%	0.15%	-27.90
Hong Kong	0.16%	0.11%	-29.38
Netherlands	0.33%	0.22%	-33.45
Peru	0.31%	0.20%	-34.76
Chile	0.40%	0.24%	-39.81
Germany	1.82%	1.07%	-41.41
India	0.27%	0.14%	-47.55
Argentina	0.35%	0.17%	-50.99
France	0.49%	0.17%	-65.98

Note: Filtered for countries with a share larger than 0.1% of total exports.
Source: BBVA Research with data from Harvard Dataverse.

Russia's share in Türkiye's exports doubled between 2017-2022

TÜRKIYE'S EXPORT DESTINATION
(GAIN IN SHARE % OF TOTAL EXPORTS, 2017-2022)

Partner name	Share 2017	Share 2022	Change % 22-17
Russia	1.86%	3.89%	109.18
Libya	0.59%	1.21%	104.18
Serbia	0.66%	1.03%	54.67
Israel	2.07%	2.89%	39.55
United States of America	4.95%	6.88%	38.92
Egypt	1.31%	1.76%	34.57
Ukraine	0.82%	1.08%	31.72
Greece	0.92%	1.20%	30.98
Bulgaria	1.58%	1.97%	24.54
Kazakhstan	0.54%	0.67%	24.28
Morocco	1.09%	1.30%	19.28
Czechia	0.79%	0.93%	16.91
Canada	0.72%	0.83%	15.38
Poland	1.86%	2.13%	14.27
Georgia	0.88%	0.99%	12.53
Azerbaijan	0.93%	1.04%	12.15
Italy	4.84%	5.22%	7.83
Lebanon	0.59%	0.63%	7.00
Netherlands	2.15%	2.30%	6.69
Qatar	0.51%	0.54%	6.27

TÜRKIYE'S EXPORT DESTINATION
(LOSS IN SHARE % OF TOTAL EXPORTS, 2017-2022)

| Partner name	Share 2017	Share 2022	Change % 22-17
Slovenia	0.56%	0.56%	-0.09
Tunisia	0.61%	0.60%	-0.88
Hungary	0.69%	0.66%	-3.44
Switzerland	0.63%	0.59%	-6.07
Germany	9.71%	8.85%	-8.84
Iraq	6.54%	5.93%	-9.36
France	4.45%	4.03%	-9.53
Denmark	0.67%	0.60%	-9.98
Austria	0.91%	0.80%	-12.06
Syria	1.02%	0.88%	-13.66
United Kingdom	6.54%	5.30%	-19.02
Sweden	0.84%	0.66%	-21.20
Spain	4.38%	3.44%	-21.57
Algeria	1.19%	0.88%	-25.81
Belgium	2.04%	1.51%	-26.22
China	1.84%	1.33%	-27.66
Iran	2.46%	1.26%	-48.80
United Arab Emirates	5.38%	2.17%	-59.63

Note: Filtered for countries with a share larger than 0.5% of total exports.
Source: BBVA Research with data from Harvard Dataverse.

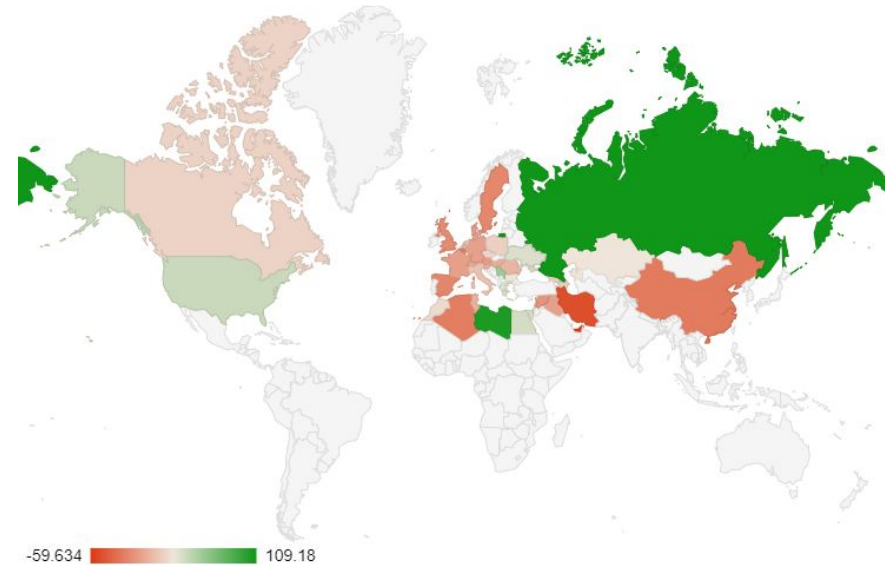# Since 2017, Russia and China have increased their share of exports

MEXICO'S EXPORT DESTINATION
(GAIN IN SHARE % OF TOTAL EXPORTS, 2017-2022)
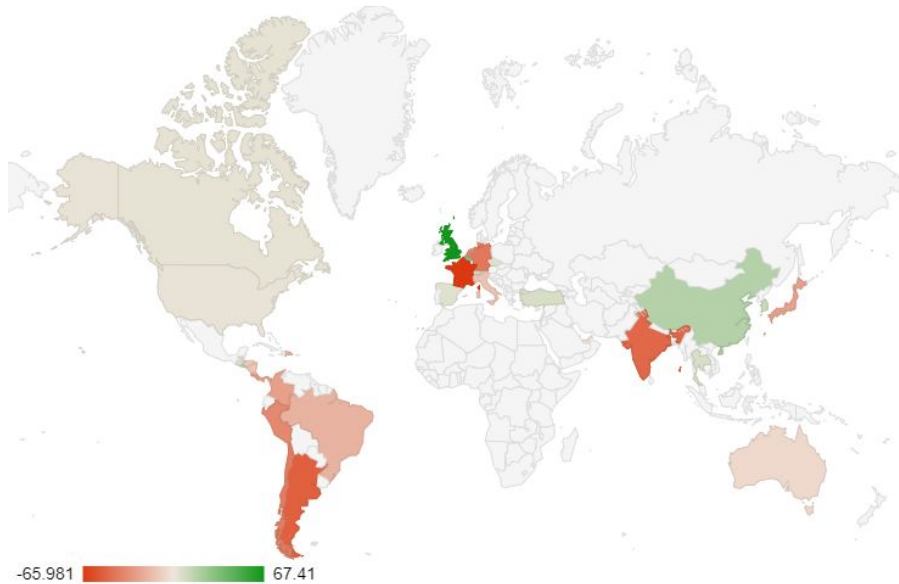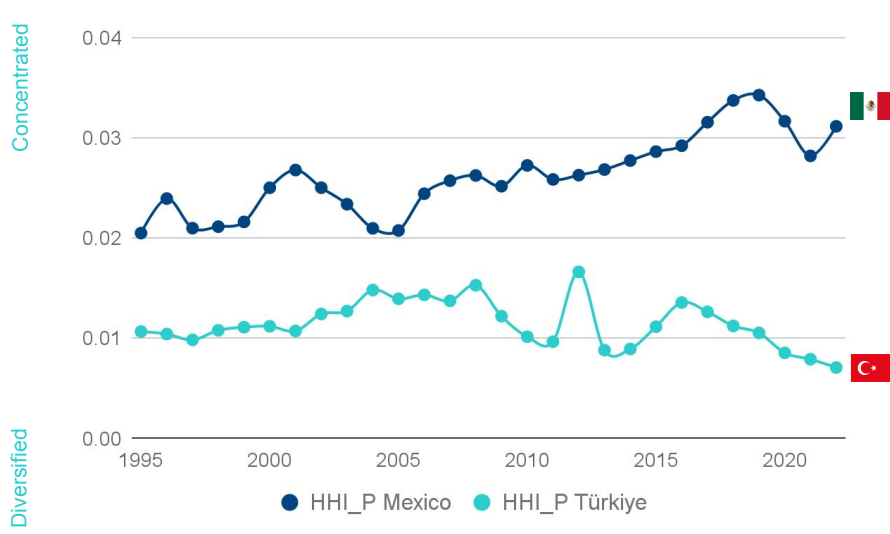
TÜRKIYE'S EXPORT DESTINATION
(GAIN IN SHARE % OF TOTAL EXPORTS, 2017-2022)

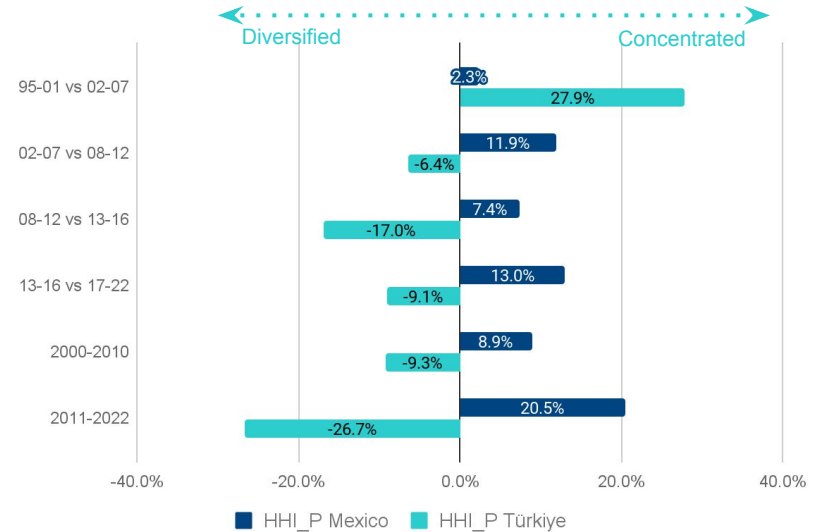-65.981   67.41

-59.634   109.18

Note: Filtered for countries with a share larger than 0.1% of total exports for Mexico and 0.5% for Türkiye.
Source: BBVA Research with data from Harvard Dataverse.

Diverging paths post 2016 in the export concentration by product (IHH_P)

EXPORT CONCENTRATION BY PRODUCT
(IHH_P: 0-1)*

EXPORT CONCENTRATION BY PRODUCT
(CHANGE %, SELECTED PERIODS)

Source: BBVA Research with data from Harvard Dataverse.   *Value close to 1 means a greater export concentration (less diversification).

The HHI_P index shows stable trend before 2008 when Mexico started to concentrate even further meanwhile Türkiye began a recomposition of its export portfolio. Over the period 2011-2022 Türkiye has diversified the exported products by 26.7%, in contrast Mexico has concentrated 20.5%

Top 10 most exported products by Mexico account for 45.8% of total exports

MEXICO: TOP 10 TRADED PRODUCTS
(SORTED BY SHARE % TOTAL EXPORTS)

1995 (35.4%)	2000 (40.6%)	2005 (39.4%)	2010 (45.3%)	2015 (46.8%)	2022 (45.8%)
(10.4%) Cars	(10.8%) Cars	(7.3%) Cars	(9.1%) Cars	(9.4%) Cars	(9.2%) Cars
(4.7%) Insulated electrical wire	(5.4%) Computers	(5.6%) Monitors and projectors	(7.8%) Monitors and projectors	(7.2%) Parts of motor vehicles	(8.3%) Computers
(4.1%) Monitors and projectors	(4.4%) Insulated electrical wire	(5.3%) Parts of motor vehicles	(5.3%) Parts of motor vehicles	(6.2%) Motor vehicles for transporting goods	(7.9%) Parts of motor vehicles
(3.2%) Spark-ignition reciprocating internal combustion piston engines	(3.8%) Parts of motor vehicles	(5%) Computers	(5.3%) Computers	(5.4%) Computers	(6.6%) Motor vehicles for transporting goods
(3.1%) Parts of motor vehicles	(3.8%) Monitors and projectors	(4%) Insulated electrical wire	(4.1%) Motor vehicles for transporting goods	(4.7%) Monitors and projectors	(3.4%) Insulated electrical wire
(2.6%) Motor vehicles for transporting goods	(3.1%) Motor vehicles for transporting goods	(3.9%) Motor vehicles for transporting goods	(3.9%) Transmission apparatus for radio, telephone and TV	(4.1%) Telephones	(2.8%) Monitors and projectors
(2.4%) Computers	(2.4%) Transmission apparatus for radio, telephone and TV	(2.9%) Transmission apparatus for radio, telephone and TV	(3.3%) Telephones	(3.3%) Insulated electrical wire	(2.6%) Medical instruments
(1.8%) Parts of radios, telephones, and T.V.s	(2.4%) Telephones	(2%) Seats	(2.6%) Insulated electrical wire	(2.6%) Tractors	(2.2%) Transmission apparatus for radio, telephone and TV
(1.7%) Reception apparatus for radio broadcasting	(2.3%) Electrical apparatus for < 1k volts	(1.7%) Electrical apparatus for < 1k volts	(2.2%) Gold	(2.1%) Medical instruments	(1.4%) Refrigerators, freezers
(1.5%) Electrical apparatus for < 1k volts	(2.1%) Parts and accessories for office machines	(1.7%) Medical instruments	(1.9%) Medical instruments	(1.8%) Seats	(1.4%) Electrical boards

TÜRKIYE: TOP 10 TRADED PRODUCTS
(SORTED BY SHARE % TOTAL EXPORTS)

1995 (26.2%)	2000 (26.5%)	2005 (30.4%)	2010 (24.7%)	2015 (26.9%)	2022 (20.3%)
(3.8%) Sweaters, pullovers, sweatshirts etc., knit	(4.5%) T-shirts, knit	(6%) Cars	(5.5%) Cars	(5.7%) Gold	(3.8%) Cars
(3.6%) Other bars of iron, not further worked than forged	(3.7%) Women's suits and pants	(4%) Monitors and projectors	(3.1%) Motor vehicles for transporting goods	(4.7%) Cars	(3.5%) Jewelry of precious metal
(3.2%) T-shirts, knit	(3.1%) Sweaters, pullovers, sweatshirts etc., knit	(3.8%) T-shirts, knit	(3%) Other bars of iron, not further worked than forged	(2.9%) Motor vehicles for transporting goods	(2.7%) Parts of motor vehicles
(3.1%) Women's suits and pants	(2.9%) Monitors and projectors	(3.4%) Motor vehicles for transporting goods	(2.4%) T-shirts, knit	(2.8%) Parts of motor vehicles	(2.3%) Motor vehicles for transporting goods
(2.7%) Other nuts	(2.4%) Other bars of iron, not further worked than forged	(3.2%) Other bars of iron, not further worked than forged	(2.4%) Parts of motor vehicles	(2.4%) Jewelry of precious metal	(1.7%) Other bars of iron, not further worked than forged
(2.6%) Women's suits, knit	(2.3%) Cars	(3%) Women's suits and pants	(1.8%) Semifinished products of iron or nonalloy steel	(2%) Other bars of iron, not further worked than forged	(1.5%) Women's suits and pants
(2.1%) Semifinished products of iron or nonalloy steel	(2.1%) Men's suits and pants	(2%) Parts of motor vehicles	(1.7%) Insulated electrical wire	(2%) T-shirts, knit	(1.5%) Insulated electrical wire
(1.8%) Leather apparel	(1.9%) House linen	(1.7%) Men's suits and pants	(1.6%) Women's suits and pants	(1.6%) Insulated electrical wire	(1.1%) T-shirts, knit
(1.7%) Women's undergarments, knit	(1.9%) Other aircraft and spacecraft	(1.7%) Other nuts	(1.6%) Gold	(1.5%) Women's suits and pants	(1.1%) Refrigerators, freezers
(1.6%) Men's suits and pants	(1.6%) Parts of motor vehicles	(1.7%) Sweaters, pullovers, sweatshirts etc., knit	(1.5%) Monitors and projectors	(1.4%) Other nuts	(1.1%) Sweaters, pullovers, sweatshirts etc., knit

Source: BBVA Research with data from Harvard Dataverse.

Electronics and Machinery increase their share in Mexico's exports

MEXICO'S EXPORT BY PRODUCT
(GAIN IN SHARE % TOTAL EXPORTS, 2017-2022 HS4)

HS4	Product	Share 2017	Share 2022	Change % 22-17
8542	Electronic integrated circuits	0.64%	0.91%	41.43
8415	Air conditioners	0.91%	1.27%	39.37
8471	Computers	6.11%	8.30%	35.82
8504	Electrical transformers	0.73%	0.97%	33.89
7108	Gold	0.68%	0.90%	33.45
2603	Copper ore	0.57%	0.72%	27.71
8421	Centrifuges	0.65%	0.83%	27.55
8512	Electrical lighting eq. for motor vehicles	0.67%	0.83%	22.70
2203	Beer	0.98%	1.19%	21.64
8537	Electrical boards	1.14%	1.38%	21.29
3923	Packing lids	0.52%	0.62%	18.67
9018	Medical instruments	2.19%	2.57%	17.07
8418	Refrigerators, freezers	1.26%	1.44%	14.75
8536	Electrical apparatus for < 1k volts	0.91%	1.04%	13.68
8414	Pumps, compressors, fans, etc.	0.68%	0.77%	13.14
8708	Parts of motor vehicles	7.03%	7.94%	12.98
8544	Insulated electrical wire	3.17%	3.44%	8.53
702	Tomatoes	0.52%	0.56%	7.65
3926	Other articles of plastic	0.53%	0.57%	7.57
8413	Pumps for liquids	0.53%	0.55%	4.68
709	Other vegetables	0.63%	0.64%	1.34
8704	Motor vehicles for transporting goods	6.55%	6.56%	0.06

MEXICO'S EXPORT BY PRODUCT
(GAIN IN SHARE % TOTAL EXPORTS, 2017-2022 HS4)

HS4	Product	Share 2017	Share 2022	Change % 22-17
8409	Parts suitable for use with spark-ignition engines	1.08%	1.08%	-0.12
8543	Electrical machines with individual functions n.e.c.	0.55%	0.54%	-0.62
8481	Appliances for thermostatically controlled valves	0.66%	0.64%	-2.91
8501	Electric motors and generators	0.98%	0.95%	-3.62
804	Avocados, pineapples, mangos, etc.	0.84%	0.79%	-5.10
8407	Spark-ignition reciprocating int. combustion engines	0.91%	0.78%	-14.05
8703	Cars	10.73%	9.20%	-14.30
8528	Monitors and projectors	3.41%	2.79%	-18.05
9032	Automatic regulating instruments	0.65%	0.50%	-22.85
8411	Gas turbines	0.76%	0.56%	-26.52

Note: Filtered for countries with a share larger than 0.5% of total exports.
Source: BBVA Research with data from Harvard Dataverse.

Iron/Steel products and metals (jewelry) gain share in Türkiye's exports

TÜRKIYE'S EXPORT BY PRODUCT
(GAIN IN SHARE % TOTAL EXPORTS, 2017-2022 HS4)

HS4	Product	Share 2017	Share 2022	Change % 22-17
7308	Structures and their parts, of iron or steel	0.65%	1.02%	56.83
7113	Jewelry of precious metal	2.60%	3.47%	33.33
9401	Seats	0.53%	0.68%	27.95
3920	Other plates of plastics, noncellular and not reinforced	0.70%	0.86%	21.76
9403	Other furniture and parts	0.85%	1.03%	20.91
7214	Other bars of iron, not further worked than forged	1.56%	1.72%	10.21
4011	New pneumatic tires of rubber	0.70%	0.76%	8.31
7306	Other tubes, pipes and hollow profiles of iron or steel	0.74%	0.79%	6.56
8544	Insulated electrical wire	1.43%	1.51%	5.33
6802	Worked building stone	0.56%	0.58%	4.58
3923	Packing lids	0.55%	0.57%	4.44

TÜRKIYE'S EXPORT BY PRODUCT
(GAIN IN SHARE % TOTAL EXPORTS, 2017-2022 HS4)

HS4	Product	Share 2017	Share 2022	Change % 22-17
8708	Parts of motor vehicles	2.76%	2.71%	-1.93
6110	Sweaters, pullovers, sweatshirts etc., knit	1.12%	1.08%	-2.94
8516	Electric heaters	0.65%	0.62%	-4.64
1101	Wheat or meslin flour	0.67%	0.63%	-5.97
8418	Refrigerators, freezers	1.15%	1.08%	-6.21
6204	Women's suits and pants	1.64%	1.52%	-7.04
6002	Other knitted fabrics	0.92%	0.83%	-10.10
7208	Flat-rolled iron, width > 600mm, hot-rolled, not clad	0.86%	0.74%	-13.70
5702	Woven carpets and rugs	1.12%	0.96%	-14.42
6203	Men's suits and pants	0.99%	0.83%	-15.96
6115	Socks, stockings, etc., knit	0.65%	0.55%	-16.00
6104	Women's suits, knit	0.73%	0.58%	-21.11
6302	House linen	0.74%	0.57%	-23.30
8704	Motor vehicles for transporting goods	2.99%	2.27%	-24.16
802	Other nuts	0.89%	0.66%	-26.34
8409	Parts suitable for use with spark-ignition engines	1.12%	0.74%	-33.97
6109	T-shirts, knit	1.79%	1.12%	-37.35
8702	Buses	1.05%	0.63%	-39.92
8703	Cars	7.26%	3.84%	-47.15
7108	Gold	4.35%	0.53%	-87.73

Note: Filtered for countries with a share larger than 0.5% of total exports.
Source: BBVA Research with data from Harvard Dataverse.

Notes on data cleansing and processing

We use the OECD's Inter-Country Input Output (ICIO) which records the domestic and foreign intersectoral relations of 68 countries and 45 sectors consistent with national GDP and global production linkages (better suited than Harvard Atla's for the estimated GVC metrics).

- The data set was updated in June 2024 comprising the period 1995 - 2020. The ICIO is available within the icio package by Borin and Mancini (2019) for Stata and in exvatools by Feás (2024) in R; we used the latter for the estimation of foreign/Domestic VA in exports and production (forward and backward) linkages.
- We rely on Borin and Mancini's (2019) methodology, which follows the perspective of the exporting country (Mexico/Türkiye), to disaggregate export flows consistent with a country's GDP as follows:

Let the aggregate exports of a country be defined as:

$$E_s = V_s B_{ss} E_s + \sum_{t \neq s}^{G} V_t B_{ts} E_s$$

Where E_s is the value of the exports of country s, V_s is the technical coefficient matrix of country s and B_{ss} is the inverse Leontief matrix quadrant for the domestic country s and B_{st} is the inverse Leontief matrix quadrant for the domestic country s and country t. Under these definitions[17], the first summand $V_s B_{ss} E_{s*}$ is the domestic VA content and the second one $\sum_{t \neq s}^{G} V_t B_{ts} E_{s*}$ is the foreign VA content.

For deeper technical details on the definitions, see Koopman et al., 2014.

For every $100 Mexico export, how much added value (VA) is Mexican?

VALUE ADDED IN EXPORTS, MEXICO
(% OF TOTAL EXPORTS)
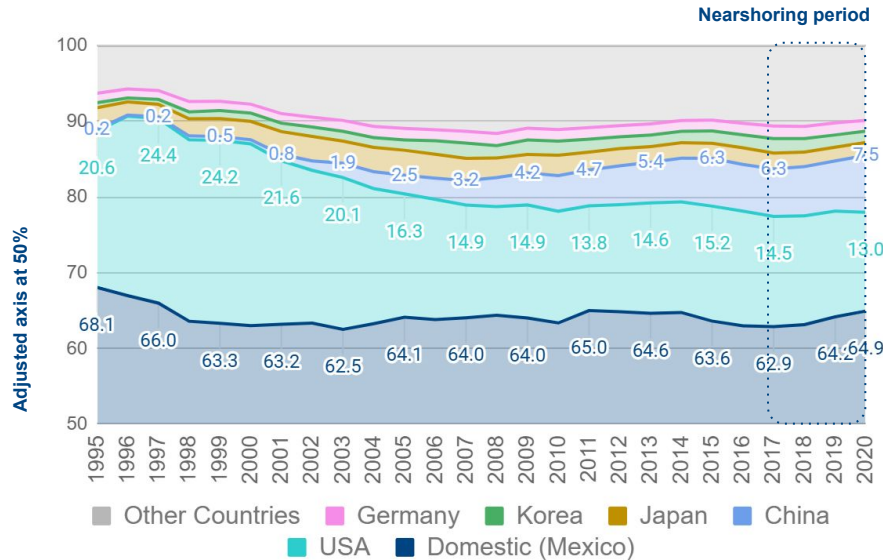
**VALUE ADDED IN EXPORTS, MEXICO**
(BPS CHANGE 2017 - 2020)
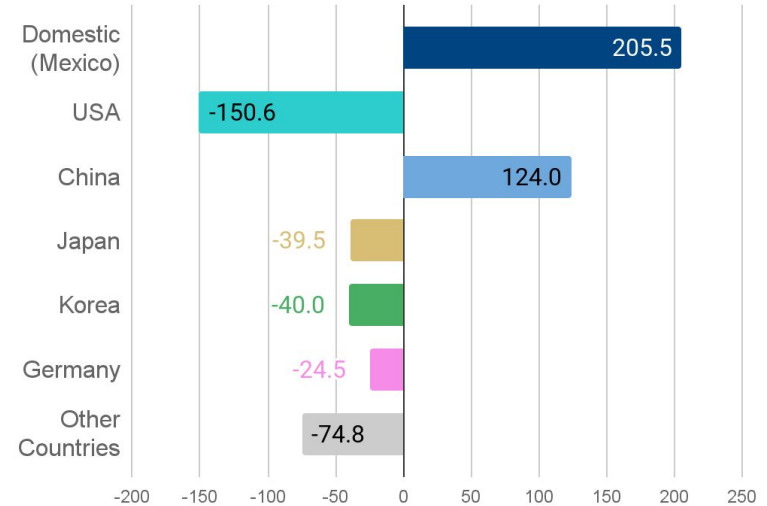
Source: BBVA Research with data from OECD. Methodology based on Koopman, Wang & Wei (2014) and Borin and Mancini (2019).

The share of domestic value added (VA) in Mexican exports began to decrease after the sign of NAFTA in 1994, the following 25 years remained relatively constant averaging 63.8% since 2000. The US share of VA in mexican exports has steadily decrease since 2017 while China's has increased 124 bps.

China's Value Added accounted for 2.4% of Türkiye total exports in 2020

VALUE ADDED IN EXPORTS, TÜRKIYE
(% OF TOTAL EXPORTS)
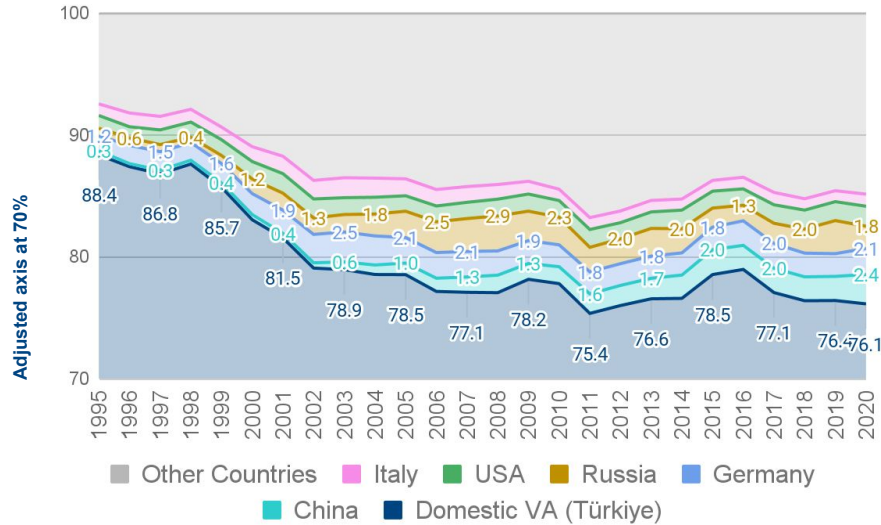
VALUE ADDED IN EXPORTS, TÜRKIYE
(BPS CHANGE 2017 - 2020)
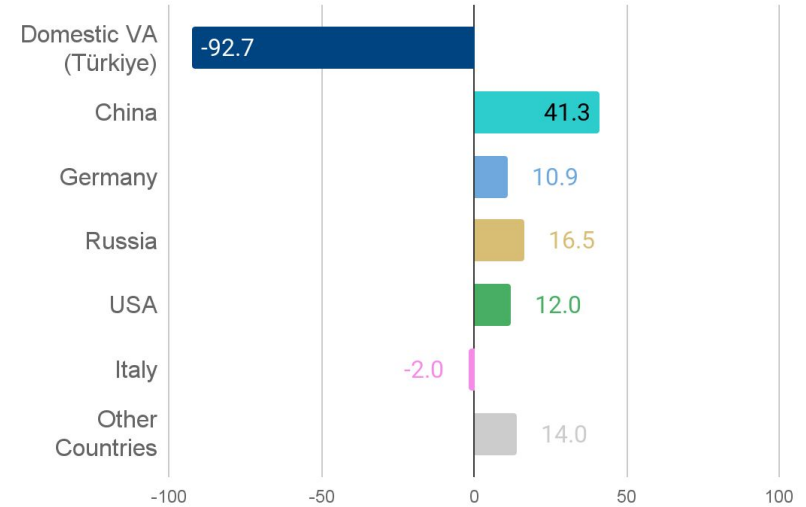
Source: BBVA Research with data from OECD. Methodology based on Koopman, Wang & Wei (2014) and Borin and Mancini (2019).

The domestic value added within Türkiye's exports has decreased steadily since 1995 but remains over 76.1% by 2020. During this period, Germany and Russia had the most significant gains in VA, with China seeing the most significant growth of 41.3 bps from 2017 to 2020.

Türkiye's backward linkages in global value chains have grown significantly

PRODUCTION LINKAGES: FORWARD AND BACKWARD
(% OF TOTAL EXPORTS)

Türkiye: Backward Linkage · Türkiye: Forward Linkage
Mexico: Backward Linkage · Mexico: Forward Linkage
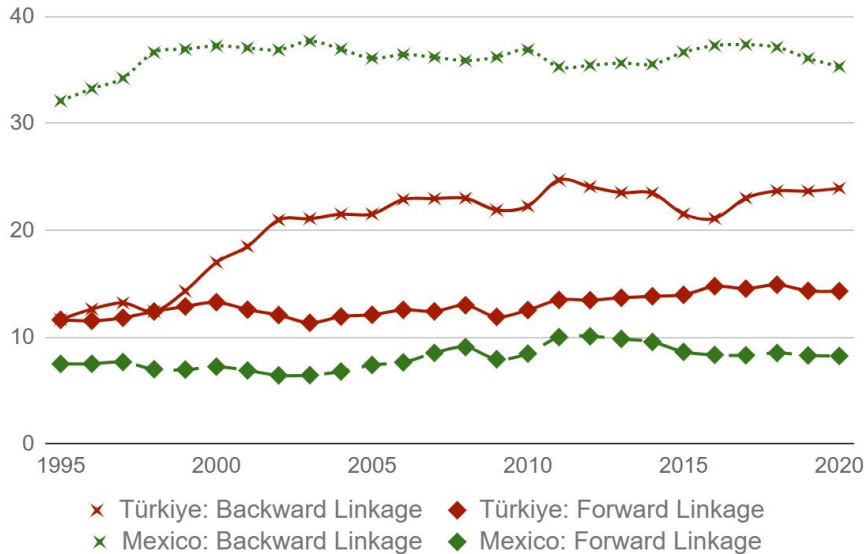
- Forward linkage (FL) measures the domestic value that, once exported, is used as intermediate inputs and exported to a third country. Backward linkage (BL) allows us to measure the value of foreign intermediate goods in exports.

- Literature indicates that a country's participation in GVC increases productivity, boosting employment and regional economies through demand for local inputs (World Bank, 2022). However, the literature suggests that the benefits of productive linkages are not symmetrical, with FL having a more significant positive impact than BL.

Source: BBVA Research with data from OECD. Methodology based on (De Backer, K. and S. Miroudot, 2013)

Türkiye portrays a more balanced position in terms of GVC linkages

BACKWARD LINKAGE, SELECTED COUNTRIES 2020
(% OF TOTAL EXPORTS)
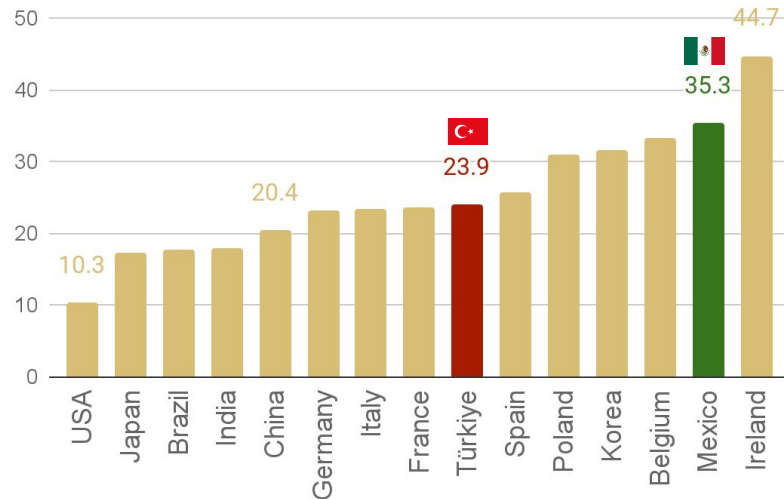
FORWARD LINKAGE, SELECTED COUNTRIES 2020
(% OF TOTAL EXPORTS)
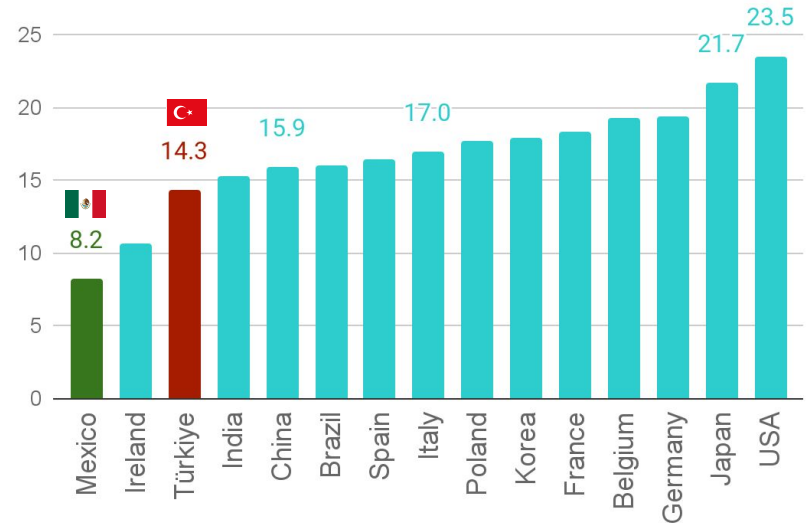
Source: BBVA Research with data from OECD. Methodology based on Koopman, Wang & Wei (2014) and Borin and Mancini (2019).

In the case of Mexico, backward linkage (BL) exceeds forward linkage more than four times; that is, the proportion of foreign VA in Mexico's exports considerably exceeds the proportion of Mexican added value incorporated into the exports of other countries. Mexico's FL is among the lowest in the OECD while Türkiye ranks closer to India, China and Brazil.

03

Economic Complexity Dynamics

Mexico's economic complexity has stagnated over the last years, while Türkiye has steadily increased the complexity of the top exported products.

Notes on data cleansing and processing

We used the ecomplexity package for Python to estimate Economic Complexity (ECI) and Product Complexity (PCI).

Stata implementation is also available here.

- We use international trade data from Harvard Growth Lab Atlas Data (See Section 1 for a more detailed description).

- **Services trade were excluded from the study.**

To create the **Product Space**, following Hidalgo, C. A., Klinger, B., Barabasi, A.-L., & Hausmann, R. (2007) we took the product coordinates embeddings of a proximity matrix. Distances between products represent their relatedness based on whether products are co-exported by countries; the resulting coordinates also allow us to position higher-complexity product clusters further away from less complex ones.

- The NetworkX Python package allowed us to illustrate the product space with 8 clusters and 865 products at the HS4 level.

- This visualization was not currently available on the official Harvard Atlas website by the date this report was published.

High complexity countries have broader sophisticated capabilities

COUNTRY ECONOMIC COMPLEXITY RANKING
(RANK)

Legend: ● Mexico ● Türkiye ⬠ Brazil ◻ China ✕ India ◆ USA
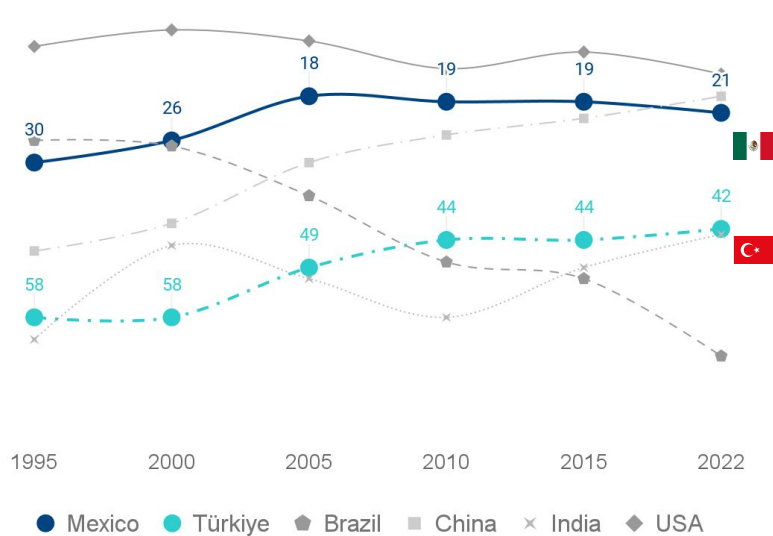
COUNTRY ECONOMIC COMPLEXITY
(INDEX, 2022)

-2.489 ▬▬▬▬ 2.285
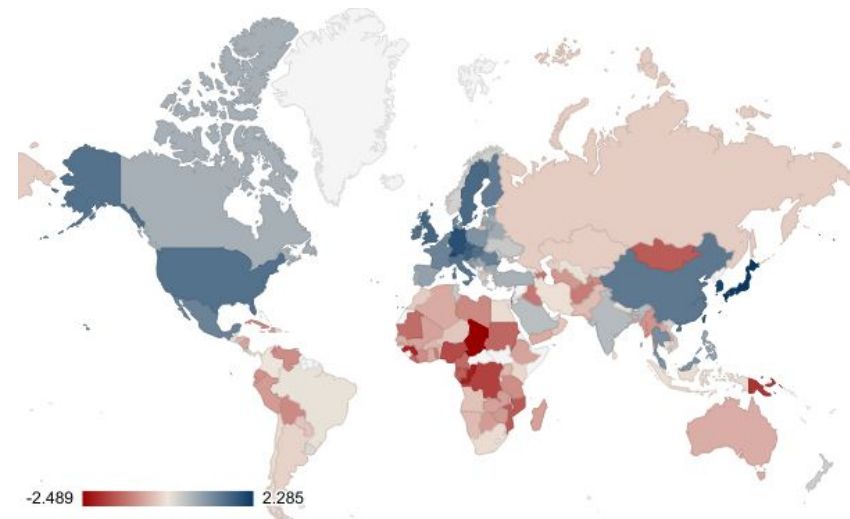
Source: BBVA Research with data from Harvard Dataverse. The Atlas of Economic Complexity offers information for 133 countries after filtering through data quality, trade > $1 Billion USD and population > 1 million.

Mexico ranks 21st out of 133 countries as of 2022 and has maintained its position in the top 20 for the past few years, having been surpassed by China in 2018. Meanwhile, Türkiye has improved its ranking, surpassing both Brazil and India. The two countries are at different stages of development concerning economic complexity.

From 2000 to 2010 both countries increased their economic complexity

NORMALIZED ECONOMIC COMPLEXITY INDEX
(ECI_NORM)*
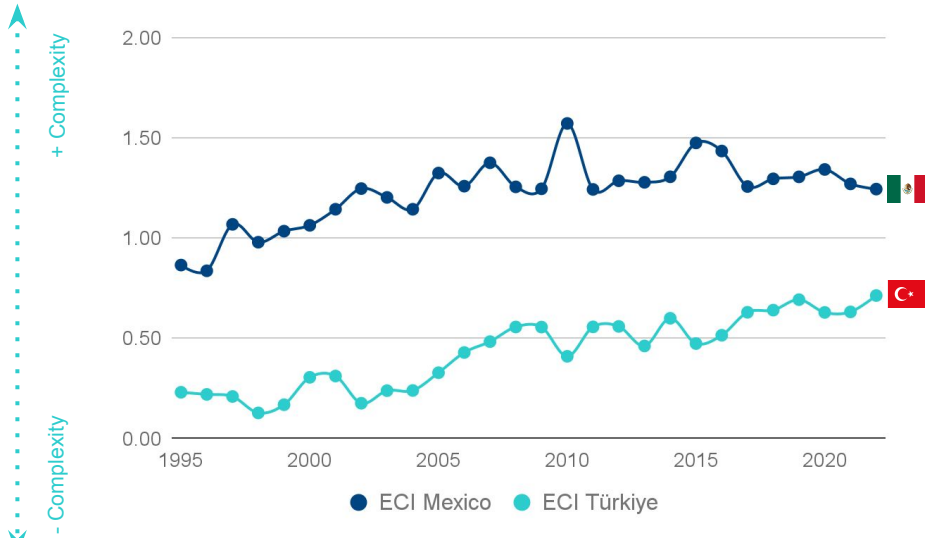
NORMALIZED ECONOMIC COMPLEXITY INDEX
(CHANGE %, SELECTED PERIODS)
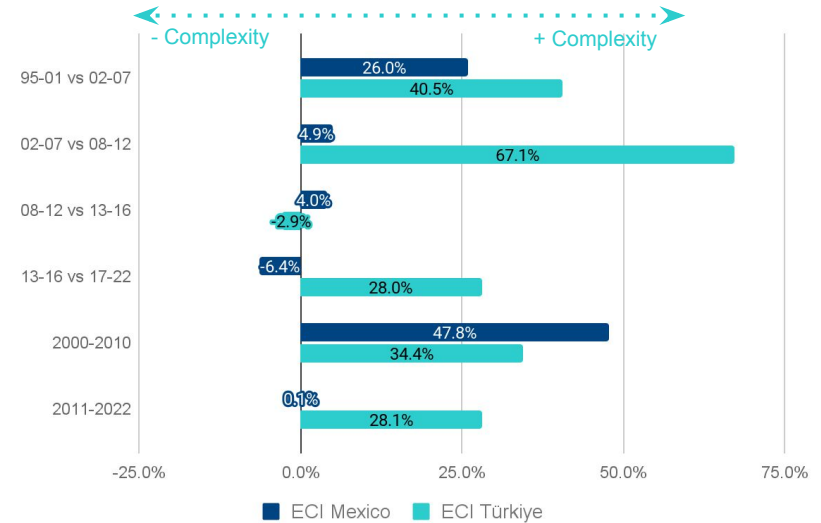
Source: BBVA Research with data from Harvard Dataverse.

Since 2011, Mexico's complexity has stagnated, while Türkiye has increased its economic complexity by 28.1% until 2022. This growth has narrowed the gap between the two countries despite a slight decline in complexity from 2013 to 2016. However, this drop was more than compensated for by a 28% increase in complexity between 2017 and 2022.

Türkiye's top traded products complexity has increased steadily

MEXICO: TOP 10 TRADED PRODUCTS
(PRODUCT COMPLEXITY INDEX & ECI)

1995	2000	2005	2010	2015	2022
Cars	Cars	Cars	Cars	Cars	Cars
Insulated electrical wire	Computers	Monitors and projectors	Monitors and projectors	Parts of motor vehicles	Computers
Monitors and projectors	Insulated electrical wire	Parts of motor vehicles	Parts of motor vehicles	Motor vehicles for transporting goods	Parts of motor vehicles
Spark-ignition reciprocating internal combustion piston engines	Parts of motor vehicles	Computers	Computers	Computers	Motor vehicles for transporting goods
Parts of motor vehicles	Monitors and projectors	Insulated electrical wire	Motor vehicles for transporting goods	Monitors and projectors	Insulated electrical wire
Motor vehicles for transporting goods	Motor vehicles for transporting goods	Motor vehicles for transporting goods	Transmission apparatus for radio, telephone and TV	Telephones	Monitors and projectors
Computers	Transmission apparatus for radio, telephone and TV	Transmission apparatus for radio, telephone and TV	Telephones	Insulated electrical wire	Medical instruments
Parts of radios, telephones, and T.V.s	Telephones	Seats	Insulated electrical wire	Tractors	Transmission apparatus for radio, telephone and TV
Reception apparatus for radio broadcasting	Electrical apparatus for < 1k volts	Electrical apparatus for < 1k volts	Gold	Medical instruments	Refrigerators, freezers
Electrical apparatus for < 1k volts	Parts and accessories for office machines	Medical instruments	Medical instruments	Seats	Electrical boards

ECI: Economic Complexity Index	0.86	1.06	1.32	1.57	1.47	1.24

TÜRKIYE: TOP 10 TRADED PRODUCTS
(PRODUCT COMPLEXITY INDEX & ECI)

1995	2000	2005	2010	2015	2022
Sweaters, pullovers, sweatshirts etc., knit	T-shirts, knit	Cars	Cars	Gold	Cars
Other bars of iron, not further worked than forged	Women's suits and pants	Monitors and projectors	Motor vehicles for transporting goods	Cars	Jewelry of precious metal
T-shirts, knit	Sweaters, pullovers, sweatshirts etc., knit	T-shirts, knit	Other bars of iron, not further worked than forged	Motor vehicles for transporting goods	Parts of motor vehicles
Women's suits and pants	Monitors and projectors	Motor vehicles for transporting goods	T-shirts, knit	Parts of motor vehicles	Motor vehicles for transporting goods
Other nuts	Other bars of iron, not further worked than forged	Other bars of iron, not further worked than forged	Parts of motor vehicles	Jewelry of precious metal	Other bars of iron, not further worked than forged
Women's suits, knit	Cars	Women's suits and pants	Semifinished products of iron or nonalloy steel	Other bars of iron, not further worked than forged	Women's suits and pants
Semifinished products of iron or nonalloy steel	Men's suits and pants	Parts of motor vehicles	Insulated electrical wire	T-shirts, knit	Insulated electrical wire
Leather apparel	House linen	Men's suits and pants	Women's suits and pants	Insulated electrical wire	T-shirts, knit
Women's undergarments, knit	Other aircraft and spacecraft	Other nuts	Gold	Women's suits and pants	Refrigerators, freezers
Men's suits and pants	Parts of motor vehicles	Sweaters, pullovers, sweatshirts etc., knit	Monitors and projectors	Other nuts	Sweaters, pullovers, sweatshirts etc., knit

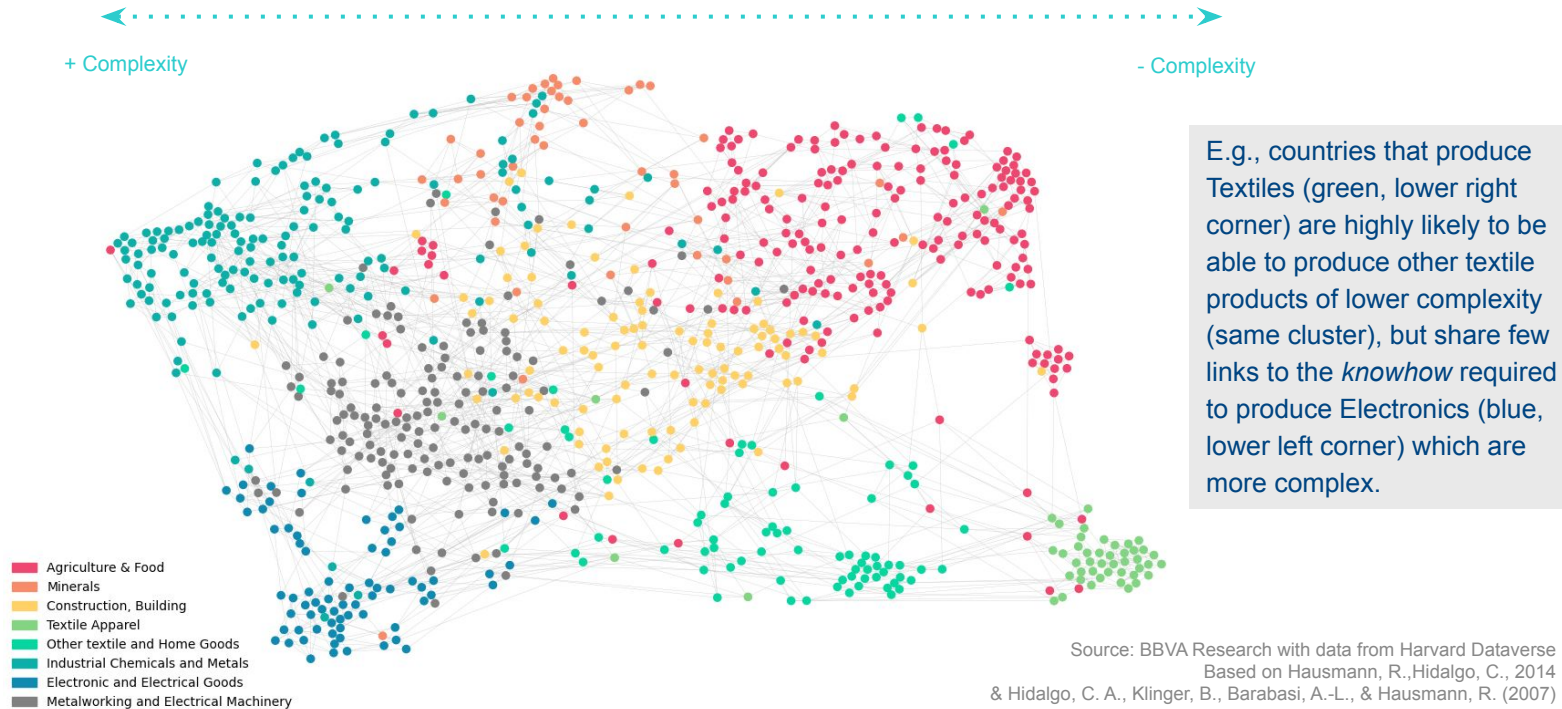| **ECI:** Economic Complexity Index	0.23	0.30	0.33	0.41	0.47	0.71

Source: BBVA Research with data from Harvard Dataverse.

Product space allows to show product concentration and complexity

**STANDARD
PRODUCT SPACE
BY CLUSTERS**

+ Complexity

- Complexity

Legend:
- Agriculture & Food
- Minerals
- Construction, Building
- Textile Apparel
- Other textile and Home Goods
- Industrial Chemicals and Metals
- Electronic and Electrical Goods
- Metalworking and Electrical Machinery

E.g., countries that produce Textiles (green, lower right corner) are highly likely to be able to produce other textile products of lower complexity (same cluster), but share few links to the *knowhow* required to produce Electronics (blue, lower left corner) which are more complex.

Source: BBVA Research with data from Harvard Dataverse
Based on Hausmann, R.,Hidalgo, C., 2014
& Hidalgo, C. A., Klinger, B., Barabasi, A.-L., & Hausmann, R. (2007)

The coordinates represent UMAP embeddings of a proximity matrix, where distances between products are meaningful and represent their relatedness based on whether products are co-exported by countries. Products have also been clustered into knowledge clusters based on co-export patterns. Note that the node positions in the node data consider the entire proximity matrix, while the edge data only shows the top relatedness links for visualization purposes. The layout has been optimized for visualization, with uninformative links removed. More info here
"The Atlas of Economic Complexity," Center for International Development at Harvard University

PRODUCT SPACE HS4
MEXICO 2022

+ Complexity   - Complexity
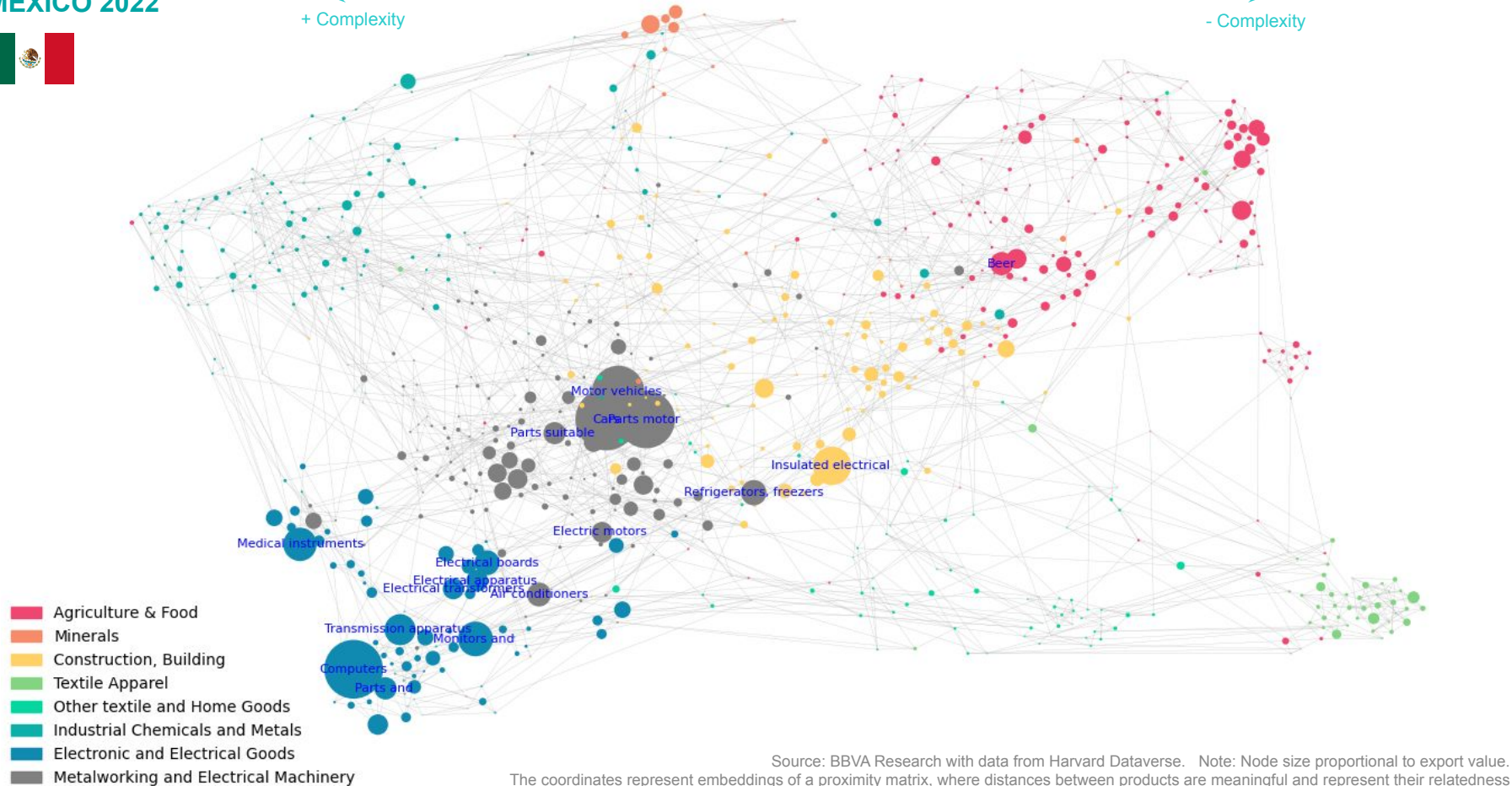
Beer

Motor vehicles

CaParts motor

Parts suitable

Insulated electrical

Refrigerators, freezers

Electric motors

Medical instruments

Electrical boards
Electrical apparatus
Electrical transformers   All conditioners

Transmission apparatus
Monitors and

Computers
Parts and

Legend:
- Agriculture & Food
- Minerals
- Construction, Building
- Textile Apparel
- Other textile and Home Goods
- Industrial Chemicals and Metals
- Electronic and Electrical Goods
- Metalworking and Electrical Machinery

Source: BBVA Research with data from Harvard Dataverse.   Note: Node size proportional to export value.
The coordinates represent embeddings of a proximity matrix, where distances between products are meaningful and represent their relatedness
based on whether products are co-exported by countries.

PRODUCT SPACE HS4
TÜRKIYE 2022

+ Complexity

- Complexity

Sunflower seed

Other bars

Other tubes,

Tractors

Structure plates / Other plates

Motor vehicles

Aluminum bars

Car parts motor

Other furniture

Insulated electrical

Woven carpets

Refrigerators, freezers

Women's suits

Men's suits

T-shirts, knit / Sweaters, pullovers,

Other knitted

Jewelry precious

Legend:
- Agriculture & Food
- Minerals
- Construction, Building
- Textile Apparel
- Other textile and Home Goods
- Industrial Chemicals and Metals
- Electronic and Electrical Goods
- Metalworking and Electrical Machinery

Source: BBVA Research with data from Harvard Dataverse.   Note: Node size proportional to export value.
The coordinates represent embeddings of a proximity matrix, where distances between products are meaningful and represent their relatedness based on whether products are co-exported by countries.

ZOOM IN MEXICO'S ELECTRONIC AND ELECTRICAL GOODS PRODUCT SPACE HS4, 2022
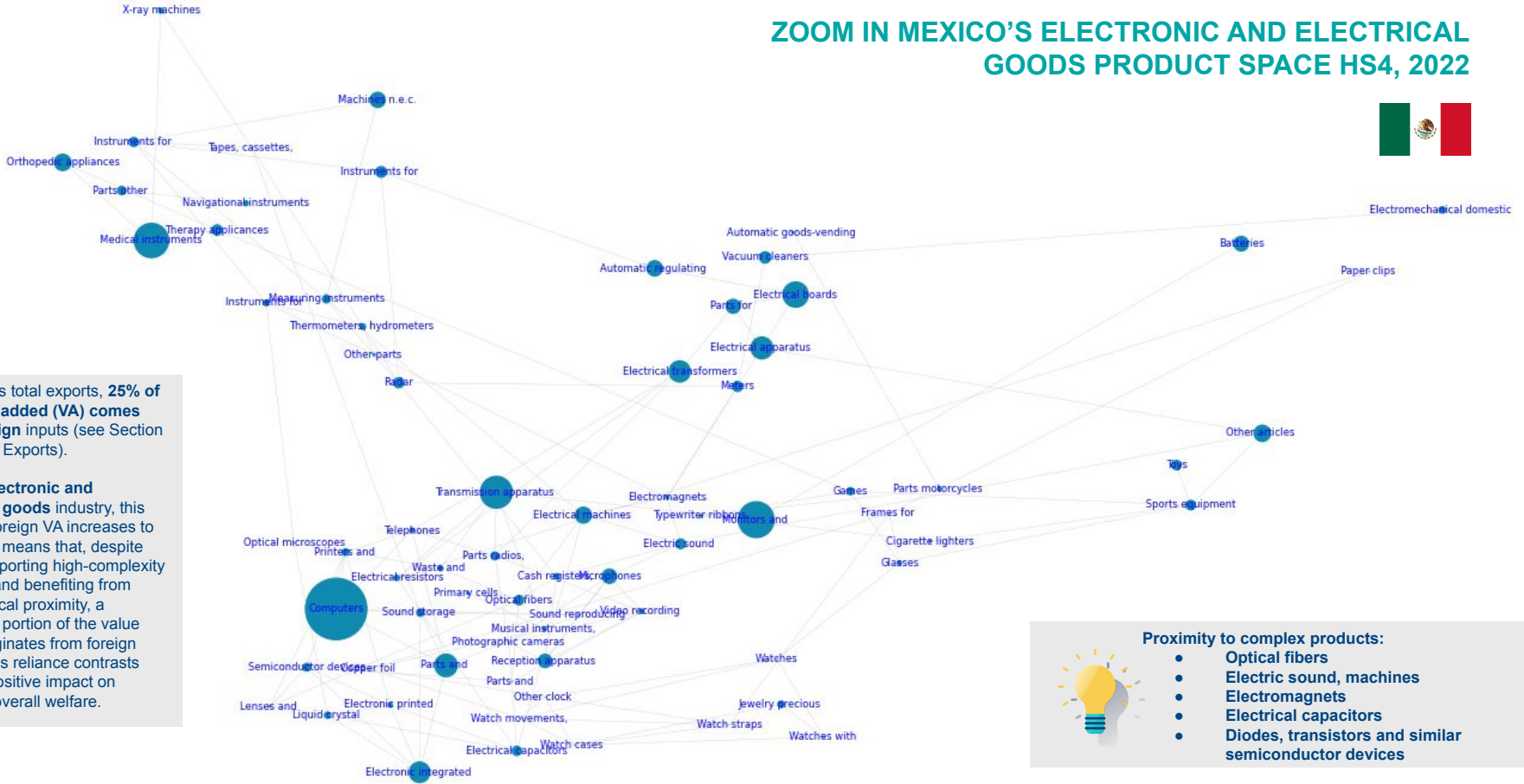
In Mexico's total exports, **25% of the value added (VA) comes from foreign** inputs (see Section 2 on VA in Exports).

For the **Electronic and Electrical goods** industry, this share of foreign VA increases to 43%. This means that, despite Mexico exporting high-complexity products and benefiting from geographical proximity, a significant portion of the value added originates from foreign inputs. This reliance contrasts with the positive impact on Mexico's overall welfare.

Proximity to complex products:
- **Optical fibers**
- **Electric sound, machines**
- **Electromagnets**
- **Electrical capacitors**
- **Diodes, transistors and similar semiconductor devices**

Electronic and Electrical Goods

Source: BBVA Research with data from Harvard Dataverse.   Note: Node size proportional to export value.
The coordinates represent embeddings of a proximity matrix, where distances between products are meaningful and represent their relatedness based on whether products are co-exported by countries.

ZOOM IN TÜRKIYE'S METALWORKING AND ELECTRICAL MACHINERY GOODS
PRODUCT SPACE HS4, 2022
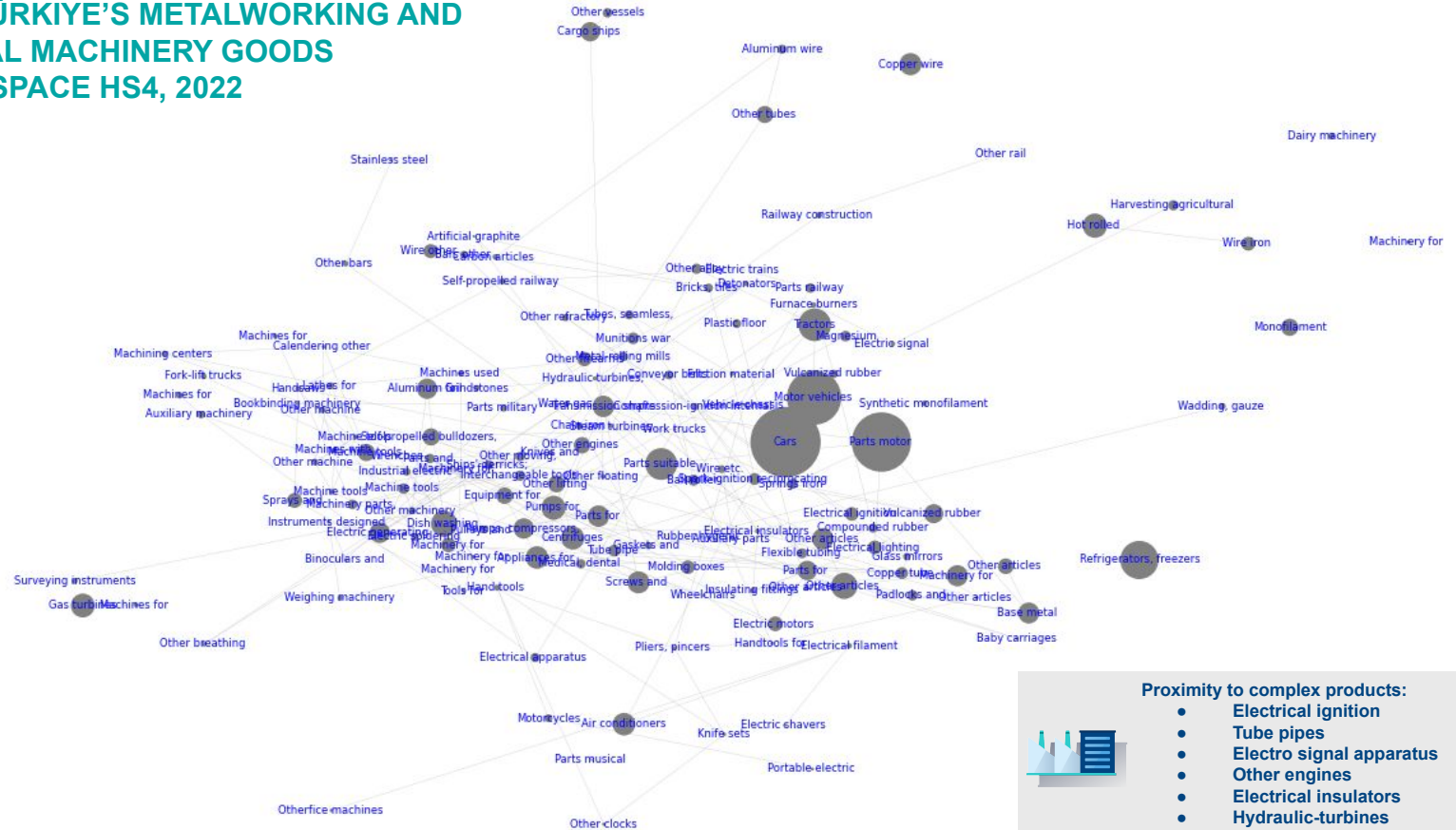
Proximity to complex products:
- Electrical ignition
- Tube pipes
- Electro signal apparatus
- Other engines
- Electrical insulators
- Hydraulic-turbines

Metalworking and Electrical Machinery

Source: BBVA Research with data from Harvard Dataverse.   Note: Node size proportional to export value.
The coordinates represent embeddings of a proximity matrix, where distances between products are meaningful and represent their relatedness based on whether products are co-exported by countries.

Higher export concentration is associated to lower economic complexity

Mexico: ECI vs IHH_D 🇲🇽
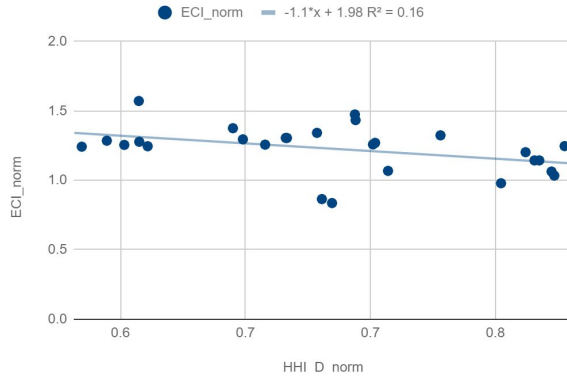
Mexico: ECI vs IHH_P 🇲🇽
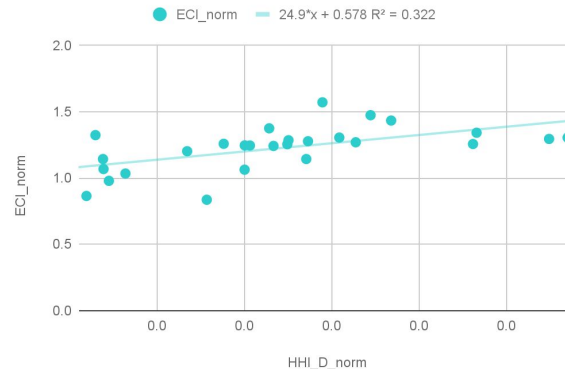
Türkiye: ECI vs IHH_D 🇹🇷

Türkiye: ECI vs IHH_P 🇹🇷

+ Complexity

− Complexity

Diversified
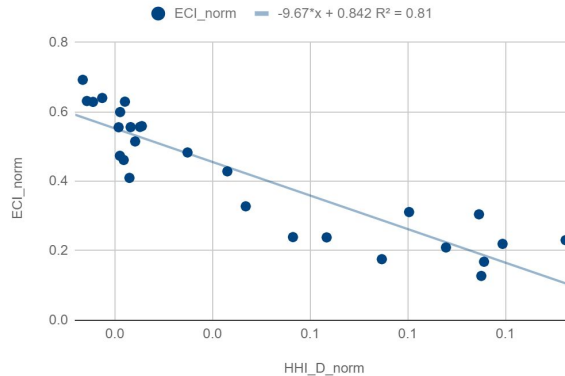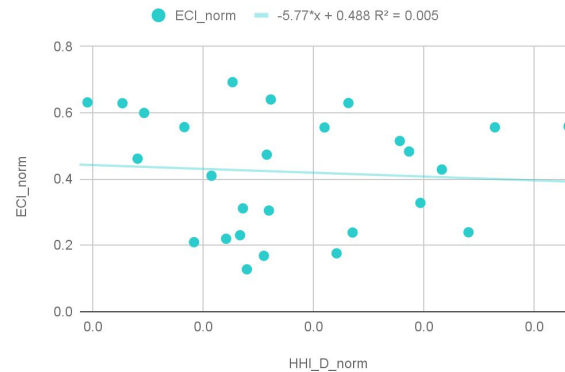
Concentrated

- This relationship appears more substantial in the "destination" dimension of export concentration, especially for Türkiye.

- In the case of product concentration, the relationship is loose but negative for Türkiye; in the case of Mexico, the slope changes.

Source: BBVA Research with data from Harvard Dataverse.

Most competitive industries (RCA) match higher product complexity

MEXICO REVEALED COMPARATIVE ADVANTAGE, 2020
(INDUSTRIES WITH VALUE ADDED ADJUSTED RCA > 1)*
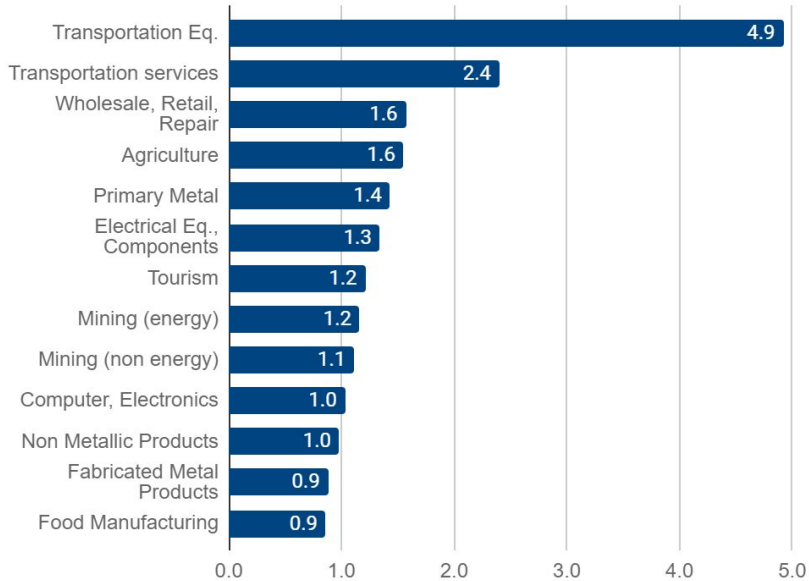
TÜRKIYE: REVEALED COMPARATIVE ADVANTAGE, 2020
(INDUSTRIES WITH VALUE ADDED ADJUSTED RCA > 1)*
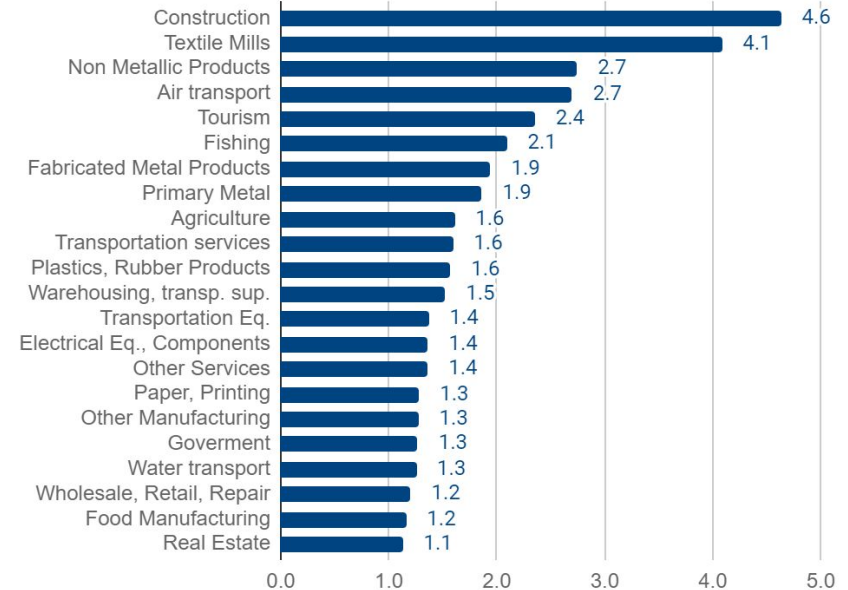
Source: BBVA Research with data from OECD.

*Following the methodology proposed by Koopman et al. (2014) we adjust this index to subtract the foreign content from the value of exports to measure competitiveness in terms of domestic added value.

05

Policy Analysis:
Tax incentives

Fiscal incentives should be directed
towards the most competitive industries
enabling more complex products

Mexico: Tax incentives aim at 6 RCA industries with high complexity products

SHCP
SECRETARÍA DE HACIENDA
Y CRÉDITO PÚBLICO

In October 2023, the Mexican government released an Act granting tax incentives to key sectors, as long as they produce, prepare or manufacture the following goods and also export them. The tax incentives include deductions ranging from 56% to 89% in fixed assets across 10 key sectors.

Participating Industries

- Food Manuf.
- Fertilizers
- Pharmaceutical
- Electronics
- Machinery
- Batteries
- Engines
- Transportation
- Medical equipment
- Films

RCA + Complexity

Additional requirements

- Export income is >50% of turnover
- Registered in the RFC and with a Tax Mailbox
- Favorable opinion of tax obligations
- Submit a statement opting for benefits

Restrictions

- Unpaid or forgiven tax credits
- Firm is untraceable
- With executory sentence
- S.A. without appropriate documentation
- Digital stamp restriction
- "Sold" or "Purchased" invoices
- Company in liquidation

Source: BBVA Research

Mexico's tax incentive programs focus on Chemicals and Machinery

TAX INCENTIVES IN THE PRODUCT SPACE 2023

Tax incentives Mexico

- Agriculture & Food
- Minerals
- Construction, Building
- Textile Apparel
- Other textile and Home Goods
- Industrial Chemicals and Metals
- Electronic and Electrical Goods
- Metalworking and Electrical Machinery

← + Complexity   - Complexity →
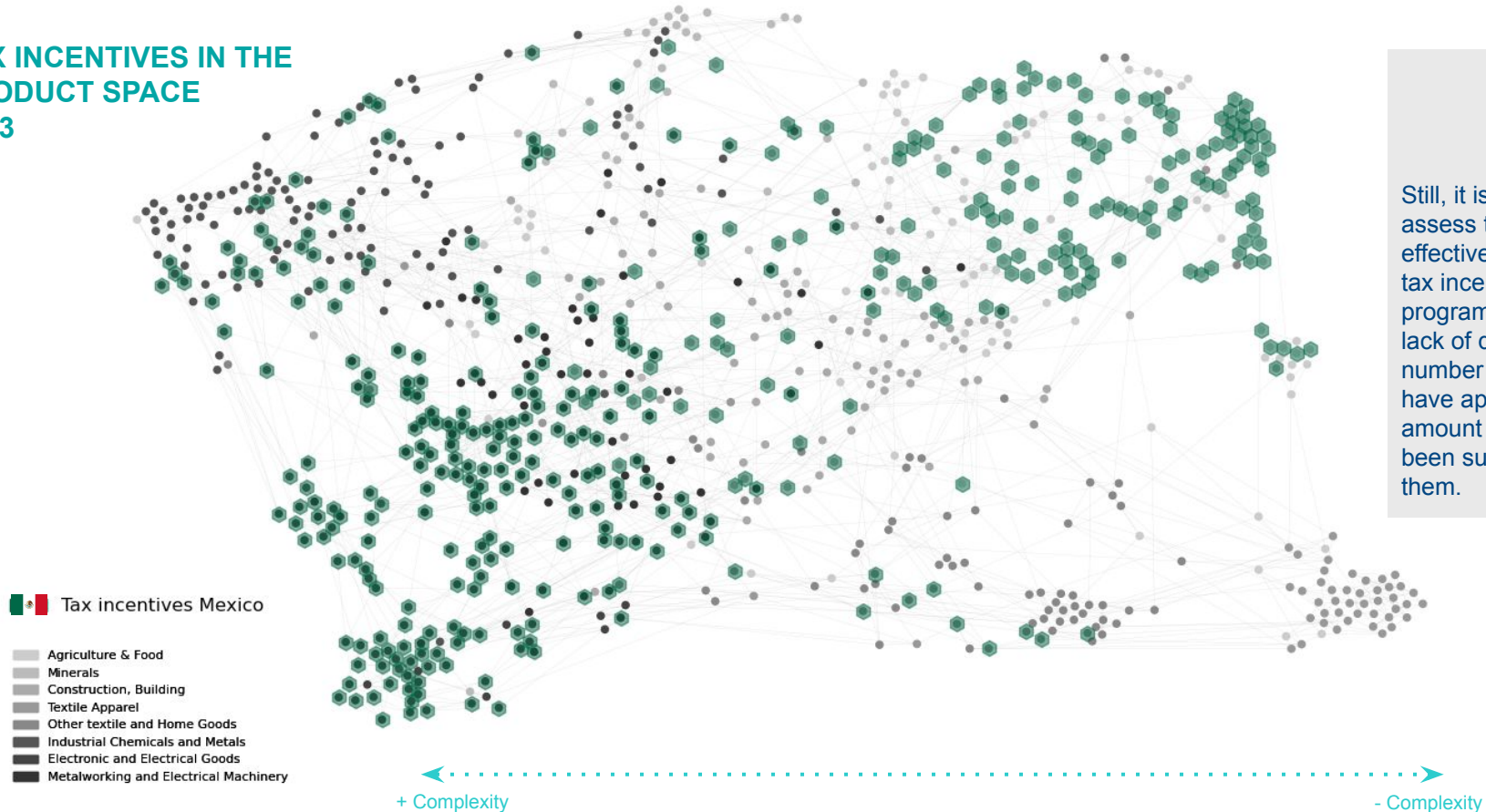
Still, it is too early to assess the effectiveness of the tax incentive program due to a lack of data on the number of firms that have applied or the amount that has been subsidized to them.

Source: BBVA Research with data from Harvard Dataverse.

Plan México expands previous fiscal incentives to all industries

Last week of december 2024, the National Strategy for Industrialization and Shared Prosperity was unveiled, summarized as *Plan México*.

The first comprehensive project from Mexico's federal government focused on strengthening the country's role in global value chains (GVC) through incentives for private investment, infrastructure development (energy, water, and transportation), and human capital training, all in coordination with government departments and agencies. The initial document of the Mexico Plan presents 11 ambitious goals for 2030.

Goals in Pan México towards 2030 regarding GVC and FDI

- **Nearshoring statue:** Deduction of new investments in incremental fixed assets aimed at high-tech, research, and development investments. Additional 25% of worker's training expenses.
  - **Foreign and Mexican companies may apply without discrimination across industries or sectors.**
- +15% domestic content in GVC by in key industries such as automotive, aerospace, electronics, semiconductors, pharmaceuticals, and chemicals
- + 1.5 million jobs in specialized manufacturing and strategic sectors
- **IMMEX 4.0**: consolidates the VAT and IEPS (Excise Tax) certification process

Source: BBVA Research

Türkiye: Understanding the tax and investment supports & incentives

The Ministry of Industry and Technology provides investment support to firms in various forms of tax, employment, financial and other types of incentives.

The ministry provides information on type of incentives foreseen to be allocated to firms on monthly terms between 2019-2023 period. We analyzed this data and manually matched US97 sector codes (product classification created by the Turkish Ministry of Industry and Technology, non related to any US current classification) with HS 97 2 and 4 digit codes for the available period to gauge to the distribution of incentives on the product space.

VAT Exemption

Customs Duty Exemption

Tax Deduction

Social Security Premium Support (Employer's Share)

SUPPORT MEASURES

Interest/Profit Share Support

Land Allocation

VAT Refund

Social Security Premium Support (Employee's Share)

Türkiye: Shifting trend in policy incentives with focus on more complex products

2019

← + Complexity   - Complexity →

TAX INCENTIVES IN THE PRODUCT SPACE 2019

Click here to see an animated version of Türkiye's product space

From 2019-2021 larger concentration of granted incentives in Textiles, a low complexity industry.

🇹🇷 Tax incentives Türkiye

- Agriculture & Food
- Minerals
- Construction, Building
- Textile Apparel
- Other textile and Home Goods
- Industrial Chemicals and Metals
- Electronic and Electrical Goods
- Metalworking and Electrical Machinery

Source: BBVA Research with data from Harvard Dataverse and Ministry of Industry and Technology. Node size proportional to the number of granted incentives

Türkiye: Shifting trend in policy incentives with focus on more complex products

TAX INCENTIVES IN THE PRODUCT SPACE 2023

2023

← + Complexity   - Complexity →
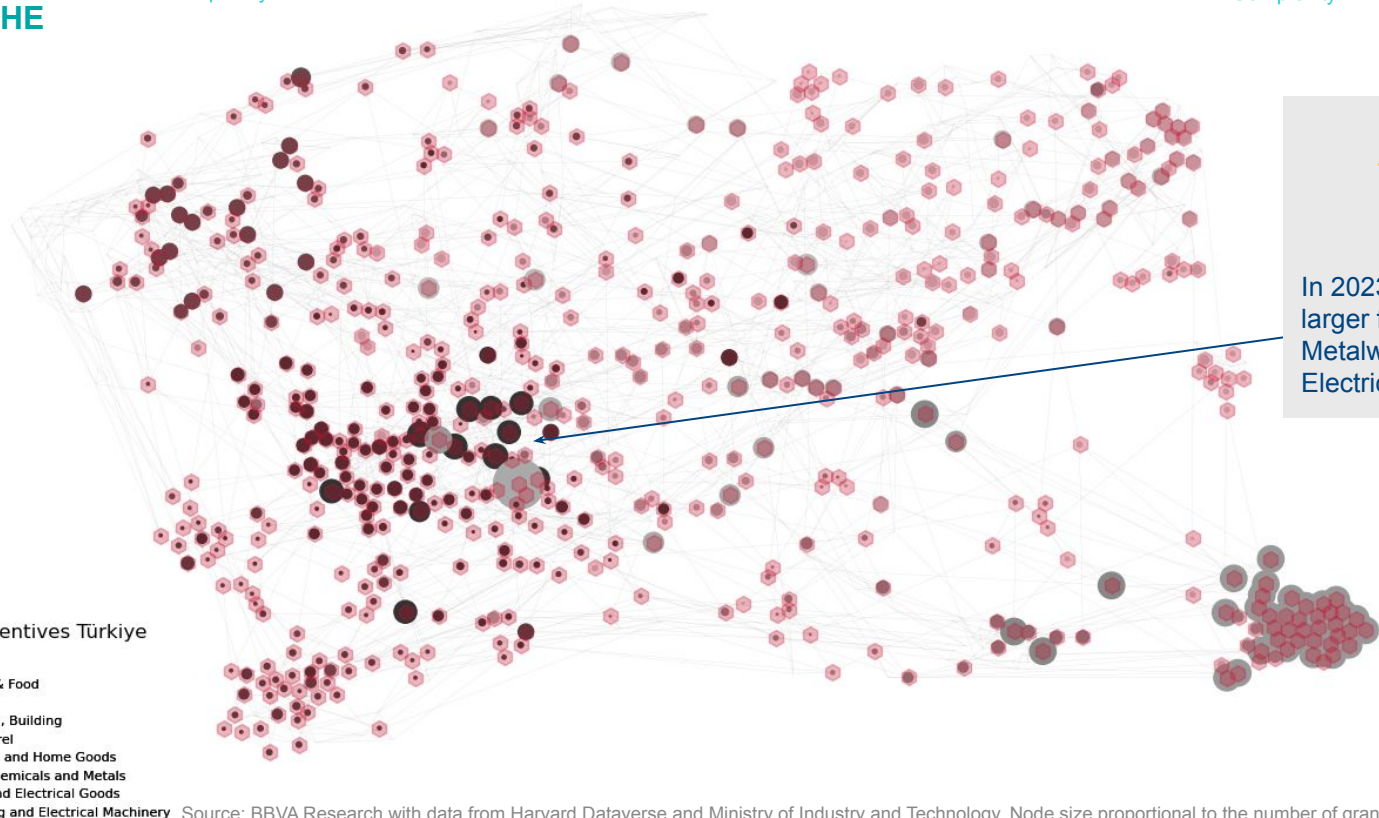
In 2023 there's a larger focus on Metalworking and Electrical Machinery

Click here to see an animated version of Türkiye's product space

Tax incentives Türkiye

Agriculture & Food
Minerals
Construction, Building
Textile Apparel
Other textile and Home Goods
Industrial Chemicals and Metals
Electronic and Electrical Goods
Metalworking and Electrical Machinery

Source: BBVA Research with data from Harvard Dataverse and Ministry of Industry and Technology. Node size proportional to the number of granted incentives

Manufacturing industry constitutes 64% of the support incentives, while the focus on regions have been increasing over time

The objective of the incentive program by the Ministry of Science, Industry and Technology could be summarized as:

- Increased production of intermediate goods and products with high import dependency in Turkey.
- Increase in medium and high tech investments
- Reducing regional development disparities and providing development opportunities in the least developed regions.

THE DISTRIBUTION OF UNIQUE FIRMS WITH INVESTMENT INCENTIVE BY SECTORS (2023)

2.8% 1.6%
10.6%
21.2%
63.8%

■ Manufacturing ■ Energy ■ Services ■ Agriculture ■ Mining
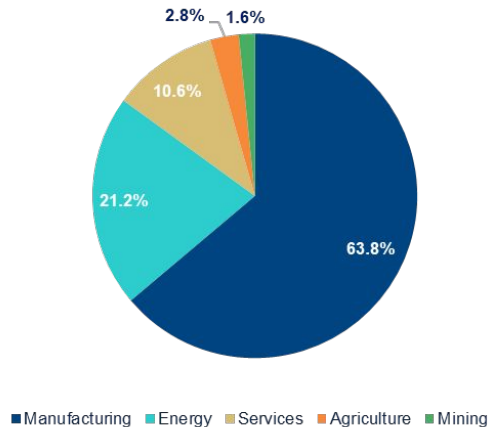
DISTRIBUTION OF UNIQUE FIRMS WITH AN INVESTMENT INCENTIVE (%)

	2019	2020	2021	2022	2023
General Investment	33.6%	38.4%	36.5%	23.0%	19.2%
Regional - Priority Investment	15.5%	11.1%	8.7%	8.4%	6.9%
Regional - Sub Regional	11.4%	12.6%	12.4%	15.0%	12.4%
Regional	39.6%	38.0%	42.3%	53.6%	61.5%

■ Regional ■ Regional - Sub Regional ■ Regional - Priority Investment ■ General Investment

Source: BBVA Research, Ministry of Industry and Technology
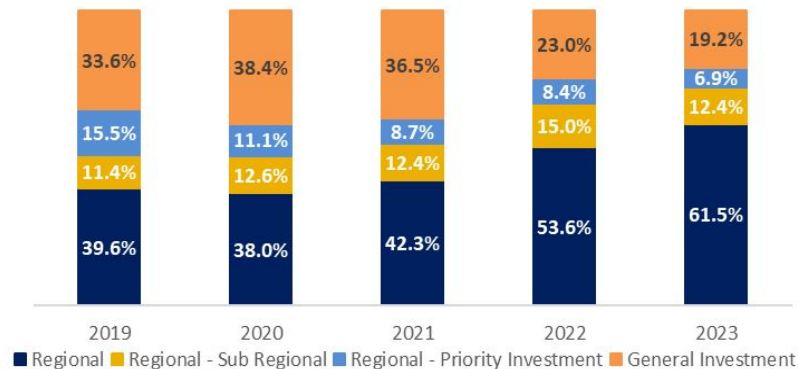
Priority areas for policy incentives

Priority Investments are considered as Region 5 Investments, meaning that following incentives are provided to these sectors:
- VAT Exemption
- Custom Duty Exemption
- Tax Deduction up to 50%
- Social Security Premium in longer horizons
- Land Allocation and Interest/Profit Share Support

RCA + Complexity

Participating Sectors

- Aircraft & Spacecraft
- Engines and Automative
- Machinery
- Railroad
- Mining

- Elderly & Disabled Care
- Data & Software
- Pharmaceutical
- Office - Computing Machinery
- Tourism

- Radio and TV
- Nuclear Power
- Education and Laboratory
- Medical equipment
- Defense

- Greenhouse
- Electricity Extraction
- LNG, Aluminum, Carbon Fiber, Warehouse
- Invesments subject to Digital Transformation Support
- Invesments subject to Environmental Licence

Source: BBVA Research, Ministry of Industry and Technology

Priority areas according to HIT30 programme

- HIT30 Policy Framework definition: The Ministry of Industry and Technology recently announced a new investment programme providing support and incentives to specialized projects in high-priority technology areas.
- Projects to be supported under HIT-30 programME are expected to have concentrated focus on emerging technologies, ensuring competitiveness through economies of scale, requiring technical competence and financial capabilities, bringing further know-how and expertise along with intellectual property rights.
- The program is envisaged to allocate $30 billion worth of support for high-tech investments by 2030, with the major part of support going to electrical vehicles and semiconductor chip technologies.
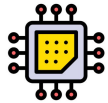
Semiconductors

Advanced Manufacturing

Mobility

Digital Technologies

Green Energy

Communication and Space

Healthy Living

Investments to Complement the Value Chain

TECHNOLOGY RELATED SUPPORT BUDGET UNDER HIT30 PROGRAM
(bn $)

Category	Value
Electric Vehicles	5
Semiconductor Chips	5
Battery	4.5
Solar Energy	2.5
Wind Energy	1.7
R&D	1

Source: BBVA Research, Ministry of Industry and Technology
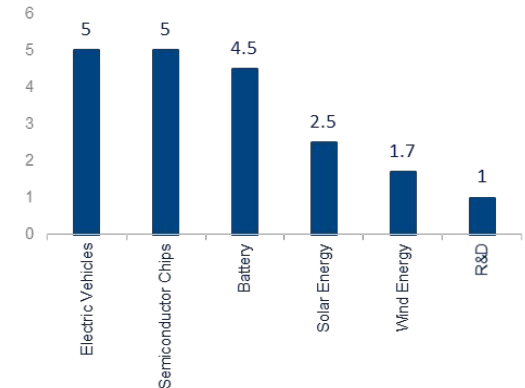
Türkiye's incentive policies : A critique

Türkiye's investment incentives are primarily composed of tax incentives, including tax reduction, VAT exemption, custom duty exemption and VAT refunds. This yields costs to the fiscal budget, hence incentivizing through fiscal policy may not be sustainable. Efficiency of tax incentives are dependent on the investment climate of the country. If a convenient investment climate is not maintained (at least for a particular project by means of specific guarantees to protect the investment), tax incentives often result in little or no new investment. More targeted and project-based tax incentives that are subject to evaluation could be more beneficial. Screening and monitoring before and after incentives are crucial in order to reduce free-riding, misreporting, lobbying and deadweight loss. In this respect, the Ministry's HIT30 programme could be regarded as a good example with its more targeted approach but there needs to be higher transparency in the evaluation and monitoring of the projects.

Depending on the business environment, protecting the tax base and providing facilities to firms helping the reduction of firms' cost may result in higher efficiency. In the long run, tax policy and administration could aim reforms achieving tax rates at more reasonable levels and less complex, more transparent and all-encompassing tax administration. In the case that this goal is achieved, investment incentives could be developed in different forms other than tax incentives.

Türkiye's incentive policies : A critique

Some industries are considered under the category of priority investments to further incentivize the high-tech value added sectors. Yet, the medium term structural deficiencies in terms of the level of preparedness for emerging high technology sectors may demand further structural adjustments. In terms of the level of preparedness for AI technologies, Türkiye performs much better than Emerging Economies, especially in the area of digital infrastructure, pointing to a relatively more comfortable space for AI technologies to flourish. However, human capital is also an important factor explaining the use of AI technologies in the workplace: 78.9% of the enterprises surveyed by the Turkstat in 2023, stated the lack of relevant expertise in the enterprise among the reasons not using AI technologies.

The skill gap is also apparent in the use of new technologies: According to Survey of Adult Skills, 38% of the adult population (16-65 year-olds) report no prior experience with computers and only 7.8% of the adult population score at the highest levels in problem solving in technology-rich environments. The investment incentives on these sectors should be supported with transformative and reforming policies addressing the skill gap in technology.

AI Preparedness Index, level, 2023

Advanced Economies — European Union — Emerging Market Economies — Türkiye

Source: BBVA Research, IMF
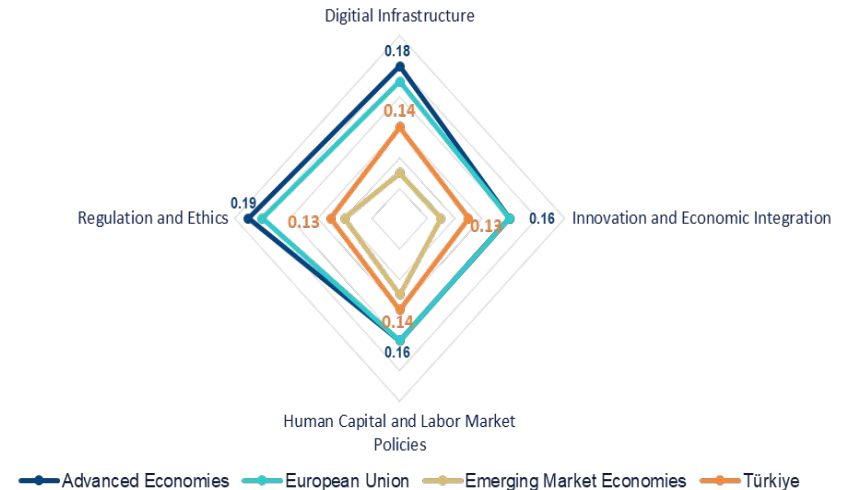
Tax incentives programs should aim to potential gains in complexity

TAX INCENTIVES IN THE PRODUCT SPACE
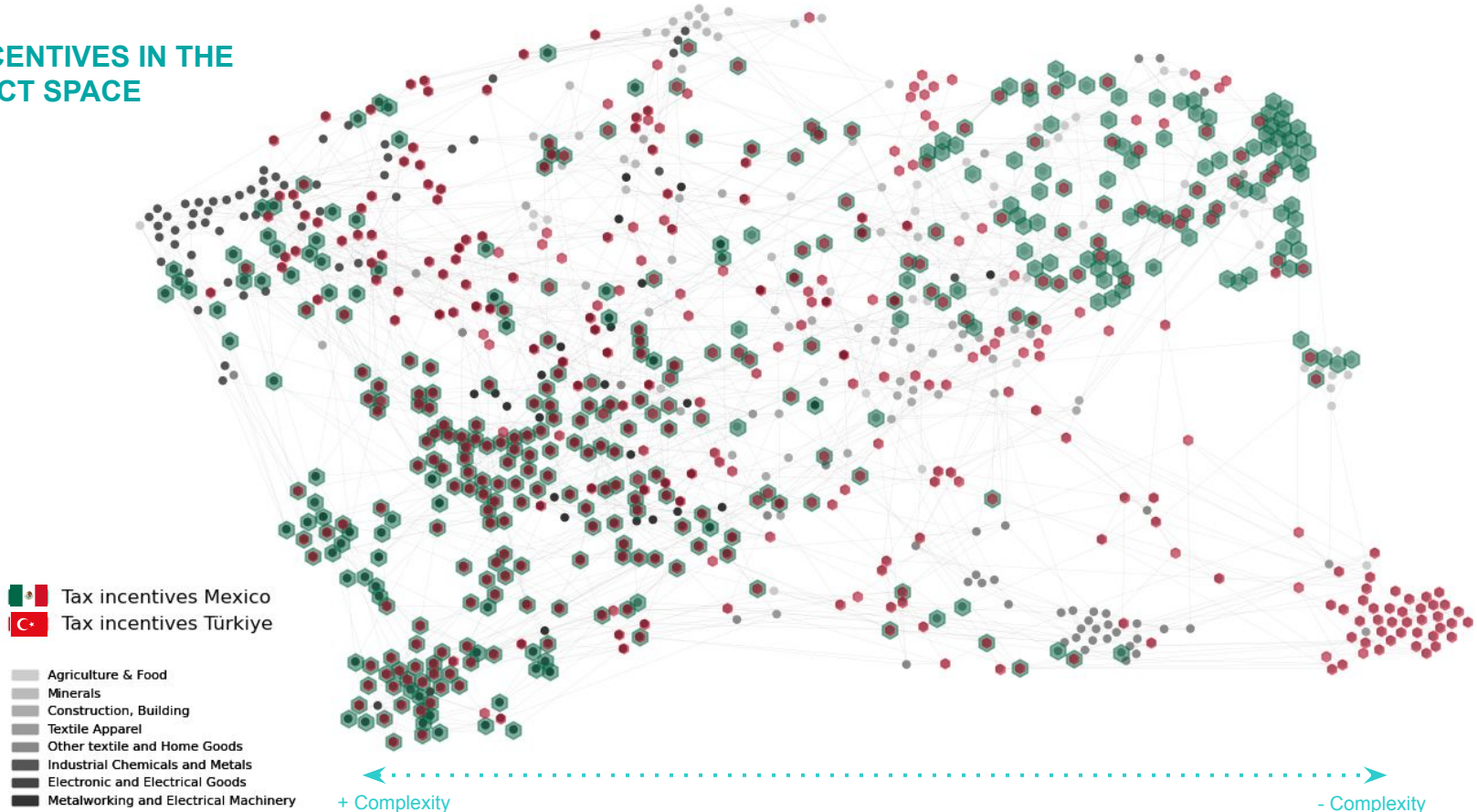
Tax incentives Mexico
Tax incentives Türkiye

Agriculture & Food
Minerals
Construction, Building
Textile Apparel
Other textile and Home Goods
Industrial Chemicals and Metals
Electronic and Electrical Goods
Metalworking and Electrical Machinery

+ Complexity — Complexity

Source: BBVA Research with data from Harvard Dataverse and Ministry of Industry and Technology

Conclusions and future work

01 Higher export concentration is associated to lower economic complexity in both countries*

- Diversifying the export destinations is correlated with higher economic complexity, this relation is stronger for Türkiye
- Mexico could take advantage of this trend to diversify the export partners looking into Europe/Asia

02 Turkey's complexity increased by 28.1% between 2011-2022, while Mexico has remained stagnant

- Türkiye's top traded products' complexity has increased steadily, from Textiles to Machinery with potential gains**.
- Mexico is already focused on exporting highly complex products, explaining the stagnation. Still, the country shows potential in Electronic and Electrical goods**

03 Fiscal incentives should be directed towards the most competitive industries (RCA) enabling more complex products (PCI)

- Türkiye's tax benefits, while more diverse, are aimed at industries with lower complexity potential gain.
- Mexico's nearshoring incentive program (launched in 2023) aim at 6 RCA industries.

* The slope for Mexico reverses in the product dimension, meaning the country might be diversifying into less complex products.
** Shown by the product space proximity of several under-exported products of this industry

Follow-up idea: Use the V-Dem Dataset, trade and FDI flows to create a "Political trade index", based on weighted sum of the political affinity of each trade/FDI partner; we can then relate this index to the economic complexity dynamics.
E.g. Does trading with a politically aligned country lead to greater complexity in the medium to long run?

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